CHUNDIKULAM National Park

யாழ்ப்பாணப் பல்கலைக்கழகம், இலங்கை
யாழ்பாண விஞ்ஞானாலய, ஸ்ரீ லங்கா
UNIVERSITY OF JAFFNA, SRI LANKA

The Thinnai
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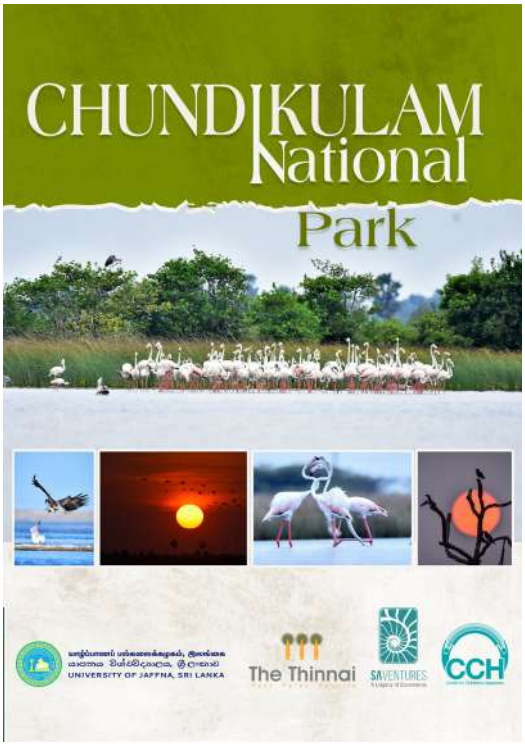
SAVENTURES
A Legacy of Excellence

CCH
Centre for Children's Happiness



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Message from the Vice Chancellor, University of Jaffna

It is with great pride and appreciation that I share my message for this final report on the Flora and Fauna Survey of Chundikulam National Park, conducted by the dedicated staff and students from the Faculties of Science and Agriculture at the University of Jaffna. This comprehensive study not only documents the biodiversity of this ecologically significant region but also highlights its current status and the urgent need for conservation.

Chundikulam National Park, with its diverse ecosystems ranging from grasslands to dry forests and wetlands, serves as a critical habitat for numerous endemic and migratory species. This survey has provided invaluable insights into the richness of its flora and fauna, while also shedding light on the environmental challenges posed by human activities, climate change, and habitat degradation. The findings of this report will serve as a vital resource for policymakers, conservationists, and researchers striving to preserve this natural treasure.

I extend my heartfelt gratitude to all members from the university community whose commitment and hard work have made this study possible. Your dedication to environmental conservation and scientific inquiry embodies the spirit of our university's mission to serve society through knowledge and research.

May this publication inspire further efforts toward sustainable conservation and responsible stewardship of our nation's natural heritage.

Prof. S. Srisatkunarajah
Vice Chancellor
University of Jaffna

Message from Managing Director for the Thinnai Group

As most Sri Lankans and tourists know, the most popular places to visit to enjoy the unspoiled beauty of nature are locations such as Yala and Wilpattu. Little has been published to increase knowledge about the beautiful landscapes in the Northern Province. I am glad to have initiated this biodiversity study sponsored by The Thinnai, which can be leveraged to influence decision-makers in the Government to develop Chundikkulam National Park so that it can welcome visitors to enjoy its unspoiled beauty and natural life.

This study marks a significant step in understanding the full potential of this largely underexplored natural treasure. While Chundikkulam is already a well-known birding destination, this study goes beyond its role as an avifaunal hotspot. The park is home to a remarkable diversity of fauna and flora, including endemic species, many of which are yet to be fully documented. Its unique ecosystems, ranging from lagoons and sand dunes to beaches, offer a rich tapestry of life that is critical to the park's overall biodiversity and ecological health.

However, the park's potential as a prime ecotourism destination can only be realised through a thorough understanding of its ecology. This is why we partnered with the University of Jaffna to carry out a comprehensive study of the park's flora and fauna. Through this study, we aim to uncover the full extent of its ecological wealth and emphasise the importance of developing robust conservation strategies. We also hope to highlight how the park's ecosystems can be preserved, particularly in the face of the ongoing climate crisis, ensuring that its biodiversity remains intact for future generations.

This research will provide a critical framework for informed decision-making, ensuring that conservation remains central to any future development of Chundikkulam National Park. Our goal is to balance the growth of ecotourism with the protection of its diverse habitats, fostering a model that promotes sustainability while mitigating the effects of climate change.

While the primary focus of this study is on the ecological aspects of Chundikkulam, I also recognise the potential for integrating cultural heritage into the broader ecotourism framework. The park is situated within a region rich in history and tradition, and I believe that the future development of this area could benefit from highlighting its cultural significance. Though not covered in this study, I see great value in combining nature tourism with cultural experiences to create a more holistic and sustainable ecotourism model for Chundikkulam.

This biodiversity study is part of The Thinnai's broader sustainability initiatives. As an organisation, The Thinnai is committed to aligning its development projects with the principles of environmental stewardship. I believe this study will help guide the responsible development of Chundikkulam National Park, ensuring that conservation remains at the heart of all future initiatives. With careful planning and dedication, I hope that Chundikkulam can be positioned alongside Sri Lanka's other renowned national parks, fostering both ecotourism and biodiversity conservation.

I hope the findings of this study will encourage greater involvement from both the government and the private sector in the sustainable development of this unique natural haven. I am proud to play a role in promoting a model that balances conservation with development, setting a precedent for responsible, sustainable tourism in Sri Lanka.

Jey Gnanam
Managing Director
TheThinnai group (pvt) ltd

Chundikkulam National Park: Bridging Biodiversity, Wellbeing, and Sustainable Development

The Center for Children's Happiness (CCH) is honored to have played a facilitating role in this significant biodiversity study, bridging the collaboration between the University of Jaffna and The Thinnai Group. As an organization dedicated to child-focused community development, we recognize the vital connection between nature and children's wellbeing, learning, and future opportunities. This study not only highlights the rich ecological diversity of Chundikkulam National Park but also serves as an opportunity to integrate nature into sustainable development efforts in the Northern Province.

We extend our sincere gratitude to The Thinnai Group for their vision in supporting this initiative and to the University of Jaffna for their invaluable research expertise. A special appreciation goes to Prof. K. Gajapathy and his dedicated team for leading this research and delivering such rich findings that deepen our understanding of Chundikkulam's ecological potential. Their work provides a critical foundation for conservation efforts and sustainable ecotourism development in the region.

At CCH, we believe that fostering an appreciation for biodiversity from an early age is key to building a generation committed to conservation and responsible environmental stewardship. By connecting this survey with our broader mission, we hope to contribute to a sustainable future where nature and community development go hand in hand.

We look forward to continuing collaborations that ensure the protection and responsible development of Chundikkulam, preserving its natural heritage for future generations.

T Thirumayuran
Executive Director
Center for Children's Happiness (CCH)

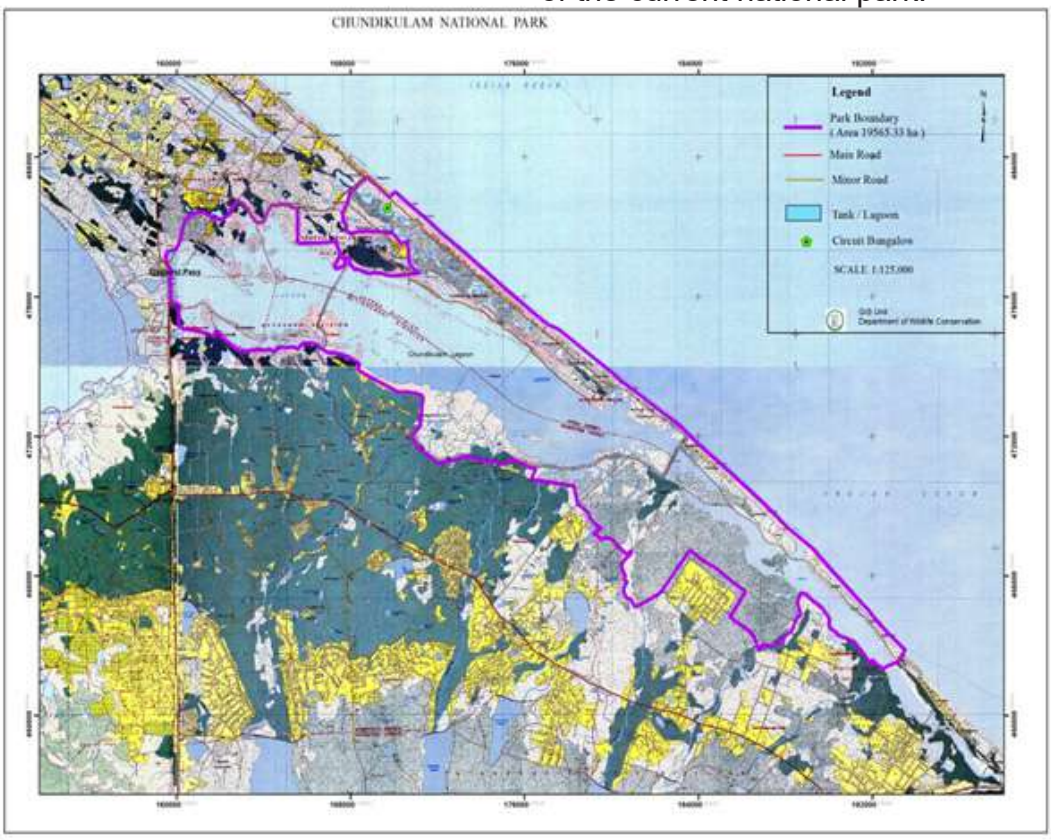
CONTENT

INTRODUCTION

1. Overview of Chundikulam National Park

Chundikulam National Park, located in the Northern Province of Sri Lanka covering three administrative districts namely Kilinochchi, Jaffna and Mulaitheevu, is a vital natural reserve that boasts a rich diversity of flora and fauna; mainly for its bird diversity, making it a significant ecological hotspot. Spanning approximately 19,500 hectares, the park is situated along the eastern coastline of the Jaffna Peninsula, bordered by the Indian Ocean to the east and the Chundikulam Lagoon to the west. This unique location, encompassing both terrestrial and aquatic ecosystems, contributes to the park's rich biodiversity, making it an area of considerable interest for conservationists, researchers and tourism sector alike.

Established as a wildlife sanctuary in 1938, Chundikulam was designated as a national park in 2015. This upgrade in status was a recognition of the park's ecological importance, particularly as a habitat for a variety of bird species. The demarcation of the national park was challenged due to the fact that there are private lands found within the boundary of the current national park.



The park is home to numerous resident and migratory birds, including flamingos, herons, and pelicans, which utilize the lagoon and its surrounding wetlands as feeding and breeding grounds. In addition to avian species, Chundikulam supports a diverse array of mammals, reptiles, amphibians, and plant species, many of which are unique to the region.

The park's landscape is characterized by its coastal and lagoon environments, with patches of mangrove forests, salt marshes, and sand dunes. These habitats provide vital ecosystem services, including coastal protection, water purification, and carbon sequestration. The rich biodiversity within these ecosystems underscores the importance of Chundikulam National Park as a conservation area, both for the preservation of species and the maintenance of ecological balance in the region.

2. Historical Context of Chundikulam National Park

The history of Chundikulam National Park is deeply intertwined with the broader environmental and socio-political history of Sri Lanka. The park's initial establishment as a wildlife sanctuary in 1938 was part of a broader colonial-era effort to protect the country's natural heritage. However, the park's development and conservation efforts were significantly hampered by the Sri Lankan Civil War, which lasted for more than three decades until it ended in 2009. During the conflict, much of the Northern Province, including Chundikulam, became inaccessible, leading to a lack of systematic conservation and research activities.

Following the end of the civil war, the government and various non-governmental organizations began focusing on the restoration and conservation of war-affected areas, including Chundikulam. The reclassification of Chundikulam as a national park in 2015 was a pivotal moment in its history, signaling a renewed commitment to protecting its biodiversity. This period also saw the return of scientific research to the area, with efforts aimed at assessing the impact of the war on the park's ecosystems and species populations.

The post-war period has been marked by a gradual increase in conservation activities, driven by both government initiatives and collaborations with local and international organizations. These efforts have included habitat restoration projects, anti-poaching measures, and community engagement programs aimed at promoting sustainable livelihoods. The recognition of Chundikulam's importance as a biodiversity hotspot has also led to an increase in the idea of promoting the site for eco-tourism, which, if managed sustainably, has the potential to provide economic benefits to local communities while supporting conservation goals.

3. The Current Survey: Objectives and Methodology

In light of the park's ecological significance and the historical challenges it has faced, the current survey conducted by the University of Jaffna, in collaboration with the Center for Children Happiness and Thinnavely Properties Group, represents a critical step in the ongoing efforts to catalogue and conserve the biodiversity of Chundikulam National Park. This survey, conducted over a period of more than four years (since 2021), aimed to provide a comprehensive inventory of the park's flora and fauna, contributing valuable data to the broader body of knowledge on Sri Lanka's biodiversity.

The primary objectives of the survey were to identify and document the species present in the park, assess the distribution of various populations, and evaluate the state of the park's habitats. This information is essential for guiding future conservation efforts, including habitat restoration, species protection, and the development of management plans that balance ecological preservation with sustainable use of the resources.

The survey methodology was designed to maximize the accuracy and comprehensiveness of the data collected. It involved a combination of fieldwork, laboratory analysis, and community engagement. Fieldwork teams, composed of experts in botany, zoology, and ecology, conducted systematic surveys across different habitats within the park, including mangroves, wetlands, and terrestrial forests. These teams employed a range of techniques, such as transect sampling, point count methods, water hole counting to gather data on species presence, abundance, and behavior. A map for potential walking track for trekking was also prepared.

This analysis was complemented by the use of GIS, including satellite imagery, to map the park's habitats and monitor changes over time. The integration of these diverse data sources allowed for a more detailed and accurate understanding of the park's biodiversity and ecological dynamics.

A key aspect of the survey was its emphasis on community involvement. Recognizing the importance of local knowledge and the need for community support in conservation efforts, the survey team engaged with residents of nearby villages, including those who rely on the park's resources for their livelihoods. Meetings were held to share information about the survey's objectives and to gather input from the community on their observations and concerns. This participatory approach not only enriched the data collected but also helped to build trust and foster a sense of shared responsibility for the park's future.

4. Significance of the Survey

The findings of this survey are expected to have significant implications for the conservation of Chundikulam National Park. By providing a detailed inventory of the park's species and habitats, the survey will serve as a baseline for future monitoring efforts, enabling conservationists to track changes in biodiversity and ecosystem health over time. This information will be crucial for identifying emerging threats, such as habitat degradation, climate change, and invasive species, and for developing strategies to mitigate their impact.

Moreover, the survey's emphasis on community engagement highlights the importance of integrating local perspectives into conservation planning. By involving local communities in the process, the survey not only enhances the quality of the data collected but also helps to ensure that conservation efforts are culturally sensitive and economically viable. This approach aligns with the broader goals of sustainable development, which seek to balance environmental protection with the well-being of human populations.

In conclusion, the survey conducted by the University of Jaffna, in collaboration with the Center for Children Happiness and Thinnavely Properties Group, represents a significant contribution to the conservation of Chundikulam National Park. By documenting the park's rich biodiversity and engaging with local communities, the survey provides a foundation for future research and conservation efforts that will help to preserve this unique and valuable ecosystem for generations to come.

Team members contributed to the survey

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3. Sharuka Selvarajah
4. Kugathasan Kiritharan
5. Mareen Tharmila Jeyaratnam

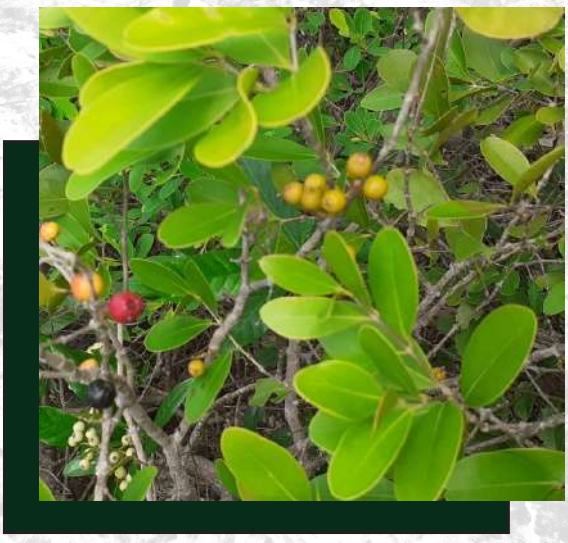
Species Catalogue for Major Flora

Syzygium cumini

Taxonomic Status: ***Syzygium cumini,*** commonly known as the Java plum or Indian blackberry, belongs to the family Myrtaceae.
Conservation Status: It is not currently listed as endangered and is widely distributed in tropical regions.
Economic Benefits: The fruit is highly valued for its medicinal properties, particularly in managing diabetes. The wood is also used in construction and furniture-making.

Drypetes sepiaria

Taxonomic Status: ***Drypetes sepiaria*** is part of the family Putranjivaceae.
Conservation Status: This species is not considered endangered and is common in its native range.
Economic Benefits: It is used in traditional medicine and as a natural fencing material due to its dense growth.



Breynia

Taxonomic Status: ***Breynia*** is a genus in the family Phyllanthaceae.
Conservation Status: Many Breynia species are not endangered, though some may have localized threats.
Economic Benefits: Some species are used in traditional medicine, while others are grown as ornamental plants.

Phoenix pusilla

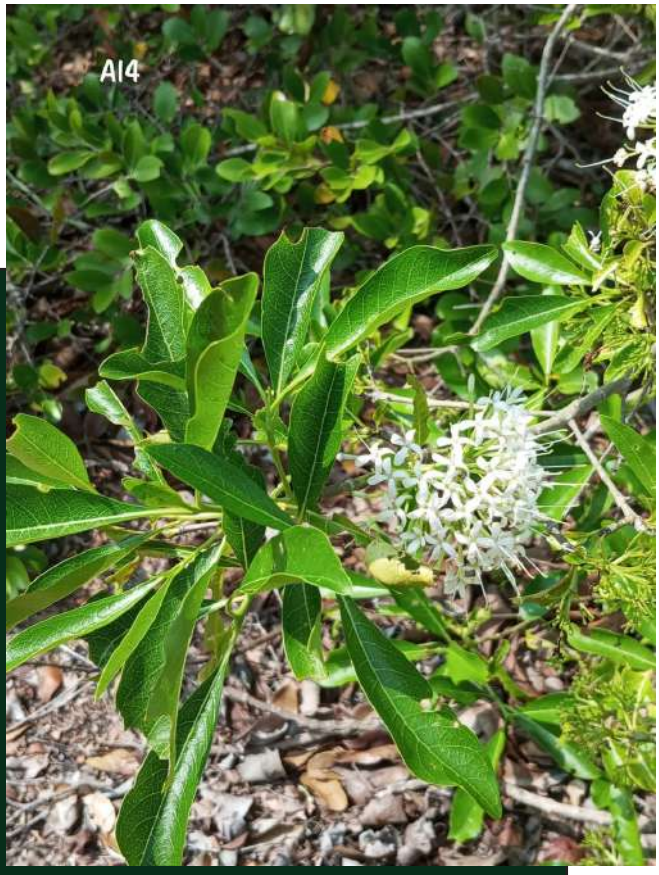
Taxonomic Status: ***Phoenix pusilla***, a species of dwarf palm, belongs to the family Arecaceae.
Conservation Status: It is not currently at risk of extinction.
Economic Benefits: It is used for its fibrous leaves in making ropes and mats and for its fruits.

Abrus precatorius

Taxonomic Status: ***Abrus precatorius,*** known as the rosary pea, is in the family Fabaceae.
Conservation Status: Abrus precatorius, known as the rosary pea, is in the family Fabaceae.
Economic Benefits: Despite its toxicity, it has applications in traditional medicine and jewelry.

Pavetta

Taxonomic Status: ***Pavetta*** is a genus in the family Rubiaceae.
Conservation Status: Some Pavetta species may be at risk due to habitat loss, though the genus as a whole is not endangered.
Economic Benefits: Used in traditional medicine and as ornamental shrubs.



Guilandina

Taxonomic Status: ***Guilandina*** is a genus in the family Fabaceae, formerly known as Caesalpinia.
Conservation Status: It is not listed as endangered.
Economic Benefits: The seeds of some species are used in traditional medicine and the wood for various purposes.

Cissus quadrangularis

Taxonomic Status: ***Cissus quadrangularis*** is part of the family Vitaceae.
Conservation Status: This species is widespread and not endangered.
Economic Benefits: Known for its medicinal properties, particularly in bone healing and joint health.

Euroschinus falcatus

Taxonomic Status: ***Euroschinus falcatus*** is a member of the family Anacardiaceae.
Conservation Status: It is not considered endangered.
Economic Benefits: The wood is used in construction, and the plant has ornamental value.

Sansevieria zeylanica

Taxonomic Status: ***Sansevieria zeylanica,*** part of the family Asparagaceae, is often used as an ornamental plant.
Conservation Status: It is not threatened.
Economic Benefits: The plant is used for its fibrous leaves in making ropes and has air-purifying properties.

Crinum ornatum

Taxonomic Status: ***Crinum ornatum*** belongs to the family Amaryllidaceae.**Conservation Status:** It is not currently endangered.

Economic Benefits: This plant is used in traditional medicine and is valued for its ornamental flowers.

Cerbera manghas

Taxonomic Status: ***Cerbera manghas,*** also known as the sea mango, is part of the family Apocynaceae.

Conservation Status: It is not endangered but is poisonous.

Economic Benefits: The plant is used in traditional medicine, though with caution due to its toxicity.

Olearia gardneri

Taxonomic Status: ***Olearia gardneri*** is a species in the family Asteraceae.
Conservation Status: It is not widely endangered but may face habitat-related threats.
Economic Benefits: Mainly used for ornamental purposes.

Quercus laeta

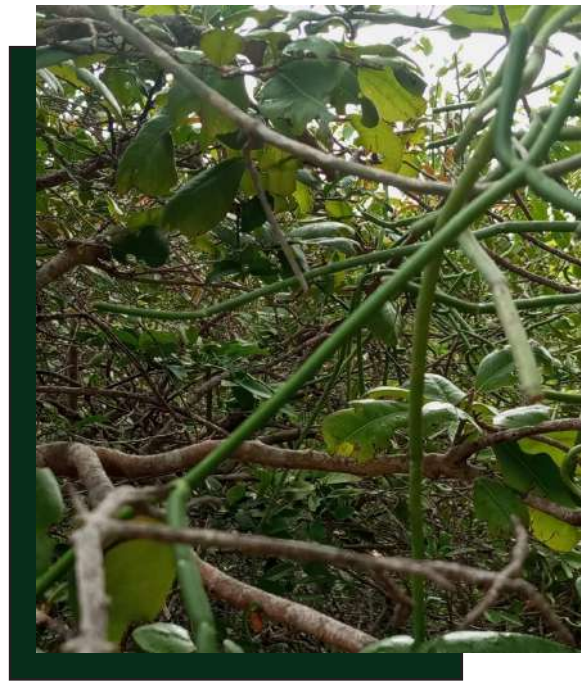
Taxonomic Status: ***Quercus laeta*** is a species in the family Fagaceae.
Conservation Status: Not endangered, with a stable population.
Economic Benefits: Its wood is valuable in construction and furniture-making.

Derris trifoliata

Taxonomic Status: ***Derris trifoliata*** belongs to the family Fabaceae.
Conservation Status: It is not endangered.
Economic Benefits: Known for its use in traditional medicine and as a natural insecticide.

Cynanchum viminale

Taxonomic Status :*Cynanchum viminale* is part of the family Apocynaceae.
Conservation Status: Not endangered, though some populations may be vulnerable.
Economic Benefits: Used in traditional medicine for treating various ailments.



Diospyros nummulariifolia

Taxonomic Status: ***Diospyros nummulariifolia*** is in the family Ebenaceae.
Conservation Status: Not widely endangered but may be at risk in some regions.**Economic Benefits:** Its wood is valued for its hardness and is used in construction and carving.

Ficus species

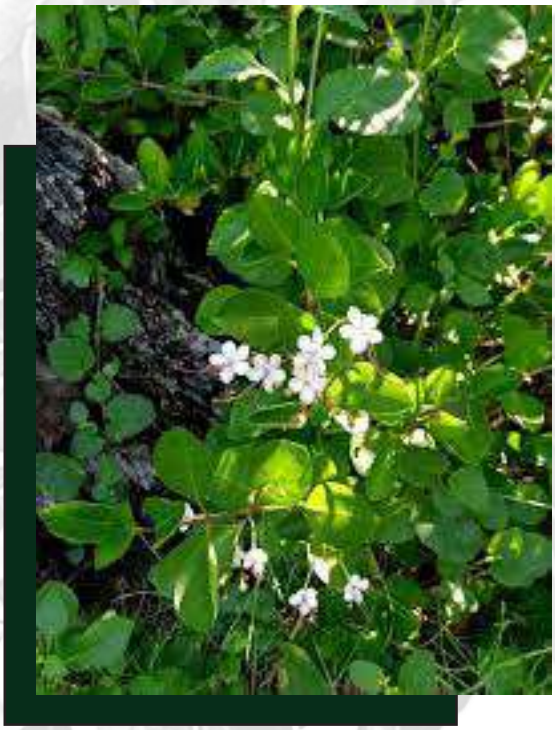
Taxonomic Status: ***Ficus*** is a large genus in the family Moraceae, including species like Ficus benghalensis (banyan tree) and Ficus religiosa (peepal tree).
Conservation Status: Most Ficus species are not endangered, although habitat loss could threaten certain species locally.
Economic Benefits: Ficus trees are valued for their ecological roles as keystone species, providing food and shelter to numerous animals. They are also used in traditional medicine, and some species have religious and cultural significance.

Excoecaria agallocha

Taxonomic Status: ***Excoecaria agallocha,*** commonly known as the milky mangrove, belongs to the family Euphorbiaceae.
Conservation Status: It is not currently endangered but faces threats from coastal development and habitat loss.
Economic Benefits: The plant is used in traditional medicine and for its latex, which has been studied for potential pharmaceutical uses, although it is toxic and must be handled with care.

Clerodendrum inerme

Taxonomic Status: ***Clerodendrum inerme*** is a species in the family Lamiaceae.
Conservation Status: This species is not endangered and is widely distributed in tropical regions.
Economic Benefits: It is commonly used as a hedge plant due to its dense growth and is also employed in traditional medicine for treating various ailments.



Vanda tessellata

Taxonomic Status: ***Vanda tessellata,*** an orchid species, belongs to the family Orchidaceae.
Conservation Status: It is not endangered but may be at risk due to overcollection and habitat destruction.
Economic Benefits: This species is highly valued in horticulture for its ornamental flowers and is also used in traditional Ayurvedic medicine.

Borassus flabellifer

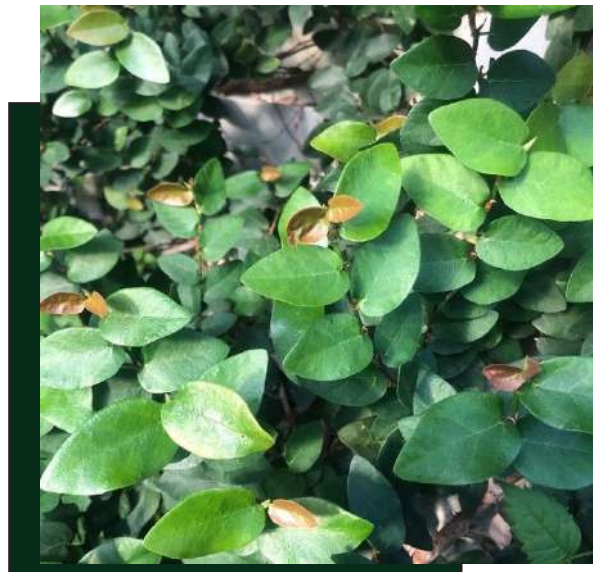
Taxonomic Status: ***Borassus flabellifer,*** commonly known as the palmyra, is a member of the family Arecaceae.
Conservation Status: It is not endangered and is widely cultivated across South and Southeast Asia.
Economic Benefits: The palmyra palm is of immense economic importance, providing food (fruits, sap), building materials, and traditional medicines. Its leaves are used for thatching and making handicrafts.

Senna auriculata

Taxonomic Status: ***Senna auriculata,*** also known as the tanner's cassia, is part of the family Fabaceae.
Conservation Status: It is not considered endangered and is commonly found in tropical and subtropical regions.
Economic Benefits: : Senna auriculata is widely used in traditional medicine, particularly for skin disorders and diabetes management. The plant is also used in the tanning industry, and its flowers are used in herbal teas.

Uncaria Tomentosa
Cat's claw

Family: Rubiaceae
Conservation Status: Generally not considered endangered, but overharvesting in some regions is a concern.
Economic Importance: Widely used in traditional medicine, particularly for anti-inflammatory and immunostimulant properties.



Gum Arabic Tree
Acacia nilotica

Family: Fabaceae
Conservation Status: Least Concern (IUCN).
Economic Importance: Valuable for gum Arabic, used in the food industry, traditional medicine, and livestock fodder.

Sage-leaved Alangium
Alangium salviifolium

Family: Cornaceae
Conservation Status: Not widely consid
ered threatened.
Economic Importance: Used in traditional medicine for treating snake bites and as a remedy for various ailments.

Grey Mangrove
Avicennia marina

Family: Acanthaceae
Conservation Status: Least Concern (IUCN).
Economic Importance: Important for coastal protection, traditional medicine, and as a habitat for marine life.

Saltwort
Batis maritima

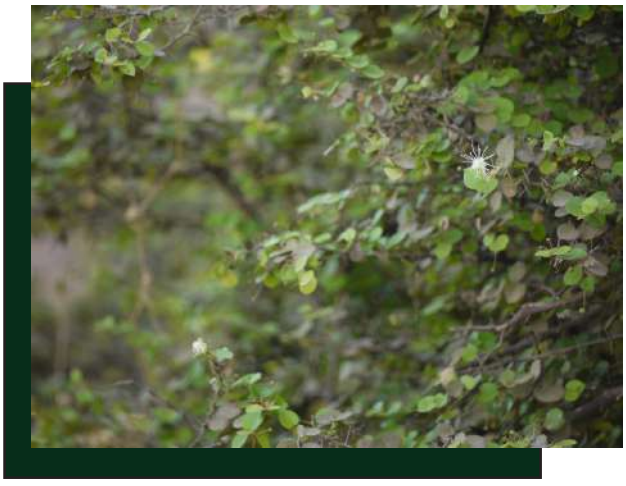
Family: Bataceae
Conservation Status: Least Concern.
Economic Importance: Used for soil stabilization in coastal areas and as forage for livestock in saline environments.

Bursera submoniliformis

Family: Burseraceae
Conservation Status: Specific data may be lacking, but many Bursera species are not considered at risk.
Economic Importance: Valued for its aromatic resin, which is used in traditional medicine and incense.

Round-leaved Caper
Capparis rotundifolia

Family: Capparaceae
Conservation Status: Not widely considered threatened.
Economic Importance: Used in traditional medicine and as a food source in some cultures.



Camphor Tree

Cinnamomum camphora

Family: Lauraceae
Conservation Status: Least Concern.
Economic Importance: Source of camphor, used in medicine, aromatherapy, and as a pest repellent.

Veldt Grape

Cissus quadrangularis

Family: Vitaceae
Conservation Status: Not considered at risk.
Economic Importance: Used in traditional medicine for bone healing and joint health.

Seaside Clerodendrum
Clerodendum inerme

Family: Conserva
Conservation Status: Not threatened.
Economic Importance: Used in traditional medicine and as an ornamental plant.

Tuckeroo
Cupaniopsis anacardioides

Family: Sapindaceae
Conservation Status: Least Concern.
Economic Importance: Commonly used in landscaping and as a shade tree.

Dodder
Cuscuta

Family: Convolvulaceae
Conservation Status: Generally not considered endangered, but some species may be locally threatened.
Economic Importance: Known as a parasitic plant, it can have negative impacts on agriculture but is also used in traditional medicine.

Hupeh Rosewood
Dalbergia hupeana

Family: Fabaceae
Conservation Status: Data deficient, but many Dalbergia species are overexploited for their timber.
Economic Importance: Valued for its high-quality timber, used in furniture and musical instruments.

OlneyaTesota

Desert Ironwood

Family: Fabaceae
Conservation Status:
Least Concern, but habitat destruction is a concern.
Economic Importance: The wood is extremely hard and used for carving, while the plant also plays a crucial role in desert ecosystems.

Sickle Bush

Dichrostachys cinerea

Family: Fabaceae
Conservation Status:
Not considered at risk.
Economic Importance: Used for fencing, fuelwood, and in traditional medicine.

Japanese Spindle

Euonymus japonicus

Family: Celastraceae
Conservation Status: Least Concern.
Economic Importance: Commonly used as an ornamental plant and for hedging.

White Fig

Ficus virens

Family: Moraceae
Conservation Status: Least Concern.
Economic Importance: Important in agroforestry systems and traditional medicine.

Euonymus Fortunei
Fortune's spindle

Family: Celastraceae
Conservation Status: Least Concern.
Economic Importance: Widely used as an ornamental plant in landscaping.

Green Ash
Fraxinus pennsylvanica

Family: Oleaceae
Conservation Status: Threatened by the emerald ash borer in North America.
Economic Importance: Valued for its timber and use in urban landscaping.

GarciniaSubelliptica

Fukugi Tree

Family: Clusiaceae
Conservation Status: Not widely considered threatened.
Economic Importance: Used in traditional medicine and as a windbreak in coastal areas.

Ligustrum lucidum

Glossy privet

Family: Oleaceae
Conservation Status: Least Concern, but considered invasive in some regions.
Economic Importance: Commonly used as an ornamental plant, especially for hedging.

Blolly
Guapira discolor

Family: Nyctaginaceae
Conservation Status: Data deficient.
Economic Importance: Used in traditional medicine and sometimes as an ornamental plant.

Grey Nicker
Guilandina bonduc

Family: Fabaceae
Conservation Status: Not widely considered threatened.
Economic Importance: Used in traditional medicine and for making beads and jewelry.

Creeping Indigo

Indigofera oblogifolia

Family: Fabaceae
Conservation Status: Not considered at risk.
Economic Importance: Known for its use in traditional medicine and as a dye plant.

Ixora

Ixora spp

Family: Rubiaceae
Conservation Status: Varies by species, with many common Ixora species not considered threatened.
Economic Importance: Widely used as an ornamental plant in gardens and landscaping.

Lantana

Lantana camara

Family: Verbenaceae
Conservation Status: Least Concern, but highly invasive in many regions.
Economic Importance: Used in traditional medicine, but it is also a major invasive species that negatively impacts ecosystems.

Henna

Lawsonia inermis

Family: Lythraceae
Conservation Status: Least Concern.
Economic Importance: Famous for its use in producing henna dye, used in body art and hair coloring.

Wood Apple

Limonia acidissima

Family: Rutaceae
Conservation Status: Not widely considered threatened.
Economic Importance: The fruit is used in traditional medicine and as food.

Malmea depressa

Family: Annonaceae
Conservation Status: Specific data may be lacking.
Economic Importance: Valued for its aromatic properties and sometimes used in traditional medicine.

Hippomane Mancinella

Manchineel

Family: Euphorbiaceae
Conservation Status: Not widely considered threatened.
Economic Importance: Extremely toxic, with limited use in traditional medicine due to its hazardous properties.

Manilkara concolor

Family: Sapotaceae
Conservation Status: Data deficient.**Economic Importance:** The wood is used for timber, and the fruit may be consumed in some cultures.

Catclaw Mimosa

Mimosa aculeaticarpa

Family: Fabaceae
Conservation Status: Not widely considered threatened.
Economic Importance: Used for erosion control and as fodder for livestock.

Viscum Album

Mistletoe

Family: Santalaceae
Conservation Status: Not considered at risk.
Economic Importance: Used in traditional medicine and cultural practices, particularly around Christmas.

Coastal Myoporum
Myoporum boninense

Family: Scrophulariaceae
Conservation Status: Least Concern.
Economic Importance: Used in coastal stabilization and traditional medicine.

Maclura Pomifera
Osage orange

Family: Moraceae
Conservation Status: Least Concern.
Economic Importance: The wood is used for fencing, and the fruit has traditional medicinal uses.

Date Palm

Phoenix dactylifera

Family: Arecaceae
Conservation Status: Least Concern.
Economic Importance: Cultivated for its edible fruit, dates, which are a significant food source in many cultures.

Wild Date Palm

Phoenix sylvestris

Family: Arecaceae
Conservation Status: Least Concern.
Economic Importance: Used for its sap, which can be fermented into a drink, and as an ornamental plant.

Wild Gardenia
Rothmannia capensis

Family: Rubiaceae
Conservation Status: Least Concern.
Economic Importance: Valued as an ornamental plant for its fragrant flowers.

Toothbrush Tree
Salvadora persica

Family: Salvadoraceae
Conservation Status: Least Concern.
Economic Importance: The twigs are traditionally used as natural toothbrushes (miswak) and have medicinal properties.

Juazeiro

Sarcomphalus joazeiro

Family: Rhamnaceae
Conservation Status: Not widely considered threatened.
Economic Importance: Used in traditional medicine and for livestock fodder.

Mangrove Apple

Scyphiphora hydrophylacea

Family: Rubiaceae
Conservation Status: Least Concern.
Economic Importance: Used in traditional medicine and as a coastal stabilizer.

Strychnine Tree
Strychnos

Family: Loganiaceae
Conservation Status: Some species are vulnerable due to habitat loss.
Economic Importance: Known for producing strychnine, a potent poison, but also used in traditional medicine in controlled amounts.

Java Plum
Syzygium cumini

Family: Myrtaceae
Conservation Status: Least Concern.
Economic Importance: The fruit is consumed and used in traditional medicine, particularly for managing diabetes.

Pink Trumpet Tree
Tabebuia heterophylla

Family: Bignoniaceae
Conservation Status: Least Concern.
Economic Importance: Valued for its ornamental flowers and used in landscaping.

Indian Laurel
Terminalia elliptica

Family: Combretaceae
Conservation Status: Least Concern.
Economic Importance: The wood is used for timber, and the bark has medicinal properties.

Portia Tree

Thespesia populnea

Family: Malvaceae
Conservation Status: Least Concern.
Economic Importance: The wood is used in carving, and the plant has traditional medicinal uses.

Chilean Bell Flower

Vallea stipularis

Family: Elaeocarpaceae
Conservation Status: Data deficient.
Economic Importance: Occasionally used as an ornamental plant.

Carissa Spinarum
White karonda

Family: Apocynaceae
Conservation Status: Not widely considered threatened.
Economic Importance: The fruit is edible, and the plant is used in traditional medicine.

Carissa Spinarum
White karonda

Family: Apocynaceae
Conservation Status: Not widely considered threatened.
Economic Importance: The fruit is edible, and the plant is used in traditional medicine.

Catalogue for Faunal species

Indian Pond Heron
Ardeola grayii

Taxonomy: Family Ardeidae
Conservation Status: Least Concern
Ecological Importance: Found in wetland habitats, it helps control insect and small fish populations.
Economic and Ecotourism Potential: Its distinctive appearance and behavior make it a draw for birdwatchers and eco-tourists visiting wetlands.

Little Egret
Egretta garzetta

Taxonomy: Family Ardeidae
Conservation Status: Least Concern
Ecological Importance: Prefers shallow waters where it preys on fish and invertebrates, aiding in aquatic ecosystem balance.
Economic and Ecotourism Potential: Its elegant white plumage is popular among birdwatchers and photographers.

Cattle Egret
Bubulcus ibis

Taxonomy: Family Ardeidae
Conservation Status: Least Concern
Ecological Importance: Often seen with livestock, where it helps reduce tick and insect populations.
Economic and Ecotourism Potential: Its unique association with cattle and distinctive plumage attract bird enthusiasts.

Asian Palm-Swift
Cypsiurus balasiensis

Taxonomy: Family Apodidae
Conservation Status: Least Concern
Ecological Importance: Feeds on insects in flight, contributing to insect population control.
Economic and Ecotourism Potential: Its aerial acrobatics and nesting habits in palm trees are of interest to bird watchers.

Little Cormorant
Microcarbo niger

Taxonomy: Family Phalacrocoracidae
Conservation Status: Least Concern
Ecological Importance: Effective fish hunter, which helps in maintaining fish population balance in aquatic ecosystems.
Economic and Ecotourism Potential: Popular in wetlands and lakes for its diving and fishing skills.

Pied Kingfisher
Ceryle rudis

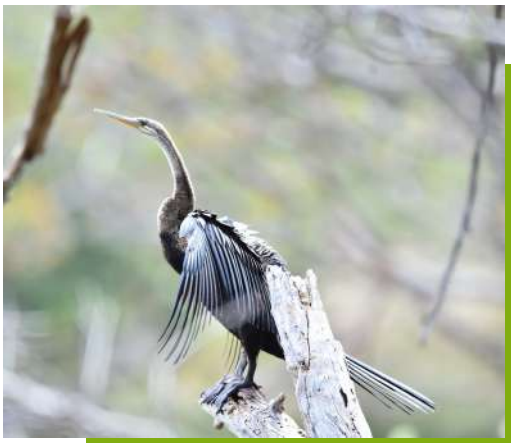
Taxonomy: Family Alcedinidae
Conservation Status: Least Concern
Ecological Importance: Its hunting behavior and role in controlling fish populations are crucial for wetland health.
Economic and Ecotourism Potential: Known for its striking plumage and fishing techniques, it is a favorite among bird watchers.

Indian Peafowl
Pavo cristatus

Taxonomy: Family Phasianidae
Conservation Status: Least Concern
Ecological Importance: Plays a role in seed dispersal and its elaborate courtship displays contribute to its ecological presence.
Economic and Ecotourism Potential: Highly sought after for its stunning plumage and display behavior, making it a major attraction in wildlife parks.

Great Thick-knee
Esacus recurvirostris

Taxonomy: Family Burhinidae
Conservation Status: Near Threatened
Ecological Importance: Inhabits riverine and coastal areas, where it preys on insects and small invertebrates.
Economic and Ecotourism Potential: Its distinctive appearance and behavior make it an interesting subject for bird watchers.



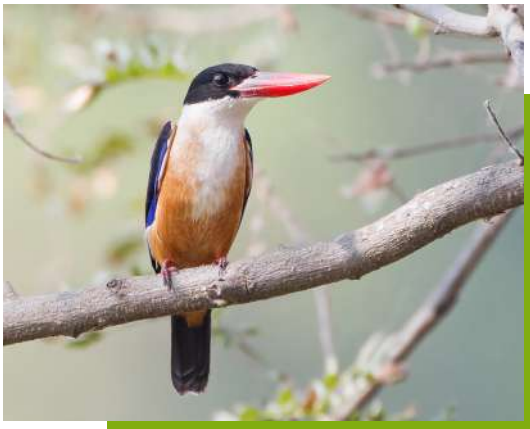
Oriental Darter

Anhinga melanogaster

Taxonomy: Family Anhingidae
Conservation Status: Near Threatened
Ecological Importance: Its unique hunting technique and role in controlling fish populations are important in wetland ecosystems.
Economic and Ecotourism Potential: The bird's striking appearance and diving skills attract bird enthusiasts and photographers.

Parrot

Taxonomy: Family Psittacidae
Conservation Status: Varies by species (e.g., Indian Ring-necked Parakeet - Least Concern)
Ecological Importance: Contributes to seed dispersal and forest health.
Economic and Ecotourism Potential: Popular in both captivity and the wild for their vibrant colors and intelligence, making them a key attraction in ecotourism.



Black-capped Kingfisher
Halcyon pileata

Taxonomy: Family Alcedinidae
Conservation Status: Least Concern
Ecological Importance: Feeds on fish and amphibians, thus aiding in the control of these populations.
Economic and Ecotourism Potential: Its vivid coloration and hunting skills make it a notable species for birdwatchers.

Brahminy Kite
Haliastur indus

Taxonomy: Family Accipitridae
Conservation Status: Least Concern
Ecological Importance: Scavenges and preys on small animals, contributing to ecosystem balance.
Economic and Ecotourism Potential: Known for its striking appearance and widespread presence in coastal areas, attracting bird enthusiasts.

Asian Openbill
Anastomus oscitans

Taxonomy: Family Ciconiidae
Conservation Status: Least Concern
Ecological Importance: Feeds on snails, helping control their populations in wetland ecosystems.
Economic and Ecotourism Potential: Its distinctive bill and feeding behavior are of interest to birdwatchers and those studying wetland ecology.

Painted Stork
Mycteria leucocephala

Taxonomy: Family Ciconiidae
Conservation Status: Near Threatened
Ecological Importance: Plays a role in wetland ecosystems by feeding on fish and amphibians.
Economic and Ecotourism Potential: Its vibrant plumage and large size make it a highlight for bird watchers and eco-tourists.

Black-headed Ibis
Threskiornis melanocephalus

Taxonomy: Family Threskiornithidae
Conservation Status: Near Threatened
Ecological Importance: Feeds on a variety of aquatic prey, contributing to ecosystem health.
Economic and Ecotourism Potential: Its striking black head and white body make it a prominent species for bird enthusiasts.

Black-winged Stilt
Himantopus himantopus

Taxonomy: Family Recurvirostridae
Conservation Status: Least Concern
Ecological Importance: Inhabits wetlands where it feeds on insects and small invertebrates, maintaining ecosystem balance.
Economic and Ecotourism Potential: Its elegant appearance and long legs make it a favorite among bird watchers.

Large-billed Crow
Corvus macrorhynchos

Taxonomy: Family Corvidae
Conservation Status: Least Concern
Ecological Importance: Scavenges and preys on small animals, playing a role in nutrient recycling.
Economic and Ecotourism Potential: Its intelligence and adaptability make it an interesting subject for study and observation.

Common Redshank
Tringa totanus

Taxonomy: Family Scolopacidae
Conservation Status: Least Concern
Ecological Importance: Found in wetlands where it feeds on insects and small invertebrates, contributing to habitat health.
Economic and Ecotourism Potential: Its distinctive call and feeding behavior attract birdwatchers.

Gull-billed Tern
Gelochelidon nilotica

Taxonomy: Family Laridae
Conservation Status: Least Concern
Ecological Importance: Feeds on fish and insects, aiding in maintaining balance in aquatic ecosystems.
Economic and Ecotourism Potential: Its distinctive appearance and behavior make it a highlight for bird watchers.

Little Ringed Plover
Charadrius dubius

Taxonomy: Family Charadriidae
Conservation Status: Least Concern
Ecological Importance: Inhabits riverbanks and wetlands, where it feeds on insects and small invertebrates, aiding in ecosystem balance.
Economic and Ecotourism Potential: Its distinctive behavior and habitat preferences attract bird watchers.

Tricolored Munia
Lonchura malacca

Taxonomy: Family Estrildidae
Conservation Status: Least Concern
Ecological Importance: Feeds on seeds and plays a role in seed dispersal, benefiting plant communities.
Economic and Ecotourism Potential: Its colorful plumage makes it a popular species for bird watchers.

Eurasian Collared Dove
Streptopelia decaocto

Taxonomy: Family Columbidae
Conservation Status: Least Concern
Ecological Importance: Found in urban and rural areas, it contributes to seed dispersal and ecosystem dynamics.
Economic and Ecotourism Potential: Its adaptability to various environments and gentle appearance make it a common sight in bird watching.

Western Spotted Dove
Spilopelia chinensis

Taxonomy: Family Columbidae
Conservation Status: Least Concern
Ecological Importance: Inhabits gardens and forests, contributing to seed dispersal and acting as prey for predators.
Economic and Ecotourism Potential: Known for its distinctive call and coloration, it attracts bird watchers.

Indian Blue Robin
Larvivora brunnea

Taxonomy: Family Muscicapidae
Conservation Status: Least Concern
Ecological Importance: Prefers forested and scrubby habitats, where it controls insect populations.
Economic and Ecotourism Potential: Its vibrant blue plumage and melodious song make it a favorite among bird enthusiasts.

Yellow-billed Babbler

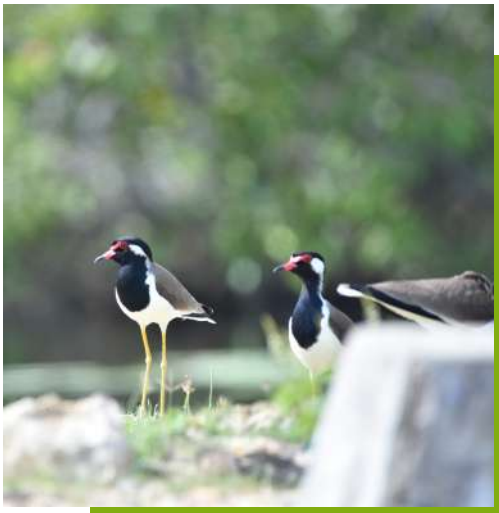
Turdoides affinis

Taxonomy: Family Leiothrichidae
Conservation Status: Least Concern
Ecological Importance: Found in open forests and urban areas, it plays a role in insect control.
Economic and Ecotourism Potential: Its social behavior and vibrant color make it of interest to bird watchers.

Red-vented Bulbul

Pycnonotus cafer

Taxonomy: Family Pycnonotidae
Conservation Status: Least Concern
Ecological Importance: Common in gardens and forests, it helps in insect control and seed dispersal.
Economic and Ecotourism Potential: Its cheerful song and bright colors attract bird watchers.

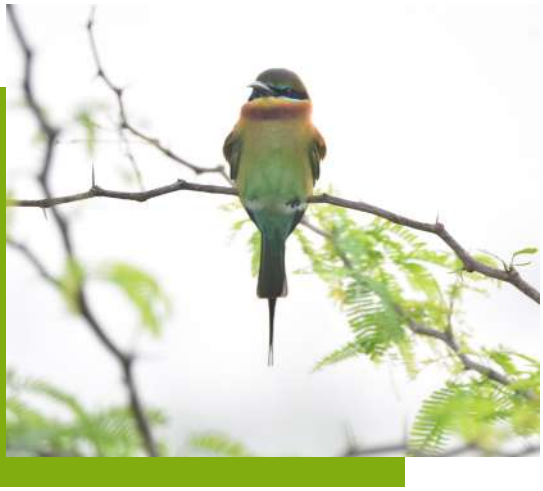


Red-wattled Lapwing
Vanellus indicus

Taxonomy: Family Charadriidae
Conservation Status: Least Concern
Ecological Importance: Inhabits open country and wetlands, where it feeds on insects and small invertebrates.
Economic and Ecotourism Potential: Its distinctive call and striking appearance are popular among bird enthusiasts.

Blue-tailed Bee-eater
Merops philippinus

Taxonomy: Family Meropidae
Conservation Status: Least Concern
Ecological Importance: Feeds on bees and other insects, aiding in insect population control.
Economic and Ecotourism Potential: Known for its vivid colors and aerial hunting skills, it attracts bird watchers.



Richard's Pipit
Anthus richardi

Taxonomy: Family Motacillidae
Conservation Status: Least Concern
Ecological Importance: Prefers grasslands and open areas, feeding on insects and seeds, which helps maintain habitat health.
Economic and Ecotourism Potential: Its distinctive call and elusive behavior make it of interest to bird enthusiasts.

Pheasant-tailed Jacana
Hydrophasianus chirurgus

Taxonomy: Family Jacanidae
Conservation Status: Least Concern
Ecological Importance: Inhabits wetlands, where it feeds on insects and plant matter, contributing to ecosystem health.
Economic and Ecotourism Potential: Its striking plumage and unique behavior in wetlands attract bird watchers.

White-breasted Kingfisher
Halcyon smyrnensis

Taxonomy: Family Alcedinidae
Conservation Status: Least Concern
Ecological Importance: Preys on fish and insects, playing a role in controlling these populations.
Economic and Ecotourism Potential: Known for its vivid colors and hunting prowess, it is popular among bird enthusiasts.

Asian Woollyneck
Ciconia episcopus

Taxonomy: Family Ciconiidae
Conservation Status: Least Concern
Ecological Importance: Feeds on small animals and insects in wetlands, aiding in population control.
Economic and Ecotourism Potential: Its distinctive woolly neck and size make it a notable species for bird watchers.

Fulvous Whistling Duck

Dendrocygna bicolor

Taxonomy: Family Anatidae
Conservation Status: Least Concern
Ecological Importance: Inhabits wetlands, where it feeds on aquatic plants and insects, contributing to habitat health.
Economic and Ecotourism Potential: Its social behavior and distinctive call are of interest to bird enthusiasts.

Purple Swamphen

Porphyrio porphyrio

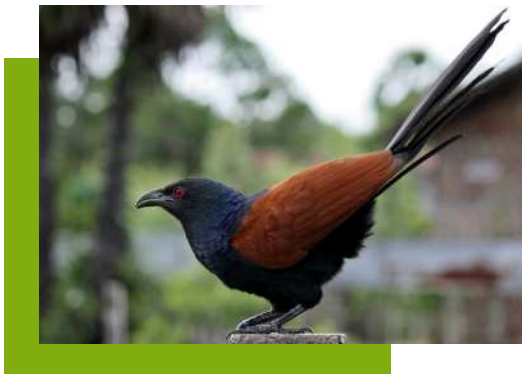
Taxonomy: Family Rallidae
Conservation Status: Least Concern
Ecological Importance: Feeds on aquatic plants and insects, playing a role in wetland ecosystem balance.
Economic and Ecotourism Potential: Its vibrant colors and interesting behavior attract bird watchers.

Grey Heron
Ardea cinerea

Taxonomy: Family Ardeidae
Conservation Status: Least Concern
Ecological Importance: Found in wetlands, it preys on fish and amphibians, maintaining aquatic ecosystem balance.
Economic and Ecotourism Potential: Its large size and hunting behavior make it a prominent species for bird watchers.

Greater Coucal
Centropus sinensis

Taxonomy: Family Cuculidae
Conservation Status: Least Concern
Ecological Importance: Inhabits forested and scrubby areas, where it feeds on insects and small animals.
Economic and Ecotourism Potential: Its distinctive call and appearance attract bird enthusiasts and eco-tourists.

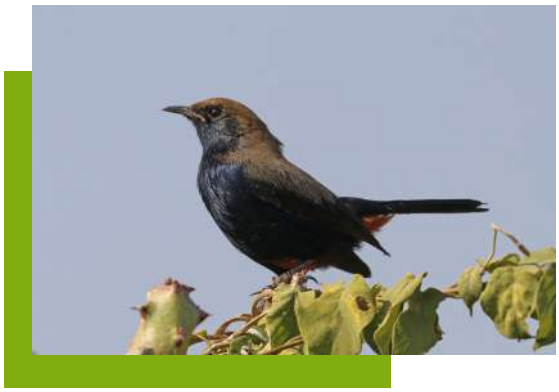


Common Myna
Acridotheres tristis

Taxonomy: Family Sturnidae
Conservation Status: Least Concern
Ecological Importance: Feeds on insects and seeds, playing a role in controlling pest populations and seed dispersal.
Economic and Ecotourism Potential: Its adaptability and presence in urban areas make it a common sight for bird watchers.

Indian Robin
Saxicoloides fulicata

Taxonomy: Family Muscicapidae
Conservation Status: Least Concern
Ecological Importance: Prefers open country and scrubland, where it controls insect populations.
Economic and Ecotourism Potential: Its colorful plumage and distinctive song make it a favorite among bird watchers.



Pied Bushchat
Saxicola caprata

Taxonomy: Family Muscicapidae
Conservation Status: Least Concern
Ecological Importance: Found in open areas and scrublands, where it preys on insects and helps control their populations.
Economic and Ecotourism Potential: Its striking appearance and active behavior attract bird watchers.

Greater Sri Lanka Flameback
Chrysocolaptes stricklandi

Taxonomy: Family Picidae
Conservation Status: Near Threatened
Ecological Importance: Important for forest health by excavating dead wood and feeding on insects.
Economic and Ecotourism Potential: Its striking appearance and role in forest ecology make it a key species for bird watchers in Sri Lanka.

Tawny Coster
Acrea terpsichore

Taxonomy: Family Nymphalidae
Conservation Status: Least Concern
Ecological Importance: Its larvae feed on host plants like Passiflora, contributing to plant reproduction.
Economic and Ecotourism Potential: Known for its vibrant orange and black wings, it attracts butterfly enthusiasts and is popular in butterfly gardens.

Plain Puffin
Appias indra

Taxonomy: Family Pieridae
Conservation Status: Least Concern
Ecological Importance: Pollinates flowers while feeding on nectar, aiding in plant reproduction.
Economic and Ecotourism Potential: Its elegant white and black coloration makes it a desirable species for butterfly watchers.

Lemon Emigrant
Catopsilia pomona

Taxonomy: Family Pieridae
Conservation Status: Least Concern
Ecological Importance: Its larvae feed on host plants like Cassia, impacting plant growth and reproduction.
Economic and Ecotourism Potential: Its bright yellow wings make it a striking addition to butterfly and insect exhibits.

Mottled Emigrant
Catopsilia pyranthe

Taxonomy: Family Pieridae
Conservation Status: Least Concern
Ecological Importance: Pollinates a variety of flowering plants while feeding on nectar.
Economic and Ecotourism Potential: Its distinctive mottled wings are attractive to butterfly watchers and contribute to butterfly conservation programs.

Lime Blue
Chilades lajus

Taxonomy: Family Lycaenidae
Conservation Status: Least Concern
Ecological Importance: Larvae feed on various plants, playing a role in plant health and ecosystem dynamics.
Economic and Ecotourism Potential: Its delicate blue coloration and small size make it a favorite among butterfly enthusiasts.

Plain Tiger
Danaus chrysippus

Taxonomy: Family Nymphalidae
Conservation Status: Least Concern
Ecological Importance: Acts as a pollinator and its larvae feed on milkweed, which helps in controlling plant populations.
Economic and Ecotourism Potential: Its striking orange and black wings make it a popular subject in butterfly watching and conservation.

Common Tiger
Danaus genutia

Taxonomy: Family Nymphalidae
Conservation Status: Least Concern
Ecological Importance: Similar to the Plain Tiger, it plays a role in pollination and plant control through its feeding habits.
Economic and Ecotourism Potential: Its vibrant coloration attracts butterfly watchers and contributes to local butterfly conservation efforts.

Jezebel
Delias eucharis

Taxonomy: Family Pieridae
Conservation Status: Least Concern
Ecological Importance: Pollinates a range of flowering plants and contributes to ecological balance.
Economic and Ecotourism Potential: Its beautiful yellow and black wings are highly valued in butterfly watching and conservation.

Gram Blue
Euchrysops cnejus

Taxonomy: Family Lycaenidae
Conservation Status: Least Concern
Ecological Importance: Its larvae feed on various legumes, affecting plant populations and ecosystem health.
Economic and Ecotourism Potential: Its subtle blue and brown coloring make it an interesting species for butterfly enthusiasts.

Common Crow
Euploea core

Taxonomy: Family Nymphalidae
Conservation Status: Least Concern
Ecological Importance: Feeds on a variety of plants and contributes to plant health through its feeding habits.
Economic and Ecotourism Potential: Its robust appearance and wide distribution make it a popular species for butterfly watchers.

Common Grass Yellow
Eurema hecabe

Taxonomy: Family Pieridae
Conservation Status: Least Concern
Ecological Importance: Pollinates flowering plants while feeding on nectar, impacting plant reproduction.
Economic and Ecotourism Potential: Its bright yellow color is appealing to butterfly enthusiasts and conservationists.

Grass Jewel
Freyeria putli

Taxonomy: Family Lycaenidae
Conservation Status: Least Concern
Ecological Importance: Its larvae feed on various grasses, helping maintain plant health and ecosystem balance.
Economic and Ecotourism Potential: Its small size and delicate beauty attract butterfly watchers and conservationists.

Zebra Blue
Leptotes plinius

Taxonomy: Family Lycaenidae
Conservation Status: Least Concern
Ecological Importance: Feeds on legumes, playing a role in plant health and ecosystem dynamics.
Economic and Ecotourism Potential: Its striped pattern and small size make it a fascinating species for butterfly enthusiasts.

Common Sailor
Neptis hylas

Taxonomy: Family Nymphalidae
Conservation Status: Least Concern
Ecological Importance: Larvae feed on host plants, affecting plant health and ecosystem dynamics.
Economic and Ecotourism Potential: Its striking black and white patterns attract butterfly watchers and contribute to conservation efforts.

Crimson Rose
Pachliopta hector

Taxonomy: Family Papilionidae
Conservation Status: Least Concern
Ecological Importance: Acts as a pollinator and contributes to ecosystem balance through its feeding habits.
Economic and Ecotourism Potential: Its vivid red and black coloration makes it a sought-after species for butterfly enthusiasts and eco-tourists.

Common Mormon
Papilio polytes

Taxonomy: Family Papilionidae
Conservation Status: Least Concern
Ecological Importance: Plays a role in pollination and contributes to the health of various plant species.
Economic and Ecotourism Potential: Its elegant appearance and widespread presence make it a favorite among butterfly watchers.

Blue Tiger
Tirumala limniace

Taxonomy: Family Nymphalidae
Conservation Status: Least Concern
Ecological Importance: Feeds on various plants, aiding in plant health and ecosystem dynamics.
Economic and Ecotourism Potential: Its vibrant blue coloration and distinctive markings attract butterfly enthusiasts.

Crimson-speckled Flunkey
Utethesia pulchella

Taxonomy: Family Erebidae
Conservation Status: Least Concern
Ecological Importance: Its larvae feed on a variety of host plants, contributing to plant health.
Economic and Ecotourism Potential: Its striking colors and unique appearance make it an attractive species for butterfly watchers.

Skipper

Taxonomy: Family Hesperiidae
Conservation Status: Varies by species (e.g., Common Skipper - Least Concern)
Ecological Importance: Feeds on nectar and contributes to pollination; its larvae feed on grasses.
Economic and Ecotourism Potential: Known for their fast flight and small size, skippers are of interest to butterfly enthusiasts and conservationists.

Dragonfly

Taxonomy: Order Odonata
Conservation Status: Varies by species (e.g., Pantala flavescens - Least Concern)
Ecological Importance: Predatory insects that help control mosquito populations and other small invertebrates.
Economic and Ecotourism Potential: Their vibrant colors and aerial prowess make them a popular subject in eco-tourism and insect watching.

Pantala Flavescens
Pantala flavescens

Taxonomy: Family Libellulidae
Conservation Status: Least Concern
Ecological Importance: Known for long migrations and significant roles in controlling insect populations.
Economic and Ecotourism Potential: Its migratory behavior and vibrant coloration attract dragonfly enthusiasts and eco-tourists.

Locust

Taxonomy: Family Acrididae
Conservation Status: Varies by species (e.g., Desert Locust - Varies)
Ecological Importance: Can impact plant populations through feeding and migration.
Economic and Ecotourism Potential: While often considered pests due to their potential for agricultural damage, they are also studied for their ecological roles and migratory patterns.

Carpenter Bee
Xylocopa

Taxonomy: Family Apidae
Conservation Status: Varies by species (e.g., Xylocopa violacea - Least Concern)
Ecological Importance: Solitary bees that are important pollinators for a variety of plants.
Economic and Ecotourism Potential: Their role in pollination and interesting behaviors make them important for both scientific study and eco-tourism.

Halictus sp.
Sweat Bees

Taxonomy: Family: Halictidae
Order: Hymenoptera
Conservation Status: NVaries by species; some are common, while others may be at risk.
Ecological Potential: These bees are essential pollinators, contributing to the health of ecosystems and agriculture.
Economic Potential: Their pollination services are vital for many crops, making them economically significant for agriculture.

Blow Flies
Chrysomya

Taxonomy: Family: Calliphoridae
Order: Diptera
Conservation Status: Not evaluated (IUCN Red List).
Ecological Potential: Chrysomya species are important decomposers and play a crucial role in nutrient cycling. They are also used in forensic entomology.
Economic Potential: While they are important in forensic science, they can also be pests, especially in livestock industries.

Gray Langur
Semnopithecus spp.

Taxonomy: Family Cercopithecidae
Conservation Status: Varies by species (e.g., Hanuman Langur - Least Concern)
Ecological Importance: Plays a role in seed dispersal and forest dynamics.
Economic and Ecotourism Potential: Its social behavior and presence in temples and forests make it a popular attraction for eco-tourists and wildlife enthusiasts.

Grey Mongoose
Herpestes edwardsii

Taxonomy: Family: Herpestidae
Order: Carnivora
Conservation Status: Least Concern (IUCN Red List). The species is widespread and relatively common across its range.
Ecological Potential: The grey mongoose plays an essential role in controlling populations of small vertebrates and invertebrates, helping maintain ecological balance.
Economic Potential: Though not economically significant, they have an indirect impact by controlling pests.

Sri Lankan Jackal
Canis aureus naria

Taxonomy: Family: Canidae
Order: Carnivora
Conservation Status: Least Concern (IUCN Red List). The species is adaptive and can thrive in various habitats, though they face threats from hunting and habitat loss.**Ecological Potential:** Jackals play a vital role as scavengers, contributing to the cleanliness of the ecosystem by consuming carrion.
Economic Potential: Like the mongoose, their primary economic significance lies in pest control.

The following fauna are present in the park as per the information provided by the community live in the surroundings:

Fishing Cat (*Prionailurus viverrinus*)

The Fishing Cat (Prionailurus viverrinus) is a medium-sized wild cat from the Felidae family, native to South and Southeast Asia. It is classified as "Vulnerable" by the IUCN due to habitat loss and poaching. This species is vital for controlling fish and amphibian populations in its habitat, helping maintain aquatic ecosystem balance. Economically, it holds potential for ecotourism as its elusive nature and specialized diet make it a sought-after sight for wildlife enthusiasts and photographers.

Asian Palm Civet (*Paradoxurus hermaphroditus*)

The Asian Palm Civet (Paradoxurus hermaphroditus) is a member of the Viverridae family and is classified as "Least Concern" by the IUCN. It is widely distributed across South and Southeast Asia and plays a key role in seed dispersal, aiding forest regeneration. Economically, it is known for its role in the production of civet coffee, where beans are processed through its digestive system to enhance flavor. Its unique coffee production process and interesting behaviors make it a potential attraction for ecotourism.

Golden Palm Civet (*Paradoxurus zeylonensis*)

The Golden Palm Civet (Paradoxurus zeylonensis), part of the Viverridae family, is endemic to Sri Lanka and classified as "Near Threatened" by the IUCN. This species contributes to seed dispersal and forest health through its fruit consumption. Its distinct appearance and rarity make it a notable species for ecotourism, although conservation efforts are essential to protect its dwindling habitat and ensure sustainable tourism practices.

Jungle Rabbit (*Nesolagus netscheri*)

The Jungle Rabbit (Nesolagus netscheri), also known as the Bornean Rabbit, belongs to the Leporidae family and is native to the rainforests of Borneo and Sumatra. It is classified as "Endangered" by the IUCN due to habitat destruction and hunting. This species is important for maintaining plant diversity through its grazing behavior. Its elusive nature and rarity can attract wildlife enthusiasts and conservationists interested in preserving rainforest ecosystems, contributing to ecotourism.

Wild Boar (Sus scrofa)

The Wild Boar (Sus scrofa) is a member of the Suidae family, distributed across Eurasia and North Africa. It is classified as "Least Concern" by the IUCN. Wild boars play a significant role in ecosystem engineering through their foraging, which helps in seed dispersal and soil aeration. Economically, they are a popular game species, and their presence in various habitats can attract tourists for hunting and wildlife observation, enhancing ecotourism opportunities.

Bat Species

Various bat speciesbelong to the Chiroptera order may be present. While many bat species are classified as "Least Concern," some face conservation threats. Bats are crucial for insect control, pollination, and seed dispersal, which supports ecosystem health. They also offer opportunities for ecotourism through bat-watching tours, where enthusiasts can observe their unique behaviors and ecological roles.

Toque Macaque (*Macaca sinica*)

The Toque Macaque (Macaca sinica), part of the Cercopithecidae family, is native to Sri Lanka and classified as "Endangered" by the IUCN. It is important for seed dispersal and forest health, as its foraging activities contribute to plant regeneration. The toque macaque's social behaviors and interactions with its environment make it a fascinating species for ecotourism, particularly in Sri Lanka, where it attracts researchers and tourists interested in primate behavior and conservation

There were reports on the citing on elephants, sblh bear a deer, They may not be residental in the area as we couldn't verify their presence crocodiles are reported from the surroundings as wel.

The major habitats identified from the sampling sites

Grasslands (Dry):

The dry grasslands, which is predominant in most sampling locations, in Chundikulam National Park are crucial for maintaining ecosystem balance. They provide essential feeding grounds for herbivores and serve as key habitats for various bird and insect species. These areas also support plant species adapted to dry conditions, which contribute to soil stability and prevent erosion. By sustaining a diverse range of plant and animal life, dry grasslands play a critical role in supporting the park's overall biodiversity.

Wetlands (Ponds, Marsh, Lagoon):

Wetlands such as ponds (more than 14 small to medium tanks were observed), marshes, and lagoons are vital for the park's ecological balance. They offer critical breeding and feeding habitats for numerous bird species, including waterfowl and waders, as well as a range of aquatic insects. These areas also help in maintaining water levels and nutrient cycling, which support surrounding terrestrial habitats. Wetlands act as natural water filters, improving water quality and contributing to the park's overall health.

Shrubby Forests:

Shrubby forests provide essential cover and nesting sites for various bird species and small mammals. They contribute to biodiversity by supporting a range of plant species that offer food and shelter for wildlife. These forests also play a role in soil conservation and water retention, helping to maintain the park's hydrological balance and prevent erosion.

Thorny Bushes:

Thorny bushes are significant in the park's ecosystem as they offer protection and food sources for numerous animals, including birds, insects, and small mammals. They are found mostly in patches in all the sampling location. The patchy distribution may be a reason for lesser mega fauna diversity. The dense, thorny structure of these bushes provides critical shelter from predators and harsh environmental conditions. Additionally, these habitats contribute to plant diversity and help in stabilizing soil, which is essential for preventing erosion and maintaining ecological balance.

Sand Dunes:

Sand dunes, which are predominate the Eastern part of the National park, are important for maintaining the park's ecological stability. They provide unique habitats for specialized plant and animal species adapted to sandy environments. Sand dunes help in controlling wind and water erosion, contributing to the stabilization of the surrounding landscape. They also support a range of flora and fauna that play a role in nutrient cycling and overall ecosystem health. Most of the sand dunes were disturbed and partly removed.

Summary: Findings on Biodiversity in Chundikulam National Park

Rich Bird and Insect Diversity Observed Throughout the Year

Chundikulam National Park showcases a remarkable array of bird and insect species throughout the year. The park's varied habitats support diverse avian populations, with migratory and resident species observed regularly. Birds such as the Indian Pond Heron (Ardeola grayii), Little Egret (Egretta garzetta), and the Black-headed Ibis (Threskiornis melanocephalus) are frequently sighted. Insect diversity is equally impressive, with numerous butterfly species like the Tawny Coster (Acrea terpsichore) and dragonflies such as Pantala flavescens contributing to the park's ecological richness. This ongoing diversity highlights the park's role as a crucial habitat for numerous species and underscores its importance in regional biodiversity conservation.

Local Utilization of Natural Resources by Villagers

The park's natural resources are utilized by local villagers, particularly for harvesting fruits. Species such as Manilkara hexandra, known locally as "Paalai," and Jamun (Syzygium cumini) or "Naaval," are gathered during the fruiting season. This practice not only reflects the park's role in local livelihoods but also demonstrates the intersection of human activity and natural resource management within the park. Sustainable harvesting practices are essential to ensure that these activities do not negatively impact the park's biodiversity.

Seasonal Dryness Impacting Water Bodies

From April to September, the park experiences a pronounced dry period, leading to the significant reduction or complete drying up of many ponds. This seasonal variation affects the availability of water for wildlife and can influence the behavior and distribution of both bird and insect species. The dry conditions may also impact the availability of breeding and feeding grounds for water-dependent species, thereby influencing overall biodiversity patterns in the park.

Trekking and Camping Opportunities

Trekking in Chundikulam National Park is feasible but limited by seasonal weather conditions. The hot weather and reduced bird activity from June to October can make trekking less enjoyable during these months. However, outside this period, the park offers excellent opportunities for trekking enthusiasts to explore its diverse landscapes and wildlife. Additionally, camping along the park's beaches presents an attractive option for visitors. The integration of community-based tourism with camping activities can provide a dual benefit: enhancing visitor experience while supporting local communities through tourism-related activities. Developing eco-friendly camping facilities and promoting responsible tourism practices will be key in balancing visitor enjoyment with conservation efforts.

From the community

From 2022 to 2024, the team engaged with government officials, community-based organizations (CBOs), civil society organizations (CSOs), and local residents—including former hunters who were active in the area decades ago. We conducted one-on-one meetings and focus group discussions using a structured set of questions. The key findings are summarized below:

- Chundikulam Park is widely recognized as a valuable resource that sup ports the livelihoods of local communities.
- Residents acknowledge its ecological importance and express a strong willingness to protect it.
- The park's once-rich biodiversity is declining, with sightings of larger mammals such as bears, deer, and leopards becoming increasingly rare.
- Elephants pose a significant threat to the livelihoods of fishermen and other individuals who travel across the park.
- One of the most pressing threats, particularly in the Kallaru area, is ille gal sand mining, which is occurring at an alarming rate. Large pits have already formed within the park as a result.
- Some community members had their land acquired during the park's gazette notification and are now seeking its return.

The team sincerely acknowledge the permission granted by the Department of Wildlife Conservation, Sri Lanka.