



Global Species Action Plan

Supporting implementation of the Kunming-Montreal
Global Biodiversity Framework



About IUCN

IUCN is a membership Union uniquely composed of both government and civil society organisations. It provides public, private and non-governmental organisations with the knowledge and tools that enable human progress, economic development and nature conservation to take place together.

Created in 1948, IUCN is now the world's largest and most diverse environmental network, harnessing the knowledge, resources and reach of more than 1,400 Member organisations and around 15,000 experts. It is a leading provider of conservation data, assessments and analysis. Its broad membership enables IUCN to fill the role of incubator and trusted repository of best practices, tools and international standards.

IUCN provides a neutral space in which diverse stakeholders including governments, NGOs, scientists, businesses, local communities, indigenous peoples organisations and others can work together to forge and implement solutions to environmental challenges and achieve sustainable development.

Working with many partners and supporters, IUCN implements a large and diverse portfolio of conservation projects worldwide. Combining the latest science with the traditional knowledge of local communities, these projects work to reverse habitat loss, restore ecosystems and improve people's well-being.

www.iucn.org
twitter.com/IUCN/

Global Species Action Plan

Supporting implementation of the Kunming-Montreal
Global Biodiversity Framework



The designation of geographical entities in this book, and the presentation of the material, do not imply the expression of any opinion whatsoever on the part of IUCN or other participating organisations concerning the legal status of any country, territory, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The views expressed in this publication do not necessarily reflect those of IUCN or other participating organisations.

IUCN is pleased to acknowledge the support of its Framework Partners who provide core funding: Ministry of Foreign Affairs, Denmark; Ministry for Foreign Affairs, Finland; Government of France and the French Development Agency (AFD); Ministry of Environment, Republic of Korea; Ministry of the Environment, Climate and Sustainable Development, Grand Duchy of Luxembourg; the Norwegian Agency for Development Cooperation (Norad); the Swedish International Development Cooperation Agency (Sida); the Swiss Agency for Development and Cooperation (SDC) and the United States Department of State.

This publication has been made possible in part by funding from Ministry of Foreign Affairs of France, Ministry of Environment of Republic of Korea and IUCN UK Charity.

Published by: IUCN, Gland, Switzerland

Produced by: IUCN Species Conservation Action Team

Copyright: © 2023 IUCN, International Union for Conservation of Nature and Natural Resources

Reproduction of this publication for educational or other non-commercial purposes is authorised without prior written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale or other commercial purposes is prohibited without prior written permission of the copyright holder.

Recommended citation: IUCN (2023). *Global Species Action Plan: Supporting implementation of the Kunming-Montreal Global Biodiversity Framework*. Gland, Switzerland: IUCN.

Front cover photos: Left to right and top to bottom: Splendid waxcap (*Hygrocybe splendissima*) © John Bjarne Jordal; migratory monarch butterfly (*Danaus plexippus plexippus*) © Joe Schelling; African savanna elephant (*Loxodonta africana*) © Jane Wynyard, Save the Elephants; Seychelles jellyfish tree (*Medusagyne oppositifolia*) © Dao Nguyen; Caley's grevillea (*Grevillea caleyi*) © Tony Auld; a cichlid fish species (*Dimidiochromis compressiceps*) © Ad Konings; Verreaux's sifaka (*Propithecus verreauxi*) © Nick Garbutt; red-shanked douc langur (*Pygathrix nemaeus*) © Nguyen Manh Hiep; blue pitta (*Hydroornis cyaneus*) © Nguyen Manh Hiep; Mediterranean tree frog (*Hyla meridionalis*) © Jérémy Calvo (CC BY-NC) ; *Mesamphiagrion gaudiimontanum* damselfly © Cornelio Bota; tucuxi (*Sotalia fluviatilis*) © Fernando Trujillo; blue spotted ribbontail ray (*Taeniura lymma*) © Simone Caprodossi; green turtle (*Chelonia mydas*) © Dao Nguyen; California condor (*Gymnogyps californianus*) © Eric Kolb (CC BY-NC 4.0)

Back cover photos: Left to right and top to bottom: Coco de mer palm (*Lodoicea maldivica*) © Dao Nguyen; Iberian lynx (*Lynx pardinus*) © Antonio Liébana; masked booby (*Sula dactylatra*) © James Hardcastle; Seychelles pitcher plant (*Nepenthes pervillei*) © Dao Nguyen; Granddier's baobab (*Adansonia grandidieri*) © Gabriel Bienzobas Fernández, (CC BY-NC); coconut crab (*Birgus latro*) © James Hardcastle; tiger (*Panthera tigris*) © naturepl.com / Andy Rouse / WWF; Komodo dragon (*Varanus komodoensis*) © Paul Hien; yellowfin tuna (*Thunnus albacares*) © Martin Gil Gallo / CC BY-NC; grey nurse shark (*Carcharias taurus*) © Simone Caprodossi

Layout by: Imre Sebestyén, jr.

Printed by: Unit Graphics

Printed on paper from 100% recycled pulp in accordance with the rules of the Forest Stewardship Council (FSC)

Table of contents

Preface	iv
Foreword	v
Acknowledgements	vi
Acronyms	viii
BACKGROUND	1
The fundamental importance of species	2
Threats to species	3
Conservation action and sustainable use.....	4
THE KUNMING-MONTREAL GLOBAL BIODIVERSITY FRAMEWORK	5
THE GLOBAL SPECIES ACTION PLAN	6
Strategic interventions essential to conserving and sustainably using species and their habitats	7
Implementation	8
GSAP TABLE OF INDICATIVE ACTIONS FOR THE CONSERVATION AND SUSTAINABLE USE OF SPECIES	10
Global Biodiversity Framework Target 1.	11
Global Biodiversity Framework Target 2.	13
Global Biodiversity Framework Target 3.	14
Global Biodiversity Framework Target 4.	17
Global Biodiversity Framework Target 5.	22
Global Biodiversity Framework Target 6.	26
Global Biodiversity Framework Target 7.	28
Global Biodiversity Framework Target 8.	29
Global Biodiversity Framework Target 9.	30
Global Biodiversity Framework Target 10.	31
Global Biodiversity Framework Target 11.	32
Global Biodiversity Framework Target 12.	33
Global Biodiversity Framework Target 13.	34
Global Biodiversity Framework Target 14.	35
Global Biodiversity Framework Target 15.	36
Global Biodiversity Framework Target 16.	37
Global Biodiversity Framework Target 17.	38
Global Biodiversity Framework Target 18.	39
Global Biodiversity Framework Target 19.	40
Global Biodiversity Framework Target 20.	41
Global Biodiversity Framework Target 21.	42
Global Biodiversity Framework Target 22.	43
Global Biodiversity Framework Target 23.	44
Schematic diagram illustrating some of the interconnections between GBF Targets and Key species outcomes.....	45

Preface

It is with great enthusiasm and a deep sense of responsibility that I introduce the Global Species Action Plan. As the Acting Director General of the International Union for Conservation of Nature (IUCN), I am honoured to present this plan as a testament to our shared commitment to improve the conservation status of species around the world.

Biodiversity loss threatens the very foundation of our ecosystems, economies and well-being. This urgent crisis requires bold and concerted action. The Global Species Action Plan charts the course to achieve the Kunming-Montreal Global Biodiversity Framework, by halting and reversing the decline of species worldwide.

IUCN experts, partners, Members, and other stakeholders collaborated to develop the Global Species Action Plan in consultation with governments and biodiversity related conventions. This plan crystallises our collective wisdom and determination, providing a key guide for our collective journey towards a more sustainable and biodiverse future.

Our planet is rich in diversity, with each species playing a unique role in maintaining the delicate balance of nature. Recognising this intricate tapestry, the Global Species Action Plan encompasses actions to contribute towards achieving all the Global Biodiversity Framework targets.

At its core, this plan embodies the principles of cooperation and innovation. By uniting governments, organisations, communities and individuals, we amplify our capacity to effect change. Through science-driven strategies, sustainable practices and adaptable solutions, we can restore the vibrancy of our planet's living wonders.

The success of the Global Species Action Plan hinges on our collective resolve. Each of us must become a steward of nature, championing conservation and embracing sustainable living. Together, we have the power to protect and revive the natural world.

As you embark on the pages of this plan, I invite you to envision a world where the songs of birds grace the air, coral reefs teem with life, and iconic animals roam freely in harmony with humans. This is a vision that compels us to act decisively and to innovate continually.

I extend my deepest gratitude to the passionate individuals and dedicated teams who have contributed their expertise to shaping this plan. Let us rally behind the Global Species Action Plan with a shared determination to ensure that our planet's remarkable species continue to sustain, enrich and inspire us all.

Dr Grethel Aguilar
Acting Director General
IUCN, International Union for
Conservation of Nature

Foreword

Biodiversity is a life support system, not just for ecosystems but for the entire planet. Naturally, the loss of biodiversity, accelerated by climate change, has posed unprecedented threat to our planet. It was urgent for the world to be aware of this threat and start acting on conservation and restoration of biodiversity. Recognizing this urgency, the Kunming-Montreal Global Biodiversity Framework (GBF) was adopted, outlining a transformative path for humanity to forge a sustainable coexistence with nature by expanding protected areas and restoring endangered species among other targets. What is important now is to implement this new Framework effectively.

The Global Species Action Plan supports this by guiding countries in their efforts to implement targeted actions that mitigate the loss of species and restore their habitats.

This action plan encapsulates a comprehensive list of actions required to achieve the species conservation outcomes for the GBF targets, and provides required species conservation actions for each GBF target together with technical tools and guidance. It empowers countries to tailor interventions that resonate with their unique biodiversity, while aligning with global conservation objectives. The Global Species Action Plan facilitates the achievement of species conservation outcomes as well as the delineation of

conservation targets, and the formulation of strategies that transcend borders and address shared challenges.

The effectiveness of the Global Species Action Plan rests not only in its ability to galvanize governmental efforts but also in its potential to rally stakeholders from all sectors of society. By encouraging and supporting governments, civil society, academia, and the private sector to take bold actions for species, this plan serves as a unifying platform to halt extinction risk and improve status of threatened species.

Ultimately the Global Species Action Plan will fortify our species conservation measures, elevate public awareness, and ensure the persistence of our biodiversity for generations to come.

Together, we have the capacity to halt biodiversity loss and achieve the 2050 Vision of Living in Harmony with Nature. We believe that the Global Species Action Plan will serve as the guideline to conserve and restore endangered species and furthermore inspire present and future generations to cherish, protect, and restore the diversity of life forms that enriches our living planet.

Se-chang Ahn (Ph.D)

Director General
Nature Conservation Bureau
Ministry of Environment
Republic of Korea

Acknowledgements

The Global Species Action Plan (GSAP) was developed by IUCN, IUCN Members, Commissions and partners in consultation with all biodiversity related conventions – Convention on Biological Diversity (CBD), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Conservation of the Conservation of Migratory Species of Wild Animals (CMS), the Ramsar Convention on Wetlands (Ramsar), the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), the World Heritage Convention (WHC), the International Convention for the Regulation of Whaling (ICRWC) also known as the International Whaling Commission (IWC), and the International Plant Protection Convention (IPPC).

Special thanks to the Ministry of Environment of Republic of Korea and France-IUCN Partnership for Nature and Development for all their support to promote the GSAP at CBD meetings as well as at CITES COP19, especially thanks to Dr Il Young Oh, Mr Joon-woo Seo (Ministry of Environment, Republic of Korea) and Dr Tae-Kwon Noh (National Institute of Biological Resources, Republic of Korea); and Charles Bonhomme (France-IUCN Partnership for Nature and Development). Special thanks also go to Türkiye, France, BirdLife International, and WWF International for their support in using and promoting the GSAP.

We are pleased to acknowledge the funding support from our donors, Ministry of Foreign Affairs of France, Ministry of Environment of Republic of Korea and IUCN UK Charity for the development and promotion of the GSAP.

The development of the GSAP was accomplished by the GSAP Team, led by Dr Jane Smart, Dr David Mallon and Dao Nguyen. Special thanks to all GSAP Team members for their hard work and contribution to the development of the GSAP through many online meetings and ten rounds of consultations. The GSAP is edited by Dr David Mallon.

GSAP Team members: Liz Bennett (WCS), Tom Brooks (IUCN), Stu Butchart (BirdLife International), Onnie Byers (IUCN SSC Conservation Planning Specialist Group), Nicola Crockford (RSPB), Wendy Elliot (WWF International), Ian Harrison (IUCN SSC Freshwater Conservation Committee), Richard Jenkins (IUCN), Caroline Lees (IUCN SSC Conservation Planning Specialist Group), Barney Long (Re:wild), Catherine Machalaba (EcoHealth Alliance and IUCN SSC Wildlife Health Specialist Group), Kelly Malsch (UNEP-WCMC), Phil McGowan (IUCN SSC Post-2020 Biodiversity Task Force), Ana Nieto (IUCN), Domitilla Raimondo (IUCN SSC, South African National Biodiversity Institute), Dilys Roe (Suli), Paul Smith (BGCI), Kevin Smith (IUCN), Gary Tabor (IUCN WCPA Conservation Connectivity Specialist

Group), Alexandra Zimmermann (IUCN SSC Human-Wildlife Conflict & Coexistence Specialist Group).

GSAP was one of the four pillars of the IUCN Post-2020 Strategic Initiative. Special thanks to Sonia Peña Moreno, Director, IUCN International Policy Centre and IUCN Policy Investment Fund for the support to the development and promotion of the GSAP as a priority in IUCN positions to the post-2020 Global Biodiversity Framework development processes.

Special thanks also go to many individuals who provided inputs to the development of the GSAP: Jihyun Lee, David Cooper, Neil Pratt, Sakhile Silitshena, Tristan Tyrrell, Joseph Appiott and CBD Secretariat Team; Amy Fraenkel, Laura Cerasi, and CMS Secretariat Team; Dr Rebecca Lent and IWC Team; Ivonne Higuero, Karen Gaynor, María Isabel Camarena Osorno and CITES Secretariat Team; Guy Debonnet and World Heritage Centre Team; Jingyuan Xia and IPPC Secretariat Team; Kent Nnadozie and ITPGRFA Secretariat Team; Martha Rojas Urrego, María

Rivera and Ramsar Secretariat Team; Dena Cator (Environment and Climate Change Canada); Jon Paul Rodriguez, Mike Hoffmann, Ehab Eid, Shyama Pagad, Piero Genovesi, Greg Mueller, Orlando Salamanca, PJ Stephenson (IUCN SSC); Aaron Laur (IUCN WCPA); Shane Mahoney and SULi members; Swati Hingorani, Jennifer Kelleher, James McBreen, James Hardcastle, Anne Mugo, Ana Nunes, Leo Niskanen, Lynn Sorrentino, Mizuki Murai, Species Conservation Action Team, Ocean Team, Protected & Conserved Areas Team, Forest and Grassland Team (IUCN Secretariat); Amy McDougall (BirdLife International); Richard Gregory (RSPB); Helen Senn (RZSS), Carina Hirsch (IUCN SSC CEESP Biodiversity & Family Planning Task Force); Richard Gregory (RSPB); Richard Scobey, Anastasiya Timoshyna and Sabri Zain (TRAFFIC); WWF International's Wildlife Practice and Team.

The process of development of the GSAP was from February 2020-May 2023.

For more information, contact: species@iucn.org

Acronyms

ABS	Access and Benefit-sharing
AEWA	Agreement on the Conservation of African-Eurasian Migratory Waterbirds
ASAP	The IUCN SSC Asian Species Action Partnership
AZE	Alliance for Zero Extinction
BGCI	Botanic Gardens Conservation International
CBD	Convention on Biological Diversity
CEESP	Commission on Environmental, Economic and Social Policy
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMS	Convention on the Conservation of Migratory Species of Wild Animals
COP	Conference of Parties
CPSG	Conservation Planning Specialist Group
CPW	Collaborative Partnership on Sustainable Wildlife Management
CSO	Civil society organisation
EAZA	European Association of Zoos and Aquaria
EIA	Environmental impact assessment
ESIA	Environmental and Social Impact Assessment
EU	European Union
FAO	Food and Agriculture Organization
FPIC	Free, Prior and Informed Consent
FSC	Forest Stewardship Council
GBF	Global Biodiversity Framework
GEF	Global Environment Facility
GIS	Geographic Information System
GSAP	Global Species Action Plan
HWC	Human wildlife conflict
IAS	Invasive alien species
ICCA	Indigenous and community conserved areas, or indigenous peoples' and community conserved territories and areas
IIED	International Institute for Environment and Development
ILK	Indigenous and local knowledge
INTERPOL	International Criminal Police Organization
IPA	Important Plant Area
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IPs and LCs	Indigenous peoples and Local communities
IPPC	International Plant Protection Convention

IRF	International Ranger Federation
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
IUCN	International Union for Conservation of Nature
IWC	International Whaling Commission
KBA	Key Biodiversity Area
MAB	Man and Biosphere
MEAs	Multilateral Environmental Agreements
NBSAP	National Biodiversity Strategy and Action Plan
NGO	Non-Governmental Organisation
OECMs	Other effective area-based conservation measures
PCA	Protected and conserved area
Ramsar	Ramsar Convention on Wetlands
RFMO	Regional fisheries management organisations
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice
SDG	Sustainable Development Goal
SSC	Species Survival Commission
STAR	Species Threat Abatement and Recovery (STAR) Metric
UN	United Nations
UNEP	United Nations Environment Programme
UNEP-WCMC	United Nations Environment Programme World Conservation Monitoring Centre
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNODC	United Nations Office on Drugs and Crime
URSA	Universal Ranger Support Alliance
WAZA	World Association of Zoos and Aquariums
WCPA	World Commission on Protected Areas
WDPA	World Database on Protected Areas
WHC	World Heritage Convention
WHO	World Health Organization
WHS	World Heritage Site
WOAH	World Organisation for Animal Health
WWF	World Wide Fund for Nature
ZSL	Zoological Society of London



The Rose Mallee (*Eucalyptus rhodantha*) is confined to Western Australia. It has been listed on The IUCN Red List of Threatened Species™ as Endangered because of habitat clearance for agricultural crops and pastoralism since 2019. Photo © Tatters (CC BY-NC 4.0)

BACKGROUND

The Global Species Action Plan (GSAP) has been developed to support implementation of the [Kunming-Montreal Global Biodiversity Framework \(GBF\)](#) by setting out the key strategic interventions and actions required to achieve successful outcomes for the conservation and sustainable use of species in the GBF Mission, Goals, and Targets.

The GSAP is linked to an online toolkit of resources, training support, and technical guidance to assist governments and other stakeholders to conserve and manage native wild species effectively and to ensure they and their products are used sustainably, legally, and equitably.

Biodiversity is declining across the planet. The [2019 IPBES Global Assessment Report on Biodiversity and Ecosystem Services](#) revealed that vertebrate species populations have declined on average by 68% since 1970, 75% of Earth's land surface has been significantly altered and 66% of the oceans are degraded. Globally, over a third of inland wetlands declined from 1970 to 2015, a rate three times that of forest loss. Around 25% of all species assessed on the IUCN Red List are threatened, suggesting that around 1 million species may already face extinction. The global rate of species extinction is already up to 100 times higher than the average background rate over the past 10 million years, suggesting that we are facing a 'sixth mass extinction'. Urgent

action is essential to reduce the drivers of biodiversity loss and restore species' populations and ecosystems.

The three interlinked crises of biodiversity loss, climate change, and emerging zoonotic diseases have far-reaching consequences for all aspects of human health, food and water security, and the economy. Given the crucial role species play in the livelihoods and economies of people all over the world, and in the ecosystem services on which they depend, maintaining healthy populations of species and ensuring that the benefits from them are managed equitably and sustainably is essential to delivery of the Sustainable Development Goals (SDGs).

The fundamental importance of species

The millions of species on land, in fresh-water, and in the oceans have evolved over millennia and form the web of life that sustains the planet. Conserving species is critical to the future of all life on earth:

- Species are the living components of ecosystems, individually and collectively securing the conditions for life.
- Species play critical roles in the processes of soil formation, organic matter decomposition, water filtration and flow, pollination, pest control, climate regulation, carbon sequestration and storage, and other vital ecosystem services.
- Conservation of wild species, and the ecosystems in which they are critical components, is critical to addressing the climate crisis, food and water security, and reducing the risks of extreme weather events and emerging zoonoses and risks of global pandemics.
- Species provide the primary source of food, medicine, raw materials and other resources for Indigenous peoples and Local communities (IPs and LCs) and hundreds of millions of other people around the world. One in five people rely on species for income and food and ~70% of the world's poor are dependent on wild species.
- Direct use of wild species forms the basis of fishing and forestry and other major economic sectors, and the wild relatives of crops and domestic livestock are a repository of irreplaceable genetic material with potential for future adaptation and therefore contribute significantly to food security, nutrition, and health.
- Species are an essential part of the history, culture, and tradition of every society on Earth and their aesthetic values and spiritual roles provide comfort, inspiration, and cultural well-being.

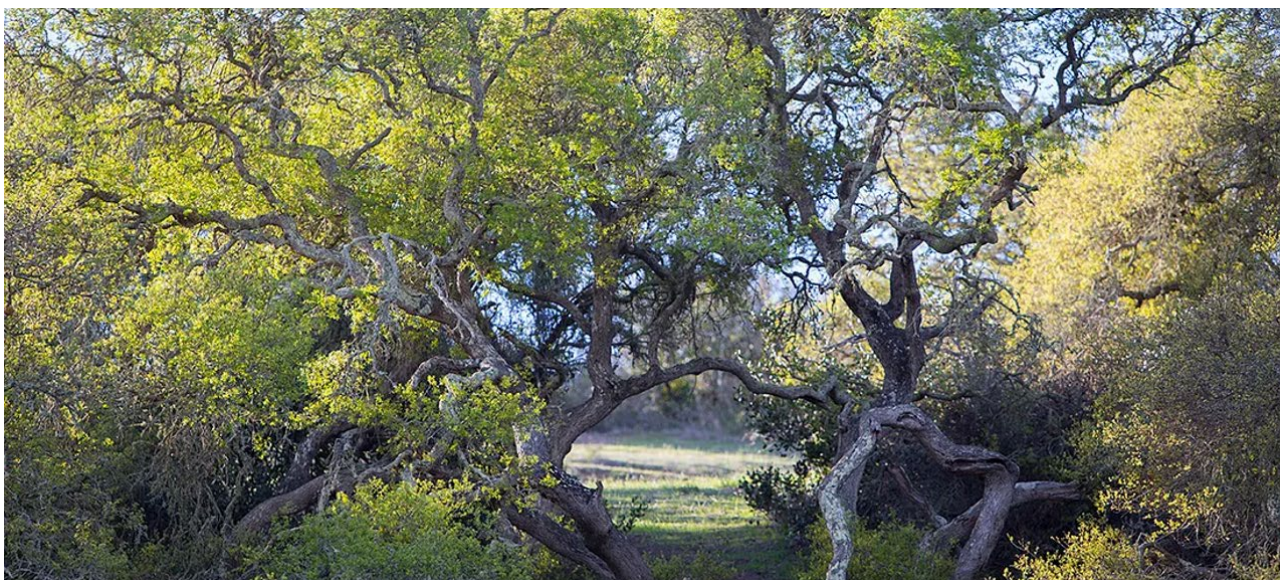
Threats to species



The Mountain Gorilla (*Gorilla beringei beringei*), which has improved in status from Critically Endangered to Endangered thanks to collaborative conservation efforts across country boundaries with engagement from communities living around Mountain Gorilla habitat. Photo © Ludovic Hirlimann (CC BY 2.0)

The primary threats to species identified in the IPBES global assessment are conversion, degradation, and fragmentation of natural habitats, unsustainable use and trade; climate change, invasive alien species, pollution, and existing and

emerging infectious diseases, all resulting from an array of underlying drivers. Erosion of genetic diversity is an additional, mainly unquantified threat, especially to very small and highly fragmented populations.



Anacapa Island: Several oak species endemic to the Channel Islands of California and Mexico were severely threatened by non-native livestock (e.g. goats and pigs) and invasive plants throughout the 20th century. A group of partners successfully removed the feral livestock from several islands, allowing seedlings to establish for the first time in decades, as well as removing invasive plants and planning fire regime management. Hundreds of seedlings have now been planted, with high survival rates. Photo © Greg Bluffin

Conservation action and sustainable use



The Australian Trout Cod (*Maccullochella macquariensis*), which has improved status from Endangered to Vulnerable. Decades of conservation action have focused on establishing additional subpopulations through reintroductions and wild-to-wild translocations. Photo © Gunther Schmida (License: CC BY Attribution-Noncommercial-ShareAlike)

Many species have been saved from extinction or had their status improved, native species and ecosystems have recovered, and habitats have been restored and rewilded, due to effective conservation action. Recent decades have seen an impressive array of scientific innovation and technological advances – including in genetics, remote sensing, GIS mapping, camera trapping, satellite tracking, acoustics, statistical analyses, and modelling that improve our ability to monitor and conserve wild species and their habitats.

Experience has demonstrated clearly that addressing the threats and drivers of species declines at an early stage to

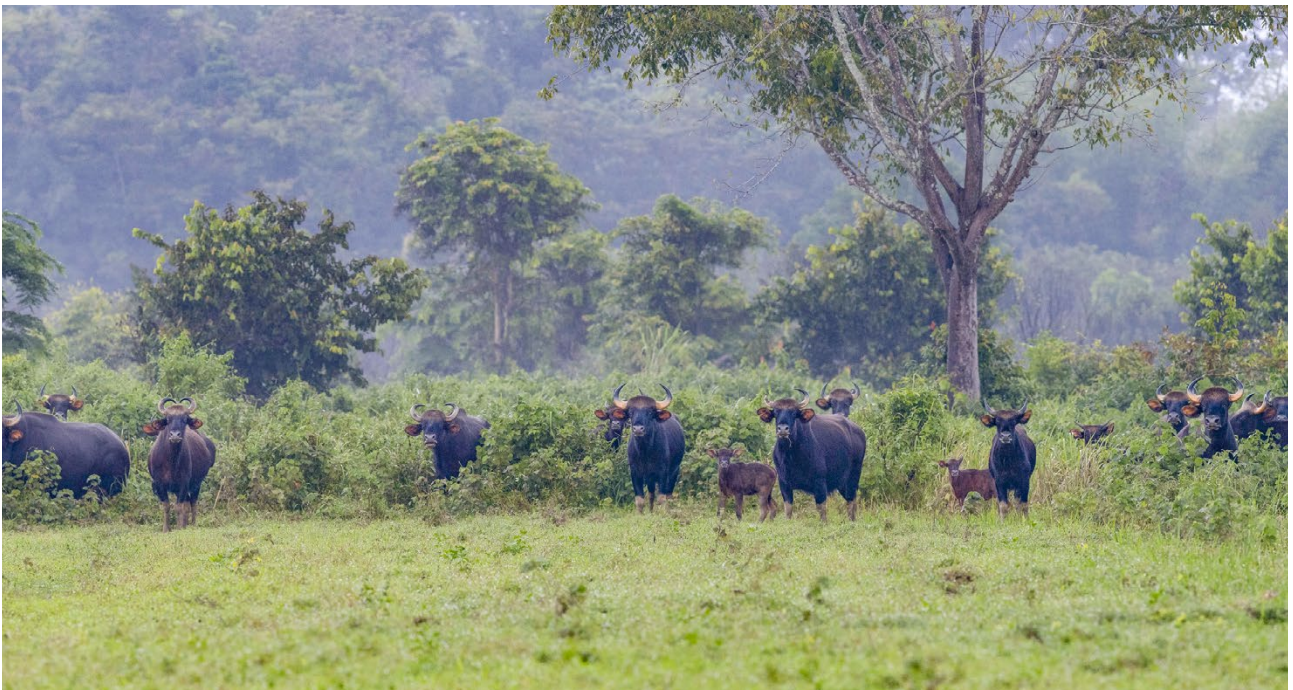
conserve remaining populations, intact habitats and their connectivity is far more efficient and cost-effective than attempting to restore habitats and reintroduce species later, underlining the importance of timely interventions.

There is ample evidence that **conservation action works**. The challenge now is to massively scale up these efforts to eliminate the drivers of species declines, ensure the survival, recovery, and persistence at healthy levels of all native species, ensure that any use of species is legal, sustainable, and safe for target and non-target species, and that material benefits from use of species and from genetic resources are equitably shared.

THE KUNMING-MONTREAL GLOBAL BIODIVERSITY FRAMEWORK

The Kunming-Montreal Global Biodiversity Framework was adopted at the CBD's fifteenth Conference of the Parties in December 2022. The framework includes four outcome-oriented goals to be achieved by 2050, 23 action-oriented targets to be achieved by 2030, a monitoring framework for tracking progress towards the goals and targets, and guidance on implementation. The Conference of the Parties to CBD also adopted several important related decisions, in particular on resource mobilization, capacity-building, mechanism for planning, monitoring, reporting and

review, technical and scientific cooperation, and digital sequence information on genetic resources. The Kunming-Montreal Framework sets out a pathway to halt and reverse biodiversity loss and put nature on the path of recovery, while ensuring the fair and equitable sharing of benefits from the utilisation of genetic resources, and providing means of implementation, in order to achieve the 2050 Vision whereby people live in harmony with nature. Enormous efforts and scaled-up action will be required to fully implement the Kunming-Montreal Framework and achieve the 2050 Vision.



Wild gaur (*Bos gaurus*) gazing in Cat Tien National Park, Viet Nam. Photo © Nguyen Manh Hiep

THE GLOBAL SPECIES ACTION PLAN

The GSAP has been developed in response to [The Abu Dhabi Call for Global Species Conservation Action by IUCN with Members, and key partners, in consultation with](#) the biodiversity-related conventions¹. The GSAP aims to support effective implementation of the Kunming-Montreal GBF and to galvanize all governments and stakeholders to scale up actions for the conservation and sustainable use of species, to increase synergies, and to work in coordinated and cooperative ways. The GSAP is a living document with an initial timeline of 2030, in alignment with the GBF.

The GSAP sets out a list of key strategic interventions required to achieve successful outcomes for the conservation and sustainable use of species for the Kunming-Montreal GBF. This is supported by an indicative list of actions (Table 1) that can be applied by countries in accordance with their national capacity and

circumstances. The Kunming-Montreal GBF goals and targets are all closely interlinked so the GSAP provides a species rationale and addresses species-relevant actions for each of the 23 global targets, though the primary focus of the GSAP remains on conservation and sustainable use of species, not on the GBF as a whole. Importantly, the GSAP does not require any separate reporting, additional to those required by existing CBD and other international environmental agreements.

The GSAP will be open access, and available to all on an online knowledge platform – *Species Conservation Knowledge, Information, Learning, Leverage and Sharing (SKILLS)*, providing a toolkit of resources, training support and technical guidance to assist governments and other stakeholders to conserve and manage wild species effectively and to ensure their products are used sustainably, legally, and equitably.

¹ The Convention on Biological Diversity (CBD), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Conservation of the Conservation of Migratory Species of Wild Animals (CMS), the Ramsar Convention on Wetlands (Ramsar), the International Treaty on Plant Genetic Resources for Food and Agriculture, the World Heritage Convention (WHC), the International Convention for the Regulation of Whaling (ICRWC) also known as the International Whaling Commission (IWC), and the International Plant Protection Convention (IPPC)

Strategic interventions essential to conserving and sustainably using species and their habitats

- Halt all further human-induced species extinctions
- Significantly reduce all the key threats to species and the underlying drivers of decline
- Develop targeted recovery programmes for all species that require them
- Ensure conservation of all sites and site networks important for species through identification, establishment, protection, and effective management of all Key Biodiversity Areas, Protected and Conserved Areas, internationally recognized sites (World Heritage Sites, Ramsar Sites, Biosphere Reserves) and other areas of high ecological integrity
- Ensure ecological connectivity, including species movement at land-freshwater- and seascape scales
- Maintain all intact areas of natural habitats and restore and rewild ecosystems, including reinforcement and reintroduction of their constituent species
- Assess species' vulnerability and adaptive capacity to climate change to inform scenario-planning and development of adaptation and dynamic management measures
- Ensure that any use of species is sustainable, legal and safe for target and non-target species, and that the benefits from use and from genetic resources are equitably shared among indigenous and local people
- Ensure animals and people are not threatened by zoonotic or vector borne diseases by reducing the nature-based drivers of disease risk
- Ensure co-existence between humans and wildlife
- Improve species conservation research and data management and analysis to inform policy making and implementation at all levels
- Communicate the value of species and the importance of their conservation and sustainable use to all audiences

Implementation

Delivery of the GSAP – and the Kunming-Montreal GBF as a whole – involves interventions taken at global, regional, national, and local levels. Establishing effective linkages and coordination between these levels, and maximum synergies between all actors, including Indigenous peoples and Local communities (IPs and LCs), will be crucial to ensuring smooth transitions from global policy, through to assessment, planning, and effective action on the ground and in the water.

National governments and their partners will have a leading role in delivering species conservation outcomes through their National Biodiversity Strategies and Action Plans (NBSAPs), national species conservation programmes, legislative frameworks, budgetary allocations, and other mechanisms. Actions at global and regional levels are also needed to formulate policies, strategies, standards, and guidelines, maintain open-access biodiversity databases, and address supranational threats.

The international community should be ready to provide necessary funding while the species conservation community can accelerate impact by providing technical support and sharing experience and expertise.

IUCN, its many Members that have collaborated closely in the development of the GSAP, its Species Survival Commission, specialist groups, and the Reverse the Red partnership, along with other Commissions, stand ready to provide technical support in collaboration with the biodiversity-related conventions

and governments to implement the GSAP.

The roles of other stakeholder groups include:

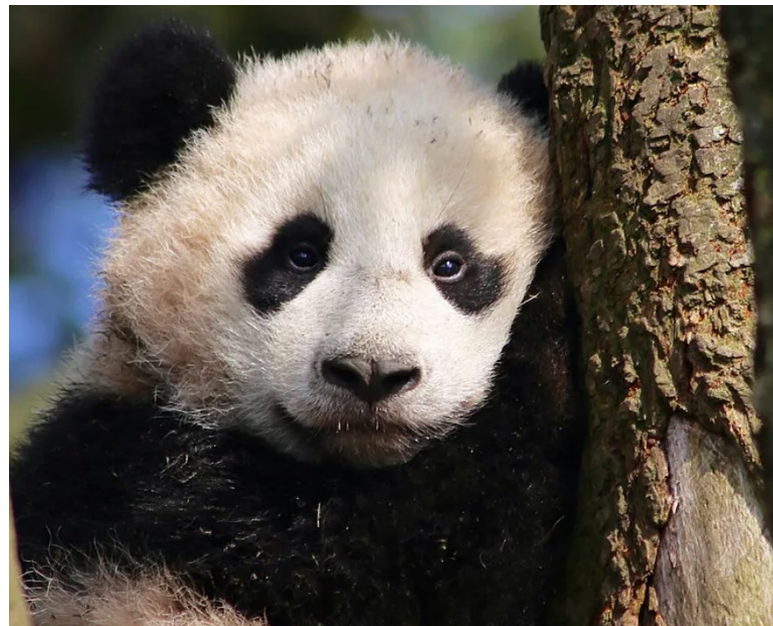
- **UN/Inter-Governmental organizations and biodiversity-related conventions and agreements:** Ensure effective implementation of all their processes, resolutions, and decisions relevant to species conservation and sustainable use, and effective, streamlined cooperation across all entities.
- **Technical agencies and institutions:** Contribute their implementation tools, guidance, knowledge products and capacity development opportunities to assist governments and stakeholders in science-based decision-making and implementation to support conservation and sustainable use of species.
- **Indigenous peoples and Local communities:** As custodians of biodiversity and through their governance systems, cultural and spiritual values including of cultural keystone species, Indigenous and traditional knowledge, customary use contribute to species conservation, with free, prior and informed consent (FPIC) where necessary, and participate in threatened species recovery and restoration, contributing to connectivity conservation.
- **Non-Government organizations:** Maintain and further develop field

programmes, support to governments, and work with IPs and LCs, through capacity building and awareness-raising activities on species conservation.

- **Civil society:** recognize the importance of species, and actively support implementation of GSAP actions to conserve all wild species.
- **Academic and research institutes:** Focus research on conservation and sustainable use of species to inform policy making and implementation at all levels.
- **Private sector and financial institutions:** Set, implement and monitor ambitious commitments to address their impacts on species and their habitats throughout production and supply chains. Ensure that financial flows minimise impacts on native species and direct investments towards positive impacts on native species and habitats.
- **Donor governments, multilateral donors, and the philanthropic community:** Mobilise and invest resources at the scale needed for effective conservation and sustainable use of species and their habitats, including necessary scientific research and monitoring activities, and seek innovative financing mechanisms.
- **Zoos, botanic gardens, aquariums:** Scale up commitments to support the conservation of species ex-situ and their return to the wild, as well

as contributions to in situ species conservation and strengthen educational outreach on species and biodiversity loss.

Ultimately the GSAP is an action plan for everyone - governments, intergovernmental organisations, the biodiversity-related conventions, international and national NGOs, Indigenous peoples and Local communities, academic and research institutes, ex-situ institutions (zoos, aquaria, botanic gardens), commercial and business sectors, funding agencies, the philanthropic community, and civil society as a whole: everyone has a part to play in addressing the species emergency and ensuring we pass on a rich natural heritage to future generations.



Giant Panda populations have increased so significantly they are no longer listed as an 'endangered species' on The IUCN Red List of Threatened Species™, although they are still vulnerable, with less than 2,000 remaining in the wild. This is due to habitat conservation, including reducing fragmentation and reconnecting isolated populations, poaching prevention, capacity strengthening and community conservation. Communities in giant panda landscapes even collect wild plants in a 'panda friendly' way, which may end up in your 'detox tea'! Photo © Meghan Martin

GSAP TABLE OF INDICATIVE ACTIONS FOR THE CONSERVATION AND SUSTAINABLE USE OF SPECIES

Global Biodiversity Framework Target 1.

Ensure that all areas are under participatory integrated biodiversity inclusive spatial planning and/or effective management processes addressing land and sea use change, to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030, while respecting the rights of indigenous peoples and Local communities.

GSAP RATIONALE: *Spatial planning and legislative approaches at landscape, freshwater-scape and seascape scales are needed to maintain the integrity, functionality and connectivity of natural ecosystems and thus conserve the species that compose them. Such actions are particularly urgent in critical ecosystems under the highest pressure, such as coral reefs, tropical forests, peatlands, grasslands and savannas, freshwater, and coastal wetlands, and to ensure any further loss or degradation of remaining areas of high ecological integrity with their full species compositions.*

Action	Actors	Tools and resources
1.1. Integrate species data into spatial planning at landscape, freshwater-scape, and seascape scales		
1.1.1. Map and include in spatial plans representative retention targets for all ecosystem types.	Government agencies IUCN	<i>Guidance on spatial planning</i> UNEP Mapping Biodiversity Priorities IUCN WCC Resolution on Spatial Planning UN Biodiversity Lab
1.1.2. Identify, map, and set retention targets for species of conservation importance (threatened, restricted range, and socio-economically important species).	NGOs IWC Research and science institutions CMS and its Instruments	International Finance Corporation Performance Standard 6 Integrated Biodiversity Assessment Tool (IBAT) Technical guidelines for producing Spatial Biodiversity Plans in South Africa
1.1.3. Evaluate how well ecosystem and species targets are already covered by protected and conserved areas, and prioritise areas for meeting targets in the most efficient configuration, favouring sites that remain in good ecological condition, and sites important for ecological connectivity (e.g. corridors, stepping stones).	AEWA Business sector	Guidance on Environmental and Social impact Assessments International Finance Corporation Performance Standard 6 Integrated Biodiversity Assessment Tool (IBAT) <i>Data on the distribution of species and important sites and habitats for their conservation</i> IUCN Red List of Threatened Species National Red Lists
1.1.4. Incorporate all species and ecosystem priorities in spatial planning between all government and business sectors.		Species Threat Abatement and Restoration (STAR) Metric IUCN Red List of Ecosystems World Database of Key Biodiversity Areas CMS Atlases and tools
1.1.5. Include species considerations in land, freshwater, and sea use guidelines for use in national development zoning schemes.		The AEWA Critical Sites Network (CSN) Tool Important Shark and Ray Areas (ISRA) Important Marine Mammals Areas Atlas Migratory Connectivity in the Ocean (MiCO) Trans-European Swimways Network
1.1.6. Include key species considerations in Environmental and Social Impact Assessments (ESIAs) for infrastructure development projects.		IWC Sanctuaries Protected Planet IUCN Global Ecosystem Typology 2.0 Other relevant resources
1.1.7. Apply the mitigation hierarchy to all infrastructure developments, with a focus on avoidance, to reduce their impact on habitats and species of conservation importance.		IWC Cetacean population status Essential Biodiversity Variables (EBV) Data Portal

1.2. Ensure connectivity and movement between species' populations		
1.2.1. Identify, map, manage and/or protect corridors, sites and systems that are important for wild species' movements and migrations.	Government agencies CMS and its Instruments IUCN NGOs	IUCN Guidelines for Conserving Connectivity through Ecological Networks and Corridors UNEP-WCMC and World Commission on Protected Areas Database of Ecological Corridors IUCN Important Marine Mammals Areas (IMMAs) IWC Sanctuaries and IWC Conservation Management Plans (CMPs) Global Initiative on Ungulate Migration CMS CAMI Infrastructure Atlas Soaring Bird Sensitivity Mapping Tool WWF Protecting Blue Corridors on identifying, mapping and protecting migratory routes of whales International Finance Corporation Performance Standard 6 Guidelines on how to avoid, minimize or mitigate impact of infrastructural developments and related disturbance affecting waterbirds - AEWA
1.2.2. Participate in CMS instruments for migratory species and integrate their recommendations into land- freshwater- and seascape spatial planning.	Governments CMS and its Instruments NGOs	CMS Instruments and initiatives e.g. legally-binding agreements ; memoranda of understanding ; special initiatives ; action plans IWC Conservation Management Plans (CMPs) IWC Task Teams , IWC Bycatch Mitigation Initiative , IWC Southern Ocean Research Partnership (SORP)
1.2.3. Enhance transboundary cooperation on conservation of species' populations that cross international borders.	Governments CMS and its Instruments NGOs IUCN Regional Offices IUCN Connectivity SG IUCN Transboundary SG IWC	UN General Assembly Resolution on transboundary cooperation for biodiversity conservation IWC Task Teams , IWC Bycatch Mitigation Initiative , IWC Southern Ocean Research Partnership (SORP) CMS Instruments and initiatives IUCN WCPA Transboundary conservation; a systematic and integrated approach Diagnostic tool for transboundary conservation planners - IUCN WCPA WWF Transboundary Conservation Landscapes Guide UNCCD Connectivity Guidance for UN Decade on Ecosystem Restoration (forthcoming)

Global Biodiversity Framework Target 2.

Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.

GSAP RATIONALE: Restoring degraded natural ecosystems increases the area of habitat for their constituent species, enhances connectivity and restores full ecosystem function.

Action	Actors	Tools and resources
2.1. Include all constituent species in ecosystem restoration and rewilding initiatives		
2.1.1. Implement restoration interventions of ecosystems and habitats at a land- freshwater- and seascape level with the greatest potential to benefit a wide range of species.	Government agencies NGOs IPs and LCs	The Bonn Challenge Restoration Barometer : Restoration Barometer - to track and monitor the progress towards ecosystem restoration (includes an indicator to specifically monitor biodiversity impacts) IUCNs Restoration Intervention Typology for Terrestrial Ecosystems UN Decade of Ecosystem Restoration 2021-2030 UN Decade of Ocean Science for Sustainable Development 2021-2030 International Principles & Standards for the Practice of Ecological Restoration Biodiversity Guidelines for Forest Restoration IUCN Guidelines for Conserving Connectivity through Ecological Networks and Corridors IWC Conservation Management Plans (CMPs) and IWC Ecosystem Functioning research Species Threat Abatement and Restoration (STAR) Metric WWF Connectivity Status Index for freshwater WWF Nature Based Solution report A guide to the Restoration Opportunities Assessment Methodology (ROAM) Restoration Barometer
2.1.2. Coordinate restoration programmes across national boundaries where appropriate.		
2.1.3. Ensure restoration initiatives are biodiversity positive, through use of indigenous species in replanting and regeneration programmes and avoid exotic species		
2.1.4. Focus restoration efforts in areas of important for ecological connectivity, thus maximizing their impact for species conservation.		

Global Biodiversity Framework Target 3.

Ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and Local communities, including over their traditional territories.

GSAP RATIONALE: *Networks of well-governed and effectively managed protected and conserved areas, including OECMs, are crucial in safeguarding species and their habitats. Focusing expansion of protected and conserved areas on Key Biodiversity Areas and other areas important for species will greatly increase their impact and benefits for species.*

Action	Actors	Tools and resources
3.1. Identify all sites important for species conservation		
3.1.1. Identify Key Biodiversity Areas comprehensively in each country and in coastal and marine areas, including those beyond national jurisdiction.	KBA National Coordination Groups KBA Partnership Government agencies	<i>Key Biodiversity Areas (KBAs)</i> A Global Standard for the Identification of KBAs Guidelines for using A global standard for the identification of KBAs Guidance on the role of KBA National Coordination Groups and how to establish them World Database on KBAs
3.1.2. Ensure that all KBAs and other sites of importance for species conservation are covered by protected or conserved areas.	NGOs IPs and LCs Reverse the Red partnership	<i>Other resources</i> Important Plant Areas AEWA Critical Sites Network (CSN) Tool Important Shark and Ray Areas (ISRA) Important Marine Mammals Areas Atlas Ecologically and Biologically Significant Areas
3.1.3. Maintain and update a comprehensive global register of all sites determined as being of importance for species such as Key Biodiversity Areas (KBA), Important Plant Areas (IPAs), the Alliance for Zero Extinction sites (AZE), Important Marine Mammals Areas (IMMAs), Important Shark and Ray Areas (ISRA), Territories of Life (ICCAs) etc.	UNEP-WCMC KBA Secretariat AZE Secretariat	Protected Planet World Database of KBAs List and map of AZE sites Important Marine Mammals Areas (IMMAs) Important Shark and Ray Areas (ISRA) ICCA Registry

3.2. Ensure that protected and conserved area networks are representative of all natural ecosystems and well connected

3.2.1. Analyse gaps in existing protected and conserved area networks for species.	Government agencies IUCN UNEP-WCMC	IUCN Green List Sustainability Standard IUCN Guidelines for Conserving Connectivity through Ecological Networks and Corridors
3.2.2. Identify, report, and maintain Other Effective Area-based Conservation Measures (OECMs) to benefit species.	KBA Secretariat AZE Secretariat NGOs IPs and LCs	IUCN Resolution WCC-2020-Res-073 "Ecological connectivity conservation in the post-2020 global biodiversity framework: from local to international levels" IWC Conservation Management Plans (CMPs) . Important Marine Mammals Areas (IMMAs) IWC Conservation Management Plans (CMPs) Important Marine Mammals Areas (IMMAs)
3.2.3. Focus expansion of protected and conserved areas on sites of high importance for species, including ecological corridors.		CMS Instruments and initiatives https://www.unep-aewa.org/sites/default/files/document/mop5_15_preliminary_site_network_report_0.pdf
3.2.4. Support transboundary conservation areas where species' populations cross national borders.		

3.3. Maximise the value of internationally recognised sites (Biosphere Reserves, Ramsar Sites, World Heritage Sites) for species conservation

3.3.1. Inscribe all sites meeting the species criteria as Wetlands of International Importance (Ramsar) and integrate Ramsar sites in wetland landscape conservation.	Ramsar Secretariat	Ramsar Sites Criteria
3.3.2. Inscribe all PCAs that meet criterion X for species outstanding universal value on the World Heritage List and review species data in mixed and cultural sites.	World Heritage Committee	World Heritage (WH) Criteria for Selection
3.3.3. Inscribe sites harbouring threatened species and cultural diversity in the UNESCO Man and Biosphere (MAB) programme.	UNESCO MAB Programme	UNESCO MAB Criteria
3.3.4. Develop synergies in managing species and reporting in sites with overlapping international designations.	Ramsar, WHS and MAB secretariats	Ramsar , WH Site , MAB tools

3.4. Manage effectively and govern equitably all protected and conserved areas and other sites important for species

3.4.1. Include key species requirements in site management plans.	National management agencies Private sector engaged in conservation efforts	CBD Programme of Work on Protected Areas IUCN Green List of Protected and Conserved Areas Standard
3.4.2. Train and equip management staff (including government, private, community, and Indigenous rangers) to professional standards that benefits species conservation.	NGOs IPs and LCs Research institutions	WCPA PA Management Competence Standards IRF Ranger Code of Conduct Universal Ranger Support Alliance Action Plan https://www.ursa4rangers.org/ursa4rangers-resources/ SMART monitoring
		IWC Task Teams and CMPs, with local monitors on cetaceans. The IWC entanglement response initiative.

3.4.3. Empower Indigenous peoples and Local communities and all rightsholders and stakeholders to participate in governance and to input their knowledge of sites and species, and to lead on their rights, values needs and the most effective ways to realise and support them.

IPs and LCs
ILK holders
Regional organizations
Fishers' Associations
IPBES
IUCN

[Nagoya Protocol](#)
[IUCN ESMS Standard on Indigenous Peoples. Version 2.1 – December 2019](#)
[United Nations Declaration on the Rights of Indigenous Peoples \(UNDRIP\), adopted in 2007](#)
[CBD decision on integration of provisions related to indigenous peoples and local communities in the work of the Convention and its Protocols](#)
[IWC Aboriginal Subsistence Whaling Management Programme \(ASWMP\): science-based management of aboriginal whaling activities](#)

3.4.4. Ensure Indigenous peoples and Local communities and all rightsholders and stakeholders are fully informed, involved, consulted and on an equitable basis, in site governance, planning and management, and provide adequate resourcing, capacity, and training as appropriate.

3.4.5. Monitor and evaluate success of protected and conserved areas in conserving species.

[IUCN Green List of Protected Areas Standard](#)
[Conservation Assured](#)
[Management Effectiveness Tracking Tool \(METT4\)](#)
[Integrated Management Effectiveness Tool \(IMET\)](#)

Global Biodiversity Framework Target 4.

Ensure urgent management actions to halt human induced extinction of known threatened species and for the recovery and conservation of species, in particular threatened species, to significantly reduce extinction risk, as well as to maintain and restore the genetic diversity within and between populations of native, wild and domesticated species to maintain their adaptive potential, including through in situ and ex situ conservation and sustainable management practices, and effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence.

GSAP RATIONALE: Targeted actions are essential to prevent extinctions, reverse declines and enable recovery of many species, in addition to reversing the threats and drivers of decline. Without such actions, extinction risk for over one third of threatened species would not be reduced sufficiently, even if all the other GBF targets were fully implemented. Species-specific actions include habitat management, reintroduction and reinforcement, translocations to expand range, captive breeding or propagation, supplementary feeding, provision of breeding sites, and others. Conserving the genetic diversity of wild species is also important for their long-term persistence. Conflicts between humans and wildlife are increasing, and threaten not only species, but also sustainable development, food security, and human life and well-being, with impacts felt most often by the most vulnerable and marginalised in society. Integrated responses are needed at large scales to minimize and manage human-wildlife conflict, promoting coexistence between wildlife and people.

Action	Actors (to be added)	Tools and resources
4.1. Assess the conservation status of all species and identify those needing targeted recovery actions		
4.1.1. Assess the extinction risk, population size and trends, distribution, threats, and conservation potential of species.	IUCN Red List Partners IUCN SSC Specialist Groups and Red List Authorities WWF IWC CMS and its instruments Reverse the Red partnership ITPGRFA National reports	IUCN Red List The IUCN Green Status of Species Living Planet Index GlobalTree Portal ThreatSearch (plants) IWC Population estimates of cetaceans and Status of the Stocks initiative IWC Extinctions Initiative Conservation actions in the national ITPGRFA Reports STAR
4.1.2. Develop National Red Lists.	Governments IUCN IUCN SSC Specialist Groups Reverse the Red partnership	IUCN Regional Red List Guidelines are available in the following IUCN-recognised versions: English , Spanish , French , Arabic and Japanese . National Red List Working Group
4.1.3. Identify species that require targeted action to enable their recovery.	IUCN MEAs Governments NGOs Research institutes IUCN SSC Specialist Groups Reverse the Red partnership	IUCN Red List of Threatened Species IUCN Green Status of Species IWC Population (Abundance) estimates of cetaceans . IWC Extinctions Initiative . CMS and its instruments

4.1.4. Develop comprehensive monitoring programmes, including relevant indicators, for target species and recovery programmes.	IUCN MEAs Governments NGOs Research institutes IUCN SSC Specialist Groups Reverse the Red partnership	CMP Conservation Standards IUCN SSC Species Monitoring Specialist Group Guidelines and Tools Biodiversity Indicators Partnership resources USAID biodiversity monitoring guidelines GEOBON essential biodiversity variables
4.2. Develop and implement a recovery plan (single species, multi-species, site-based, or threat-based) for all species that require one		
4.2.1. Integrate existing global strategies for whole taxonomic groups into national and regional planning.	Governments IWC IUCN SSC Specialist Groups	IUCN Species Planning Guidelines (IUCN 2017) IUCN SSC CPSG Species Planning Principles and Steps Application of the global standard for Crop Wild Relatives (CWR) in documentation phase for the creation of national inventories IUCN SSC CPSG Species Conservation Planning Online Training Course IUCN SSC CPSG A Facilitators Guide to Species Conservation Planning IUCN SSC CPSG Conservation Planning Specialist Group Webinar Series IUCN SSC CPSG Conservation Planning's PHVA Workshop Process IUCN SSC CPSG Species Conservation Planning Tools Library IWC Conservation Management Plans and Task Teams AEWA International Single and Multi-Species Action Planning Format and Guidelines ITPGRFA CWR descriptors: Global standard for Crop Wild Relatives (CWR)
4.2.2. Increase the capacity of national governments, NGOs and CSOs to conduct species recovery planning at global, regional, and national levels.	ITPGRFA CWR descriptors NGOs	
4.2.3. Develop comprehensive recovery plans with a defined implementation and coordination mechanism.		
4.2.4. Integrate in situ and ex situ planning for species with significant ex-situ populations.		IUCN SSC CPSG 'One Plan' approach
4.2.5. Identify species or groups of species with similar planning needs.		IUCN SSC CPSG Assess to Plan Overview - YouTube
4.3. Enact measures to prevent extinctions and recover threatened species		
4.3.1. Implement species recovery plans fully and effectively.	Governments NGOs	IUCN SSC CPSG Species Conservation Planning Tools Library IUCN Reintroduction and Translocation Guidelines (2013) Species Recovery Manual (plants) IUCN Reintroduction Case Studies IWC CMPs AEWA International Single and Multi-Species Action Plans: ITPGRFA Benefit-Sharing Fund
4.3.2. Include national work plans for species in NBSAPs.	MEAs IUCN	
4.3.3. Provide full technical and financial support to those responsible for implementation.	Reverse the Red partnership IUCN SSC Specialist Groups	
4.3.4. Conduct all species reintroductions and other conservation translocations according to IUCN guidelines and other specific guidelines building on the IUCN ones.	Business sector	
4.3.5. Incorporate assisted colonization of species most vulnerable to impacts of climate change or identify and secure 'climate corridors' allowing species to move naturally.		

4.3.6. Apply laws and regulations on species conservation effectively and strengthen or update legal frameworks where relevant.	Governments CMS and its instruments AEWA World Commission on Environmental Law Centre for Environmental Law IUCN-FAO-UNEP Ecolex	https://www.iucn.org/our-union/commissions/world-commission-environmental-law https://www.ecolex.org/ CIEL https://www.ciel.org/ AEWA International Review of Hunting and Trade Legislation ; AEWA Guidelines on National Legislation AEWA Guidance on Measures in National Legislation for Different Populations of the Same Species, Particularly with Respect to Hunting and Trade AEWA Guidance on Addressing the Risk of Accidental Shooting of Look-alike Species of Waterbirds in the Agreement Area
4.3.7. Support transboundary conservation programmes for species' populations that cross national borders.	Governments Regional government associations CMS AEWA	CMS Agreements IWC CMPs WWF report "Transboundary Conservation Landscapes" CMS tools under 1.2.2. AEWA Resolution 8.15: https://www.unep-aewa.org/sites/default/files/document/aewa_mop_res8_15_addressing_causes_of_waterbird_mortality_en.pdf ASEAN Handbook on Legal Cooperation to Combat the Illegal Wildlife Trade
4.3.8. Reduce incidental mortality of species (ship strikes, wind turbines, collision and electrocution on electricity wires, road kill).	Governments IWC IUCN NGOs	IWC Bycatch Mitigation Initiative pilot projects IWC coordinates work on marine debris, bycatch and entanglement, underwater noise and other pollutants with other IGOs/RFMOs IWC science and stewardship of ship strikes, IWC Ship strike database , and collaboration with IMO on vessel speed and routing. IUCN guidelines: Mitigating biodiversity impacts associated with solar and wind energy development
4.3.9. Employ One Health approaches to manage the human-livestock-wildlife disease interface regarding infectious diseases.	IUCN Wildlife Health Specialist Group World Organisation for Animal Health (WOAH, formerly OIE) and the Quadripartite partners (WOAH, UNEP, FAO and WHO) Governments NGOs	IUCN SSC Wildlife Disease Risk Analysis (DRA) Guidelines and associated DRA Manual IUCN SSC CPSG DRA On-line training course Healthy People and Wildlife through Nature Protection: Guidelines for Prevention, Detection, Response and Recovery from Disease Risks in and around Protected and Conserved Areas Guidelines for Working with Free-Ranging Wild Mammals in the Era of the COVID-19 Pandemic One Health Principles for Sustainable Tourism in Protected and Conserved Areas One Health Joint Plan of Action Living with Wildlife through One Health

4.4. Maintain or establish coordinated ex-situ breeding or propagation programmes for all species that require them

4.4.1. Evaluate the status and value of ex-situ populations and reinforce or establish them where appropriate.	WAZA BCCI Regional zoo associations	IUCN Guidelines on the Use of Ex Situ Management for Species Conservation , version 2.0, 2014 Amphibian Ark Ex situ Assessment tool and process
4.4.2. Provide support to range countries in collection planning, breeding, and propagation programmes.	Botanic Gardens Zoos, and Aquaria IUCN	IUCN resolution 079: Linking in situ and ex situ efforts to save threatened species IUCN SSC CPSG 'One Plan' approach Species360
4.4.3. Follow Red List guidance on including ex situ populations in assessments.	Governments NGOs	Global Information System on Plant Genetic Resources for Food and Agriculture PlantSearch and PlantShare https://www.globalconservationconsortia.org/ The World Flora Online: An Online Flora of All Known Plants

4.5. Minimise loss of genetic diversity across all threatened species and retain at least 95% gene diversity in species where it is already depleted

4.5.1. Evaluate the loss in genetic diversity in populations of threatened species through genetic and genomic tools or proxy assessments.	Conservation Genetics Specialist Group	Safari genetic scorecard IWC Scientific Committee work on cetacean DNA
4.5.2. Develop standardised genetic diversity indicators and reporting mechanisms for policy makers and conservation managers.	Research institutes	
4.5.3. Use genetic and genomic analyses to inform integrated metapopulation management of ex situ and in situ populations and their role in reintroductions and reinforcement.		
4.5.4. Include genetic risks in species Red List assessments.		

4.6. Reduce and manage human-wildlife conflict and its drivers through a holistic, cross-sectoral approach

4.6.1. Develop holistic strategies and associated policies to prevent and manage human-wildlife conflict (HWC).	IWC IUCN HWC Task Force IUCN SSC Specialist	WCC2020-Res101: Addressing human-wildlife conflict: fostering a safe and beneficial coexistence of people and wildlife
4.6.2. Increase national and local capacity to prevent and manage HWC.	Groups NGOs Governments Business sector	IUCN Position Statement on HWC IUCN training courses on HWC IUCN SSC guidelines on human-wildlife conflict and coexistence: first edition
4.6.3. Integrate standards of HWC prevention, management, and coexistence into industry certification schemes.		
4.6.4. Develop and implement standardised HWC monitoring protocols, ideally at national level, utilizing available technologies (e.g. SMART).		
4.6.5. Increase awareness, knowledge exchange, and adaptive management of HWC approaches, increasing their efficacy.		

4.7. Determine factors governing species conservation success

4.7.1. Analyse reasons for success and failure of species conservation measures.	Governments AEWA Implementing agencies	PANORAMA Species Conservation Solutions AEWA International Review the Stage of Preparation and Implementation of Species Action Plans
4.7.2. Promote all examples of successful species conservation action and lessons learned.	IUCN NGOs IUCN SSC Specialist Groups	

Global Biodiversity Framework Target 5.

Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spillover, applying the ecosystem approach, while respecting and protecting customary sustainable use by indigenous peoples and Local communities.

GSAP RATIONALE: Overexploitation has depleted the populations of many species and caused local extinctions. Illegal wildlife trade is a multibillion-dollar industry and a threat not only to biodiversity conservation, but also to public health. Ensuring that legal use is sustainable and combatting illegal wildlife trade are crucial to the persistence of species and the resources on which millions of people depend for food, medicine, building, fuel, and other purposes. Reduce the risk of negative public health and economic impacts of zoonotic spillover within the wildlife trade through further support enforcement of existing laws and creation of new ones as needed.

Action	Actors	Tools and resources
5.1. Ensure that use of wild species is sustainable		
5.1.1. Develop effective systems to monitor population trends in harvested or traded species.	CITES TRAFFIC	The Addis Ababa Principles and Guidelines for the Sustainable use of Biodiversity
5.1.2. Provide technical support for sustainable use of species.	IUCN Sustainable Use and Livelihoods Specialist Group	European Charter on Hunting and Biodiversity
5.1.3. Co-develop harvest quotas equitably and transparently with Indigenous peoples and Local communities.	MEAs FAO	ECOLEX - The gateway to environmental law Zero Poaching Framework
5.1.4. Develop effective systems to monitor and report harvest, trade, and sustainability, along with participation and socio-economic benefits.	Collaborative Partnership on Sustainable Wildlife Management Government agencies NGOs and CSOs	FAO's tools and resources on Illegal, Unreported and Unregulated (IUU) fishing CMS Text and List of Species of CMS and its instruments CMS Review Mechanism and National Legislation Programme Agreement Text and its Annexes as amended by the 8th Session of the Meeting of the Parties (MOP8) AEWA Strategic Plan 2019-2027 Adopted at the 7th Session of the Meeting of the Parties, Objective 2
5.1.5. Monitor success of sustainable use programmes and interventions in improving the local conservation status of species and improving local attitudes to nature.	CITES Secretariat CMS Regional Wildlife Enforcement Networks INTERPOL	AEWA Implementation Review Process (IRP) CMS Intergovernmental Task Force on Illegal Killing, Taking and Trade of Migratory Birds in the Mediterranean (MIKT) AEWA Guidance on Measures in National Legislation for Different Populations of the Same Species, Particularly with Respect to Hunting and Trade
5.1.6. Develop species management plans for key wild species of fauna and flora in use and trade.	Universal Ranger Support Alliance Business sector	IUCN ESMS Standard on Indigenous Peoples, Version 2.1 – December 2019 United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), adopted in 2007 CBD decision on integration of provisions related to indigenous peoples and local communities in the work of the Convention and its Protocols
5.1.7. Apply voluntary guidelines and standards verifying traceability and sustainability (including FSC, MSC, FairWild, UEBT, and others) wherever applicable.		IWC Aboriginal Subsistence Whaling Management Programme (ASWMP): science-based management of aboriginal whaling activities The State of World Fisheries and Aquaculture 2022 Post-2020 Global Biodiversity Framework: An Indicator to Monitor the Threats to Inland Fisheries, as a Component of Target 5

5.2. Ensure wild meat consumption and trade is at sustainable levels

5.2.1. Develop wild meat demand reduction and behaviour change programmes in urban areas where needed.	Research and academic institutions Government agencies	Wild Meat Database Wild Meat Library Wild Meat Toolkit
5.2.2. Work with Indigenous peoples and Local communities to provide alternative protein sources to rural communities.	NGOs and CSOs CITES, TRAFFIC IUCN Sustainable Use and Livelihoods Specialist Group	CMS Impacts of Taking, Trade and Consumption of Terrestrial Migratory Species for Wild Meat Widespread Use of Migratory Megafauna for Aquatic Wild Meat in the Tropics and Subtropics The harvest of CMS appendix i-listed sharks and rays as aquatic wild meat
5.2.3. Supply training materials in local and indigenous languages for rural community project self-management.	MEAs FAO Collaborative Partnership on Sustainable Wildlife Management Business sector	

5.3. Ensure that all use of species is legal

5.3.1. Review national legislation in respect of species in use and trade and identify gaps.	Governments CITES Secretariat CMS	ECOLEX Zero Poaching Framework FAO's tools and resources on Illegal, Unreported and Unregulated (IUU) fishing
5.3.1. Include customary sustainable use (CSU) within legal use.	Regional Wildlife Enforcement Networks INTERPOL	CMS Review Mechanism and National Legislation Programme
5.3.2. Develop or revise legal frameworks and harvest levels as appropriate.	Universal Ranger Support Alliance TRAFFIC	AEWA Strategic Plan 2019-2027, Objective 2: https://www.unep-aewa.org/sites/default/files/basic_page_documents/aewa_strategic_plan_2019-2027_final.pdf AEWA Implementation Review Process: https://www.unep-aewa.org/en/activities/irp
5.3.3. Focus enforcement efforts on commercial levels of poaching and illegal trade.		CMS work on illegal Killing, Taking and Trade of Migratory Birds AEWA Guidance on Measures in National Legislation for Different Populations of the Same Species, Particularly with Respect to Hunting and Trade Addis Ababa Principles and Guidelines Principle 3 European Charter on Hunting and Biodiversity Bern Convention Charters ; Southeast Asian Reptile Conservation Alliance

5.4. Reduce illegal trade of species and products		
5.4.1. Encourage all countries to become signatories to CITES.	Governments CITES Secretariat Regional Wildlife Enforcement Networks INTERPOL UNEP-WCMC Universal Ranger Support Alliance NGOs Business sector	UNODC Forest and Wildlife Crime Toolkit CITES 'Non-detriment findings' CITES Trade Database CITES Wildlife TradeView Species+ and the CITES Checklist TRAFFIC online Learning Centre https://www.traffic.org/learning-centre/ TRAFFIC - Wildlife Trade portal Zero Poaching Framework WWF Elephant Ivory Initiative FAO's tools and resources on Illegal, Unreported and Unregulated (IUU) fishing Collaborative Partnership on Sustainable Wildlife Management
5.4.2. Comply fully with CITES regulations, non-detriment findings, and reporting on international trade.	International Whaling Commission Collaborative Partnership on Sustainable Wildlife Management (CPW) Resource beneficiary NGOs IUCN Sustainable Use Groups TRAFFIC UNODC	UNODC wildlife crime - contains World Wildlife Crime Report Wildlife Trade Portal - [online tool that displays TRAFFIC's open-source wildlife seizure and incident data] People Not Poaching - supporting and engaging communities as the first line of defence against illegal wildlife trade International Maritime Organization (IMO) Guidelines for the Prevention and Suppression of the Smuggling of Wildlife on Ships Engaged in International Maritime Traffic
5.4.3. Coordinate and scale-up collaborative actions by enforcement agencies, customs, judiciary, and other relevant entities to combat poaching trade in wild species.		
5.4.4. Use behavioural change interventions to reduce demand for products from threatened populations.		
5.4.5. Reduce Illegal, Unreported, Unregulated Practices (IUUP) in fisheries.		
5.4.6. Reduce in-country illegal trade, including of illegally obtained animals and plants and readily recognisable parts or derivatives of such.		AEWA Guidelines on National Legislation AEWA Guidelines on National Legislation Addis Ababa Principles and Guidelines Bern Convention Charters FACE Biodiversity Manifesto database
5.4.7. Identify and implement targeted economic activities as an alternative to illegal trade.		
5.4.8. Assess the role of safe and sustainable wildlife farming and cultivation where appropriate.		
5.4.9. Ensure that measures to reduce illegal trade and trafficking do not create barriers to sustainable use that conserves species and supports livelihoods and the ecosystems on which they depend.		Addis Ababa Principles and Guidelines Bern Convention Charters FACE Biodiversity Manifesto database

5.5. Reduce the impact of bycatch on non-target species

5.5.1. Drive innovation to fishing gear modifications that reduce or eliminate bycatch.	Governments CITES Secretariat Research institutions	FAO technical Guidelines for Responsible Fisheries Fishing operations. Guidelines to prevent and reduce bycatch of marine mammals in capture fisheries
5.5.2. Control the discarding of fishing nets and other gear.	NGOs Regional Wildlife Enforcement Networks	Global Ghost Gear Initiative Guidelines to prevent and reduce bycatch of marine mammals in capture fisheries
5.5.3. Work with fisher communities and organizations to increase capacity and experience in the safe handling, monitoring, and release of bycatch.	INTERPOL Universal Ranger Support Alliance	Guidelines for the Safe and Humane Handling and Release of bycatch small cetaceans in fishing gear
5.5.4. Assess community fisheries education programmes with local partners to identify systemic weakness requiring remediation.	IWC NGOs Business sector RFMOs	IWC bycatch mitigation initiative ASCOBANS Cost-benefit Analysis for Mitigation Measures in Fisheries with High Bycatch IWC Entanglement response initiative, bycatch mitigation initiative , CMPs and the work done on ship strikes , marine debris , other pollutants and anthropogenic underwater noise .
5.5.5. Adopt legislation on the most effective gear modifications and handling protocols.		ASCOBANS Monitoring Cetacean Bycatch: An Analysis of Different Methods Aboard Commercial
5.5.6. Ensure Regional Fisheries management is effective.		
5.5.7. Reduce the impact of bycatch on other non-target species (snaring, indiscriminate harvest etc).		

5.6. Reduce risks for human health from handling, trading, and consuming wild species

5.6.1. Employ One Health approaches in all sectors involved in handling and managing wild species.	Quadrupartite partners (WOAH, UNEP, FAO and WHO)	One Health and Wildlife Interim Guidance on Reducing public health risks associated with the sale of live wild animals of mammalian species in traditional food markets PANORAMA Solutions – Species Conservation community
5.6.2. Deliver One Health programmes with local partners to engage Indigenous peoples and Local communities for the purpose of raising IPs and LCs awareness of critical health issues regarding wild species.	IUCN SSC Wildlife Health Specialist Group Business sector NGOs TRAFFIC	IUCN-OIE Wildlife Disease Risk Analysis Guidelines Manual of procedures for wildlife disease risk analysis IUCN SSC CPSG DRA online training courses IWC Strandings Initiative
5.6.3. Create a central database and reporting mechanism for data on diseases originating from the global wildlife trade.	Collaborative Partnership on Sustainable Wildlife Management (CPW)	Guidelines for Prevention, Detection, Response and Recovery from Disease Risks in and around Protected and Conserved Areas
5.6.4. Ensure IUCN SSC Disease Risk Analysis (DRA) Guidelines and associated manual and training materials are kept up to date.		
5.6.5. Provide DRA expertise and training where needed.		

Global Biodiversity Framework Target 6.

Eliminate, minimize, reduce and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services by identifying and managing pathways of the introduction of alien species, preventing the introduction and establishment of priority invasive alien species, reducing the rates of introduction and establishment of other known or potential invasive alien species by at least 50 per cent, by 2030, eradicating or controlling invasive alien species especially in priority sites, such as islands.

GSAP RATIONALE: *Invasive alien species (IAS) are a major threat to native species, especially on islands and in freshwater systems. Eradication or control of such species can result in rapid recovery of native species and habitats, and technological and methodological advances mean that such interventions are feasible at increasingly large scales.*

Action	Actors	Tools and resources
6.1. Enact strategies, policies, and legislation to reduce impacts of invasive alien species on native species		
6.1.1. Develop and implement National Invasive Species Strategies and Action Plans (NISSAP).	Governments IUCN Invasive Species Specialist Group	IUCN Environmental Impact Classification of Alien Taxa (EICAT)
6.1.2. Enact legislation and policies to control and manage IAS, pathways of introduction, and banning the import, possession, or breeding of priority IAS.	IUCN SSC National Species Specialist Groups Business sector	
6.1.3. Produce technical guidance on development of legislation, policy and strategies addressing IAS.		
6.1.4. Identify IAS that have the most harmful impacts on species and sites that are the most vulnerable to IAS.		
6.1.5. Develop and implement private sector standards and guidance for the control of IAS, and management of their impacts.		
6.1.6. Maintain and update the Global Invasive Species Database.	IUCN Invasive Species Specialist Group	IUCN Environmental Impact Classification of Alien Taxa (EICAT) IUCN Global Invasive Species Database (GISD) Global Register of Introduced and Invasive Species (GRIIS)
6.2. Control pathways of introduction of IAS, particularly the most harmful species		
6.2.1. Identify and prioritise pathways of introduction to be controlled.	Governments IUCN Invasive Species Specialist Group	Global Register of Introduced and Invasive Species (enhanced pathway component) IUCN Invasive Species Specialist Group's tools and resources Beware of Aliens campaign by the EC ISSG codes of conduct developed through Bern Convention
6.2.2. Include IAS pathway identification and control into NISSAPs.		

6.3. Eradicate, or control, IAS that have the most harmful impacts upon wild species

6.3.1. Develop and implement eradication or and control plans for priority IAS and priority sites.	Governments IUCN Invasive Species Specialist Group	IUCN resources on the prevention and management of IAS and pathways of introduction (produced for the EC) Manual for the management of vertebrate invasive alien species of Union concern, incorporating animal welfare (2022) ISSG developed codes of conduct through Bern Convention IUCN Invasive Species Specialist Group's tools and resources
6.3.2. Produce guidance and best practices on the eradication and control of IAS.		

6.4. Build capacity, stakeholder engagement and public awareness of the impacts of invasive alien species

6.4.1. Build national capacity for biosecurity, monitoring and research, rapid eradication, management, and restoration.	Governments IUCN Invasive Species Specialist Group	IUCN SSC Species Conservation Competence Standards IUCN resources on the prevention and management of IAS and pathways of introduction Beware of Aliens campaign by the EC IMO / IUCN / ICOMIA / World Sailing Biofouling management for recreational boating (2022) IUCN SSC (2021) A global register of competencies for threatened species recovery
6.4.2. Raise awareness among key stakeholder groups of IAS, their impacts, and actions that can be taken to control them.		ISSG developed codes of conduct through Bern Convention IUCN Invasive Species Specialist Group's tools and resources
6.4.3. Involve local communities in the planning and implementation of IAS management.		
6.4.4. Initiate local language efforts on invasive species awareness.		

Global Biodiversity Framework Target 7.

Reduce pollution risks and the negative impact of pollution from all sources, by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: reducing excess nutrients lost to the environment by at least half including through more efficient nutrient cycling and use; reducing the overall risk from pesticides and highly hazardous chemicals by at least half including through integrated pest management, based on science, taking into account food security and livelihoods; and also preventing, reducing, and working towards eliminating plastic pollution.

GSAP RATIONALE: Pollution from all sources, including fossil fuel burning, industrial discharges, plastic waste, biocides, excess nutrients, sewage, agricultural run-off, and new emerging pollutants, has significant direct and indirect effects on species. The effects of plastic pollution and bio-accumulation throughout the marine realm are particularly marked. Noise and light pollution have further negative effects in both terrestrial and marine realms. Minimizing production and use, preventing release, and mitigating the impacts of pollutants are all needed.

Action	Actors	Tools and resources
7.1. Minimise the negative effects of pollution on species		
7.1.1. Implement guidelines and decisions of the Basel, Rotterdam, and Stockholm conventions to protect species from hazardous chemicals and wastes.	Governments Business sector MEAs NGOs	IWC Pollution 2020 IWC Marine Debris programme , IWC work on Anthropogenic underwater noise IWC Strandings Initiative 7.1.2 CMS Risk Assessment of Plastic Pollution to Migratory Species in the Mekong and Gange River Basins For 7.1.4 Guidelines to Prevent the Risk of Poisoning to Migratory Birds and other materials: www.cms.int/en/workinggroup/preventing-poisoning-migratory-birds For 7.1.7: CMS Family Guidelines on Environmental Impact Assessments for Marine Noise-generating Activities CMS Light Pollution Guidelines Africa Wildlife Poison Database and WOA/WAHIS-Wild
7.1.2. Support a new global treaty on plastic pollution to minimize effects on species.		
7.1.3. Limit impacts on species from agricultural runoff and biocides.		
7.1.4. Increase the use of integrated pest management, and reduce indiscriminate use of pesticides, antibiotics, fertilizers.		
7.1.5. Minimise the loss of hydrocarbon-based fuel sources from marine vessels (e.g. bilge water discharge, fuel tank washing) that threaten species.		
7.1.6. Undertake measures to reduce the most severe impacts of acoustic and light pollution on threatened species in terrestrial and marine realms.		
7.1.7. Ensure chemical and veterinary medicine licensing procedures take into account potential or demonstrated impacts on non-target species and seek safer alternatives in line with a One Health approach.		
7.1.8. Phase out the use of lead ammunition for hunting and sport shooting.	Governments CMS	Guidelines to Prevent the Risk of Poisoning to Migratory Birds and other materials AEWA legal text and annexes

Global Biodiversity Framework Target 8.

Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solution and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity.

GSAP RATIONALE: *The magnitude of climate change has widespread and increasingly negative impacts on wild species, affecting their morphology, genetics, behaviour, abundance, distribution, extinction risk, and community interactions. Species in ecosystems such as coral reefs, high mountains, and at high latitudes are particularly at risk. It is critical to restrict average global temperature rises to 1.5 degrees, and interventions are needed now to help species adapt to the challenges they are already facing.*

Action	Actors	Tools and resources
8.1. Minimise the impacts of climate change on species through mitigation and adaptation		
8.1.1. Use IPCC global climate change scenarios to model threats to species and identify possible range shifts.	IPCC MEAs CMS and its instruments	IPCC scenarios IWC science and stewardship of climate change impacts on cetaceans IUCN Climate Change Specialist Group
8.1.2. Conduct climate change vulnerability and adaptive capacity assessments for all threatened species.	Government agencies Research institutions IUCN NGOs	IUCN Guidelines for Assessing Species' Vulnerability to Climate Change Directrices de la CSE de UICN para evaluar la vulnerabilidad de las especies al cambio climático CMS Review of impacts of climate change on migratory species (tbd) AEWA Strategic Plan 2019-2027, Objective 3: AEWA International Species Action and Management Plans that envisage actions on climate change adaptation AEWA Lesser White-fronted Goose climate change vulnerability assessment and adaptation management measures (in development)
8.1.3. Identify potential species refugia and climate corridors inside and outside indigenous range and secure them through PCAs (see also Target 3).		
8.1.4. Incorporate vulnerability assessments into species conservation and recovery plans.		
8.1.5. Maintain or restore ecological networks that allow species to move to climatically more suitable areas (see also Target 1).		
8.1.6. Utilize diverse indigenous plant and fungi species in areas planted for carbon sequestration and climate mitigation and adaptation.	Government agencies IUCN MEAs NGOs	Global Strategy for Plant Conservation

Global Biodiversity Framework Target 9.

Ensure that the management and use of wild species are sustainable, thereby providing social, economic and environmental benefits for people, especially those in vulnerable situations and those most dependent on biodiversity, including through sustainable biodiversity-based activities, products and services that enhance biodiversity, and protecting and encouraging customary sustainable use by indigenous peoples and Local communities.

GSAP RATIONALE: *Providing the people and communities who depend on wild species for essential food and other needs with the appropriate incentives and equitable benefits underpins sustainable use, thus assuring the persistence of species and continued resource availability.*

Action	Actors	Tools and resources
9.1. Safeguard fully equitable benefit-sharing mechanisms through appropriate legislation and regulations		
9.1.1. Provide Indigenous peoples and Local communities with the appropriate legal rights and incentives to protect, manage, and use species sustainably.	IPs and LC ILK holders Community organizations National governments	Nagoya Protocol IUCN ESMS Standard on Indigenous Peoples. Version 2.1 – December 2019 United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), adopted in 2007
9.1.2. Allocate sustainable harvest quotas equitably and transparently.	IUCN SSC Specialist Groups MEAs TRAFFIC	CBD decision on integration of provisions related to indigenous peoples and local communities in the work of the Convention and its Protocols IWC Aboriginal Subsistence Whaling Management Programme (ASWMP): science-based management of aboriginal whaling activities
9.1.3. Guarantee equitable revenues from use and trade in species for IPs and LCs through regulations or legislation.	CPW FAO IIED	Obligations under CMS and its instruments Southeast Asian Reptile Conservation Alliance IUCN People in Nature
9.1.4. Document Indigenous knowledge to support implementation of the Nagoya Protocol.		People in nature : valuing the diversity of interrelationships between people and nature - resource IUCN IUCN SULi Species Use Database CITES and Livelihoods case-studies
9.1.5. Fulfil obligations under the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)		ITPGRFA, its mechanisms, and national reports
9.2 Expand and diversify the wildlife economy to benefit species conservation		
9.2.1. Implement sustainable tourism where possible, and other wildlife-based incentives to conserve species and their habitats.	National governments NGOs IUCN SSC Specialist	Wildlife Economy guides Wildlife credit schemes Wildlife bonds
9.2.2. Ensure recreational hunting provides benefits for conservation and for local communities.	Groups TRAFFIC CPW IIED UNEP	State of the Wildlife Economy in Africa (2021) IWC Whale Watching Handbook One Health Principles for Sustainable Tourism in Protected and Conserved Areas IUCN People in Nature People in nature : valuing the diversity of interrelationships between people and nature - resource IUCN IUCN SULi Species Use Database CITES and Livelihoods case-studies

Global Biodiversity Framework Target 10.

Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity friendly practices, such as sustainable intensification, agroecological and other innovative approaches contributing to the resilience and long-term efficiency and productivity of these production systems and to food security, conserving and restoring biodiversity and maintaining nature's contributions to people, including ecosystem functions and services.

GSAP RATIONALE: Expansion and intensification of agriculture and aquaculture are major drivers of species declines. Increasing the productivity and sustainability of all managed ecosystems will reduce the demand for land and freshwater resources and the associated pressure on wild species.

Action	Actors	Tools and resources
10.1. Reduce and reverse the negative impacts of intensive agriculture, aquaculture, forestry on species		
10.1.1. Prevent conversion of all sites and corridors important for species conservation.	Governments FAO IUCN	Wildlife Economy guides Wildlife credit schemes State of the Wildlife Economy in Africa (2021)
10.1.2. Promote design of agricultural and other managed ecosystems to minimise fragmentation of remaining natural habitats.	MEAs	
10.1.3. Promote farming linked to the Wildlife Economy.		
10.1.4. Incorporate key species considerations fully into agricultural, aquacultural and forestry certification schemes.		

Global Biodiversity Framework Target 11.

Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as regulation of air, water, and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions and/or ecosystem-based approaches for the benefit of all people and nature.

GSAP RATIONALE: Nature-based solutions and green infrastructure approaches explicitly designed to benefit wild species, such as the restoration of ecological networks, contributes to species viability, ecosystem service provision, and resilience to climate change.

Action	Actors	Tools and resources
11.1. Maximise the benefits to species from Nature-based solutions		
11.1.1. Scale up NbS to strengthen ecosystem services, climate change resilience, and species viability.	IUCN Governments	Nature based solutions report outlining the benefits of scaling NbS across ecological networks Environmental Flows Network (eFlowNet) WANI-Water and Nature Initiative IUCN-OIE Wildlife Disease Risk Analysis Guidelines Manual of procedures for wildlife disease risk analysis IUCN SSC DRA online training courses
11.1.2. Ensure IUCN SSC DRA Guidelines, manual, and training materials are kept up-to-date.		
11.1.3. Provide expertise and training on DRA to countries that need it.		

Global Biodiversity Framework Target 12.

GBF Target 12. Significantly increase the area and quality and connectivity of, access to, and benefits from green and blue spaces in urban and densely populated areas sustainably, by mainstreaming the conservation and sustainable use of biodiversity, and ensure biodiversity-inclusive urban planning, enhancing native biodiversity, ecological connectivity and integrity, and improving human health and well-being and connection to nature and contributing to inclusive and sustainable urbanization and the provision of ecosystem functions and services.

GSAP RATIONALE: *Appropriate location, design, and management of green and blue spaces can provide additional habitat and improve connectivity for wild species in addition to their benefits for human health and well-being.*

Action	Actors	Tools and resources
12.1. Manage green and blue spaces to maximise their value for species and connectivity		
12.1.1. Include native species conservation and habitat restoration in urban planning and development greening projects.	National and sub-national governments IUCN	A guide for pollinator-friendly cities IUCN Urban Alliance and solutions for Sustainable Urban Development and Resilience
12.1.2. Promote green infrastructure and eco-gardening to benefit species in all education institutions and private households (pollinator-friendly gardening, eco-school gardens).	NGOs Regional and national institutions and organisations	Eco-gardening The Ultimate Guide to Eco-Friendly Gardening A guide for pollinator-friendly cities IUCN SSC Guidelines on Disease Risk Analysis and associated manual and on-line training materials. Sustainable urban development and resilience solutions CMS tools listed under 1.1.1 -1.1.3, 1.2.1 and 1.2.2.

Global Biodiversity Framework Target 13.

Take effective legal, policy, administrative and capacity-building measures at all levels, as appropriate, to ensure the fair and equitable sharing of benefits that arise from the utilization of genetic resources and from digital sequence information on genetic resources, as well as traditional knowledge associated with genetic resources, and facilitating appropriate access to genetic resources, and by 2030 facilitating a significant increase of the benefits shared, in accordance with applicable international access and benefit-sharing instruments.

GSAP RATIONALE: Equitable access to, and benefit-sharing measures from, the use of genetic resources, including Indigenous and Local knowledge, create incentives for the sustainable use of species and their conservation, and contribute to a fairer economy.

Action	Actors	Tools and resources
13.1. Share the benefits from use of genetic resources equitably among all users.	Business sector Research institutes Governments	Nagoya Protocol and resources Free Prior Informed Consent IUCN Standard on Indigenous Peoples IUCN Seed Conservation Specialist Group's resources
13.2. Apply and accredit ILK where appropriate to secure engagement in species conservation.	IUCN Crop Wild Relatives Specialist Group IUCN Seed Conservation Specialist Group	
13.3. Safeguard all crop wild relatives through inclusion in seed banks and culture collections.		
13.4. Halt the erosion of genetic diversity of wild relatives of domesticated animals, plants, and fungi.		

Global Biodiversity Framework Target 14.

Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, poverty eradication strategies, strategic environmental assessments, environmental impact assessments and, as appropriate, national accounting, within and across all levels of government and across all sectors, in particular those with significant impacts on biodiversity, progressively aligning all relevant public and private activities, fiscal and financial flows with the goals and targets of this framework.

GSAP RATIONALE: *International and national policies generally prioritize economic growth over species, including subsidies and incentives associated with environmentally harmful practices in fisheries, aquaculture, agriculture, livestock rearing, forestry, mining, and energy, and pollution. Integrating species conservation needs into policies and regulatory frameworks across all sectors contributes directly to many targets and positive species outcomes.*

Action	Actors	Tools and resources
14.1. Incorporate species values into whole-government policy and national accounting systems.	National governments Multilateral donors Business sector	WCC 2020 Res 072 “Importance for the conservation of nature of removing barriers to rights-based voluntary family planning”
14.2. Reflect fully the ambitions of GBF Targets for species, relevant obligations under other MEAs and the GSAP when updating NBSAPs.		IUCN SSC & CEESP Biodiversity & Family Planning Task Force Population Reference Bureau's resources and training
14.3. Integrate the principle of No Net Loss or Net Positive Impact for biodiversity into development and planning policy affecting species.		USAID's Knowledge Success “20 Essential Resources: Population, Health & Environment” and Population Health & Environment Toolkits
14.4. Conduct strategic environmental assessments and environmental and social impact assessments for all major developments thoroughly and transparently to take account of species conservation.		
14.5. Ensure removal of barriers to rights-based voluntary family planning.	Governments NGOs IUCN Biodiversity & Family Planning Task Force	

Global Biodiversity Framework Target 15.

Take legal, administrative or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions:

- (a) Regularly monitor, assess, and transparently disclose their risks, dependencies and impacts on biodiversity, including with requirements for all large as well as transnational companies and financial institutions along their operations, supply and value chains and portfolios;
- (b) Provide information needed to consumers to promote sustainable consumption patterns;
- (c) Report on compliance with access and benefit-sharing regulations and measures, as applicable;

in order to progressively reduce negative impacts on biodiversity, increase positive impacts, reduce biodiversity-related risks to business and financial institutions, and promote actions to ensure sustainable patterns of production.

GSAP RATIONALE: *The production and supply chain practices are the driving factors behind many threats to species and it is essential to reduce the negative effects and aim for Nature Positive outcomes.*

Action	Actors	Tools and resources
15.1. Apply all international standards to production and supply chains to ensure use of species is sustainable.	Governments NGOs IUCN	Marine Stewardship Council (MSC): certified sustainable seafood Forest Stewardship Council: forest certification Farming with biodiversity: Towards Nature Positive Production at Scale
15.2. Redesign agricultural production systems to minimize negative impacts, and maximize positive impacts on species.	Agricultural sector Forestry sector	Responsible Sourcing: A Practical Guide FairWild for wild plant and fungi commodities Fashion Forever Green Pack: sustainable sourcing Fashion Pact, signed by over 300 brands, in which companies commit to “Wildlife friendly” approaches to agriculture, mining and forestry that promote the conservation of key species.”
15.3. Ensure all natural inputs (timber, non-timber wild plants and fungi, fish and other aquatic species, commercially traded fauna species) are obtained from certified sources.		Wildlife Friendly Enterprise Network IUCN's Working Paper on the Nature-Positive Approach
15.4. Provide information to consumers on appropriate sustainable sources or stocks of species.		

Global Biodiversity Framework Target 16.

Ensure that people are encouraged and enabled to make sustainable consumption choices including by establishing supportive policy, legislative or regulatory frameworks, improving education and access to relevant and accurate information and alternatives, and by 2030, reduce the global footprint of consumption in an equitable manner, including through halving global food waste, significantly reducing overconsumption and substantially reducing waste generation, in order for all people to live well in harmony with Mother Earth.

GSAP RATIONALE: Measures are needed to address patterns of overconsumption through increasing efficiency, limiting waste, and reducing overall demand - especially in developed countries – to limit their negative impacts on wild species.

Action	Actors	Tools and resources
16.1. Minimize impacts of food production on species by reducing consumption of animal protein, and eliminating food waste.	All institutions and individuals	Planet-based diets: A science based platform to encourage diets that are good for people and planet
16.2. Increase use of eco-labelling to help consumers make informed and sustainable choices.		One Planet Network - Sustainable Food Systems Playbook for guiding diners to plant rich dishes in food services (WRI) Love Food Hate Waste (WRAP)
16.3. Support use of local produce.		

Global Biodiversity Framework Target 17.

Establish, strengthen capacity for, and implement in all countries in biosafety measures as set out in Article 8(g) of the Convention on Biological Diversity and measures for the handling of biotechnology and distribution of its benefits as set out in Article 19 of the Convention.

GSAP RATIONALE: Controlling and managing release of genetically modified organisms and other biotechnology products reduces potentially severe impacts on species, their habitats, and people.

Action	Actors	Tools and resources
17.1. Implement measures to control or manage and monitor individual impacts of biotechnology on wild species.	All institutions and individuals	Cartagena Protocol on Biosafety Biosafety Clearing-House - an online platform for exchanging information on Living Modified Organisms (LMOs) and a key tool for facilitating the implementation of the Cartagena Protocol on Biosafety
17.2. Develop strict protocols to prevent negative effects on wild species from gene editing and genetic manipulation.		

Global Biodiversity Framework Target 18.

Identify by 2025, and eliminate, phase out or reform incentives, including subsidies, harmful for biodiversity, in a proportionate, just, fair, effective and equitable way, while substantially and progressively reducing them by at least 500 billion United States dollars per year by 2030, starting with the most harmful incentives, and scale up positive incentives for the conservation and sustainable use of biodiversity.

GSAP RATIONALE: Action by national governments, financial institutions, and multilateral development banks is needed to remove or reduce the most harmful incentives and reform them in ways that are neutral or positive to species conservation.

Action	Actors	Tools and resources
18.1. Identify the economic and regulatory incentives most damaging to species at global / regional / national scales.	All institutions and individuals	To be added
18.2. Develop targeted measures to eliminate or repurpose the incentives most damaging to species.		

Global Biodiversity Framework Target 19.

Substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner, including domestic, international, public and private resources, in accordance with Article 20 of the Convention, to implement national biodiversity strategies and action plans, by 2030 mobilizing at least 200 billion United States dollars per year, including by:

- (a) Increasing total biodiversity related international financial resources from developed countries, including official development assistance, and from countries that voluntarily assume obligations of developed country Parties, to developing countries, in particular the least developed countries and small island developing States, as well as countries with economies in transition, to at least US\$ 20 billion per year by 2025, and to at least US\$ 30 billion per year by 2030;
- (b) Significantly increasing domestic resource mobilization, facilitated by the preparation and implementation of national biodiversity finance plans or similar instruments according to national needs, priorities and circumstances;
- (c) Leveraging private finance, promoting blended finance, implementing strategies for raising new and additional resources, and encouraging the private sector to invest in biodiversity, including through impact funds and other instruments;
- (d) Stimulating innovative schemes such as payment for ecosystem services, green bonds, biodiversity offsets and credits, benefit-sharing mechanisms, with environmental and social safeguards
- (e) Optimizing co-benefits and synergies of finance targeting the biodiversity and climate crises,
- (f) Enhancing the role of collective actions, including by indigenous peoples and Local communities, Mother Earth centric actions¹ and non-market-based approaches including community based natural resource management and civil society cooperation and solidarity aimed at the conservation of biodiversity
- (g) Enhancing the effectiveness, efficiency and transparency of resource provision and use

GSAP RATIONALE: Achieving all the needs of species conservation requires a massive increase in funding, capacity building, and transfer of knowledge and technology to all countries.

Action	Actors	Tools and resources
19.1. Scale up funding from all sources, including redirected subsidies, to implement the actions outlined in the GSAP.	Multilateral finance institutions Donor agencies	Global Environmental Facility IWC Whale Watching Handbook
19.2. Develop innovative financing mechanisms to support the species conservation.	Philanthropic sector	IUCN SOS supports science-based conservation action that saves animals, plants and fungi from extinction. The Mohamed bin Zayed Species Conservation Fund Whitley Fund for Nature The Rufford Foundation Darwin Initiative EDGE Protected and Conserved Area Fund

¹ Mother Earth Centric Actions: Ecocentric and rights-based approach enabling the implementation of actions towards harmonic and complementary relationships between peoples and nature, promoting the continuity of all living beings and their communities and ensuring the non-commodification of environmental functions of Mother Earth.

Global Biodiversity Framework Target 20.

Strengthen capacity-building and development, access to and transfer of technology, and promote development of and access to innovation and technical and scientific cooperation, including through South-South, North-South and triangular cooperation, to meet the needs for effective implementation, particularly in developing countries, fostering joint technology development and joint scientific research programmes for the conservation and sustainable use of biodiversity and strengthening scientific research and monitoring capacities, commensurate with the ambition of the goals and targets of the framework.

GSAP RATIONALE: Achieving all the needs of species conservation requires a global programme of capacity building and transfer of knowledge and technology to all countries.

Action	Actors	Tools and resources
20.1. Build adequate capacity for species conservation in all countries.	Governments IUCN All stakeholders	GSAP SKILLS platform (to be developed in 2023) Restoration Barometer
20.2. Make available new and emerging science and technology relating to species conservation to all countries.	Research institutions	
20.3. Support young people to become species conservationists.		
20.4. Provide training in species identification, taxonomy, and monitoring.		

Global Biodiversity Framework Target 21.

Ensure that the best available data, information and knowledge, are accessible to decision makers, practitioners and the public to guide effective and equitable governance, integrated and participatory management of biodiversity, and to strengthen communication, awareness-raising, education, monitoring, research and knowledge management and, also in this context, traditional knowledge, innovations, practices and technologies of indigenous peoples and Local communities should only be accessed with their free, prior and informed consent,² in accordance with national legislation.

GSAP RATIONALE: Knowledge of the status, distribution, population trend, ecology, and threats to species is essential to set priorities, inform planning, determine levels of sustainable use, and implement action effectively. IPs and LCs have much of this knowledge embedded in their practices and use of their lands and resources, especially those upon which their livelihoods depend. Systematic monitoring of species and the condition of their habitats is needed to track trends and measure effectiveness of conservation action.

Action	Actors	Tools and resources
21.1. Assess and monitor the status, trends, abundance, and conservation potential of species.	IUCN Biodiversity-related conventions	IUCN Red List of Threatened Species The IUCN Green Status of Species Restoration Barometer
21.2. Assess and monitor the status, and trends of ecosystems.	IPBES WWF	IWC Population Status and IWC Population (Abundance) Estimates Wildlife Insights
21.3. Develop co-monitoring plans for species with IPs and LCs.	Governments NGOs	Living Planet Index World Database of KBAs
21.4. Build partnerships between research institutions and conservation agencies.	Research institutions All stakeholders	World Database on Protected Areas (WDPA) Citizen science programmes (iNaturalist , e-Bird , etc). UN Biodiversity Lab: Providing decision makers with the best available spatial data
21.5. Integrate the latest and emerging technologies in survey and monitoring programmes.		IUCN SSC Guidelines on Applying Indigenous & Local Knowledge in the Red List IUCN SSC Species Monitoring Specialist Group Database of Biodiversity Data
21.6. Maintain all relevant guidelines and other key documents and make available in multiple languages.		Sources for Conservation Monitoring IUCN Red List of Threatened Species Global Biodiversity Information Facility
21.7. Share project data with national, regional, or global databases wherever possible and appropriate.		ZSL Living Planet Index

² Free, prior and informed consent refers to the tripartite terminology of “prior and informed consent” or “free, prior and informed consent” or “approval and involvement.”

Global Biodiversity Framework Target 22.

Ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by indigenous peoples and Local communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by women and girls, children and youth, and persons with disabilities and ensure the full protection of environmental human rights defenders.

GSAP RATIONALE: *Equitable inclusion of Indigenous & Local Knowledge (ILK) and participation by IPs and LCs, women and youth in decisions that affect species conservation, and respect for their rights, increases their participation and commitment and enhances successful species outcomes.*

Action	Actors	Tools and resources
22.1. Involve IPs and LCs fully in all relevant processes and decisions affecting species conservation.	Governments IPBES IUCN	IUCN Standard on Indigenous Peoples SSC Guidelines on Applying ILK in the Red List ICCA Consortium
22.2. Mainstream ILK and participation of IPs and LCs into the development and implementation of National Biodiversity Strategy and Action Plans (NBSAPs).	MEAs NGOs UN Secretary General's Envoy on Youth	Nagoya Protocol on Access and Benefit-sharing Free Prior Informed Consent CBD Gender and Biodiversity Tools and Guidelines Gender Action Plan ASAP Women in Conservation Leadership Programme World Wildlife Day Conservation Leadership Programme Youth for Wildlife Conservation Global Youth Biodiversity Network CITES Youth Engagement IUCN Conservation Congress Global Youth Summit GEF Small Grant programme Youth Participation IUCN Climate Change Gender Action Plan
22.3. Ensure equitable participation by women and youth, in decisions affecting species conservation.		
22.4. Use the annual World Wildlife Day to incentivize wildlife conservation awareness among younger generations.		
22.5. Ensure safety of IPs and LCs and environmental activists.		

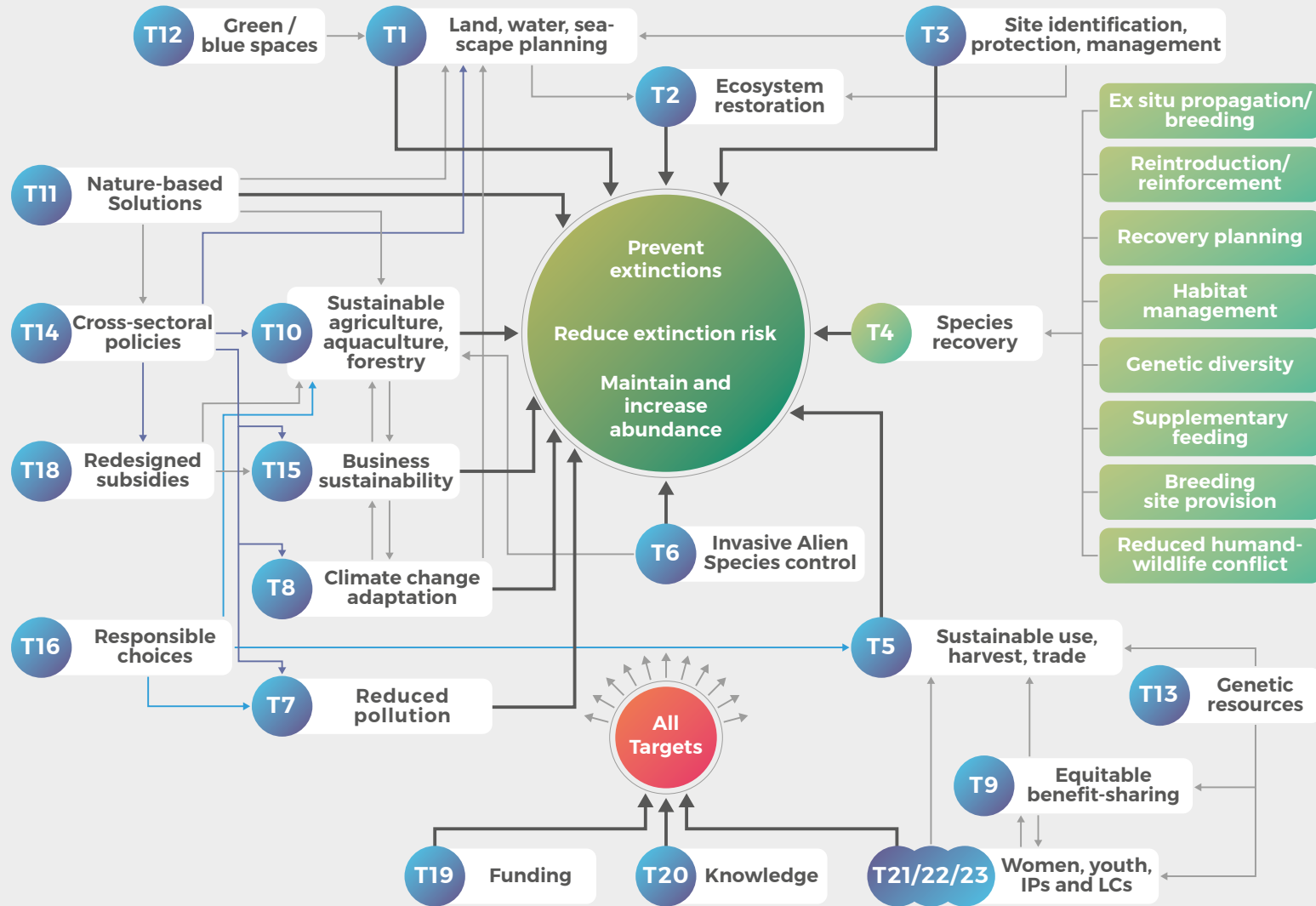
Global Biodiversity Framework Target 23.

Ensure gender equality in the implementation of the framework through a gender-responsive approach where all women and girls have equal opportunity and capacity to contribute to the three objectives of the Convention, including by recognizing their equal rights and access to land and natural resources and their full, equitable, meaningful and informed participation and leadership at all levels of action, engagement, policy and decision-making related to biodiversity.

GSAP RATIONALE: Ensuring gender equality and full participation by women and girls, in decisions that affect species conservation, increases their participation and commitment and enhances successful species outcomes.

Action	Actors	Tools and resources
23.1. Ensure full and equitable participation by women and girls, in all decisions affecting species conservation.	Governments NGOs	CBD Gender and Biodiversity Tools and Guidelines Gender Action Plan ASAP Women in Conservation Leadership Programme IUCN Climate Change Gender Action Plan Zoological Society of London — EDGE Fellowships
23.2. Mainstream gender into the development and implementation of National Biodiversity Strategy and Action Plans (NBSAPs).		

Schematic diagram illustrating some of the interconnections between GBF Targets and Key species outcomes





**INTERNATIONAL UNION
FOR CONSERVATION OF NATURE**

WORLD HEADQUARTERS
Rue Mauverney 28
1196 Gland, Switzerland
species@iucn.org
Tel +41 22 999 0000
Fax +41 22 999 0002
www.iucn.org
www.iucn.org/resources/publications