



50  
YEARS

*Empowered lives. Resilient nations.*



# Burning Bright

UNDP AND GEF IN  
THE TIGER LANDSCAPE

# ACKNOWLEDGEMENTS

We would like to recognise and thank all those who have contributed to this publication. We are sincerely grateful to colleagues and partners who are working tirelessly towards achievement of the Global Tiger Recovery Programme (GTRP).

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PHOTO BY MIDORI PAXTON

## INTRODUCTION

Since the Global Tiger Recovery Programme (GTRP) was endorsed by the 13 tiger range countries at the Tiger Summit in St. Petersburg in 2010, a global alliance of governments, international organizations, civil society and private sector organizations has consolidated with increasing momentum to save wild tigers from extinction. The United Nations Development Programme (UNDP) and the Global Environment Facility (GEF) contribute to tiger range countries' efforts toward implementing the GTRP through a series of projects, recognizing the recovery of healthy tiger populations and their habitats as an important part of maintaining globally significant biodiversity and the essential ecosystem services upon which all life on Earth depends.

Since the Tiger Summit, the GEF has approved 22 projects in 12 Tiger Range Countries that are closely aligned with the GTRP. GEF grants for these projects total US\$120 million and this investment has also leveraged cofinancing of \$450 million from national and international partners. Through these projects, we are strengthening management of over 17 million hectares of tiger habitat.

This publication highlights the unique contribution of ten GEF financed, UNDP supported projects in six tiger range countries (Bhutan, India, Indonesia, Malaysia, Myanmar and Thailand), demonstrating how conservation activities in tiger habitat can accomplish more than the preservation of one iconic wildlife species. The comprehensive approach our projects employ, based on clear identification of threats and barriers, can catalyze significant improvement in human well-being and support countries' efforts towards achievement of the Sustainable Development Goals. Our strategy comprises maintenance of vital ecosystem services, improved livelihoods and realization of rights and enhanced security through comprehensive policy and functioning systems of natural resource governance. Weaving through this narrative, traditional knowledge, religious beliefs, folklore and artwork illustrate the role tigers have played in shaping cultural identity and history throughout Asia, further illuminating the imperative for conserving *Panthera tigris*.



**Adriana Dinu**  
*UNDP-GEF Executive Coordinator*



**Gustavo Fonseca**  
*GEF Director of Programs*

# Historic and Present Day Tiger Range

## GEF-FINANCED, UNDP-SUPPORTED PROJECTS IN THE TIGER LANDSCAPE

- 1. Bhutan**  
Enhancing Sustainability and Climate Resilience of Forest and Agricultural Landscape and Community Livelihoods, US\$14m (UNDP)
- 2. India**  
High Range Landscape Project, \$6.2m (UNDP)
- 3. Indonesia**  
Combatting Illegal and Unsustainable Trade in Endangered Species in Indonesia, \$7.6m (UNDP)
- 4. Indonesia**  
Transforming Effectiveness of Biodiversity Conservation in Priority Sumatran Landscapes, \$9.1m (UNDP)
- 5. Malaysia**  
Enhancing Effectiveness and Financial Sustainability of Protected Areas in Malaysia, \$5.6m (UNDP)
- 6. Malaysia**  
Improving Connectivity in the Central Forest Spine Landscape, \$10.86m (UNDP)
- 7. Myanmar**  
Ridge to Reef: Integrated Protected Area Land and Seascape Management in Tanintharyi, \$5.25m (UNDP)
- 8. Myanmar**  
Strengthening Sustainability of Protected Area Management, \$6m (UNDP)
- 9. Thailand**  
Combatting Illegal Wildlife Trade, \$4m (UNDP)
- 10. Thailand**  
Wildlife Conservation in the Western Forest Complex, \$7.34m (UNDP)





## OTHER GEF-FINANCED PROJECTS IN THE TIGER LANDSCAPE

Supported by United Nations Environment Programme (UNEP), Asian Development Bank (ADB) and The World Bank (WB)

- 11. Cambodia**  
Mondulkiri Conservation Landscape, \$4.7m (UNEP)
- 12. China**  
Landscape Approach to Wildlife Conservation in Northeastern China, \$3m (WB)
- 13. India**  
Ecosystem Services Improvement Project, \$24.6m (WB)
- 14. Lao PDR**  
Protected Area Management Models: Learning and Disseminating Lessons from Nam Et-Phou Louey \$0.88m (WB)
- 15. Lao PDR**  
GMS Strengthening Protection and Management Effectiveness for Wildlife and Protected Areas, \$6.8m (WB)
- 16. Russia**  
Supporting Global Tiger Summit, \$0.56m (WB)
- 17. Vietnam**  
Wildlife Consumption: Reforming Policies and Practices, \$1m (WB)
- 18. Vietnam**  
Trung Truong Son Landscape Mgmt, \$4m (ADB)
- 19. SOS/Bangladesh**  
Human and Tiger Coexistence in Sundarbans, \$0.1m (WB)
- 20. SOS/Malaysia**  
Citizen Conservation, \$65359 (WB)
- 21. SOS/Global**  
SMART Patrolling, \$0.7m (WB)
- 22. Global**  
Tiger Future, \$0.95m (WB)

# Vital Stats

## UNDP-SUPPORTED, GEF-FINANCED PROJECTS IN THE TIGER LANDSCAPE

### 1. BHUTAN

**PROJECT TITLE:** Enhancing Sustainability and Climate Resilience of Forest and Agricultural Landscape and Community Livelihoods

**PROJECT PERIOD:** 2016-2021

**GEF FUNDING:** \$14,000,000

**CO-FINANCING:** \$41,900,000

**EXECUTING PARTNER:** Ministry of Agriculture and Forests

**OBJECTIVE:** Operationalizing an integrated landscape approach through strengthening of biological corridors, sustainable forest and agricultural systems, and building climate resilience of community livelihoods.

**KEY ACTIVITIES:** Enhancing institutional capacity for integrated forest management; strengthening biological corridor system including climate change adaptation, sustainable financing and law enforcement; community capacity building for conservation management and livelihood enhancement.

**TARGETED TIGER STRONGHOLDS:** Jigme Singye Wangchuck National Park, Thrumshingla National Park, Bumdeling Wildlife Sanctuary and associated biological corridors.

### 4. INDONESIA

**PROJECT TITLE:** Transforming Effectiveness of Biodiversity Conservation in Priority Sumatran Landscapes

**PROJECT PERIOD:** 2015-2021

**GEF FUNDING:** US\$ 9,150,000

**CO-FINANCING:** US\$ 53,300,000

**EXECUTING PARTNER:** Ministry of Environment and Forestry;

**OTHER LEADING PARTNERS:** Sumatran Tiger Conservation Forum (HarimauKita), Wildlife Conservation Society, Fauna & Flora International and Zoological Society of London.

**OBJECTIVE:** To enhance biodiversity conservation in priority landscapes in Sumatra through adoption of best management practices in protected areas and adjacent production landscapes, using tiger recovery as a key indicator of success.

**KEY ACTIVITIES:** Strengthen Protected Area management effectiveness and law enforcement, including SMART-patrolling; update National Tiger Recovery Plan and Sumatran Tiger Strategy and Action Plan; develop inter-agency partnerships for landscape-level planning and management cooperation; develop sustainable financing plans and build national level capacity; reduce human-tiger conflict; enhance community forest conservation and restoration.

**TARGETED TIGER STRONGHOLDS:** Gunung Leuser National Park, Kerinci Seblat National Park, Bukit Barisan Selatan National Park, Berbak National Park, Sembilang National Park.

### 2. INDIA

**PROJECT TITLE:** India High Range Landscape Project

**PROJECT PERIOD:** 2014-2018

**GEF FUNDING:** \$6,275,000

**CO-FINANCING:** \$30,000,000

**EXECUTING PARTNER:** Ministry of Environment, Forest and Climate Change

**OBJECTIVE:** To protect biodiversity of the High Range Mountain Landscape of the southern Western Ghats in India through building an effective governance framework for multiple use management.

**KEY ACTIVITIES:** Landscape level land use plans and sustainable resource management systems in place; biodiversity considerations mainstreamed into sector plans and practices; capacity building for PA system management, conservation and production sector staff; capacity building for community based organizations for sustainable resource use, management and governance.

### 5. MALAYSIA

**PROJECT TITLE:** Enhancing Effectiveness and Financial Sustainability of Protected Areas in Malaysia

**PROJECT PERIOD:** 2012-2019

**GEF FUNDING:** \$5,600,000

**CO-FINANCING:** \$13,400,000

**EXECUTING PARTNER:** Ministry of Natural Resources and Environment

**OBJECTIVE:** To establish a performance-based financing structure to support effective PA systems management.

**KEY ACTIVITIES:** Capacity building at national level to manage and financially support a national PA system; technical and institutional capacity building to manage sub-national PA network; capacity building for effective site-level PA management.

**TARGETED TIGER STRONGHOLDS:** Taman Negara National Park, Endau-Rompin National Park, and Royal Belum State Park (together encompassing 67% of the total protected wildlife areas in Peninsular Malaysia).

### 3. INDONESIA

**PROJECT TITLE:** Combatting Illegal and Unsustainable Trade in Endangered Species in Indonesia

**PROJECT PERIOD:** 2015-2021

**GEF FUNDING:** \$7,630,000

**CO-FINANCING:** \$42,000,000

**EXECUTING PARTNER:** Ministry of Environment and Forestry; **OTHER LEADING PARTNERS:** Indonesian National Police; Wildlife Conservation Society

**OBJECTIVE:** To reduce the volume of unsustainable wildlife trade and the rate of loss of globally significant biodiversity.

**KEY ACTIVITIES:** Enhance the legal and policy environment to support enforcement of wildlife trade regulations; enhance inter-agency coordination and information sharing both domestically and internationally, establish a National Wildlife Crime Taskforce; capacity building for law enforcement institutions; scaling-up improved enforcement strategies at key trade ports and ecosystems.

### 6. MALAYSIA

**PROJECT TITLE:** Improving Connectivity in the Central Forest Spine (CFS) Landscape

**PROJECT PERIOD:** 2014-2020

**GEF FUNDING:** \$10,860,000

**CO-FINANCING:** \$36,500,000

**EXECUTING PARTNER:** Ministry of Natural Resources and Environment

**OBJECTIVE:** To increase federal and state level capacity to execute the CFS Management Plan.

**KEY ACTIVITIES:** System-level capacity building for integrated forest landscape management and sustainable financing; establishment of a wildlife crime intelligence unit and community-led monitoring; implementation of sustainable forest landscape management plans; protection of additional critical corridor forests; constructing wildlife crossings across infrastructural barriers; sustainable livelihood enhancement and human-wildlife conflict mitigation.

**TARGETED TIGER STRONGHOLDS:** CFS - Belum-Temengor forest landscape (354,600 ha), Endau-Rompin forest landscape (238,900ha) and Greater Taman Negara-Main Range Ecological Corridor (100,000 ha).



## 7. MYANMAR

**PROJECT TITLE:** Ridge to Reef: Integrated Protected Area Land and Seascape Management in Tanintharyi

**PROJECT PERIOD:** 2015-2020

**GEF FUNDING:** \$5,250,000

**CO-FINANCING:** \$16,000,000

**EXECUTING PARTNER:** Ministry of Environmental Conservation and Forestry; **OTHER LEADING PARTNERS:** Tanintharyi Regional Government, Smithsonian Institution, Green Economy Green Growth-Myanmar Association, Fauna and Flora International.

**OBJECTIVE:** Secure long-term protection of Key Biodiversity Areas through integrated planning and management of the protected area land/seascape in Tanintharyi.

**KEY ACTIVITIES:** Establish cross-sector planning and coordination for sustainable forest and land management; expand key biodiversity areas and biological corridors under protection; develop sector-specific standards to safeguard biodiversity; improve management effectiveness and financial sustainability of Tanintharyi PA system, including management plans, biodiversity monitoring, SMART-patrolling, and community participation.

## 9. THAILAND

**PROJECT TITLE:** Combatting Illegal Wildlife Trade, Focusing on Ivory, Rhino Horn, Tiger and Pangolins in Thailand

**PROJECT PERIOD:** 2016-2021

**GEF FUNDING:** \$4,018,440

**CO-FINANCING:** \$14,739,379

**EXECUTING PARTNER:** Department of National Parks, Wildlife and Plant Conservation; **OTHER LEADING PARTNERS:** IUCN, WWF.

**OBJECTIVE:** To strengthen the capacity of and enhance collaboration between Enforcement Agencies and reduce demand in illegal wildlife trade through a targeted awareness campaign in order to reduce trafficking of wildlife and their products in Thailand.

**KEY ACTIVITIES:** Improve cooperation, coordination and information exchange to strengthen institutional capacity for wildlife crime enforcement; capacity building for wildlife crime enforcement officers, forensic staff and the justice system to identify, report, arrest and prosecute suspects in illegal trade; reduce demand for wildlife merchandise through outreach campaigns.

## 8. MYANMAR

**PROJECT TITLE:** Strengthening Sustainability of Protected Area Management in Myanmar

**PROJECT PERIOD:** 2014-2019

**GEF FUNDING:** \$6,027,397

**CO-FINANCING:** \$17,896,300

**EXECUTING PARTNERS:** Ministry of Environmental Conservation and Forestry, Wildlife Conservation Society.

**OBJECTIVE:** To strengthen the terrestrial system of national protected areas for biodiversity conservation through enhanced representation, management effectiveness, monitoring, enforcement and financing.

**KEY ACTIVITIES:** Enhanced systemic, institutional and financial frameworks for biodiversity conservation, PA expansion and management; mainstream biodiversity in sub-national government sectors, expand national PA system based on gap analysis, strengthen management and threat reduction in the target landscape through business plans, site operations, community participation, and monitoring capacity.

**DEMONSTRATION SITES:** Hkakaborazi National Park, Hponkanrazi Wildlife Sanctuary, Hukaung Valley Wildlife Sanctuary, Htamanthi Wildlife Sanctuary.

## 10. THAILAND

**PROJECT TITLE:** Strengthening Capacity and Incentives for Wildlife Conservation in the Western Forest Complex

**PROJECT PERIOD:** 2015-2020

**GEF FUNDING:** \$7,339,450

**CO-FINANCING:** \$24,234,427

**EXECUTING PARTNER:** Department of National Parks, Wildlife and Plant Conservation; Ministry of Natural Resources and Environment.

**OBJECTIVE:** To improve management effectiveness and sustainable financing for Huai Kha Khaeng-Thung Yai Naresuan World Heritage Site and incentivize local community stewardship.

**KEY ACTIVITIES:** PA staff capacity building in law enforcement, SMART-patrol, fire management and wildlife monitoring; diversify income generation for sustainable PA financing; promote wildlife conservation and forest protection through Conservation Agreements with local and indigenous communities; improve awareness and participation through direct outreach in communities, schools, and community-based organizations.

**TARGETED TIGER STRONGHOLDS:** Huai Kha Khaeng Wildlife Sanctuary, Thung Yai Naresuan East Wildlife Sanctuary, Thung Yai Naresuan West Wildlife Sanctuary.



PHOTO BY SARAH CHERITON-JONES



PHOTO BY FRANS LANTING/LANTING.COM



PHOTO BY DENNIS W. DONOHUE



SECTION 1

# Why tigers?

PHOTO BY ENCIKTAT

Tigers captivate the imagination; their beauty, independence, size, strength and even their allure of danger and fearsome reputation mark them out as something rather special in the animal kingdom. As a result, tigers serve as a **FLAGSHIP** species — a rallying point for people from all walks of life who are inspired to learn about nature and work to conserve the tiger and by proxy everything that shares the tiger's world. Saving wild tigers from extinction yields benefits that go far beyond this one species. As the top (**APEX**) predator in its habitat, tiger survival depends on healthy, robust populations of all the species below it in the food web. Plants, insects, birds, rodents and other mammals — all must thrive in order for conditions within the habitat to support a community of apex predators and for this to occur it is essential that tiger conservation projects embrace ecosystems in their entirety. The tiger, in turn, contributes to ecosystem health in its function as a **KEYSTONE** species, balancing the food web by controlling populations of prey species, preventing any one species from dominating the habitat.

### **APEX SPECIES**

Species at the top of the food web with no natural predators; the top predator

### **KEYSTONE SPECIES**

A species that usually occurs in low abundance yet serves a critical role in the continued functioning of the ecosystem in which it lives

### **FLAGSHIP SPECIES**

Popular species that serves as an icon to rally support for wider conservation initiatives



## ADDITIONALLY,

tigers are well-adapted to a wide range of habitats, from high mountain ranges (one has been observed at over 4,000m in Bhutan), tropical forests and grasslands to semi-forested savannahs, coastal wetlands and mangrove swamps. Each of these habitat types provides a home for hundreds of different plant and animal species, many of which can live nowhere else. Targeting the recovery of tigers across their range draws attention and resources for the protection and restoration of this vast range of unique ecosystems and the globally significant biodiversity that they support.

## TIGERS CAN LIVE IN A WIDE RANGE OF HABITATS, AND ARE COMMONLY FOUND IN:



SAVANNAHS



MANGROVE SWAMPS



GRASSLANDS



WET AND DRY  
TROPICAL FORESTS



HIGH MOUNTAIN  
RANGES

HABITAT PHOTOS: MIDORI PAXTON, UNDP MYANMAR, BALAN MADHAVAN, TASHI DORJI, UNDP THAILAND

## TIGER HABITAT CONSERVATION BENEFITS THE WEB OF LIFE



WHAT ARE

# Ecosystem Services?

HEALTHY ECOSYSTEMS DO MORE THAN SIMPLY PROVIDE HABITAT FOR TIGERS AND OTHER IMPORTANT WILDLIFE.

## PROVISIONING



WATER



FOOD



FUEL



FIBERS



RAW MATERIALS



MEDICINES

Ecosystems provide services that allow all life on earth to survive and thrive, and this very much includes humans. Whether providing food and raw materials (provisioning), controlling floods and purifying water (regulating), or forming rich topsoil in which to grow crops (supporting), human welfare depends on functioning ecosystems. Beyond our physical needs, healthy ecosystems also provide for our emotional well-being through cultural services, including opportunities for recreation, education and spiritual fulfillment.

**Providing the right conditions for tigers to survive and thrive provides life-giving benefits to humans as well, not only on a local or regional scale, but for the whole planet.**

## REGULATING



FLOOD CONTROL



EROSION PREVENTION



SHORELINE BUFFERING



CARBON SEQUESTRATION



PEST CONTROL



WATER PURIFICATION



AIR PURIFICATION

## SUPPORTING



SOIL FORMATION



WATER CYCLING



NUTRIENT CYCLING

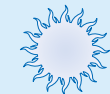


PRIMARY PRODUCTION

## CULTURAL



AESTHETIC



INSPIRATIONAL



CULTURAL HERITAGE



SPIRITUAL/RELIGIOUS



RECREATION



EDUCATION

WHY ARE

# The Tigers Disappearing?

Tigers and their habitat face many complex and overlapping/interlinked threats, driven in part by an expanding human population and increased exploitation of natural resources particularly over the last century. Loss or fragmentation of healthy ecosystems leads to a decline in food and reproductive opportunities for tigers, as well as increased conflict with humans. This has resulted in the decimation of tiger numbers — down from an estimated 100,000 in 1900 to approximately 3,200-3,800 wild individuals remaining today. During that same time-frame three, possibly four, sub-species have already been driven to extinction.

## ISSUE 1

### HABITAT LOSS AND FRAGMENTATION

Degraded habitat supports fewer plant and animal species, both in number and variety, undercutting the foundation of the food web and resulting in loss of tiger prey. Fewer prey species and restricted territory in which to hunt results in reduced tiger populations and limited reproduction and genetic exchange. Intensive land use practices by humans have resulted in isolated pockets of natural habitat interrupted by land cleared for agriculture or urbanization. Uninterrupted tracts of natural habitat are necessary to maintain genetically diverse breeding populations of tigers.



PHOBIKHA VALLEY, BHUTAN.  
PHOTO BY TASHI DORJI.

## ISSUE 2

### POVERTY AND HIGH POPULATION DENSITY

Many people living in poverty are dependent on natural resources for survival. Plants and trees may be harvested for food, firewood or raw materials and land cleared to make way for crops or livestock pasture. High numbers of people living in one area can lead to unsustainable use of these resources, degrading wildlife habitat and disrupting vital ecosystem functions. Unfortunately, such efforts to survive from day to day erode the natural resource base on which long-term well-being depends, both for tigers and humans.



ORANG ASILI CHILD, MALAYSIA.  
PHOTO BY MIDORI PAXTON.

## ISSUE 3

### KILLING/POACHING

Where farm and pasture land replaces natural wildlife habitat, tigers and other top predators resort to hunting domesticated livestock as an alternative food source for natural prey. Even the loss of one animal can be a devastating setback for a subsistence herder, leading to preemptive or retaliatory killing of predators that threaten their stock. As further incentive, a thriving market for tiger bones, teeth and skins can provide desperately needed cash to struggling families. This illegal trade is largely led by organized crime syndicates whose activities undermine the peace and security of the areas in which they operate. Community members



MYANMAR. PHOTO COURTESY  
OF CHANG HTOO.

may be coerced to poach tigers on behalf of these criminals out of a desperate attempt to earn income or to avoid criminal threats.

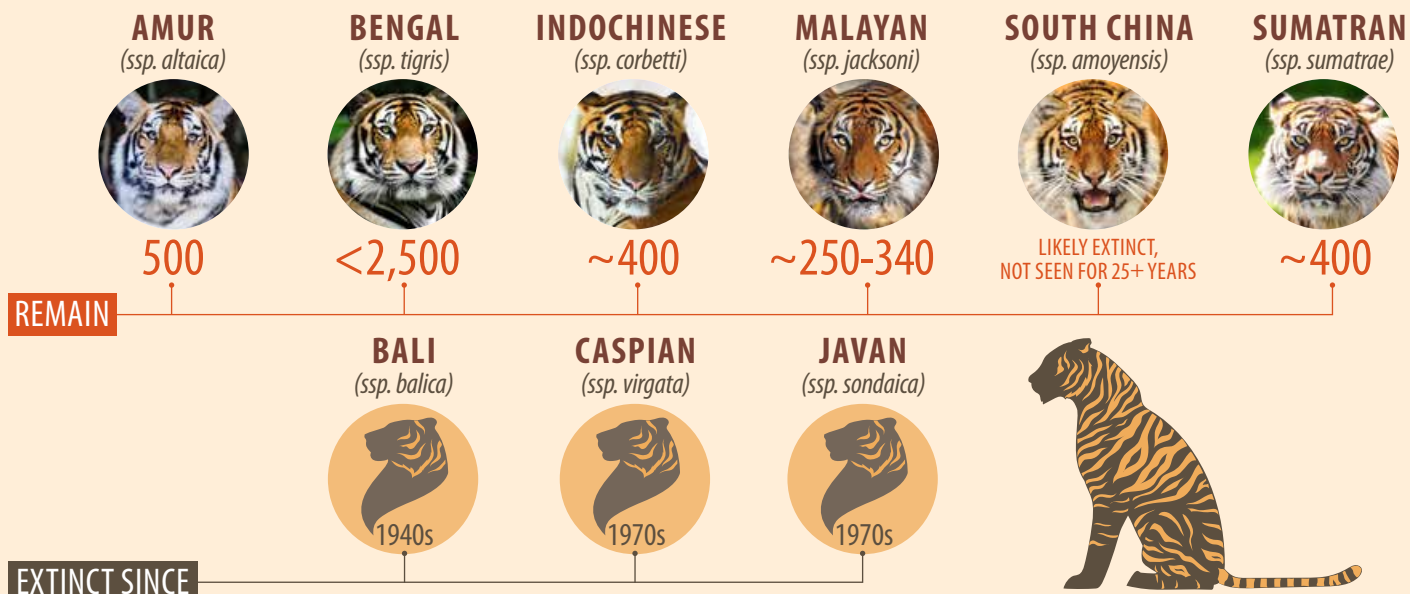
Weak institutions and policies in tiger range countries further contribute to these threats as a cross-cutting issue. Communities without legal rights to use and benefit from their local natural resources have no incentive for their equitable and sustainable management. Regional and national governments that do not effectively conduct land use planning coordinated across all sectors cannot ensure the functionality of landscapes that support biodiversity and provide ecosystem services. Furthermore, corruption at all levels can lead to habitat and wildlife destruction, whether by illegally granting

permits for destructive resource extraction or accepting bribes to overlook poaching operations. Weak institutions result in poor enforcement of Protected Area (PA) regulations and park boundaries. Weak policies provide insufficient regulation of illegal wildlife trade and trafficking, as well as low conviction rates and weak penalties for the few low-level criminals who can be caught. In the same way that tiger conservation strengthens the wellbeing of many other species, tiger poaching threatens any other species inhabiting the same environment that has commercial value, e.g. bears, rhinos, or 'exotic' birds and timber.

These threats leading to the decline of tiger populations and decreased human well-being serve as part of a feedback loop, each reinforcing

the other as both cause and effect. **Attempting to solve one threat without addressing the others cannot ultimately achieve success.** Instead, the problem requires a holistic response with multiple interventions aimed at tackling each threat simultaneously. The GEF financed, UNDP managed projects described in the following pages have been implemented with just such a holistic approach in mind. These projects have been designed to address the underlying conditions that allow for the decline of ecosystem health which decimates tiger populations, contributes to increased poverty for people in tiger range countries, and undermines the sustainable development path which the countries have committed to follow.

## SUB-SPECIES OF *PANTHERA TIGRIS*\* AND APPROXIMATE POPULATION



\* Scientists currently debate whether sufficient evidence exists to classify nine separate sub-species rather than only two (continental vs. island-dwelling).



SECTION 2

# Interventions

PHOTO BY FRANS LANTING/LANTING.COM





The interventions described in the following pages directly correspond to the aforementioned major issues facing tigers and which also compromise human well-being in tiger range countries. For each threat, GEF financed, UNDP supported projects employ a suite of interventions that work in combination to address the issues of habitat loss, poverty, gender inequality and illegal wildlife trade. While only a small portion of each project has been highlighted below, each project involves a holistic set of interventions that work in tandem to address the threats and achieve a comprehensive resolution that benefits both tigers and people. Additional information about each project may be found on pages 4–7 of this booklet.



## STRATEGY 1: PREVENTING HABITAT LOSS AND FRAGMENTATION

Tigers require high quality environmental conditions, abundant food and expansive territory to survive. To improve the provision of these requirements in the tiger landscape, our projects employ strategies to secure healthy habitat, including the improvement of management effectiveness in the operation of existing Protected Areas, integrated landscape planning and policy at a system level, expanding the diversity of habitat types and the coverage area of high quality landscapes under protection and improving connectivity of separate habitat blocks through biological corridors. Together these interventions work to strengthen the conservation status of tiger landscapes.

### TIGERS

need vast territory to hunt for prey. 100 sq. km can typically support 3-12 tigers, though in less prey-dense areas such as far eastern Russia, this same land area will support only one tiger.

### INTEGRATED LANDSCAPE MANAGEMENT

It is not enough just to protect isolated pockets of prime habitat. Areas outside PA boundaries support a large percentage of important wildlife populations, including tigers, and play a significant role in the overall health of people and ecosystem functions. It is imperative for governments to take a landscape-scale view when making decisions about zoning and infrastructure projects, as well as policies that encourage environmentally-responsible behavior from its citizens. Integrated Landscape Planning and Management is a process whereby the needs and priorities of government sectors, such as agriculture, forestry, infrastructure development, natural resources conservation and the economy, are considered together during the planning phases of such projects. Integrated Landscape Management

Plans ensure that projects from one sector do not undermine the efforts of another sector, improving cost-effectiveness, and maximizing the progress of all sectors toward a commonly-held end goal as well as equitable contribution to community well-being. These considerations ensure that biodiversity and ecological health are considered before potentially impactful activities begin. This type of “biodiversity mainstreaming” is a key component in many of our projects.

### PROJECTS

With the goal to conserve tigers and other globally significant biodiversity in the Western Ghats, the “India High Range Landscape” project seeks to build a collaborative governance framework for landscape management that mainstreams biodiversity considerations across relevant government sectors and includes important stakeholders such as local and indigenous communities





and the private sector. The primary strategy there is a Landscape Level Land Use Plan to serve as a framework providing an overall vision and land use prescription within which biodiversity-friendly Sector Plans may then be developed. Through a process of engaging stakeholders from multiple government, non-government and private sector agencies, these plans seek to balance the objectives of biodiversity conservation, livelihoods and economic production with the ultimate objective of determining how current land uses by different sectors can be made more compatible with the landscape's conservation needs. Developing these plans is an opportunity for stakeholders to set common goals, engage in dialogues and manage

trade-offs for resource use that will yield the best overall long-term benefit for all parties.

## EFFECTIVE PROTECTED AREA MANAGEMENT

It is not enough to have habitat areas protected on paper. Protected Areas (PAs) must be managed effectively on the ground to adequately protect intact wildlife habitat and preserve ecosystem functions. While enforcement of park boundaries and restrictions on harmful activities are important, the capacity of PA staff is the first step to effective protection.

However, investing in capacity building for individual Protected Area sites will only result in

long-term benefits if there is a comprehensive policy and financial framework at the national level to provide ongoing support for local efforts. Thus, our projects place heavy emphasis on a system-level approach to improving the management effectiveness of Protected Areas in perpetuity.

## PROJECTS

The Malaysia "Enhancing Effectiveness and Financial Sustainability of Protected Areas" project takes a system-level approach to improving on-the-ground management effectiveness for government-operated PAs. It works toward establishing a nationwide

PHOTO CREDITS: 1) Cardamom farming is an important land use in India's project landscape. Photo by Balan Madhavan. 2) Royal Belum National Park ranger with *Rafflesia cantleyi*, Malaysia. Photo by Midori Paxton. 3) Park ranger at the Lingzhi Range Post, Dodena, Bhutan. Photo by Midori Paxton. 4) Bhutanese park ranger patch. Photo by Midori Paxton. 5) Wildlife habitat must be shared with domesticated livestock in some parts of India's project landscape. Photo by Balan Madhavan.

system of PAs with consistent policies, appropriate financing mechanisms, standard operating procedures and satisfactory technical standards. At the national level, this project begins by creating national criteria for the establishment of Protected Areas and the management standards to which different categories of PAs will be held. A framework for financial support of the national system of Protected Areas is also being established, using economic valuation of PA resources and services. Capacity building activities will strengthen sub-national institutions in the areas of governance, design and implementation of projects, effective planning and financial management, as well as community support and outreach. Even at this sub-national level, the project will continue to focus on fostering a network among the various agencies and will encourage coordination for a landscape-level approach to planning and management. The formation of these integrated networks and consistent national frameworks will create a conducive environment and provide the financial support necessary for site-level management efforts to succeed. Three critical tiger PAs which comprise 67% of the total protected wildlife areas in Peninsular Malaysia are targeted for site-level capacity building through this project.

## COMMUNITY CO-MANAGEMENT

Without community support, PAs and the tigers within them will always be in jeopardy. Securing this support requires a fresh approach to governance. Traditionally, PAs have been established by governing authorities despite, not with, the people; a problem that is particularly acute in Asia where PAs often encompass, or lie adjacent to, settlements that rely heavily on the park's natural resources for their daily needs. In many cases, these communities have sustainably used these resources for generations. Our projects

promote co-managed governance structures of these parks, as well as inclusive, community-managed conservation areas in buffer zones and biological corridors outside park boundaries. For example, the “Enhancing Sustainability and Resilience of Forest Landscape and Community Livelihoods” project in Bhutan includes extensive natural resources management and sustainable livelihood capacity building among local residents in order to operationalize the country's network of biological corridors under a co-management framework. Extending rights and decision-making authority to these



PHOTO CREDITS: 1) Community mapping of natural resources, Myanmar. Photo by WCS. 2) Jigme Singye Wangchuck National Park, Trongsa District, Bhutan. Photo by Tashi Dorji. 3) Indigenous Karen child, Thailand. Photo by Kwanruen Seub-Am.

# FENG SHUI TIGERS

The Tiger is the third Chinese zodiacal animal and is associated with the Westerly direction in the Chinese system of geomancy commonly known as *Feng Shui*. The Tiger is traditionally thought to govern the pleasure area of your house and to a lesser degree the western part of each room in microcosm, and is also considered a source of potential surprises, both good and bad. For this reason it is recommended to avoid placing dense shrubberies close to the western side of your house as that might invite ambush, as surprise itself is not considered ideal. It is thought best to place images of the tiger in an open space at head height to thoroughly activate the Chi in that area that you wish to stimulate. In home décor, images of tigers have been located facing the front door to encourage good fortune and to deter fire, thieves and evil spirits. Tiger imagery is also thought to guard graves and protect deceased ancestors.



Celadon-glazed stoneware vase with tiger, c. 13th-14th century, Longquan, China. © Trustees of the British Museum; "Door Guard Zhao Gongming." Woodblock print from Wei Xian, China, 1900-1911. © Trustees of the British Museum.

residents improves equitable and sustainable use of resources and compliance with conservation regulations.

In Myanmar, the "Strengthening Sustainability of Protected Area Management" project led by the Ministry of Environmental Conservation and Forestry promotes community co-management by establishing site stakeholder committees to inform, advise and coordinate activities within each project PA. Institutionalizing these committees creates a platform from which local and indigenous community members have a say in the management decisions of the land, improving commitment to conservation objectives within the park and benefiting the community as a whole.

## EXPAND PROTECTED AREAS

Expanding PAs where possible is an effective approach to preventing further loss or fragmentation of tiger habitat. To make the best use of limited resources, projects seeking to create new PAs must determine the most effective areas in which to invest resources. Determining areas that are critical for tiger survival is thus paramount. This can include prime habitat with plenty of prey species, sufficient area to support the territorial needs of multiple tigers, and buffer zones between tiger habitat and human populations. Especially crucial to preserve and expand PAs in this respect are areas currently occupied

by breeding populations of tigers, as these areas serve as strongholds from which tiger recovery may spread out naturally without human intervention.

## PROJECTS

The 12-million hectare Kayah Karen Tenasserim Ecoregion which spans the border of Thailand and southern Myanmar harbours a critical wild tiger population (approximately 50 individuals). Facing severe threats from illegal logging and illegal wildlife trade, overexploitation of forest products for commercial use and land conversion to palm oil and rubber plantations, the "Ridge to Reef: Integrated Protected Area Land and Seascape Management in Tanintharyi" project led by the Ministry of Environmental

Conservation and Forestry is supporting Myanmar to expand the PA system in the Tanintharyi Range portion of the tiger landscape by at least 300,000 ha to maintain the remaining natural forest habitats.

Additionally, the project will support improvement of trans-boundary cooperation with neighboring Thailand, where wide swaths of the Kayah Karen Tenasserim Ecoregion are already established as Protected Areas. Joint conservation initiatives and research projects between the two countries will provide a significant, continuous transboundary landscape for wildlife to inhabit.

## BIOLOGICAL CORRIDORS

Whether Protected Areas support large or small populations of tigers, creating connections between fragments of habitat has become a critical priority. Even relatively narrow strips of basic habitat that connect two PAs together can form a biological corridor whereby tigers and other wildlife can travel from one Protected Area to another. This is crucial for unrelated populations of tigers to meet, breed and maintain the genetic diversity necessary for species survival.

## PROJECTS

In 1999, the government of Bhutan set about establishing a system of biological corridors to connect significant Protected Areas across the country. Similarly, Malaysia included the establishment of 37 biological corridors in the Central Forest Spine Master Plan in order to connect all significant forest blocks in the world's only habitat for the Malay Tiger. Although these corridors have been demarcated on paper, the networks have yet to be operationalized on the ground, due in large part to insufficient institutional capacity and resources to implement large-scale integrated forest land management.

## RIDING TIGERS

Traveling by tiger is a well-established mode of divine transport in many religious traditions. In the case of the Hindu deity Ayyappa, he established his God-head not by slaying the demon Mahishi but by emerging victorious from the haunted forest of battle mounted on a tigress, followed by her cubs and holding a goblet of her milk. Ten-armed Hindu goddess, Durga uses her tiger, Damon, less peacefully, as a battle steed. Dragon Tiger Mountain temple in China's Jiangxi province is the hereditary seat of the Daoist Wise. Here Zhang Daoling, "the First Master of Heaven," rides a tiger and wields a sword to drive off demons as he escorts the dead to their rest. Chao Kunming, the Chinese God of Wealth, carries an ingot of silver. Unusually his tiger is black. One of the most dramatic tiger tales comes from the remote Himalayan Kingdom of Bhutan where Guru Rinpoche arrived 3,000 feet above the Paro valley mounted on a flying tigress bearing Buddhist texts. After three years meditating in a series of caves he introduced Buddhism to Bhutan and nine centuries later in the 1600s the precipitous cliff-face Takstang "Tiger's Nest" monastery was built to commemorate this momentous cultural and spiritual revolution. The Nest, or Lair, is not just one of the most awe-inspiring sites in the country but also Bhutan's holiest.



Detail of mural painting, Wat Phra Kaew, Thailand. Photo by Erin Charles; "Diety Durga on a tiger." Jaipur style of the Rajasthan School, c. 1800, India. © Trustees of the British Museum; "Manju with tiger in a torrent." Ivory and gilt copper netsuke by Suzuki Tokoku, c. 1900, Japan. © Trustees of the British Museum.



Furthermore, corridors through significantly degraded landscapes require major interventions, such as construction of wildlife crossing overpasses or viaducts in critical corridor areas where highways or other infrastructural barriers exist.

Our projects are supporting these governments to turn the theoretical corridors into reality. In partnership with Bhutan's Ministry of Agriculture and Forests and Malaysia's Ministry of Natural Resources and Environment, the projects will concentrate first on building foundational capacity for Integrated Landscape Planning and Management in national, regional and local agencies, which will then

be put into action through the development and implementation of management plans for each corridor. In an inclusive, stakeholder-led process, participants will lay out the governance structure, land use specifications, biodiversity management and monitoring protocols, regulations, enforcement, budgetary needs and financing mechanisms. Designed with a view toward community development and livelihood enhancement for residents in and around these biological corridors, these projects will promote management plans that optimize land use for both ecological conservation and economic benefits

for local residents. Maximizing the benefits of these newly operational corridors for local residents not only increases the likelihood of compliance with regulations but fills multiple government goals at once, making cost effective use of limited funds by linking conservation with increased health and well-being, sustainable rural development and contributing to the national economy.

## STRATEGY 2: REDUCING POVERTY AND SUPPORTING RURAL DEVELOPMENT



Poverty drives people to use the resources available at hand to survive. Households in rural or remote areas of tiger range countries may be forced to degrade the natural landscape in order to scrape a living for the day, trapping them in a cycle that leaves them further impoverished as ecosystem services decline and provide less for each tomorrow. Conservation regulations may be interpreted by residents as restricting their access to their only means of survival. By introducing sustainable options that result in greater benefits for all community members, both women and men, our projects help curb habitat degradation and poaching, as well as decreasing human-wildlife conflict.

### SUSTAINABLE LIVELIHOODS

Working with communities to develop alternatives to overuse of limited natural resources provides a foundation on which to build conservation initiatives that mutually benefit tigers and humans. Without improved options, individuals must continue to use whatever resources are at hand to survive. Using gender- and

minority-inclusive participatory methods to define a community's needs and priorities and then to brainstorm possible solutions forms a foundational part of our projects in the tiger landscape. From these sessions, projects are developed to provide capacity building activities that equip people with the skills and opportunities necessary to derive benefits from the local natural resources while sustaining, rather than depleting them. With planning,

support and cooperation, these sustainable livelihood activities can also serve to build mutually supportive networks within and among communities, improving human well-being throughout the landscape while strengthening local commitment to long-term conservation. Our projects further promote these positive outcomes by supporting economic and market analysis, feasibility studies and facilitating market linkages.



Yang Xiang protects his father from a tiger. "Yang Xiang: Twenty Four Paragons of Filial Piety for Children." Woodblock print by Utagawa Kuniyoshi, c. 1843, Japan. Gift of Prof. Arthur R. Miller, to the American Friends of the British Museum. © Trustees of the British Museum.

## TIGERS AND CHILDREN

Tigers in folklore, myth, literature and children's stories are usually the bad guys. Rudyard Kipling's Shere Khan, for example, has no redeeming features! He's everything bad — boastful, violent, cowardly, and in the end, he gets skinned. Tigers stalk the pages of fiction. But no matter how badly they behave, millions of children go to sleep hugging a cuddly fluffy tiger toy to make them feel safe.



## PROJECTS

In Thailand, the “Strengthening Capacity and Incentives for Wildlife Conservation in the Western Forest Complex” project implemented in a tiger stronghold of three adjacent Protected Areas provides livelihood assistance within the framework of ‘Conservation Agreements.’ Through a participatory process, each community identifies sustainable livelihood activities that are of interest and priority to the community, inclusive of gender and minority considerations, as well as in compliance with the terms of the Kingdom’s Wildlife Sanctuary status. A Conservation Agreement is then drawn up, defining the agreed responsibilities of both parties: the community with respect to conservation goals (such as limiting poaching or clear-cutting for agriculture) and the project with respect to livelihood assistance in the form of trainings, equipment and networking facilitation with local institutions. These agreements formalize the community’s right to use and benefit from the land in biodiversity-friendly ways, as well as lay out a framework by which the whole community may benefit more from jointly practicing conservation than by exploiting resources for individual gain.

Indigenous Karen villages located within the wildlife sanctuaries participate in the project, as well as villages in the buffer zone surrounding the parks. Where livestock grazing and tourism are not permitted within park boundaries, the project supports the development of sustainable livelihoods such as planting, processing and marketing indigenous varieties of upland rice, chili, betel nut and medicinal herbs, or improving business opportunities for traditional weavers with active involvement and empowerment of women in the communities. The emphasis on traditional knowledge adds value to these products for the outside consumer, as does the fact that families produce these goods according to biodiversity-friendly practices, allowing them to draw premium prices in the marketplace and significantly supplement household income.

For villages outside of park boundaries, the project focuses on community forestry activities such as agroforestry and forest gardens, tree farms of economically valuable indigenous hardwoods and fruit trees, and reforestation projects that result in community owned forests on previously degraded land. Additional project activities work with the most vulnerable households to identify sustainable harvesting



PHOTO BY ERIN CHARLES

India, home to 70% of the world’s wild tigers, published a report in 2015 calculating the total value to India’s economy of six tiger reserves at **US\$24 BILLION!** The experts contributing to the *Economic Value of Six Tiger Reserves* took into account the monetary estimates of a range of *ecosystem services* including water provisioning, gene-pool protection, carbon storage and sequestration among other tangible and intangible benefits. Potential of employment generation and tourism had also been factored in while conducting the valuation exercise.

techniques for non-timber forest products that can supply daily needs and provide income. These activities not only improve livelihoods but help maintain or improve habitat and ecosystem services in the critical buffer zone area designed to reduce encroachment into the protected wildlife sanctuary.

Our project in Bhutan takes capacity building for sustainable livelihoods one step further by incorporating climate change adaptation into techniques for sustainable agriculture initiatives. Not only do indigenous crop strains and traditional livestock breeds fetch a premium price on the market, cultivating these wild relatives

preserves agrobiodiversity and promotes the selection of climate change resilient varieties that reduce farmer's vulnerability to increasingly unpredictable and shifting weather patterns.

These unique agricultural systems in the biological corridor areas also create an opportunity to develop nature-based ecotourism and agrotourism, multiplying the livelihood-creating effects of the project. Traditional lodging and meals for guests, creating and selling handicrafts, leading farm tours, guiding nature treks, and other types of tourism-related jobs offer new opportunities for increased household income and economic

growth for these Bhutanese corridor communities and at the same time sustain cultural skills and preserve traditional knowledge that might otherwise fall into decline.

Finally, in Bhutan, Thailand, and other project countries, our projects work to increase "conservation jobs," for example, as community rangers. These projects facilitate training initiatives to establish community ranger systems that equip community members with the skills necessary for employment — patrolling borders, monitoring wildlife, and conducting other conservation activities within PAs, buffer zones and biological corridors.



PHOTO CREDITS: 1) Photo by Kwanruen Seub-Am/UNDP Thailand. 2) Many Bhutanese villages depend on the forest for cooking fuel. Photo by Tashi Dorji. 3) Agro-tourism can thrive where communities in Bhutan still practice traditional methods. Photo by Tashi Dorji. 4) Photo by UNDP Thailand.



## PAYMENT FOR ECOSYSTEM SERVICES (PES)

Maintaining healthy ecosystems does not only benefit the wildlife and humans living within the habitat and close to nature. In addition, the services that ecosystems provide enable people from entire regions and even around the globe to benefit from clean water and air, energy, extreme weather protection and more. Through traditional stewardship of the land and formal protection, rural residents and conservation agencies safeguard these services for municipalities, urban citizens and business owners. Our projects support innovative biodiversity

financing mechanisms to fund these conservation efforts by initiating Payment for Ecosystem Services (PES) programmes, which encourage cities and corporations to recognize the value of these services and to contribute financially for their continued upkeep. These funds contribute to rural poverty alleviation through job creation and by promoting healthy ecosystems which support livelihoods for forest-dependent communities.

### PROJECTS

Malaysia's Central Forest Spine serves as a natural water tower, providing abundant fresh water for all of peninsular Malaysia and Singapore.

The "Improving Connectivity in the Central Forest Spine Landscape" project led by the Ministry of Natural Resources and Environment is working toward establishing PES programmes that will enable stakeholders, including downstream water users, to contribute financially to the upkeep of the forested watersheds that provide vital ecosystem services to millions of Malaysians and Singaporeans. The project will engage in establishing a transparent mechanism to collect payments and administer the reinvestment of PES funds into safeguarding the natural source of this precious water and the only remaining habitat for the Malayan Tiger.

## STRATEGY 3: COMBATING POACHING AND ILLEGAL WILDLIFE TRADE

Tigers and other globally significant wildlife species continue to be threatened to the point of extinction by poaching and trafficking, most often facilitated by organized crime syndicates that undermine the peace and security of rural communities and urban centers alike. Our project strategies seek to simultaneously address the variety of conditions that allow criminal activity to thrive.



### LAW ENFORCEMENT

On the front lines in the battle against poaching and trafficking, park rangers and law enforcement officers in Protected Areas, at border crossings, airports, seaports and in urban markets come face to face with the multi-faceted challenges of wildlife crime, estimated by INTERPOL to be worth well in excess of US\$20 billion a year and frequently linked with other organized crimes, e.g. trafficking of humans, narcotics and weapons. Our projects seek to support these officers from crime

scene to courthouse through comprehensive training, modern equipment, and an effective justice system, as well as through efforts to build local community support and cooperation.

### PROJECTS

Following the extinction of the Bali Tiger in the 1940s and the Javan Tiger in the 1970s, the island of Sumatra harbors Indonesia's last remaining tiger sub-species — the Sumatran Tiger. The landscape now faces unprecedented tiger habitat loss and fragmentation due to clear

cutting and burning for new palm oil and timber fiber plantations, as well as commercial logging.

The “Transforming effectiveness of biodiversity conservation in priority Sumatran landscapes” project led by Indonesia's Ministry of Environment and Forestry sets out to operationalise the National Tiger Recovery Plan in an effort to conserve the nation's globally significant forests and wildlife. A major component of the project is to strengthen patrolling and law enforcement capacity within the project target sites, which represent



PHOTO CREDITS: 1) Camera traps help rangers monitor biodiversity and wildlife crime. Photo by Midori Paxton. 2) Patrol team in Htamanthi Wildlife Sanctuary, Myanmar. Photo by WCS.

# TIGER GUARDIANS

Little Fang Lin is three years old. Although he is unlikely ever to see a wild tiger in China, tigers will surround him for the rest of his life. On his feet he wears red slippers decorated with tigers. When it is cold or on special occasions he shrugs on a jacket. Again a tiger prowls in design. When Fang Lin has a cold his grandmother rubs tiger balm under his nose. There are tigers on his favourite chopsticks and on the soy sauce bottle and his noodle pack. The nearest temple has tiger wall sculptures. A white tiger will guard him after death if his family follow the geomantic (*Feng Shui*) practice of raising his tomb slightly higher on the right side (the right side is considered stronger) to attract the tiger. The tiger is a symbol of strength and health, widely used to brand products, but it is also the ultimate spiritual watchdog against evil forces. Throughout Asian myth and religion the tiger, along with the dragon, have been fending off demons for millennia. In Indonesia were-tigers guard fields against thieves. In China they dismay “The Three Evils”: fire, thieves and ghosts. Protective tiger amulets, as well as fragments of tiger skin and bone, frequently fraudulent, are sold at religious sites in all tiger range states.

Fang Lin and his family believe the tiger protects them. Convincing them they can protect the tiger in return is the conservation challenge. Our projects engage with religious, corporate and community bodies to help everybody make that reciprocal link.



Detail of page from a ritual tattooing manual, 19<sup>th</sup> century, Burma (Myanmar). © Trustees of the British Museum; Detail of Tiger Balm packaging. Printed cardboard, c. 2000, Singapore. © Trustees of the British Museum; Cizhou Ware pillow in the form of a tiger. Earthenware with painted slip decoration and transparent glaze, c. 1182, China. Gift of the Asian Art Council to the Brooklyn Museum.

some of the largest contiguous forest areas still remaining in Indonesia, including all priority tiger landscapes, which also support unique sub-species of rhinoceros, elephant and orangutan found nowhere else in the world. With support of four civil society organizations, namely Fauna and Flora International, Wildlife Conservation Society, Zoological Society of London and the Sumatra Tiger Forum, the project facilitates an increase in forest rangers and patrol units trained in SMART-based patrolling methods. SMART patrolling

is designed to detect and mitigate threats to PAs and the biodiversity within, such as illegal logging and poaching activity. Trained rangers input field data into spatial mapping software that will calculate trends and levels of threats, performance of patrol teams and gaps in coverage. These outputs will help park managers monitor trends in threats to forests and wildlife, plan enforcement operations and monitor patrol effectiveness. Staff will be trained in field data collection methods, database operation, strategic planning and patrol strategy.

## ANTI-TRAFFICKING

Improving the detection of contraband at border crossings and air and seaports is an integral step in breaking the trade and transport links that enable wildlife trafficking. Our projects in Tiger Range Countries support capacity building for transportation and customs authority stakeholders, as well as improving technology to increase detection rates of live animals as well as feathers, furs, teeth, bones and other wildlife parts and products.



## PROJECTS

Thailand serves as a transportation hub for Southeast Asia, with an important international airport and thriving sea trade. Along with strengthening capacity of law enforcement to detect illegal wildlife cargo and closing loopholes that facilitate corruption, the “Combating Illegal Wildlife Trade” project led by the Department of National Parks is working to dismantle the networks that facilitate the exchange of illegal wildlife and wildlife products across international borders. A key feature of this endeavor is to improve cooperation, coordination and information exchange among government, non-government and private sector organizations, both inside Thailand and internationally. The project will establish a central

joint-agency task force to generate intelligence and develop strategic operations against wildlife trafficking networks, using spatial monitoring data from the field and information exchanged with Chinese, ASEAN and African anti-trafficking operations. To ensure long-term success, the project will work to identify legal gaps in national policy and work to streamline the institutional framework within which wildlife crime is addressed.

## POLICY REFORM AND ANTI-CORRUPTION

Establishing strong national policy that strengthens the disincentives for illegal behavior and provides adequate resources for law enforcement to effectively tackle wildlife crime forms an essential

foundation for eliminating poaching and illegal wildlife trade. Our projects in tiger range countries recognize the vital importance of unambiguous laws, appropriate penalties and capacity across the prosecution and justice system to respond to these challenges. Just as vital is the need to address the corruption that facilitates these crimes through bribery, fraud, abuse of power and kickback payments. Corruption is present throughout the wildlife trade supply chain, from the issuance of permits and concessions by national authorities to lax enforcement by border and trade authorities, down to weak monitoring of retail shops and web-based markets.

## PROJECTS

The “Combatting illegal and unsustainable trade in endangered species in Indonesia” project led by Indonesia’s Ministry of Environment and Forestry aims to tighten regulatory structures and improve oversight of enforcement responses. The project will support the revision of existing conservation laws to remove loopholes and inconsistencies, as well as to enhance minimum penalties as a deterrent to wildlife crimes. Introducing anti-money-laundering legislation will further hinder access to financial resources that fund wildlife crime and related corruption. Finally, additional mechanisms for enhanced oversight of enforcement

agencies and stricter monitoring of permitting and concessions ensures appropriate actions are taken in response to regulatory infractions, and further limits the opportunities for corruption and malpractice.

## DEMAND REDUCTION

**As long as demand for wildlife products persists, illegal traders will not stop exploiting desirable species for personal profit. Our projects aim to reduce demand by educating consumers about the true cost of wildlife crime to biodiversity, national economies, political and social stability and human livelihoods, as well as the**

**legal consequences for purchasing protected wildlife or prohibited wildlife products.**

## PROJECTS

For example, Thailand’s “Combatting Illegal Wildlife Trade” project will conduct a campaign to raise awareness about how the complex legal and illegal ivory trade in Thailand contributes to the plight of elephants in Africa. This campaign will also serve as a springboard to raise broader issues of the trade in prohibited wildlife and wildlife parts, including Thailand’s own tigers, and the greater benefit that will be gained by protecting rather than exploiting these creatures.

## UNDP AND GEF’S WORK FOR SUPPORTING TIGER CONSERVATION IS NOT NEW

In the 1980s, the UNDP-funded and FAO-executed “Assistance of the Establishment of the Wildlife Institute of India (WII)” project supported the formation of the WII in 1982, with a mandate to build capacity through training, education and research in wildlife conservation. In Bhutan, under GEF financed UNDP supported project “Linking the Enhancing Protected Areas in the Temperate Broadleaf Forest Ecoregion of Bhutan (LINKPA),” the Ministry of Agriculture and Forestry and the World Wildlife Fund (WWF) Bhutan, laid the foundation for the current biological corridor strengthening project (see page 20). The project identified suitable corridors for tiger and other wildlife, developed a management plan, and piloted management approaches with local authorities and communities in the corridor, linking Thrumshingla National Park with two other protected areas. In Nepal, the GEF financed UNDP supported Western Terai Landscape Project worked collaboratively with local people to manage human wildlife conflict and improve livelihoods around the Bardia National Park and Sukla Phanta Wildlife Reserve. Before the Tiger Summit, between 1991 and 2010, the GEF has supported 19 projects that are related to tiger conservation, with a total GEF grant of about \$100 million in the range countries.



## AFFINITY FOR NATURE

One final threat cuts across all these issues, as does our strategy to mitigate the problem. Increasingly, affinity for nature and wildlife has eroded in both urban and rural populations. This cognitive and experiential detachment leads to loss of traditional knowledge and cultural diversity, worsens

human-wildlife conflict and prevents the sustainable use of natural resources. Furthermore, it results in a lack of collective will to influence policymakers and markets to support biodiversity and resource conservation.

To combat the negative effects stemming from a lack of affinity for nature, all of our projects include an awareness raising component, working with social media, community groups and religious organizations to spread messages tailored to the project's focal area. Educating urban residents on the vital role that nature plays in their everyday life in the city — through provision

of drinking water, flood control, etc. — improves understanding of the links between rural and urban landscapes and helps to promote environmentally responsible behavior in cities. For rural inhabitants, stressing the value of wildlife and healthy habitat for livelihoods and improved quality of life can encourage co-existence rather than conflict between humans and wildlife occupying the same territory. Campaigns to reduce demand for prohibited wildlife products may also serve to lower the incidence of wildlife crime, promoting peace and preventing the proliferation of criminal activity.

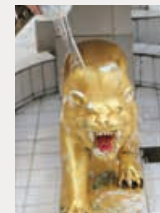
PHOTO CREDITS: 1) Tiger paintings inspire pride in local community members at this train station in India. Photo by Midori Paxton. 2) Promoting an affinity for nature helps preserve traditional skills and knowledge, such as this fish trap crafted by an Orang Asli villager in Royal Belum National Park, Malaysia. Photo by Midori Paxton. 3) Environmental education program in Hukaung Valley, Myanmar. Photo by WCS.



# ZODIAC TIGERS

Although the Gregorian calendar is now recognized worldwide, the Chinese lunar calendar (zodiac) continues to exert a profound influence on the cultural and religious practices of hundreds of millions of people. The earliest depictions of the 12 zodiac animals were discovered on Chinese tomb ceilings dating back to 533 BC and to this day, these creatures can be found throughout Asia, in effigy, in amulets sold in temples, in fortune tellers' booths, and in daily newspapers! Only three range nations include the tiger — Hindu-influenced zodiacs replace it with a lion — but in China, Korea and Japan the tiger remains among the most auspicious of what the Koreans call *sibi jisin lit.* Gods of the Earth.

All symbolic zodiac animals are credited with influencing both human character and destiny and in China demographics clearly show that in some cases decisions to have children are made based on the most auspicious zodiac dates. The Tiger is a powerfully energetic and auspicious sign. Traditionally Tiger people are second only to Dragons in terms of luck and power. They can make great leaders as they are considered dominant, courageous, spirited, charismatic, energetic, patriotic, generous, honest, competitive, determined and self-actuated. They love glory and make good self-publicists. On the downside, their spirit can be selfish, possessive, fierce, inflexible, wasteful and challenging. To succeed they need to be diligent and try to keep calm. Some suggested career paths to suit a tiger include advertising executive, actor, writer, musician and military general. Proof of this latter is convincingly supplied by Minamoto no Yoshitsune, one of Japan's greatest heroes, who was born in the hour of the tiger, in the month of the tiger... and the year of the tiger!



"Hachimantaro Minamoto no Yoshiie: Selection of Six Men of Wisdom and Courage". Woodblock print by Utagawa Kuniyoshi, c. 1850, Japan. Gift of Prof. Arthur R. Miller, on loan from the American Friends of the British Museum. © Trustees of the British Museum; Visitors born on the day of the tiger (Monday) pour water over a golden tiger fountain in the Schwedagon Pagoda, Myanmar — one cup of water for each year since their birth. Photo by Midori Paxton; Schwedagon Pagoda, Myanmar. Photo by Midori Paxton.





PHOTO BY DMITRI GOMON

## CONCLUSION

The five years following the first Tiger Summit have seen ups and downs in terms of progress in tiger conservation. In 2015 we saw India's tiger population increase by 30% from 2010 figures. Bhutan, Nepal, Russia and Bangladesh have carried out systematic national tiger surveys. Scientists have observed the first evidence of Amur tigers breeding in China in 10 years and more evidence of tiger breeding in the Thailand and Myanmar border areas. However, poaching continues and demand for tiger parts has not diminished. News comes in... both good and bad. Tigers face a serious challenge. More than 50% of the world's human population lives in the historical tiger range countries. The future of the tiger is in co-existence — wildlife and humans. UNDP and GEF will continue to support the range countries' collective efforts to save the striped giant of Asia. This publication we hope will have explained some of our strategies. **For UNDP and GEF, the fight to save tigers and the fight to improve the well-being of people are one and the same.**



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