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OF WILD FAUNA AND FLORA



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CONSERVATION STRATEGIES FOR PANGOLINS (PHOLIDOTA: MANIDAE)

This document has been submitted by the Philippines at the request of IUCN in relation to agenda item 75.*

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CONSERVATION STRATEGIES FOR PANGOLINS (PHOLIDOTA: MANIDAE)

INFORMATION DOCUMENT FOR THE 18TH MEETING OF THE CONFERENCE OF THE PARTIES TO CITES

17 – 28 AUG 2019, GENEVA, SWITZERLAND

Prepared by the Philippines and the IUCN SSC Pangolin Specialist Group.

Introduction

1. All species of pangolin (Pholidota: Manidae) are threatened with overexploitation for local and international use, and trafficked internationally in high volumes. Pangolins are listed as Critically Endangered, Endangered, or Vulnerable on The IUCN Red List of Threatened Species (IUCN, 2019). At CITES CoP18, the Parties adopted Res. Conf. 17.10 on the *Conservation of and trade in pangolins*. This Resolution, among other things, “urges pangolin range States to work with appropriate bodies to develop and implement in situ pangolin management and conservation programmes, which include population assessments, the making of non-detriment findings for trade in the species, monitoring, and management and conservation measures.”
2. In 2017 the IUCN SSC Pangolin Specialist Group collaborated with the IUCN SSC Conservation Planning Specialist Group, IUCN SSC Asian Species Action Partnership and Wildlife Reserves Singapore to develop a regional conservation strategy for the Sunda pangolin (*Manis javanica*). The strategy was developed at a workshop held at Wildlife Reserves Singapore which convened 53 participants, including government representatives, conservation scientists and zoo professionals.
3. In 2018, the IUCN SSC Pangolin Specialist Group collaborated with the Palawan Council for Sustainable Development Staff (PCSDS), the Katala Foundation and the Zoological Society of London, to develop a conservation strategy for the Philippine (or Palawan) pangolin (*M. culionensis*). A workshop was held in Puerto Princesa City, Palawan that was attended by 49 participants from government agencies, conservation practitioners, zoo professionals, enforcement agencies, and other experts. Both strategies were developed following the IUCN SSC Conservation Planning Specialist Group’s [One Plan Approach](#).
4. The aim of this document is to present the vision, goals, objectives and actions of the aforementioned conservation strategies. The regional Sunda pangolin strategy is presented in pages 2– 8, and the Philippine pangolin strategy in pages 9–16. The final versions each document will be published on the IUCN SSC Pangolin Specialist Group website (www.pangolinsg.org) in 2019.
5. Acronyms are detailed in Annex 1.

Regional Strategy for Sunda pangolin 2018-2028

Vision

The 25 year vision developed for the Sunda pangolin is: *“The Sunda Pangolin is secure and thriving in a variety of habitats across its entire range. Threats have been abated and research has provided a better understanding of this unique species, which is locally and globally appreciated.”*

Goals, objectives and actions

GOAL 1: Change consumer behaviour to reduce demand for pangolin parts and products.

Demand for pangolin parts and products, primarily scales and meat, is driving poaching and the complex supply chain of traffickers, traders and consumers. Changing consumer behaviour to reduce demand for pangolin parts and products, as well as reducing supply-side influence on demand, is essential to combatting illegal trade. Key actions include understanding consumer demand to develop informed behaviour change interventions; supporting law enforcement to reduce the ability of consumers to purchase pangolin products; and understanding trafficking chains to effect behaviour change along the supply chain.

Objective 1.1: Reduce consumer demand for pangolin products						
No.	Action	Location	Responsibility	Timeline	Measurable	Collaborators / Partners
1.1.1	Undertake research to understand the full range of pangolin uses, motivations for use and key target audiences, to inform the prioritisation and development of appropriate behaviour change interventions.	China, Vietnam, Malaysia, Indonesia, the U.S. and other existing and emerging key markets.	Save Vietnam's Wildlife, USAID Wildlife Asia, WCS-Indonesia	5 years	Research undertaken and results published.	Universities, TRAFFIC, ZSL, and other NGOs
1.1.2	Develop and implement evidence based, targeted behaviour change interventions to reduce specific types of demand for pangolin parts (e.g. 'status-enhancing consumption' of pangolins, medicinal use).	China, Vietnam and other existing and emerging markets.	USAID Wildlife Asia, TRAFFIC, WWF-Vietnam, USAID Saving Species, ENV	5 years	Interventions funded, designed, implemented, evaluated and results reported.	ZSL, Save Vietnam's Wildlife, other universities and NGOs
1.1.3	Develop a framework for monitoring and evaluating the impact of behaviour change campaigns on reducing demand for pangolins.	Global	TRAFFIC, USAID Saving Species, USAID Wildlife Asia, WCS	5 years	Working Group formed to develop framework; Monitoring and Evaluation Framework developed.	ZSL, University of Oxford

1.1.4	Identify and implement ways to work with law enforcement agencies to reduce the ability of consumers to purchase/access pangolin products.	China, Vietnam, and other existing and emerging markets.	TRAFFIC, WCS, USAID Wildlife Asia (China), Save Vietnam's Wildlife, ENV	5 years	Strategies developed, implemented, evaluated and reported.	Universities, NGOs, other stakeholders
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Objective 1.2: Reduce supply-side influence on consumer demand

No.	Action	Location	Responsibility	Timeline	Measurable	Collaborators / Partners
1.2.1	Undertake research to identify and understand all actors in the supply chain and the scope of their influence on consumers.	All stages of the supply chain.	Wildlife Alliance (Cambodia)	5 years	Research undertaken and results published.	TRAFFIC, ZSL, and universities and other NGOs
1.2.2	Design and implement strategies to effect behaviour change among key actors in the pangolin supply chain (e.g. medicinal practitioners and pharmaceutical sector, transport sector, hospitality sector, business sector) in order to reduce their influence on consumer demand.	All stages of the supply chain.	Wildlife Alliance (Cambodia) Save Vietnam's Wildlife, ENV, TRAFFIC, USAID Saving Species, WWF-Vietnam (Vietnam) USAID Wildlife Asia (China)	5 years	Strategies funded, designed, implemented, evaluated and reported.	Universities, NGOs, other stakeholders

1.2.3	Identify and implement ways to work with law enforcement to reduce supplier ability to sell/ market pangolin products.	China, Vietnam and other existing and emerging markets	TRAFFIC, WCS, USAID Wildlife Asia, Save Vietnam's Wildlife, ENV	5 years	Strategies developed, implemented, evaluated and reported.	Universities, NGOs, other stakeholders
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GOAL 2: Combat illegal trade by strengthening policy and law enforcement.

The Sunda pangolin is severely threatened by high levels of trafficking. Combatting pangolin trafficking in range, transit and consumer countries is often a low priority and lack of capacity and resources impede effective enforcement. Existing legislation is often not applied fully and there is a need to ensure the implementation of international agreements, including CITES, to combat trafficking. To address this threat it is necessary to raise the priority of combatting wildlife trafficking, including pangolins, in range, transit and consumer countries. It may be necessary to increase the legal protection for the Sunda pangolin (as well as all other species of pangolin). There is also a need to increase the profile and knowledge of Sunda pangolins within responsible authorities, particularly the threat from trafficking and potential solutions to this problem. This could be achieved by supporting range states to build capacity to enforce laws effectively, by developing and disseminating a “pangolin trafficking resource kit”, and by communicating achievements through the Pangolin SG and its networks.

Objective 2.1: Review and where necessary strengthen, legislation affording protection to pangolins					
No.	Action	Responsibility	Timeline	Measurable	Collaborators/ Partners
2.1.1	Identify gaps in national legislation protecting pangolins (identified priorities include: Indonesia, Lao PDR, Thailand and Vietnam).	Pangolin SG, WCS	2 year	Resources secured; report published on gaps and suggested amendments.	Legal atlas, legal experts
2.1.2	Provide support, where necessary, to range states to amend legislation affording protection to pangolins.	All range states, other CITES Parties, qualified experts.	On-going	No. of agenda items on legislation in pangolin range states at CITES meetings; no. of range states that CITES is providing support to on legislative reform; no. of pieces of national legislation amended.	ZSL, Save Vietnam's Wildlife

2.1.3	Develop pangolin trade resource kit, including; identification guide; sampling guide for large seizures of scales; best practice guidelines on handling, rescue and rehabilitation; guidance on immediate and long-term placement of animals; catalogue of suitable housing facilities for short- and long-term placement.	TRAFFIC, USAID Saving Species, USAID Wildlife Asia, WCS, Pangolin SG	2 years	Resource kit developed and shared with CITES Parties.	ZSL, USAID
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GOAL 3: Engage local communities to participate in conservation processes.

Preventing poaching at the site level and effectively conserving Sunda pangolins requires the support and active participation of local communities and indigenous peoples. Genuine, long-term buy-in across the species' range is needed, which requires locally appropriate community-focused interventions.

Research into the dependence of local communities and indigenous peoples on the Sunda pangolin, an understanding of local context regarding awareness of legislation, customary rights (e.g., hunting rights), attitudes and behaviour towards pangolins, and local livelihood aspirations, will be needed to support the development of partnerships and programmes with local people.

Objective 3.1: Ensure local communities and indigenous peoples are active partners in Sunda pangolin conservation and prevent poaching at the site level through locally appropriate community-centred interventions.

No.	Action	Responsibility	Timeline	Measurable	Collaborators / Partners
3.1.1	Determine the most appropriate means of securing the long term and genuine buy-in of local communities to Sunda pangolin conservation at sites across its range and develop and implement programmes.	Programs for doing this developed and implemented by stakeholders and organisations who are working at a site with field based programmes.	On-going	No. of projects with long-term and genuine buy-in of local communities to Sunda pangolin conservation at sites across its range.	IUCN CEESP/ SSC SULi

3.1.2	Conduct research to determine the dependence of local communities on the Sunda pangolin, their attitudes and behaviour towards pangolins, and awareness of relevant legislation in order to guide future actions.	Programs for doing this developed and implemented by stakeholders and organisations who are working at a site with field based programmes.	3 years	No. of studies conducted; no of studies published.	Wildlife Asia, WCS, FFI, WWF, Save Vietnam's Wildlife, ZSL
3.1.3	Facilitate targeted youth education programs in local communities within Sunda pangolin's range	NGOs	2 years	No. of students who have taken part in education programs.	Local partners, community organisations

GOAL 4: Identify and protect areas with important pangolin populations

Many sites that contain Sunda pangolins are not adequately protected (e.g., from poaching). A key objective of this strategy is to increase the likelihood of detection of poachers at priority sites for the Sunda pangolin. To do so, a number of actions need to be implemented within a short time-frame. These include: ensuring that resources are secured to protect sites at which the Sunda pangolin occurs, and where it could occur (e.g., through release of trade confiscated animals); and identifying poaching hotspots where enforcement efforts can be targeted on a regional level. It also includes generating support for conserving the species within and around protected areas and among stakeholders (e.g., wildlife rangers and local communities).

Objective 4.1: Identify sites important for conservation of the Sunda pangolin					
No.	Action	Responsibility	Timeline	Measurable	Collaborators / Partners
4.1.1	Identify sites important for conservation of the Sunda pangolin.	Pangolin SG, Universities, NGOs	2 years	Research to determine important sites for Sunda pangolin conducted; research published.	Universities, NGOs, other stakeholders
4.1.2	Identify poaching hotspots at national and regional levels.	Wildlife Alliance, WCS, ZSL	On-going	No. of reports produced over time identifying poaching hotspots.	Pangolin SG, organisations and sites using SMART and similar systems

Objective 4.2: Increase the likelihood of detection of poachers at sites identified as suitable for conservation intervention					
4.2.1	Adequately protect sites where the Sunda pangolin occurs or likely occurs.	Wildlife Alliance, WCS, WWF, Wildlife Asia, ZSL	On-going	Number of sites supporting Sunda pangolin meeting IUCN Green List or Conservation Assured Tiger Standards. METT (Management Effectiveness Tracking Tool) scores for protected areas supporting Sunda pangolin.	Range state governments, organisations with field based programmes
4.2.2	Ensure site-based enforcement staff have adequate training, resources, capacity, and appropriate incentives to do their job well.	Wildlife Alliance, WCS, WWF, Wildlife Asia, ZSL	5 years	Number of fully trained, adequately paid and equipped and insured law enforcement rangers patrolling key protected areas supporting Sunda pangolin across the species' range.	Range state governments, organisations with field based programmes

GOAL 5: Conduct research to gain a better understanding of Sunda pangolin ecology and behaviour.

There remain important gaps in our knowledge of the biology, ecology and behaviour of the Sunda pangolin and there are no standardised protocols for monitoring the status of the species or its populations. Further research is needed to fill these gaps, including but not limited to: home range size in different habitats, comparative abundance in natural vs. artificial habitats, and the ability of the species to persist in isolated blocks of monoculture plantations.

Objective 5.1: Develop a comprehensive understanding of Sunda pangolin biology, ecology and behaviour					
No.	Action	Responsibility	Timeline	Measurable	Collaborators / Partners
5.1.1	Undertake research to fill knowledge gaps on Sunda pangolin biology, ecology and behaviour.	Range state governments, universities, NGOs, organisations with field based programmes.	On-going	No. of research projects initiated; no. scientific papers/reports published.	Universities, NGOs, organisations with field based programmes
Objective 5.2: Improve monitoring of Sunda pangolin populations					
5.2.1	Develop guidance on monitoring methods for the Sunda pangolin.	Pangolin SG	1 year	Guidance document developed	SG members, other individuals with appropriate expertise

5.2.2	Develop long-term monitoring projects at sites where Sunda pangolin occur.	Range state governments, field-based conservation organisations and stakeholders, NGOs, universities, academics.	On-going	No. of projects initiated; no. of scientific papers/reports published; no. of monitoring protocols published.	Sabah Wildlife Department, University of Cardiff, Save Vietnam's Wildlife, ZSL, National University of Singapore, Katala Foundation Incorporated
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GOAL 6: Establish successful systems for rescue, rehabilitation and release of pangolins.

The confiscation of illegally acquired Sunda pangolins is an important area of law enforcement. A network of centres able to accommodate, rehabilitate and where appropriate release, trade-confiscated Sunda pangolins, will provide essential support to this work. The current network of centres is not adequately equipped to fulfil this role. Key areas for development are: increased coordination, capacity-building, staff training and the development of standard protocols for care and management, including release. Inevitably, some pangolins will be unsuitable for release to the wild. Currently there is no consensus on the role (if any) that these animals could play in supporting pangolin conservation. Clarification, in form of a comprehensive ex situ needs assessment, would be helpful especially to those involved in the management of confiscated Sunda pangolins.

Objective 6.1: Increase capacity and coordination of rescue, rehabilitation and release of trade-confiscated pangolins					
No.	Action	Responsibility	Timeline	Measurable	Collaborators / Partners
6.1.1	Create a captive task force within the Pangolin SG.	Pangolin SG	1 year	Task force created	Save Vietnam's Wildlife, Wildlife Reserves Singapore
6.1.2	Develop standard protocols to guide rescue, rehabilitation and release of trade confiscated pangolins.	Pangolin SG, Save Vietnam's Wildlife, Wildlife Reserves Singapore	1.5 years	Protocol developed; protocol disseminated to CITES Parties	
6.1.3	Develop a catalogue of suitable facilities for the short- and long term housing of Sunda pangolins within range states and key transit and destination countries. Seek government endorsement of rescue centres.	Pangolin SG, Wildlife Reserves Singapore	1.5 years	Catalogue developed; catalogue disseminated to CITES Parties	Save Vietnam's Wildlife

6.1.4	Develop materials for training and capacity-building workshops, with translation into local languages.	Wildlife Reserves Singapore, Indonesian Institute of Sciences (LIPI), One Stop Borneo, Sabah Wildlife Department, South China Normal University, Taipei Zoo, Wildlife Alliance, Ministry of Natural Resource and Environmental Conservation (Myanmar).	2 years	Training material developed; training modules developed; no. of training events held	Pangolin SG
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Regional strategy for the Philippine pangolin, 2018-2044

Vision

The 25 year vision developed for the Philippine pangolin is “By 2044, populations of the Palawan Pangolin are thriving in suitable habitats as part of fully-functioning ecosystems that benefit biodiversity and local communities. As a flagship species, its biology and ecology are well understood, its threats have been mitigated, and its conservation is prioritised through good governance and empowered stakeholders.”

Goals, objectives and actions

GOAL 1: Habitat destruction and loss have been arrested.

Objective 1.1: To establish a knowledge platform on pangolins and ensure knowledge is disseminated to relevant agencies for consideration in the evaluation of development proposals.					
No.	Action	Responsibility	Timeline	Measurable	Collaborators / Partners
1.1.1	Conduct a Knowledge Management Analysis (KMA).	PCSDS	2 years	Analysis completed; technical report and recommendations published	Members of the Palawan Knowledge Platform (PKP)
1.1.2	Establish and manage a wildlife database in Palawan	PCSDS	2 years	Database built and operational	PSU, Forest Foundation Philippines, Protect Wildlife Project-USAID, PKP Members
1.1.3	Convene a stakeholder meeting to identify ways to integrate knowledge in all types of planning	NGOs, LGUs, NCIP and DENR	2 years	Stakeholder meeting held; strategy developed	
1.1.4	Integrate KMA into planning in pangolin habitat.	PSCDS	25 years	Number of planning applications informed via KMA or other means identified in 1.1.3	PCSD, DENR

GOAL 2: Overexploitation of the Palawan pangolin has been significantly reduced.

Objective 1.2: Effective management of Key Biodiversity Areas through conservation finance and improved accountability mechanisms					
No.	Action	Responsibility	Timeline	Measurable	Collaborators / Partners
1.2.1	Document best practices of private sector in	DENR	2 years	Best practices documented; report of best practices published	PCSDS, PAMB, LGUs

	conservation work				
1.2.2	Implement existing PCSDS guidelines on the private sector to adopt a wildlife species	PCSDS	2 years	Number of programs adopted and financed	Private Sector
1.2.3	Develop and present funding portfolios to potential donors	PCSDS	2 years	Number of funding portfolios presented to donors; Database of funding from all sources	DENR, NGOs/CSOs, Indigenous Communities
1.2.4	Collaboration with donors to design and implement conservation financing mechanisms	Protected Area, local conservation area, critical habitat and Ancestral Domain managers	1-25 years	Number of conservation financing mechanisms initiated	CSOs, NGOs, LGUs, Academia, NCIP, DENR, PCSDS
1.2.5	Use funding generated to manage KBAs for pangolins	PCSDS	1-25 years	No. of KBAs effectively managed.	

Objective 1.3: Harmonize laws, ordinances, issuances, IRRs and other relevant policy instruments, and interpretation of such, to reduce conflicts in land-use and the management of pangolin habitats

No.	Action	Responsibility	Timeline	Measurable	Collaborators / Partners
1.3.1	Creation of Technical Working Group (TWG) to review and harmonize laws, ordinances, IRRs and other relevant policy instruments	PCSDS	1 year	Technical Working Group established.	DENR, ELAC, NCIP, Protect Wildlife Project-USAID, PCSD
1.3.2	TWG (see 1.3.1) to revise implementing mechanisms and institutional arrangements for harmonizing laws and ordinances	PCSDS	2 years	Strategy for revision to implementing mechanisms and institutional arrangements developed.	PCSD, DENR, USAID, KFI

1.3.3	Strategy for revision to implementing mechanisms and institutional arrangements developed and implemented.	PCSDS	5-25 years	Subject to strategy development	
1.3.4	Periodically review laws and policies related to the conservation of pangolin habitats, including customary laws.	PCSDS	25 years (ongoing)	Workshops held with key stakeholders to discuss application of law.	

Objective 1.4: To increase suitable habitats by conducting research to identify and declare habitats for protection.

No.	Action	Responsibility	Timeline	Measurable	Collaborators / Partners
1.4.1	Conduct research to identify existing and potential pangolin habitats.	Universities, Indigenous Communities, Local communities, LGUs and NGOs	5 years	Number of research projects completed; number of scientific papers published	PCSDS, NGOs, Academia, DENR
1.4.2	Declare and manage Palawan pangolin habitats, existing and potential, pursuant to best practice, including the Wildlife Act and/or local government code	PCSDS, enforcement agencies, Indigenous Communities, Local communities, LGUs, and NGOs	5-25 years	Number of critical habitats or Local Conservation Areas (LCAs) declared and demarcated; no. of management plans developed; no. of sites and/or LCAs managed according to best practice and in accordance with the Wildlife Act and government code.	PCSDS, NGOs, Academia
1.4.3	Engage existing mining and plantation companies to adopt pangolin conservation programs	DENR	1-25 years	Number of compliant companies; no. of sites implementing programmes for pangolins	PCSDS, NCIP, LGUs, Multipartite Monitoring Team (MMT), Mine Rehabilitation Fund Committee (MRFC), Indigenous communities

Objective 2.1 : Provide timely and punitive wildlife law enforcement to prevent and stop wildlife crimes involving pangolins

No.	Action	Responsibility	Timeline	Measurable	Resources Collaborators
2.1.1	Conduct training with law enforcement agencies at the local, municipal, provincial and national level on identification of pangolins, trafficking dynamics, and law enforcement best practices.	PCSDS, PCSDS Enforcement task force	10 years	No. of workshops held; no. of law enforcement staff trained.	NGOs: ELAC, PNNI, NATRIPAL, KFI, Intel Group of PNP, NBI, PCG, AFP, DENR, LGU, PhilJA, DAP, PNPA, USAID.
2.1.2	Conduct training on applicable laws and jurisprudence with the judiciary in Palawan and the Philippines.	PCSDS, Dept. of Justice, PhilJA	5 years	No. of workshops held; no. of judiciary staff trained.	
2.1.3	Strengthen existing Wildlife Enforcement Network (WEN) by establishing interpersonal wildlife enforcement network	PCSDS (Provincial) DENR (national)	1 year	Interpersonal WEN established; no. of active participants; no. of arrests and convictions linked to the network.	
2.1.4	Conduct research on online pangolin trade involving the Palawan pangolin	PCSDS (locally) DENR (nationally)	5 years	No. of research projects completed; no. of scientific studies completed.	DENR, USAID, ICFI. ZSL-Ph
2.1.5	Creation and provision of permanent wildlife enforcement positions for PCSDS, DENR, and other NGAs to undertake pangolin trafficking detection and surveillance	NBI, PCSDS, DENR	2 years	No. of wildlife positions created, filled and resourced.	Philippine Center for Transnational Crime (PCTC), NGOs, NGAs (CAAP and PPA), legal traders (not pangolin traders), Couriers, Airlines, Shipping Company, Senator Legarda, House of Representative Committee on Environment and Natural Resources,

					Governor of Palawan
2.1.6	Increase the profile of wildlife crime locally and nationally through traditional and social media outlets	PCSDS (locally) DENR (nationally)	5 years	Profile of wildlife crime raised against an established baseline.	

Objective 2.2: Eliminate demand for pangolin meat and scales in the Philippines

No.	Action	Responsibility	Timeline	Measurable	Collaborators / Partners
2.2.1	Undertake research on consumers to inform behaviour change programmes	UP, Consultants KFI, PCSDS, DENR	5 years	Number of research projects funded; number of research projects completed; number of scientific papers published.	Academics, TRAFFIC, KFI, ZSL-Ph
2.2.2	Undertake research on Palawan pangolin trade dynamics in the Philippines	UP, Consultants KFI, PCSDS, DENR	5 years	Number of research projects funded; number of research projects completed; number of scientific papers published.	Academics, TRAFFIC, KFI, ZSL-Ph
2.2.3	Develop and implement behaviour campaigns to reduce demand for pangolin products in the Philippines	UP, Consultants KFI, PCSDS, DENR	5-10 years	Number of campaigns developed, implemented and evaluated.	Protect Wildlife Project-USAD
2.2.4	Engage with DFA to discuss pangolin trade and consumption with Peoples Republic of China (PROC)	PCSDS	3 years	DFA-PCSDS dialogue meetings held; DFAPROC meeting held	DFA, CSO

Objective 2.3: Review wildlife laws periodically to ensure they are responsive to changing needs.

No.	Action	Responsibility	Timeline	Measurable	Collaborators / Partners
2.3.1	Lobby for immediate passage of the revised wildlife act	DENR	2 years	Lobby effort exerted.	CSO, industry, media, wildlife Ambassadors

2.3.2	Review agency mandates	DENR NALECC-Sub Committee on the Environment and Natural Resources (SCENR)	2 years	TWG, Review groups formed	CSO (NGOs, academe) DBM, EO, DAO, JAO
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GOAL 3: The ecology, biology and conservation needs of the Palawan Pangolin are understood through scientific research and using local ecological knowledge.

Objective 3.1: Knowledge of the ecology and biology of the Palawan pangolin is generated					
No.	Action	Responsibility	Timeline	Measurable	Collaborators
3.1.1	Form a Palawan Pangolin Special Interest Group (PPSG) to coordinate research efforts and streamline permit acquisition	KFI	1 year	PPSG established	PCSDS, ZSL-Ph
3.1.2	Conduct research on pangolin populations, including comparative studies between habitat types.	PPTF	1-10 years	No of research projects funded; no. of research projects completed; no .of scientific papers published.	Pangolin SG, PSU, WPU, HTU, KFI, ZSL, Protect Wildlife Project- USAD
3.1.3	Conduct research on pangolin ecology including dietary preferences.	PPTF	1-10 years	No of research projects funded; no. of research projects completed; no .of scientific papers published.	Pangolin SG, PSU, WPU, HTU, KFI, ZSL, Protect Wildlife Project- USAD, ant and termite experts.
3.1.4	Conduct research to identify priority areas for habitat research	PCSDS	1 year	Research projects funded; research completed; no .of scientific papers/reports published	PPTF
3.1.5	Identify and train researchers to study pangolins and their threats	PPTF	1-10 years	No. of researchers identified and trained	PSU, WPU, HTU, KFI
3.1.6	Develop citizen science protocol for pangolin monitoring	ZSL Philippines	1 year	Protocol developed	PBCFI, PSU, WPU, HTU, KFI, IPs

3.1.7	Citizen scientists trained in monitoring Palawan pangolins	ZSL Philippines	Ongoing	No. of citizen scientists trained	PBCFI, PSU, WPU, HTU, KFI, IPs
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Objective 3.2: Rescue and rehabilitation capacity built for pangolins in the Philippines

No.	Action	Responsibility	Timeline	Measurable	Collaborators
3.2.1	Establish and increase capacity of existing rescue facilities	DENR-BMB	1-10 years	No. of individuals qualified to rehabilitate pangolins	WRS, Pangolin SG
3.2.2	Accredit KFI to receive pangolins	DENR-BMB	1 year	KFI accredited through SEP clearance	WRS
3.2.3	Through future release of confiscated animals, determine best practice for monitoring release success	PPTF	2 years	No. of releases evaluated	WRS, Save Vietnam's Wildlife
3.2.4	Palawan pangolin rescue, rehabilitation and release protocol developed	DENR-BMB PCSD	3 years	Protocol developed	PPTF, Pangolin SG, Singapore Pangolin Working Group, Save Vietnam's Wildlife
3.2.5	Appropriate personnel (vets, rescue centres' personnel) trained every 3 years on rescue, rehabilitation and release of pangolins	DENR-BMB	Ongoing	No. of people trained	KFI, WRS
3.2.6	Streamline air repatriation of pangolins to Palawan	DENR-BMB	2 years	Airlines consulted and MoU signed on repatriation	Airlines

Objective 3.3: Education materials developed and integrated into education curriculum in the Philippines

No.	Action	Responsibility	Timeline	Measurable	Collaborators
3.3.1	Create an education committee as part of PPTF	PSU, WPU	1 year	Committee established and operational	CHED, Department of Education, other experts.

3.3.2	Develop educational materials on the Palawan pangolin for integration into school curriculum.	PSU, WPU	2 years	Education materials developed; no. of schools using curriculum	CHED, Department of Education, other experts
3.3.3	Create and implement a communications plan for the Palawan pangolin	ZSL	1-10 years	Communications plan developed; communications plan implemented	CHED, NGAs, Department of Education, SUCs, KFI, Universities and NGOs

GOAL 4: Indigenous peoples and local communities are empowered to conserve the Palawan pangolin.

Objective 4.1: Empower and strengthen local communities for the protection of the Palawan pangolin and its habitat					
No.	Action	Responsibility	Timeline	Measurable	Collaborators
4.1.1	Pilot the drafting of ADSDPP (Ancestral Domain Sustainable Development and Protection Plan) in 3 areas in Palawan (South, Central, and North) to include conservation of pangolins	NCIP/IP communities	3 years	No. of ADSDPP's drafted	PCSDS, ZSL, LGUs, DENR, NGOs, NATRIPAL
4.1.2	Reduce the process length for NTFP permitting and extend permit duration	NATRIPAL, NCIP, DENR, CENRO, PENRO	2 years	Permitting process improved through revised rules incorporating localized approval and reduced cost for application. Resumption of the production of NTFPs by IPs.	PCSDS, ZSL, NGOs, DENR
4.1.3	Provide support to IPs for product development and marketing (e.g., rattan, honey)	IP group	2 years		DOST, DTI, NTFP Exchange Philippines, NGOs/Fair Trade Organisations
4.1.4	Develop and deputize more Wildlife Enforcement Volunteers coming from local communities to conduct monitoring, surveillance, and provide intelligence.	PCSDS	2 years		IP communities, NATRIPAL, DENR, KFI/ZSL, ELAC, PNP-MP, PCG

4.1.5	Develop and distribute information and education materials (World Pangolin Day, Radio spots, social marketing, champions, pride campaigns)	PCSD, DENR	Ongoing		KFI/ZSL, ELAC, NATRIPAL, IP communities, other NGAs, NGOs, schools, and media
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Annex 1. Acronyms

ADSDPP – Ancestral Domain Sustainable Development and Protection Plan

AFP – Armed Forces of the Philippines

CAAP – Civil Aviation Authority of the Philippines

CENRO – Community Environment and Natural Resources Office

CSO – Civil Society Organisation

DAP – Development Academy of the Philippines

DAO – Department Administrative Order

DBM – Department of Budget and Management

DENR – Department of Environment and Natural Resources

DFA – Bureau

DOST – Department of Justice

DTI – Department of Science and Technology

ELAC – Environmental Critical Areas Network

ENV – Education for Nature-Vietnam

EO – Environment and Natural Resources Office

FFI – Fauna and Flora International

HTU – Executive Order

ICFI – Holy Trinity University

IP – Indigenous Peoples

JAO – Joint Administrative Order

KBA – Key Biodiversity Area

KFI – Katala Foundation Incorporated

LGUs – Local Government Agencies

NALECC–SCENR – National Law Enforcement Coordinating Committee – Sub Committee on the Environment and Natural Resources

NATRIPAL - Nagkakaisang Tribo ng Palawan

NBI – National Bureau of Investigation

NCIP – National Commission of Indigenous People

NGA – National Government Agency

PBCFI – Philippine Biodiversity Conservation Foundation, Inc.

PCSD – Palawan Council for Sustainable Development
PCSDS – Palawan Council for Sustainable Development Staff
PCG – Philippines Coast Guard
PENRO – Provincial Environment and Natural Resources Office
Phil-JA – Philippine Judicial Academy
PKP – Palawan Knowledge Platform
PNNI – Palawan NGO Network, Inc.
PNP – Philippine National Police
PNP–MP – Philippine National Police - Maritime Police
PPA – Philippine Ports Authority
PPTF – Philippine Pangolin Task Force
PSU – Palawan State University
SEP – Strategic Environmental Plan
SUCs – State Universities and Colleges
TWG – Technical Working Group
UP – University of the Philippines
USAID – United States Agency for International Development
WCS – Wildlife Conservation Society
WPU – Western Philippines University
WRS – Wildlife Reserves Singapore
WWF – World Wide Fund for Nature
ZSL – Zoological Society of London
ZSL-Ph – Zoological Society of London-Philippines