

# COMMUNITIES CONSERVING **WILDLIFE**

## **AUTHORS**

Ana Paula Canestrelli, Ana Maria Currea,  
Terence Hay-Edie, Doley Tshering

## **ACKNOWLEDGEMENT**

This publication could not have  
been produced without the valuable  
contributions provided by SGP Country  
Programmes and grantee partners.

## **EDITORS**

Christopher Dickson and Yoko Watanabe

## **DISCLAIMER**

The views expressed in this publication  
are those of the author(s) and do not  
necessarily represent the views of the  
United Nations Development Programme,  
the United Nations generally, or United  
Nations Member States.

## **CITATION**

United Nations Development  
Programme. 2021. Communities  
Conserving Wildlife.

## **DESIGN**

Camilo Salomon @ [www.cjsalomon.com](http://www.cjsalomon.com)

Published  
GEF Small Grants Programme  
Bureau for Policy and Programme Support  
United Nations Development Programme  
304 E 45<sup>th</sup> Street, 9<sup>th</sup> Floor  
New York, NY 10017  
[www.sgp.undp.org](http://www.sgp.undp.org)

© Copyright 2021  
United Nations Development Programme  
All rights reserved





CONSERVATION OF SCLATER'S MONKEY IN NIGERIA  
SGP NIGERIA

COMMUNITIES  
CONSERVING WILDLIFE



COLOBUS GUEREZA





# Contents

Foreword	2
Message from the SGP Global Manager	4
Introduction	6
1. Jaguar	8
2. Lion	10
3. Snow leopard	12
4. Sclater's monkey	14
5. Rhinoceros	16
6. Raptor	18
7. Vulture	20
8. Sea turtles	22
9. Atlantic humpback dolphin	24
Conclusion and looking forward	26

# Foreword

Several recent global reports<sup>1</sup> indicate that our planet is undergoing another mass extinction due to reasons widely known, including human activities such as deforestation, hunting, and overfishing. Much of the failure to arrest the loss of nature stem from the fact that the issue is highly complex and often requires concerted and integrated efforts from a range of stakeholders, including government, private sector and civil society. To this end, the Small Grants Programme (SGP) – a corporate programme of the Global Environment Facility (GEF) implemented by the United Nations Development Programme (UNDP) – has been supporting community-based actions with a focus on integrated initiatives that address global environmental issues, including conservation of threatened species.

Community-based measures supported by the SGP focus on the close links between biodiversity conservation and local peoples' lives and livelihoods. Such efforts are contributing in several countries towards the reduction of threats to wildlife and include measures to curtail illegal wildlife trade, stop poaching, and secure the protection of important wildlife habitats in protected areas and other conserved areas that are led by local communities and Indigenous Peoples.

The COVID-19 pandemic came as a wake-up call for humanity. The pandemic made it clear that we must take urgent actions and address the fractured relationship between wildlife, human, and environmental health. Zoonotic diseases typically threaten the poor and vulnerable who often live on the edge of degraded natural habitats, exacerbated by the climate crisis, where pathogens move more easily between wildlife, livestock, and people.

In this context, community-based wildlife management initiatives supported by the SGP will go a long way in not only protecting wildlife and improving the well-being of the local people, but also in preventing future health risks. The case studies included in this publication provide a snapshot of the range of wildlife management measures supported by SGP across its global network. The cases also illustrate the ability of the SGP to mobilize civil society partners and empower community-based actors for the conservation of threatened species such as big cats, critically endangered monkeys, vultures and raptors, as well as marine species like cetaceans and sea turtles.

From the creation of community-based enterprises like ecotourism ventures that transform wildlife into economic assets capable of benefiting local communities directly (as in the case of the vulture in Nepal), to addressing human-wildlife conflict to foster a mutually beneficial coexistence (as in the case of the jaguar in Panama and Argentina), local communities and other community-based actors have demonstrated innovative solutions to redefine our relationship with nature for the future well-being of both people and the environment.

Overall, this publication provides a valuable account of how participation of local communities in the conservation of threatened species yields positive environmental and socio-economic results. We hope these examples will inspire further efforts to engage people at all levels in biodiversity and

---

<sup>1</sup> For example, the IPBES Global Assessment Report on Biodiversity and Ecosystem Services: <https://ipbes.net/global-assessment>



other environmental issues, bringing about innovation and transformation from the local to the global level. This set of case studies is also timely in igniting a renewed push towards increased funding to promote locally led approaches to conservation of threatened species and ecosystems, together with governments and the private sector, to contribute towards meeting several Sustainable Development Goals.



A stylized, handwritten signature in black ink.

**Pradeep Kurukulasuriya**

*Executive Coordinator, Nature, Climate and Energy,  
Bureau for Policy and Programme Support,  
United Nations Development Programme*



A stylized, handwritten signature in black ink.

**Gustavo Fonseca**

*Director of Programs,  
Global Environment Facility*



# Message from the SGP Global Manager

Local communities play a vital role in biodiversity conservation and wildlife management through locally owned and integrated solutions that not only safeguard their livelihoods, but also reduce threats to wildlife. The GEF Small Grants Programme, implemented by UNDP, has supported more than 25,000 community-based projects in over 133 countries to protect the global environment by empowering and supporting action by local communities, including indigenous peoples, women, youth, and persons with disabilities. Recognizing the importance of community-centred measures to address the challenge of nature loss, more than 40 percent of the SGP global portfolio of projects focuses on biodiversity conservation.

The case studies highlighted in this publication demonstrate the power of local innovation and local communities' participation to address persistent challenges in wildlife management. These include human-wildlife conflict, co-management and ownership of protected areas, and integrated landscape and seascape management, which can generate positive environmental and socio-economic benefits. This publication is thus a celebration of the incredible results that have been achieved through powerful local actions and partnerships.

Going forward, the SGP will continue to support community-centred approaches to promote the conservation of threatened species and ecosystems. In doing so, it will ensure alignment with the strategic objectives of both GEF and UNDP, while also contributing to the relevant Sustainable Development Goals. SGP will support efforts to combine innovative technologies, such as Internet of Things and Artificial Intelligence, with traditional knowledge of local communities and indigenous peoples; and forge new partnerships among civil society, government and private sector to develop integrated, multi-actor and participatory strategies to conserve wildlife and nature.



A handwritten signature in black ink, appearing to read 'Yoko Watanabe'.

**Yoko Watanabe**  
*Global Manager*  
*GEF Small Grants Programme*





CORAL REEF CONSERVATION IN VIETNAM  
SGP VIET NAM



VULTURES FEEDING AT VULTURE RESTAURANT  
SGP NEPAL



MONGOLIAN YURT AND LIVESTOCK  
CHARLES DYE/SNOW LEOPARD TRUST



SEA TURTLE HATCHLINGS BEING RELEASED TO SEA  
SGP VIET NAM



# Introduction

The impact of human activities on biodiversity and the natural environment is well known, but global attention to this problem and the ambition to fix it have not risen to match the level of our understanding. Our planet is undergoing another mass extinction, in large part due to deforestation, hunting, and overfishing. Much of the failure to stop this can be attributed to the difficulties in reconciling conservation with equitable socioeconomic development. There is a limited appreciation of the contribution of biodiversity to national and household economies. Many fail to link the degradation of the natural environment to human health and wellbeing. By explicitly linking biodiversity conservation to people's desire for development and empowering local actors to take concrete action, environment and conservation efforts can make sustainable impacts. A central ingredient of such an approach is to engage people, especially at the local level, in biodiversity and other environmental issues, and work with local actors and organizations to empower individuals, groups and societies to make connections with nature and take bold actions that are biodiversity-friendly and nature-positive.

We must acknowledge, however, that the issue is highly complex and presents some tough challenges. Despite the planet-wide emergency we are facing, it is still difficult to raise the profile and visibility of the crisis of biodiversity decline and nature loss. Much is needed in the way of concerted and integrated efforts from governments, the private sector, and civil society. To this end, the SGP, a corporate programme of the GEF implemented by UNDP, supports community-based actions with a focus on integrated initiatives that address global environmental issues, including the conservation of threatened species.

Given the close links between biodiversity conservation and local livelihoods, SGP-supported community-based measures have focused on not only addressing the threats to biodiversity and wildlife, but also on finding viable and durable solutions to improving local communities' livelihoods and wellbeing. SGP-supported measures include community-based efforts to curtail illegal wildlife trade and enhance community

stewardship, and other measures to protect important habitats in protected areas and other conserved areas, including those protected by indigenous peoples and local communities. Such measures are contributing significantly in several countries towards the reduction of threats to wildlife, safeguarding biodiversity and securing the survival of important threatened species. More than 40 percent of the SGP portfolio globally has focused on biodiversity conservation.

In addition to these organically evolved local efforts, SGP has also recently introduced the targeted Innovation Programme on Big Cats. This is a concerted effort among several SGP Country Programmes to conserve the threatened big cats around the world, including the snow leopard, tiger, and jaguar.

The pandemic has raised awareness regarding the risks of zoonotic diseases. While the direct and indirect drivers that affect their emergence are numerous and interacting, potential causes include loss of biodiversity, wildlife and increased interface between humans and wildlife as a result of encroachment on habitats, urbanization and demand for food and goods. Regardless of its causes, the devastating human and economic losses of the pandemic underscored the fact that business as usual is not an option anymore.

There is an increased urgency to repair the fractured relationship between nature and human beings. Considering the strong links between human, animal and planetary health, there is growing recognition of the need for multi-stakeholder approaches including full engagement of local communities, such as those promoted by the SGP. In this respect, the SGP has an important role to play, thanks to its presence on the ground in more than 125 countries, proven ability to foster multi-stakeholder partnerships, and history of empowering environmental and sustainable development actions by local actors. SGP can leverage its limited grant making to foster large scale efforts to integrate nature-positive, climate-sensitive strategies into local development, sectoral plans and practices of agriculture, forestry, and other sectors.



The case studies included in this short brochure are examples of such climate-sensitive and nature-positive approaches at the local level that can be scaled up. They also provide a snapshot of the range of conservation measures that SGP has supported across its global network. Moreover, the cases illustrate the ability of the SGP to mobilize civil society partners and community-based actors to implement actions that secure the survival of threatened species such as big cats, critically endangered monkeys, vultures and raptors, or sea turtles.

Specifically, for the big cats, the project examples illustrate the participatory approach adopted by SGP across three continents, in support of snow leopards in Asia, lions in Africa, and jaguars in the Americas. The SGP has consistently sought to identify bottom-up solutions to the underlying causes of human-wildlife conflicts. For many local communities living close to apex predators, the loss of livestock from predation can represent a significant hardship at the household and community levels. With a focus on both global species conservation and human livelihoods, SGP has pioneered and field-tested a suite of novel approaches including: improved cattle enclosures in Tanzania; solar-electrified fences in Argentina; predation insurance schemes in China; and new ecotourism opportunities across many of the target areas and landscapes, often close or adjacent to protected areas. As captured by the story of Sclater's monkey in Nigeria, the cultural context of conservation is a critical element across the portfolio.

For many indigenous and traditional peoples living close to wild animals and their habitats, such as the Itam in Nigeria or the Maasai in Tanzania, animals may have strong cultural or totemic associations. In numerous instances, SGP has sought to strengthen and revitalize these traditional and customary norms for respecting wildlife, which may not always be shared equally by migrants and outsiders. In other instances, such as the compelling story of the “restaurant for vultures” in Nepal, previous negative perceptions of the species have been replaced by more positive associations, often through demonstrating economic incentives for local populations. Solutions to wildlife conservation have become



more systemic in nature, and increasingly involved working with an array of partners. These include government officials, for example, the Marine Protected Area managers for sea turtles in Viet Nam, as well as research bodies and industry, as for the improved raptor-friendly electricity pylons developed in Kazakhstan.

These case studies are only a sample of the wildlife management initiatives that the SGP has supported over the years. We hope you will also consider visiting the SGP online library of innovations, where many more case studies and examples are available. Given the relatively small size and short duration of many SGP projects, the sustainability and strength of the interventions is often strongly correlated with the aspiration of the community partners to search for lasting solutions to the pressing everyday problems they face. In alignment with global efforts to build forward greener and better, SGP support for wildlife management and biodiversity in the future will focus on green recovery measures, the creation of green jobs, promoting nature-positive practices, and enterprises that strengthen the stability and health of both local communities and their environment.



## 1. JAGUAR



Once abundant in the wild, jaguars (*Panthera onca*) are the largest wild cat living in the Americas. According to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), jaguars live in 18 countries from Mexico to Argentina, and the species is threatened by illegal hunting, deforestation, and the loss of wild prey. Today the jaguar is listed as near threatened on the International Union for the Conservation of Nature (IUCN) Red List of Threatened Species.



Over the past decades, SGP has to date supported over 30 projects in 10 countries for jaguar conservation: Argentina (1), Brazil (2), Belize (2), Bolivia (4), Costa Rica (5), Guatemala (2), Honduras (3), Mexico (3), Panama (7). To further the conservation of jaguars, in line with the regional strategy and platform led by the regional leaders, SGP recently launched the Innovation Programme on Big Cats, which includes conservation of the jaguar population in Argentina and Panama. SGP takes a strategic approach in tackling the issue in the concerned countries by having a portfolio of community-based projects that are coordinated at the country and regional levels.

In Panama, one of the main threats for jaguars today is human-wildlife conflict, with approximately 15 jaguars being killed annually. To alleviate the conflict, Yaguará, a local non-profit organization, works to build knowledge and capacity among local populations to sustainably manage human-wildlife interactions. Yaguará works with local communities through environmental education, scientific research, and the development of alternative livelihoods to reduce conflicts between people and the jaguar.

Since 2017, with support from SGP, Yaguará has been working with communities in the protection of jaguars and other mammals in Pijibasal, a conserved area spanning 575,000 hectares of critical habitat for jaguars located in the buffer zone of Darién National Park. The project is increasing the availability of scientific information about jaguar populations in the area, and helping to improve conservation strategies for the Darién National Park. The project has focused on the participatory monitoring of jaguars and their prey (tapirs and mountain pigs) using camera traps and training community groups to participate.

To increase local capacity on wildlife management, a network of 20 residents of Pijibasal and neighbouring communities have been trained in conservation strategies to protect the jaguar and its habitat in the vicinity of the Darién National Park. These trainers have in turn given orientations to others in the community. Yaguará has also developed communication materials on the animal, including a monthly magazine.

Another project supported by SGP through the Innovation Programme is scaling up the initiative by supporting five additional local organizations to reduce human-wildlife conflict through the introduction of electric fences, bells, lights and sounds in farms near the jaguars' habitat. The project is also working with the NGO Green Rainforest in the Chagres National Park to stop the hunting of jaguars by establishing community groups that can quickly respond when conflict arises.

A third project supported by SGP Panama is promoting ecotourism and environmental education around jaguar conservation. The project is involved in the development of a "Jaguar Tourism Route"



as an economic incentive for the community of La Muela in Santa Fe National Park. SGP Panama is also supporting another NGO, *Fundiccep* to carry out an educational campaign in schools and communities in areas where there is human-wildlife conflict in the buffer zone of La Amistad National Park.

In Argentina, the jaguar population has fallen to fewer than 250 and its habitat has been reduced by 95% in just a few decades due to deforestation, hunting and loss of prey. To address the threats, SGP Argentina is strengthening the *Jaguars Network*, a local civil society organization, to protect the jaguar in the province of Misiones using solar-powered electrified fences.

As part of the project, three electric perimeter fences with a total length of 10 kilometres were built and use solar power. Camera traps were also installed to monitor the presence of jaguars in the selected areas. All of the private properties and landholdings neighbouring the Salto Encantado-Misiones Provincial Park were mapped, confirming the presence of jaguars. A protocol of action was subsequently defined between the communities and park rangers to deal with the human-wildlife conflicts, including livestock depredation by jaguars. As a result, five generations of calves have been raised without any attack by jaguars. The pilot project has inspired other farmers, who are now replicating the system in their farms.

SGP Panama and Argentina, as part of the Innovation Programme on Big Cats, are actively exchanging their experiences and approach in a hope to scale up the approach within the country as well as at the regional level.



## 2. LION



The lion (*Panthera leo*) is currently listed on the IUCN Red List of Threatened Species as vulnerable with a decreasing population trend, and as critically endangered in West Africa. The main threats to lions documented by the IUCN Species Survival Commission include habitat loss and fragmentation, unsustainable trophy hunting, and human-wildlife conflict.





In Tanzania, SGP has supported a project to address human-wildlife conflict in indigenous Maasai communities who live adjacent to the Serengeti ecosystem. Prior to the project, cattle enclosures (*bomas*) were often attacked at night by the big cats, including both lions and leopards. Following the attacks, indigenous communities, especially the Maasai youth, would group up and pursue killing them. Some studies suggest that for one head of cattle killed, more than five lions may perish in retaliation.

In collaboration with a wildlife research group, an SGP project worked with the Maasai to develop a new low-cost enclosure that is higher and stronger to prevent lions and other big cats from attacking livestock. Over 120 demonstration enclosures were installed and tested for their ability to protect livestock. Records by district authorities indicate that no further incidences of livestock depredation by large carnivores have occurred in the households with improved enclosures, and no lions or any other large carnivores have died as a result of retaliatory killings in the area.

Furthermore, both women and men were trained on how to establish and maintain the improved enclosures and have been training other pastoralists. Since women are often the ones in pastoral communities who construct and repair cattle enclosures, the improved *boma* design has significantly reduced the workload for women in the community. Given that for every pastoral community cattle are a source of personal wealth and cultural pride, the improved *boma* design has been deemed a considerable success.

With regards to forest conservation, the Maasai community also engaged in collective efforts to regenerate the acacia species to produce poles for building and maintaining the improved enclosures.

In terms of scaling up, the initial SGP project started with 31 households and was subsequently scaled up to 120 households, with additional resources from UNDP. After witnessing the results, pastoralists in the target area and neighbouring districts have adopted the improved design using their own resources.



### 3. SNOW LEOPARD



Over the past decade, SGP has actively supported the conservation of the snow leopard (*Panthera uncia*) and high mountain ecosystems through numerous projects across the range countries in Central Asia and South Asia. In total, SGP has supported more than 20 projects in eight countries. Past and ongoing SGP projects have focused on community-based conservation initiatives addressing human-wildlife conflicts, improved livestock management, participatory monitoring, establishing baseline data, capacity development and awareness raising, among others.





SNOW LEOPARD WITH DOG KILL  
KARMA SONAM, SNOW LEOPARD TRUST/NATURE CONSERVATION FOUNDATION-INDIA

Under SGP's Innovation Programme on Big Cats, further consolidation activities are ongoing in Afghanistan, Bhutan, China and Tajikistan. SGP has also contributed to the creation of the Global Snow Leopard and Ecosystem Protection Program (GSLEP) and its Secretariat, a global partnership among the 12 home range countries, donors, and key partners to conserve the snow leopard and its habitat.

In Kazakhstan, SGP helped strengthen the protected areas around the Katon-Karagai National Park to provide better protection for snow leopards through improved monitoring, anti-poaching activities and community awareness campaigns. Through the project, the park was able to procure GPS and GIS equipment, and install 54 camera traps within the park and in surrounding buffer zones. To date, the cameras have captured five shots of the elusive snow leopards. Prey species, including the Siberian ibex, musk deer, red deer, and roe deer were also captured, together with competing predators such as the East Siberian brown bear, wolf, fox, wolverine, lynx, sable, and weasel. One camera also captured the IUCN Red-listed Pallas's cat (*Otocolobus manul*), never spotted before in the area.

An SGP project in Tajikistan has promoted economic incentives among the local communities for conservation of the snow leopard. Efforts have focused on reducing conflict between humans and snow leopards and diversifying livelihood options for both women and men. The project conducted trainings and provided materials

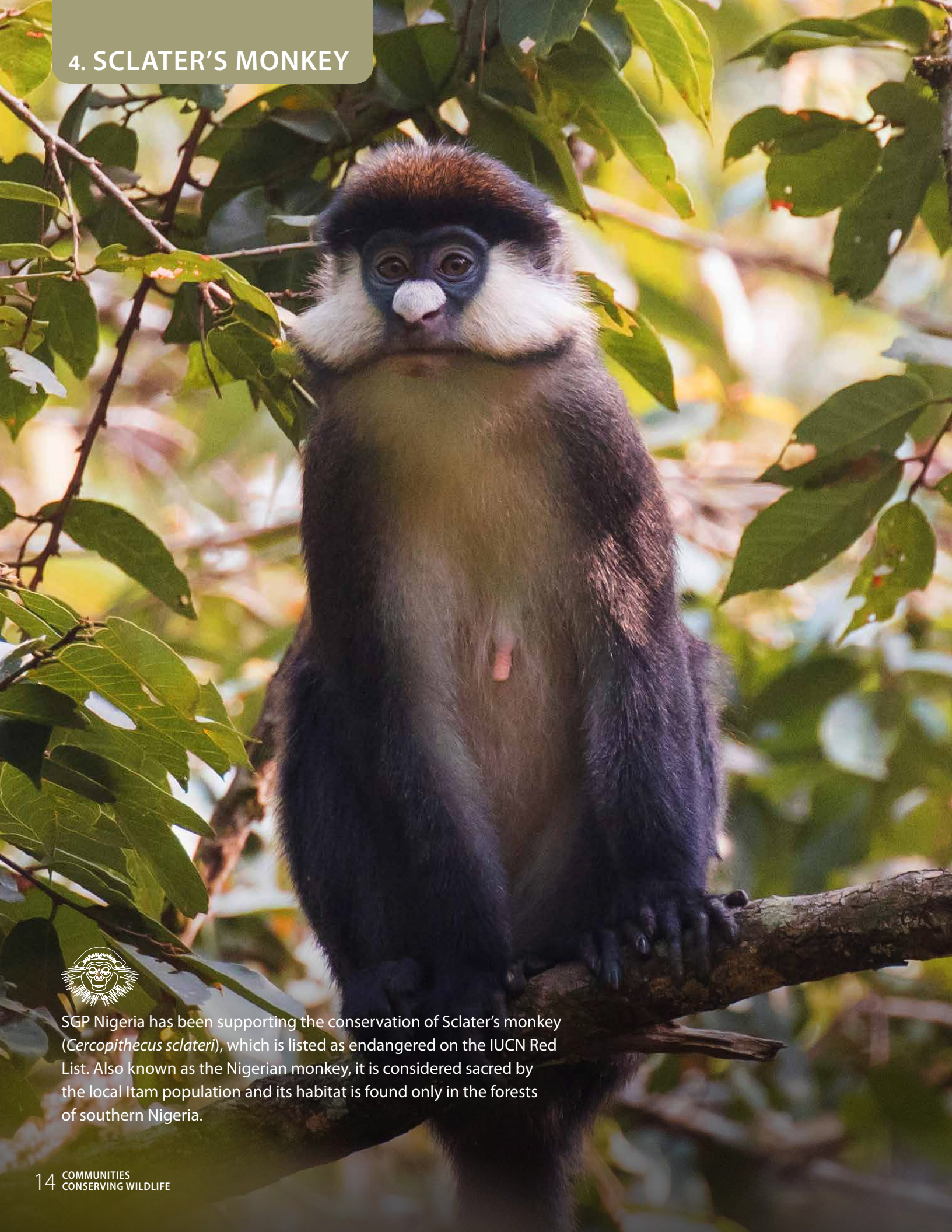
to build reinforced shelters (*koshaar*) to protect livestock from depredation, and constructed two nomad tents (*yurts*) to promote tourism-related income generation from handicraft sales. Local community members were trained as rangers and carried out anti-poaching and monitoring activities in nearby protected areas. The activities helped to establish baseline data in four protected areas, and created a critical mass of activities to be scaled up through a full-size UNDP-GEF project.

In the Eastern Himalayas, SGP China has supported a project in the habitat of the snow leopard in Sanjiangyuan National Park. During scientific monitoring carried out in 2015, 27 snow leopards were found within a 1,000-square-kilometre area. Since human-animal conflict has been a serious concern throughout the area, the project offered prevention training on human-animal conflict and compensation, and designed a snow leopard eco-tour with the local communities. In addition, the project introduced infrared cameras for the monitoring of snow leopards and other important wildlife, as well as to deter poaching. A human-wildlife insurance scheme was introduced, which is now being assessed for further replication.

As a result of the eco-tourism scheme, the 15 participating households reported an increase of 6,000 yuan (US\$850) in average annual household income in 2019.



#### 4. SCLATER'S MONKEY



SGP Nigeria has been supporting the conservation of Sclater's monkey (*Cercopithecus sclateri*), which is listed as endangered on the IUCN Red List. Also known as the Nigerian monkey, it is considered sacred by the local Itam population and its habitat is found only in the forests of southern Nigeria.





Hunting by outsiders and habitat loss have been the main reasons for the decline in the population. At a landscape scale, the primary objective of the SGP project has been to restore and enlarge the last known habitat of the endangered monkey in order to achieve in-situ conservation of the species.

To stem the loss of the monkey's habitat, SGP Nigeria supported the Biodiversity Preservation Centre on the southern coast of the state of Akwa Ibom to plant and nurture to maturity 10,000 multi-purpose trees of different indigenous species on degraded land. The project provided alternative livelihoods to 50 households through bamboo and rattan production, sales of handicrafts, and ecotourism for monkey viewing. The project also helped to enact local community by-laws forbidding all hunting of the monkeys for bushmeat.

To monitor the population of Sclater's monkeys, the project conducted a population census of the monkeys by mapping their range, paving the way for primate-based ecotourism. The Itam clan council of chiefs has endorsed the project and has adopted

the monkey as the totem for the annual Itam Day Festival held every December. This is the first time in southern Nigeria that a local species has been elevated and celebrated by a traditional authority. The project partners also now conduct an annual competition for primary and secondary schools across the state including essays on primate conservation, a quiz and arts, with the aim of raising future conservation leaders.

Given the initial success of the SGP project, two other community wildlife sanctuaries have been established with local governments in Uruan and Akpabuyo in the Cross River State. In addition, the approach has been scaled up and replicated with support from the Critical Ecosystem Partnership Fund and conservation group Birdlife International to operate an endangered tortoise conservation project in southern Nigeria.



## 5. RHINOCEROS



According to WWF, the population of black rhinoceroses (*Diceros bicornis*) declined by an estimated 97.6 percent since 1960, with numbers bottoming out at 2,410 in 1995, mainly as a result of poaching.





Since then, the numbers doubled to 4,880 by the end of 2010. The species is still listed as critically endangered by IUCN Red List, although numbers are increasing.

The Khama Rhino Sanctuary in Botswana, established in 1992, is a community-based wildlife project that covers 8,585 hectares of Kalahari Sandveld. In addition to saving rhinos, the sanctuary provides and aims to restore the habitat of white and black rhinoceros, as well as more than 260 species, including at least 230 bird species, while providing economic benefits to the local community through tourism and the sustainable use of natural resources. Animals in the sanctuary are protected by anti-poaching patrols. In the long term, the goal is to reintroduce them into their natural wild habitats.

In 2006, SGP supported the reintroduction of a black male rhino (Noddy) from Zimbabwe as the sanctuary had a female rhino (Chinga). After settling in, Noddy mated with Chinga and in March 2008, Chinga gave birth to her first calf, the first black male rhino to be born in the sanctuary. It was the first addition to both the sanctuary and national populations in 16 years.

The population of 16 white and black rhinos have been reintroduced to the Okavango Delta and other places within the country from these founding population of four animals.

## 6. RAPTOR



Raptors face a variety of threats from humans, such as habitat loss and degradation, illegal shooting and poisoning, collisions with aerial structures and electrocution by power lines. Migratory raptors are particularly at risk due to the often long and arduous annual journeys from their breeding grounds to wintering areas and back.







Furthermore, some species either migrate in large groups or form major concentrations along their flyways, for example, at narrow land bridges or sea crossings, which enhances the potential impact of some threats.

Given these dangers, an SGP project in Kazakhstan demonstrated measures to decrease the mortality rate of rare raptors that frequently strike high-voltage power lines, through the creation of a model site that uses bird-protection equipment, capacity building of government officials, and a partnership with the private electrical operators of Central Kazakhstan.

During project implementation, a demonstration site of a power line equipped with the bird-protecting plastic guards was created to show the effectiveness of the equipment and raise the awareness of power line operators. The design of the bird-protection technology was shared between all the organizations involved in the target Karaganda region, as well as with the National Committee of Forestry and Hunting.

Before the SGP project started, the bird mortality rate in the Karaganda region of Central Kazakhstan was approximately 59 bird deaths per migrating season (autumn 2012, spring 2013), of which 45 were members of rare raptor species, including the steppe eagle (*Aquila nipalensis*) and imperial eagle (*Aquila heliaca*) listed in the IUCN Red list as vulnerable. As a result of this project, 26 kilometres of power lines were equipped with bird-protecting devices, which reduced bird deaths by more than 99 percent, to only three individuals in the period from 2014 to 2016.

A special information board was established in the Karaganda EcoMuseum to share the project results. Realized in close partnership with the local electrical power company, the demonstration site has since become an innovation centre for Central Kazakhstan, capable of being widely replicated, and has contributed to the conservation and protection of important bird areas across the region.



Across the Indian subcontinent, five species of vulture are in grave danger of extinction. Within the last 20 years, the populations of the white-rumped vulture, long-billed vulture, slender-billed vulture, red-headed vulture and Egyptian vulture have all declined precipitously.





In Nepal, rapid declines of the white-rumped and slender-billed vulture numbers have been documented with the increasing loss of breeding colonies and local extinctions. Three of these vulture species became listed as critically endangered on the IUCN Red List in 2000, joined by the two others in 2007.

The cause of vulture declines has been shown to be directly linked to the veterinary drug diclofenac, which is widely used to treat livestock in Asia. Vultures are exposed to diclofenac by feeding on livestock carcasses which contain residues of the anti-inflammatory drug. A post-mortem examination of birds from India and Nepal has demonstrated the high incidence of diclofenac residues and visceral gout.

To tackle the problem, SGP Nepal supported a project with *Bird Conservation Nepal* and partnered with the Namuna community in the buffer zone of Chitwan National Park to establish the world's first community-managed vulture restaurant in 2007, together with an information centre and vulture-viewing house. The center acts as a "restaurant" to feed the vultures with diclofenac-free food. In parallel, the project lobbied to phase out the use of diclofenac in favour of less harmful drugs such as meloxicam.

Diclofenac was banned in 2006. The implementation of this ban has been uneven, especially in the earlier years, but through the project and efforts by partners, diclofenac use has now been discontinued in many significant vulture habitats, and Nepal's vulture population overall has stabilized. In Chitwan National Park, the vulture restaurant has not only become one of the most popular tourist attractions, increasing the number of homestays amongst the local community, but it has also become a hub for raising awareness amongst schoolchildren. Negative images of the vulture have now largely vanished from the community.

Since the end of the project, SGP's partner Bird Conservation Nepal has continued to monitor the vulture population. Prior to the establishment of the restaurant, a maximum of 60 vultures had been recorded, in 2006. Since the project began, the figure rose to 217 in 2009, and 182 in 2016. Eight of the nine species of vulture found in Nepal have been reported at Jatayu Restaurant. Vulture nest numbers have also increased in the immediate vicinity of the restaurant since its establishment. The number rose from 17 in 2006 to 40 in 2009, with the highest number of nests ever counted (67) in 2010.

The reduction in the number of nests in recent years is attributed to the establishment of vulture restaurants in other parts of Nepal. The concept has been replicated with support from other donors in several other project sites, covering five vulture restaurants. All have shown a positive results with an increase in nest numbers.

The vulture restaurant model has also been replicated in India, Pakistan and Bangladesh. Furthermore, the project contributed to the effective implementation of the diclofenac ban, and the declaration of vulture-safe zones, which are truly free of the drug. Today, vulture-safe zones have been declared in 65 out of 77 districts in Nepal. In 2008, the Government of Nepal along with the National Trust for Nature Conservation also established a vulture breeding centre in Kasara, close to Chitwan National Park.

Project team leader and the vulture restaurant management committee have been recognized by many awards including: the WWF Abraham Conservation Award (2010) in the institutional category; Birdlife Nature's Hero Award (2018); and Tiger Wildlife Tourism Award (2018).

## 8. SEA TURTLES

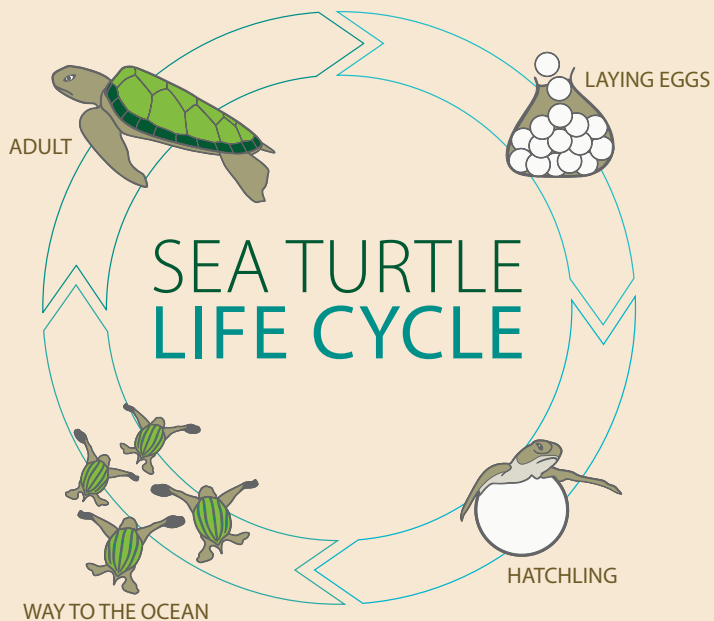


There are seven species of sea turtles around the world: green, hawksbill, loggerhead, leatherback, olive ridley, Kemp's ridley and flatback.

All of them have been classified as vulnerable and critically endangered on the IUCN Red List (except the flatback turtle, for which data is lacking), due to poaching, over-exploitation, habitat destruction and accidental capture in fishing gear.







Through its global network of country programmes, SGP has been protecting sea turtle nesting grounds in many countries across the world.

In Viet Nam, SGP has helped to create a turtle conservation programme in the Hon Cau Marine Protected Area (MPA) off the south-eastern province of Binh Thuan. The objective was to mitigate threats to sea turtles' nesting beaches, contributing to biodiversity conservation and promoting ecotourism to add value to the MPA and engage communities in the conservation of natural resources. The project was implemented by the *Tuy Phong District Association of Farmers* and focused on the protection of sea turtles and their habitats, preventing environmental damage and conserving aquatic resources in a sustainable way.

Through the SGP project, eight training courses were provided to 400 people from various communes and towns to raise awareness on the threats and need for conservation of sea turtles and their habitats, including the cultural and socio-economic value among the fishers. The project organized a signed commitment by 500 fishers to stop dumping garbage, nylon bags, and broken nets into the sea in order to protect sea turtles from eating or getting entangled in them, which could lead to death. It also included a commitment to release any sea turtles trapped by active fishing nets.

The project also engaged eight communities in collecting baseline data and rescuing sea turtles in emergencies. The baseline data supported the development of mechanisms to coordinate the work of local sea turtle management units. The project developed three sets of coordination regulations between the Hon Cau MPA management unit, border guards, the provincial fisheries administration, and the military command post of the district. A significant result of the project includes the establishment of a team of marine conservation collaborators whose salary is now paid by the provincial budget of the Hon Cau MPA, in addition to a network of voluntary collaborators across the eight communes of Tuy Phong district.





## 9. ATLANTIC HUMPBACK DOLPHIN



The Atlantic humpback dolphin (*Sousa teuszii*) is endemic to the coasts off West Africa and listed as critically endangered in the IUCN Red List of Threatened Species, with fewer than 1,500 mature individuals estimated to exist in the wild. Its preference for shallow coastal waters makes it particularly vulnerable to coastal development, fishing bycatch, and to pollution and noise disturbances from shipping and other industrial activities.







EDNOMESOR-ATLANTIC HUMPBACED DOLPHIN PHOTOGRAPHED IN SEPTEMBER 2017 IN THE SALOUM DELTA (SENEGAL).

In Cameroon, the southern coastline extending from the town of Kribi to the border with Equatorial Guinea is home to the rare Atlantic humpback dolphin, as well as to many other species of dolphins, humpback and sperm whales, and African manatees. After being seen in 1892, the next sighting of this dolphin in the area was only recorded 119 years later, when a group of 12 animals was observed in 2011.

The lack of data about the presence of threatened species like the Atlantic humpback dolphin is one of the main reasons why this rich coastline still enjoys little environmental protection. To address this issue, SGP supported the Cameroonian Association of Marine Biology in 2016 to establish a data-gathering team made up of researchers, civil society volunteers, university students, and representatives from local communities.

Their objective was to produce an inventory of marine life in the region to inform environmental policymaking, including proposals to create marine protected areas. The team confirmed the existence of a local herd of 25 to 30 humpback dolphins, as well as two smaller herds of between four and 10 individuals around the delta of the Nyong river and the village of Londji, near Kribi. The project also found an increasing number of whales in the region, which improves the prospects of establishing ecotourism as an alternative source of livelihoods for local communities.

Urbanization, the construction of deep ports and gas-fired power stations, mining, oil exploration, shipping and pollution were identified as the main threats to marine animals along the southern coast of Cameroon. Bycatch, that is the unintended capture of non-target species by fishers, also frequently affected the dolphins, as well as several species of sea turtles and the African manatee. The project gathered data on some of these issues by establishing a permanent monitoring programme north of Kribi, which detected an encouraging rise in the number of leatherback and green turtles returning to lay their eggs on these beaches, as well as the continued presence of the manatee.

The results of this project could be used in the advocacy for the creation of a new marine protected area in the region, including the priority sites identified. This would increase the income of local fishers by promoting artisanal fishing, while allowing other activities such as ecotourism to be developed at the same time. In addition to this, the coastal zone between the town of Kribi and the border with Equatorial Guinea was shortlisted in 2017 as a Whale Heritage Site by the World Cetacean Alliance, an important step towards formal recognition of its significance for cetacean conservation.

# Conclusion and looking forward

These case studies demonstrate how participation by local communities in the conservation of threatened species yields positive results. The jaguar monitoring from Panama shows how local communities' innovations and traditional knowledge are strong starting points for generating scientific monitoring information on wildlife conservation. Several SGP initiatives support local and national efforts to strengthen the capacity of community-level organizations for experimentation and feedback.

An effective strategy that is critical for the conservation of threatened species is addressing or minimizing human-wildlife conflict. SGP support to the conservation of the snow leopard and lion in several range countries has evolved important community-based lessons in this regard. These range from mobilizing support through greater engagement in anti-poaching and monitoring efforts, to supporting preventive measures such as improved herding and livestock practices (e.g. snow leopard-proof livestock shelters) and mitigating the impact of depredation by snow leopards through community-implemented compensation schemes (e.g. crop and livestock insurance). In other cases, community-based enterprises and other income-generating opportunities such as wildlife-based tourism make wildlife an asset for the benefit of local communities. Localized action, such as raptor conservation in Kazakhstan, can also contribute to the conservation of wildlife by directly eliminating threats and promoting the adoption of wildlife-friendly practices.

Going forward, SGP will continue to promote community-centred approaches to achieve the conservation of threatened species and ecosystems, a key strategic initiative during its 7<sup>th</sup> Operational Phase. SGP support under this strategic initiative will focus on increasing participation by and support of communities, with a sustained emphasis on community co-management and ownership of protected areas and conservation areas. This will include indigenous peoples' and community conserved territories and areas, further support to develop best practices, and lessons in community approaches. In combination, this will prevent, reduce and mitigate human-wildlife conflicts, and support innovation and experimentation around natural resource-based enterprises and development of appropriate community-based

ecotourism and other income-generating products. The objective is not only to boost conservation, but also to increase communities' incentive to invest in conservation. SGP support in these areas will emphasize capacity building of community groups and strengthening of governance institutions and platforms at the community level.

At the same time, an important priority for SGP is to enhance its ability to better track its cumulative results in target landscapes and seascapes, including for the conservation of key species within key biodiversity areas. This will require a new generation of partnerships with researchers, scientists, and institutions (e.g. academic departments or specialists in geographic information systems and mapping) with a comparative advantage in data collection. Grassroots non-profit organizations, indigenous peoples and local communities (IPLCs) have an unrivalled presence on the ground – and the capacity to collect and regularly update baseline data. In order to share these results with the GEF, together with the emerging post-2020 Global Biodiversity Framework of the Convention on Biological Diversity, IPLCs will need increased assistance in learning to use, adopt and adapt the latest available technologies. With support from SGP, scientists, volunteers and local universities, IPLCs are poised to be at the vanguard of data reporting and monitoring and conservation efforts in general.

SGP will continue to strive and contribute to meeting the GEF and UNDP strategic objectives and relevant Sustainable Development Goals related to biodiversity and species conservation. With the strong links between human, animal and planetary health, under the One Health approach, SGP will promote integrated multi-stakeholder approaches and full engagement of local communities. As emphasized by the Global Assessment of the Inter-Government Policy Platform on Biodiversity and Ecosystem Services, the challenge ahead will require a blend of science, technology, and traditional knowledge. Through the revitalization of cultural traditions in support of wildlife, experimentation with new technologies, as well as forging new partnerships, SGP is uniquely positioned to contribute to this agenda.









The Small Grants Programme (SGP) is a corporate programme of the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP) since 1992. SGP grantmaking in over 125 countries promotes community-based innovation, capacity development, and empowerment through sustainable development projects of local civil society organizations, with special consideration for indigenous peoples, women, and youth. SGP has supported over 24,000 community-based projects in biodiversity conservation, climate change mitigation and adaptation, prevention of land degradation, protection of international waters, and reduction of the impact of chemicals, while generating sustainable livelihoods.



Established on the eve of the 1992 Rio Earth Summit, the GEF is a catalyst for action on the environment — and much more. Through its strategic investments, the GEF works with partners to tackle the planet's biggest environmental issues. Our funding also helps reduce poverty, strengthen governance and achieve greater equality between women and men. As such, we occupy a unique space in the global partnership for a more sustainable planet.



*Empowered lives.  
Resilient nations.*

UNDP partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone. On the ground in 177 countries and territories, we offer global perspective and local insight to help empower lives and build resilient nations.



304 E 45<sup>th</sup> Street  
UNDP, 9<sup>th</sup> Floor  
New York, NY 10017  
USA

Email: [sgp.info@undp.org](mailto:sgp.info@undp.org)  
Website: [www.sgp.undp.org](http://www.sgp.undp.org)