

## **WCS and the Sustainable Development Goals (SDGs)**

**The WCS mission is to save wildlife and wild places worldwide through science, conservation action, education, and inspiring people to value nature. We envision a world in which people value and embrace the diversity of life, live sustainably with wildlife, and ensure the integrity of the natural world. Our programs build on our more than 100 years of experience and scientific and technical expertise across the globe.**

**Today WCS works with government partners, local and indigenous communities, and other partners in over 60 countries to help deliver on the Sustainable Development Goals (SDGs) and the specific targets. We are best positioned to help contribute to the 13 goals and 44 targets identified here. We have provided a few examples of our work on each of these goals and targets; please contact us at [www.wcs.org](http://www.wcs.org) for more information or other examples of our global work.**

### **Goal 1: End poverty in all its forms everywhere**

WCS works in 15 global regions that are home to 300 million people who are among the world's poorest, most isolated from markets, politically marginalized, directly dependent on natural resources, and last to receive social services. Our programs, in and around parks and protected areas, seek to sustain natural ecosystems and the stocks of flows of goods and services that provide the basic necessities for people's lives.

- **Target 1.4: By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance**
  - WCS works to ensure that poor and vulnerable populations, especially indigenous and other traditional peoples, including forest-dwelling, riverine and coastal populations, have formal access to and management authority over the land, waters, and natural resources on which they depend, including those that provide food, shelter, and medicine. In Bolivia, for example, WCS supports indigenous organizations' efforts to secure land and resources in traditional territories – to date securing land title to nearly 1.4m hectares. Today we help local people to manage resource access and use within Sustainable Development Reserves (Brazil), Communal Reserves (Peru), Indigenous reserves (Bolivia), First Nations Lands (Canada), Traditional and tribal lands (DR Congo, Cambodia, Guatemala, USA), Wildlife Management Areas (Tanzania and Zambia) and Locally-Managed Marine Areas (Belize, Melanesia, Indonesia, Western Indian Ocean).
- **Target 1.5: By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters**

- Conserving natural systems and the ecosystem services they generate is necessary to protect the livelihood security and resilience to environmental shocks of many of the most isolated, politically marginalized, and poorest people on the planet. WCS works to conserve coastal and terrestrial ecosystems, whose integrity helps reduce the exposure of poor, rural populations to climatic extremes, especially in countries facing the greatest risk. In Papua New Guinea, WCS works with local communities to restore and conserve mangroves and protect coral reefs – ecosystems that buffer the impacts of storms while providing the resources to support local livelihoods. In Rwanda, WCS works with government, communities, and local partners to protect the Nyungwe forest, securing reliable supplies of high quality water for drinking, agriculture, manufacturing and energy production. By stabilizing the forest’s steep slopes, the risk of landslides and flooding that threaten agriculture communities and businesses have been significantly reduced.

**Goal 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture**

All WCS programs work diligently to conserve terrestrial wildlife and freshwater and coastal fisheries. These resources, if well managed, are essential for food security and can act as insurance to smooth consumption during economic, health and climatic shocks. In some countries, we support sustainable agriculture and coastal fisheries programs as a way to relieve the pressure on national protected areas.

- **Target 2.1: By 2030 end hunger and ensure access by all people, in particular the poor and people in vulnerable situations including infants, to safe, nutritious and sufficient food all year round**
  - By maintaining, protecting and restoring healthy terrestrial and aquatic ecosystems, WCS is helping to ensure year-round food security for vulnerable people in countries in Africa, Asia and Latin America, especially those societies isolated from markets whose diet relies on consumption of foods harvested from the wild. Throughout Central Africa, rural people harvest, eat and trade, over one million metric tons of bushmeat every year. WCS works across the region to promote sustainable use of this vital and valuable natural resource
- **Target 2.3: By 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets, and opportunities for value addition and non-farm employment**
  - WCS supports community-managed, sustainable businesses for agricultural products such as rice, maize, coffee and cacao that enable members, by partnering with financial services institutions to provide loans and business services, and by offering technical assistance to improve productivity, and

value-added processing and access to markets to increase profit margins. In Zambia, WCS has trained and supported over 61,000 small farmers in adopting conservation agriculture practices and securing access to higher margin urban markets. In Cambodia, WCS has helped households to adopt wildlife-friendly certified, sustainable agriculture practices that increase their rice harvests, improve food security and generate higher profit margins.

- **Target 2.4 by 2030 ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality.**
  - WCS works to maintain and improve the productivity of agriculture and fisheries while stewarding natural systems and maintaining the ecosystem services essential for the wellbeing of rural populations. The Amazon Waters Initiative integrates how fisheries, protected area and dam construction influences the food security of 20 million Amazonian residents who depend on fish as their primary food. In the Bolivian Piedmont, Paraguayan Chaco and the Pantanal grasslands of Brazil, WCS works with ranchers to improve cattle production while conserving natural ecosystems. In Cambodia and Zambia, WCS helps poor rural farmers to implement environmentally sustainable, value-added, agriculture practices. In the KAZA Transfrontier Conservation Area of southern Africa, across which Angola, Botswana, Namibia, Zambia and Zimbabwe collaborate, WCS is working with governmental veterinary services, livestock farmers, the conservation community, and beef trade policymakers to modernize foot and mouth disease management policies so that the livestock *and* wildlife sectors benefit.

### **Goal 3: Ensure healthy lives and promote well-being for all at all ages**

Recognizing that public health can be a benefit provided by relatively unmodified ecosystems, WCS seeks to avoid potential public health costs associated with ecosystem alteration and degradation by improving understanding of how health depends on natural ecosystems, and by working with both local communities and national and international health and environment agencies, to design appropriate policies and ‘upstream’ interventions.

- **Target 3.3: By 2030 end the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases and combat hepatitis, water-borne diseases, and other communicable diseases**
  - Our work has shown that habitat degradation can heighten the transmission of communicable diseases. WCS is working to understand how avoiding deforestation of upstream areas in the islands of Fiji may reduce the downstream incidence of infectious diseases like typhoid; how forest loss and fragmentation in places like the Brazilian Amazon might be increasing the abundance and virulence of *Anopheles* mosquito vectors that carry malaria; and how alterations of the forest environment in tropical Africa might be related to Ebola virus disease emergence.

- **Target 3.9: By 2030 substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination**
  - Our work has shown that conservation of protected areas reduces levels of air, water and soil pollution that can harm health. For example, the WCS-led HEAL (Health & Ecosystems: Analysis of Linkages) consortium is helping quantify the health benefits of forest conservation by delineating the downwind effect of forest fires for land clearing on the incidence and severity of cardiorespiratory ailments in Indonesia, Singapore and Malaysia.

### **Goal 5: Achieve gender equality and empower all women and girls**

Women are the primary users and traditional stewards of natural resources, possess unique knowledge on resource use and management, and thus can contribute significantly to the sustainability of resource use and to poverty alleviation. Recognizing this, WCS seeks to ensure that in our programs around the world, women are actively engaged in the planning and management of both terrestrial and aquatic natural resources, and have an equitable share in the benefits of sustainable management.

- **Target 5.5: Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life.**
  - WCS, in our programs around the world, supports indigenous, First Nations, traditional and local people to secure their rights to natural resources and to build the governance systems needed to manage their resources sustainably. A key to effective natural resource governance is the equitable engagement of women, and WCS seeks to ensure that women have an equal voice in natural resource use decisions and equal rights to benefit from natural resource use. The Isoso women of the Bolivian Chaco initially had no say in the operations of their indigenous organization – CABI. Today with the help of WCS, the organization is more gender balanced and women have an equitable voice in natural resource access and use decisions.

### **Goal 6: Ensure availability and sustainable management of water and sanitation for all**

Recognizing that the availability and quality of fresh water influences the natural resource productivity and ecological health of rivers, lakes, wetlands, and downstream marine systems, WCS seeks to protect natural watersheds to maintain critical ecosystem processes and services.

- **Target 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all**
  - Our work has shown that conserving forests and watershed areas maintains natural water filtration and provides local people as well as those downstream with access to safe, regular and reliable sources of affordable drinking water. The WCS-led HEAL consortium is addressing the role of watershed conservation in reducing diarrheal illness at a global scale.

- **Target 6.5: By 2030 implement integrated water resources management at all levels, including through transboundary cooperation as appropriate**
  - Freshwater is an international resource that flows across political borders as it moves from source to sea. To conserve abundant populations of migratory freshwater fish species that know no political boundaries and are the primary source of protein and income for millions of riverine people, WCS invests in integrated freshwater management across jurisdictions at a vast, ecologically meaningful scale. In the Mekong River Basin, WCS engages sub-national, national and regional jurisdictions to maintain wetlands and natural flooding cycles essential to sustain fisheries productivity in Tonle Sap, Cambodia. In the Amazon, WCS works to maintain the connectivity and integrity of the world's largest freshwater system by conserving critical wetlands and minimizing the effects of infrastructure development. In the Pacific, WCS promotes integrated “ridge to reef” management to conserve both upland and coastal marine natural resources and secure supplies of clean fresh water.
  
- **Target 6.6: By 2020 protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.**
  - WCS promotes integrated river basin management approaches, ridge-to-reef management, conservation or restoration of watersheds, and protection of especially sensitive water-related ecosystems, including high mountain glaciers, paramos, rainforests, wetlands, flooded forests, and lakes. We do so by building strong partnerships and networks of government, community, private sector and civil society stakeholders. In the high Andes, WCS supports governments and communities to effectively manage wet paramo as an integrated part of larger Andean ecosystems. In Cuba, WCS supports efforts to protect and manage the Caribbean's largest and best-preserved swamps. In Rwanda, WCS is working with Government, communities and other partners to conserve the Nyungwe forest and watershed, headwaters for the Nile river, that play a critical role in regulating flood risk while supplying clean water resources to downstream communities, hydropower facilities, agribusinesses and bottling plants.

**Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all**

The unsustainable use of natural resources undercuts the livelihoods and job security of people who depend on those natural resources, and the illegal trade in wildlife, timber, forest products and fish resources corrupts the staff of public and private organizations and ultimately undermines the jobs that depend on the long term management and conservation of natural resources. WCS programs promote sustainability and legitimate use, and seek to create and shift jobs into legal occupations that conserve nature over the long-term.

- **Target 8.3: promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage formalization and growth of micro-, small- and medium-sized enterprises including through access to financial services**

- WCS's Conservation Enterprise Development Program (CEDP) finances and incubates promising new and existing business enterprises with long-term potential for environmental, social, and economic returns. CEDP supports local people in developing new rural enterprises that increase families incomes by adding value to certified agricultural products and sustainable natural product harvesting practices. In the Northern Plains of Cambodia, WCS has helped establish village marketing networks that allow rural farmers who follow wetland conservation plans to market their rice, to premium outlets, under the label *Ibis Rice*<sup>™</sup> - a Certified Wildlife Friendly® brand.
- **Target 8.4: improve progressively through 2030 global resource efficiency in consumption and production, and endeavour to decouple economic growth from environmental degradation in accordance with the 10-year framework of programmes on sustainable consumption and production with developed countries taking the lead**
  - WCS works with governments, companies, and lenders to promote adherence to a mitigation hierarchy whereby all economic development projects first seek to avoid impacts before they occur, then design steps that minimize the impacts on the ground, and finally offset any residual impacts, with the project proponent financing the establishment, implementation and monitoring of actions that deliver positive conservation outcomes. For instance, in Africa, WCS is supporting the governments of Uganda, Mozambique, Madagascar, and Guinea in developing and implementing regulations that require no net loss of biodiversity for projects that will have an impact on the environment. In South East Asia WCS engages with the banking sector to promote the adoption of green principles such as the Equator Principles that require investors to follow the mitigation hierarchy, to be eligible for loans. Through the Rockefeller Foundation-Lancet Commission on Planetary Health, WCS advocates capturing the true costs of the use of natural resources and the impacts of environmental change on public health.
- **Target 8.9: by 2030 devise and implement policies to promote sustainable tourism which creates jobs, promotes local culture and products.**
  - WCS supports the establishment of sustainable ecotourism enterprises which are integrated with local economies. These provide jobs and revenues to support local community initiatives, contribute funds for protected area management, educate visitors about the value of wildlife and wild lands, and are compatible with local social, cultural and conservation conditions. We work with tour operators and governments to promote these policies in many of the protected areas where we work around the world.

**Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation**

Infrastructure development (especially transportation, mining and hydroelectric power) frequently contributes to habitat degradation, ecological fragmentation, loss of natural resources,

and ancillary impacts such as unsustainable hunting. WCS works with governments and private companies to promote smart, green infrastructure development that mitigates impact on biodiversity and ecosystem services through avoidance, minimization, offsets, and compensation.

- **Target 9.1: develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.**
  - WCS promotes smart, green infrastructure through a planning process that considers expected impacts of projects, ascertains resource needs of impacted ecosystems and human communities, and identifies priority areas for conservation and the provision of ecosystem services. In Uganda, WCS has worked with petroleum companies to avoid and minimize impacts on biodiversity in the Murchison Falls NP. In northern Congo, WCS works with logging companies to site roads away from the Nouabale Ndoki NP and other ecologically sensitive areas.

### **Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable**

When urban residents are conscious of their relationship to nature, they can advocate for and sustain a city lifestyle that is more environmentally benign, and they come together as a powerful, highly visible, and readily heard constituency for the conservation of biodiversity and ecosystem services at local, national and global levels. WCS supports the efforts of cities, including our home base of New York, to protect urban ecological systems and wildlife, build nature into the lives of city dwellers, plan for sustainable, resilient and equitable urban life, and minimize the “over the horizon” impact of urban consumption on biodiversity around the globe.

- **Target 11.2: by 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.**
  - WCS has contributed a vision of how car-dependent societies can move to alternative and more sustainable forms of urban land use, transportation and energy use.
- **Target 11.4: strengthen efforts to protect and safeguard the world’s cultural and natural heritage.**
  - WCS helps urban people understand and appreciate wildlife through the world’s largest system of urban zoological parks, including the world famous Bronx Zoo, through describing the pre-development ecological history of cities (e.g., the Mannahatta Project). WCS works with indigenous, First Nations, and traditional peoples to secure rights to their land which is the foundation of their cultural identities. In North America we are working with First Nation to bring bison, a cultural icon, back to their lands. WCS is also very active with the UNESCO-World Heritage Convention, and efforts of the Convention and its Parties to preserve the cultural and natural heritage of humanity; we work on the ground in

32 natural and mixed World Heritage sites, in close collaboration with national and local governments and local communities.

- **Target 11.5: by 2030 significantly reduce the number of deaths, the number of affected people, and the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with the focus on protecting the poor and people in vulnerable situations, including through humanitarian assistance.**
  - WCS contributes to the resilience of local people to disasters by supporting participatory planning and resilience strategy deployment, and through research and public outreach about how nature responds to and overcomes disturbance. In New York City, WCS works with partners to assess how natural infrastructure such as barrier islands, oyster reefs and wetlands can help mitigate the impact of hurricanes. Around the world, we are maintaining and reinforcing the role that coral reefs and mangroves play in coastal protection.
  
- **Target 11.6: by 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management.**
  - All cities depend on the importation of water, food, fuel and other commodities. WCS conducts research on the environmental impact of “over the horizon” consumption by urban dwellers on the wildlife and ecosystem services in the places where these goods are produced. Helping urban families better understand the impact of their consumption patterns and choices has proven a powerful motivator for them to reduce their environmental footprint, and the aggregate impact of cities on biodiversity.
  
- **Target 11.7: by 2030, provide universal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons and persons with disabilities.**
  - Green space and natural environments within cities has a net positive impact on mental wellbeing, crime prevention and citizen safety. WCS works with the private and public sector in New York to develop nature goals for the city, and protects green space through its system of urban parks.

## **Goal 12: Ensure sustainable consumption and production patterns**

Sustainable use of natural resources depends on balancing consumption (demand) with the ecological limits of natural resource production (supply). This requires governance systems that are perceived as legitimate, capable and fair. WCS through its programs around the world supports national and local efforts to manage the sustainable use of natural resources, especially wildlife, and both freshwater and marine fish.

- **Target 12.2: by 2030 achieve sustainable management and efficient use of natural resources.**



- WCS, in all of our programs, strives to ensure that off-take of natural resources is sustainable. This includes working with local communities to manage subsistence hunting and coastal fisheries to ensure sustainability, and to ensure that any commercial off-take is based on scientific evidence, well regulated, and sustainable. WCS works with commercial logging companies in the Republic of Congo to change their business practices to minimize the impact of timber extraction on wildlife populations and ecosystem services. In Bolivia, WCS is working with the Tsimane Mosekene, Lecos and Tacana indigenous people to implement management plans for the sustainable harvest and trade of spectacled caiman, cacao, incense and shade coffee.
- **Target 12.6: encourage companies, especially large and trans-national companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.**
  - WCS works with corporations and financial institutions to ensure that biodiversity conservation and the management of ecosystem services are included in company policies and practices, and that they have and use the tools to implement these new approaches.

### **Goal 13: Take urgent action to combat climate change and its impacts**

WCS engages with national governments in all of the places where we work to understand the impact of climate change on natural systems and human land use, develop plans to help people and wild species adapt to climate change, and modify existing development and conservation policies and strategies to respond to present and future climate change.

- **Target 13.1: strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries**

WCS works to quantify the role forest and coastal ecosystems play in reducing risks from climate hazards, and integrating these roles into disaster risk reduction, environmental management and resilient development planning. In Papua New Guinea, WCS is working with government, local communities, and civil society to strengthen coastal resilience to extreme events. We do so by identifying where protecting coastal ecosystems, such as mangroves, can reduce risk, and managing those ecosystems to enhance resilience of local communities. In Rwanda, WCS identifies how forests regulate water supplies, and reduce flood and landslide risk, and works with communities and the government to protect these forests and sustain the vital ecosystem services they produce.
- **Target 13.2: integrate climate change measures into national policies, strategies, and planning**
  - WCS is committed to integrating climate adaptation into our planning and implementation with national and local authorities around the world. Globally we seek to understand and address how conserving and restoring forests, grasslands and coastal habitats can protect poor rural communities from extreme environmental events. In Ecuador, WCS works with communities along an altitudinal gradient from the high Andes to the lowland Amazon to conduct climate-smart planning for resilient development. In Uganda, WCS is

helping design climate resilient approaches to ecosystem management that both protect wildlife species and help secure the livelihoods of the rural poor.

- **Target 13.3: Improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.**
  - WCS increases public awareness of the impact of climate change on local communities and the natural resources upon which they rely. In Papua New Guinea, WCS has created two climate change resource centers for use by educators, the public and school groups. The centers provide free curriculum materials, educational films, and teaching modules. In the United States, WCS leads regional climate adaptation trainings for both public agency managers and conservation practitioners.

#### **Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development**

WCS is committed to improving the catch and sustainability of small-scale fishers operating in tropical developing countries, where biodiversity is highest and economies are highly dependent on healthy marine ecosystems. Today 90% of all fishers operate in small-scale coastal fisheries, live in developing countries, and are dependent for protein and livelihoods on a sustainable catch from the ocean, WCS aims to improve marine resource governance and the sustainability of coastal fisheries. WCS seeks to triple fish biomass because this will restore ecosystem health and fisheries production, significantly expand protection for critical habitat and species to protect at least 10% of the oceans in conditions approaching pristine, and improve the overall sustainability of coastal communities and the resilience of their livelihoods.

- **Target 14.1: by 2025, prevent and significantly reduce marine pollution of all kinds, particularly from land-based activities, including marine debris and nutrient pollution**
  - WCS works to ensure habitat protection and sustainable land-use in watersheds upstream from critical coral and other coastal ecosystems where we work. WCS' innovative ridge to reef approach was pioneered in Fiji, Papua New Guinea and Madagascar.
- **Target 14.2: by 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration, to achieve healthy and productive oceans**
  - WCS emphasizes improved community resilience through sustaining or enhancing the provision of ecosystem services from marine and coastal ecosystems. We invest in mangrove protection and restoration, conservation of intact seagrass beds and the identification and protection of climate refugia for coral reefs. In Belize, we support the development and implementation of guidelines to ensure critical mangrove habitat is protected from economic development in vulnerable offshore cays and islets. In Argentina and Chile, WCS works to extend protection of coastal and marine ecosystems by expanding

existing coastal parks 12 nautical miles into the sea, thus protecting Patagonia's rich marine biodiversity.

- **Target 14.3 minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels**
  - WCS conducts research on coral reefs around the globe to tracking the changing status of pH vulnerable reef-building corals and to investigate the impact of a rising temperatures and dropping calcium carbonate (aragonite) levels on corals in general. In collaboration with our partners this has enabled us to identify the most climate resilient corals and reef system on the planet and advocate for their protection from non-climate related threats.
  
- **Target 14.4: by 2020, effectively regulate harvesting, and end overfishing, illegal, unreported and unregulated (IUU) fishing and destructive fishing practices and implement science-based management plans, to restore fish stocks in the shortest time feasible at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.**
  - WCS is committed to tripling fish biomass to the optimum level for both ecosystem health and fisheries production ~500 kg/ha for coral reef fisheries. The countries where WCS works produce, in aggregate, over 20% of global fish catch, and support the super-majority of poor small-scale coastal fishers. We conduct research to improving understanding of fisheries catch, building capacity for more effective and equitable governance of fisheries, and help local and government managers to reduce IUU fishing and improve local capture of benefits from well regulated fisheries. In Gabon, we support government efforts to reform both artisanal and commercial fisheries sectors, helping significantly reduce IUU fishing and overcapacity in the nearshore fleet. In Kenya, we support coastal community efforts to improve management of nearshore fisheries through the formalization of Beach Management Units (BMUs), helping increase and often double fish catch and fishers income, while improving overall ecosystem health. Our program on sharks and rays works to help countries develop and implement sustainable, well-managed programs, that are currently lacking or completely absent.
  
- **Target 14.5: by 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on best available scientific information**
  - WCS is committed to working with governments to meet their Aichi commitments of protecting 10% of coastal and marine areas by 2020. Across the more than 20 countries where WCS works on marine conservation, this will amount to 3.7 million km<sup>2</sup> of newly declared marine protected areas (MPAs). Within these protected areas, WCS is committed to reaching biomass targets that approach pristine levels in coral reef ecosystems. In the past two years our efforts have supported the expansion of MPAs in Belize, Nicaragua, Argentina, Gabon, Madagascar, Bangladesh, Indonesia and Fiji.

- **Target 14.7 by 2030 increase the economic benefits to SIDS and LDCs from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism**
  - WCS works with a combined 13 SIDS and LDCs to improve their sustainable management of marine resources, particularly fisheries. Our conservation programs measure the impact of improved fisheries management on the livelihoods, health and wellbeing of coastal communities, and adapts our conservation strategies in response to what we learn.

**Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss**

In all 62 countries where WCS works diligently to conserve wildlife and wild places, biodiversity and ecosystem services, we do so with governments, indigenous peoples and local communities. We help establish and manage parks and protected areas, promote the sustainable use of forests and rangelands, and conduct research and public outreach on the most effective ways to protect, restore and sustainably use terrestrial ecosystems. Our core focus, and the heart of our expertise and experience globally, is working with partners on the ground in large, wild terrestrial and aquatic systems to conserve the full complement of native wildlife species and the vital ecological roles they play in maintaining healthy, productive and resilient ecosystems.

- **Target 15.1: by 2020 ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements**
  - WCS works closely with government and other partners to manage and conserve approximately 6.6 million km<sup>2</sup> of terrestrial ecosystems, in Africa, Asia, Latin America, and North America. We assist governments in the delivery of their obligations under international agreements that relate to protected areas, including the World Heritage Convention, and the Convention on Biological Diversity, especially to support the legal establishment of protected areas to achieve Aichi Target 11. We work in large wild areas across the globe on the conservation, restoration, management, and sustainable use of terrestrial and freshwater ecosystems, with particular focus on tropical and temperate forests, mountain, wetland, and coastal reef ecosystems. These large wild areas are important not only because they are our last manuals for how nature works largely untouched by the influence of industrial and urban humanity, but also because they are the foundation of the cultural identities of millions of indigenous, First Nations, and traditional peoples.
- **Target 15.2: by 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and increase afforestation and reforestation by x% globally.**
  - WCS works in multiple tropical and temperate forest landscapes across the globe to halt deforestation and, where needed, support forest restoration and recovery. We pioneered incorporation of wildlife management into sustainable logging

practices in the tropics, to ensure that off-take of timber and non-timber forest products, including wildlife, are both legal and ecologically sustainable.

- **Target 15.4: by 2030 ensure the conservation of mountain ecosystems, including their biodiversity, to enhance their capacity to provide benefits which are essential for sustainable development**
  - At WCS we have shown that mountain ecosystems provide critical water and other natural resources to both local residents as well as downstream populations, and in the face of climate driven altitude shifts of species ranges will be critical to climate adaptation and resilience. In the Andes, WCS works to promote sustainable agriculture and animal husbandry among local populations, who are often among the poorest and most isolated in the Andean countries. We support landscape level planning and zoning to ensure that conservation, sustainable use, and residential uses are compatible in these fragile ecosystems.
  
- **Target 15.5: take urgent and significant action to reduce degradation of natural habitat, halt the loss of biodiversity, and by 2020 protect and prevent the extinction of threatened species.**

WCS works in close collaboration with government, local communities and the private sector, to prevent degradation of natural habitats and to conserve biodiversity in more than 60 large wild terrestrial areas across the globe. Between them, they include at least part of the ranges of more than 8,500 species, or 42% of all terrestrial vertebrate species. The entire known range of more than 100 threatened terrestrial vertebrate species occur in wild areas where WCS is active. We work to reduce multiple threats to at risk species and restore and maintain robust populations of wildlife that fulfill their important ecological roles. We strive to maintain the ecological range of iconic species that serve as flagships for safeguarding other species that shelter under their conservation canopy.
  
- **Target 15.7: take urgent action to end poaching and trafficking of protected species of flora and fauna, and address both demand and supply of illegal wildlife products.**
  - WCS works actively along the entire chain of illegal wildlife trade to stop poaching, stop trafficking and stop demand. We are pioneering development and deployment of SMART ranger patrolling in 74 sites across Latin America, Africa and Asia. With various international and local collaborators we are building intelligence databases, analyzing trade networks, collaborating with government and intergovernmental enforcement agencies, establishing and supporting Wildlife Crimes Units (WCUs), and using sniffer dogs with the support of the transport sector to stop trafficking. And we are working with key consumer countries to reduce demand for illegal wildlife and wildlife products. Where SMART is deployed in Congo, forest elephant numbers are stable, and in Thailand, tiger numbers are increasing. In Indonesia, WCS-supported WCUs have resulted in arrests of hundreds of wildlife traffickers, including many kingpins. In China, WCS's targeted social media program aims to reduce demand for ivory. We are also working at the intergovernmental level through the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and

other treaties, the UNGA, and multiple UN agencies (e.g. UNDP, UNODC, UNEP) to ensure that governments effectively address the wildlife trafficking at all levels and treat it as transnational organized crime

- **Target 15.8: by 2020 introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems, and control or eradicate the priority species.**
  - WCS helps eradicate invasive species on several islands (e.g., Zanzibar, Chile's Tierra del Fuego) where native fauna are threatened by invasive species.
- **Target 15.9: by 2020, integrate ecosystems and biodiversity values into national and local planning, development processes and poverty reduction strategies, and accounts.**
  - In the 48 countries in which WCS operates country offices, we are working with our government partners to integrate ecosystem conservation and biodiversity values into national planning and policies.

**Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels**

Conserving biodiversity and ensuring sustainable resource use depends on good governance and appropriate incentives to maintain the rule of law. Long-term sustainable management of natural resources is predicated on representative, democratic and transparent governance where the costs and benefits are distributed fairly. Recognizing this, WCS works closely with indigenous and traditional peoples, local authorities, national governments, and the international community to strengthen governance of natural areas and wild species, and regulate access to and use of protected areas, halt illegal harvesting of wild resources, and stop the illegal international trafficking and consumption of wild species.

- **Target 16.3 promote the rule of law at the national and international levels, and ensure equal access to justice for all.**
  - WCS supports governments to strengthen and enforce legislation on protected areas and wildlife conservation and sustainable management. We train government enforcement officers, as well as customs agents, prosecutors, and judges. We work closely with CITES, UNODC, UNDP and INTERPOL and other international treaties and intergovernmental organizations to prevent international wildlife crime.
- **Target 16.4: by 2030 significantly reduce illicit financial and arms flows, strengthen recovery and return of stolen assets, and combat all forms of organized crime**
  - Through efforts to combat wildlife trafficking, WCS works with governments to strengthen their legislation to ensure that wildlife crime is a predicate offense that can be prosecuted under criminal statutes such as those against money laundering. We also work with various national governments and intergovernmental organizations to ensure that government agencies include illicit financial flows from wildlife trafficking in their analyses.

- **Target 16.5: substantially reduce corruption and bribery in all its forms**
  - WCS helps to establish systems to increase transparency at all levels, especially in management of state and indigenous protected areas and efforts to counter wildlife trafficking and associated corruption. WCS pioneered the development and deployment of SMART (Spatial Monitoring and Reporting Tool), now being used in more than 130 sites in 34 countries, which increases transparency and accountability of law enforcement patrols and greatly reduces opportunities for corruption.
  
- **Target 16.6: develop effective, accountable and transparent institutions at all levels.**
  - WCS invests heavily in helping local communities, private sector companies, municipalities, and national governments to establish effective systems to govern access to and use of natural resources within their formal or customary jurisdictions. Such legitimate and accountable governance is essential for long-term, sustainable management and conservation of natural resources. In Bolivia, WCS has helped the Tacana, Isoseño, Lecos and Tsimane-Mosetene peoples to establish strong governance systems for their TCOs (Tierras Comunitarias de Origen), which promotes transparency and accountability in the communities' exclusive use of their natural resources.
  
- **Target 16.7: ensure responsive, inclusive, participatory and representative decision-making at all levels.**
  - WCS conducts regular, repeated assessments of the strengths and weaknesses of governance bodies with formal or customary jurisdiction over natural resources within the landscapes and seascapes within which we work. This helps us to identify and target the technical assistance that specific groups need to improve the effectiveness of their natural resource governance by strengthening their authority (attained through the legitimacy, accountability, transparency, participation and fairness of their actions), capacity (which is derived from their knowledge and skills to know what to do, and the physical, financial and staffing assets needed to put their knowledge and skills to work) and motivation to govern.
  
- **Target 16.8 broaden and strengthen the participation of developing countries in the institutions of global governance.**
  - WCS provides government partners with assistance in engaging intergovernmental organizations and the treaties and other institutions of global governance. WCS has active programs in 15 of the United Nations List of Least Developed Countries, and is committed to enhancing their effective engagement with relevant intergovernmental organizations and institutions.