



## IMPACT RESULTS FROM PROJECTS IMPLEMENTED BETWEEN 2015 AND 2021

INTEGRATED TIGER HABITAT CONSERVATION PROGRAMME

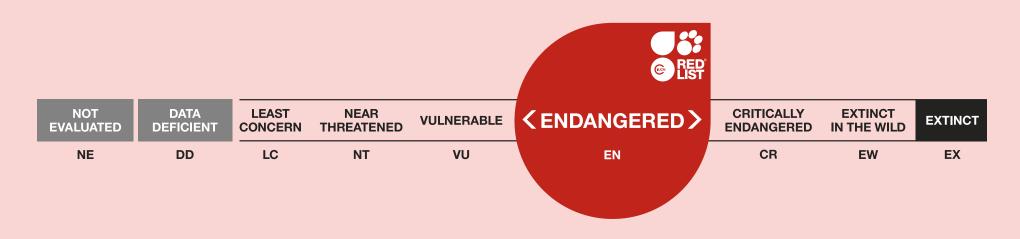
JULY 2021

## TABLE OF CONTENTS

CONTEXT	3
SPECIES	14
HABITAT	22
PEOPLE	32
WHAT'S NEXT	37

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## THE TIGER (PANTHERA TIGRIS) IS LISTED AS « ENDANGERED » ON THE IUCN RED LIST OF THREATENED SPECIES™



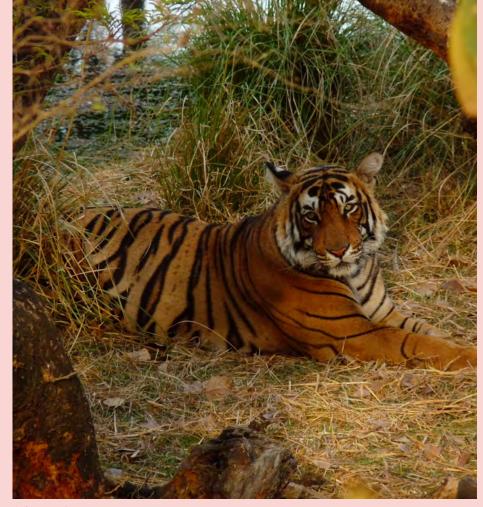
CONTEXT

The tiger, Panthera tigris, is listed as 'Endangered' on the IUCN Red List of Threatened Species. The largest of all cats, the tiger once occurred throughout central, eastern and southern Asia. However, in the past 100 years, the tiger has lost more than 93% of its historic range and now only survives in scattered populations in 13 countries, from India to Southeast Asia, and in Sumatra, China and the Russian Far East.

Over the past century, tiger populations have fallen from around 100,000 individuals to an estimated 3,500 individuals in 2014. Populations in Southeast Asia in particular have crashed dramatically.

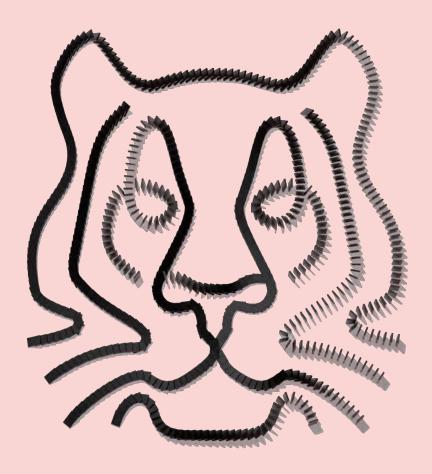
The main threats to tigers are poaching for trade in body parts used in traditional medicines, habitat loss and fragmentation, retaliatory killing after attacks on people and livestock. The majority of remaining wild tigers are isolated, unconnected to other populations and face increasing human encroachment into their territories. Tigers are also increasingly exposed to zoonosis through interactions with domestic or feral animals.

As a top predator and a keystone species, a healthy tiger population reflects the health of the environment. Conservation efforts to protect tigers can therefore contribute to the preservation of healthy herbivore populations, other carnivore species and ultimately the entire ecosystem and its functions.



© Sugoto Roy

CONTEXT



**EARLY 1900s** 100,000 TIGERS



2014 3,500 TIGERS



Bengal Tiger captured in camera trap © ZSL

The Integrated Tiger Habitat Conservation Programme (ITHCP) is an initiative implemented by the International Union for Conservation of Nature (IUCN) and funded by the German Cooperation (BMZ) through the German Development Bank (KfW).

The initiative was created in 2014 as a contribution to the Global Tiger Recovery Programme (GTRP). This landmark global agreement announced in St. Petersburg in 2010 aims to double tiger numbers in the wild by 2022.

The first phase of the ITHCP was implemented between 2014 and 2021, and provided grants to a wide range of organisations, including governments, national and international NGOs. With a

total investment of 20 million Euros, the programme developed a portfolio of 12 projects operating in priority Tiger Conservation Landscapes across six Tiger Range Countries (India, Nepal, Bangladesh, Bhutan, Myanmar and Indonesia). In this report, ITHCP projects have been grouped in four main areas, namely: Terai Arc and Transboudary Manas Conservation Area (TraMCA). Southern-Central India and Sundarbans. Myanmar, Sumatra.

In addition, two studies were funded as part of the programme to assess the status of tiger habitat in high altitude ecosystems of the Himalayas and to identify lessons learnt from human wildlife conflict management.

The programme promotes a multidimensional approach to tiger conservation and it is based on **three key components**:

- Protecting tiger **species** through anti-poaching and conflict mitigation measures.
- Preserving tiger habitats through the effective management of protected areas, buffer zones and corridors.
- Supporting human populations living in and around tiger habitats to reduce unsustainable dependence on natural resources and promote alternative livelihoods and income sources.

## ITHCP PROJECT LOCATIONS

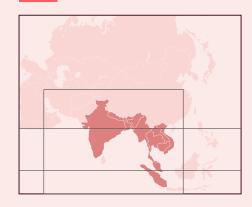
## SOUTHERN-CENTRAL INDIA AND SUNDARBANS











TNDTAN OGFAN

WESTERN GHATS

MAHARASHTRA

## TERAI ARC AND TRAMCA





## A WORD FROM THE PROJECT LEADERS



### **WESTERN TERAI**

Supporting trans-boundary tiger recovery in India and Nepal

Zoological Society of London

"The project contributed to the increment of 82% tiger population, achieved mainly through human tiger conflict mitigation measures, strengthening protected area management effectiveness, and ensuring equitable participation of marginalized households directly in a wide range of sustainable livelihood schemes through community banking."

Hem Baral, ZSL



## **EASTERN TERAI**

Transcending Boundaries for Tiger Recovery: The Chitwan-Parsa-Valmiki Complex in Nepal and India

**WWF Germany** 

"The transboundary cooperation between government authorities has significantly improved in the Chitwan-Parsa-Valmiki Complex which wouldn't have happened without the ITHCP contribution.

These transboundary efforts are extremely important for effectively combating illegal wildlife trade of tigers and other Endangered species but also to jointly mitigate human-wildlife conflict."

Kathrin Samson, WWF Germany



## **ROYAL MANAS**

Securing the Future of Tigers in Bhutan Manas Complex

Department of Forests and Park Services Bhutan

"The ITHCP project with Bhutan Tiger Center, Department of Forests and Park Services (DoFPS) has helped us to show that tigers living in the vicinity can be a source of livelihood and economic opportunities for communities, besides securing the future of tigers in Royal Manas National Park."

Tshering Tempa, DoFPS Bhutan

CONTEXT



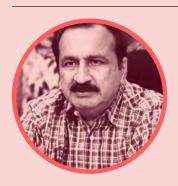
**MANAS** 

Securing Source Population of Tiger, Prey and Habitats in Indo-Bhutan Manas Landscape

Aaranyak

"The tiger population in the Manas National Park is thriving due to integrated efforts by the stakeholders and support of the ITHCP. This was possible due to improved habitats and reduced human disturbances achieved through effective law enforcement and alternative livelihood efforts with communities along with increased sensitivity among the communities."

M Firoz Ahmed, Aaranyak



## **MAHARASHTRA**

Integrated Habitat Conservation and Eco-development in Vidharba Tiger Landscape

Maharashtra Forest Department

"The ITHCP is a trailblazer project being first of its kind to focus on wildlife corridors and areas outside protected areas of the region. The project successfully stressed the importance of maintenance and development of corridors through sensitization and education to all the stakeholders. Providing alternative livelihoods and mitigating human-wildlife conflicts not only helped in increasing tiger numbers but improve the genetic viability through safe migration in the region."

B. S. Hooda, Maharashtra Forest Department



**WESTERN GHATS** 

Recovering Tigers in the Confluence of the Western and Eastern Ghats

Nature Conservation Foundation

"ITHCP's support has helped us garner conservation support, conserve vital tiger habitat, tiger and prey populations by enabling us to introduce better alternatives to over 6,000 people from forest-dependent communities, which subsequently improved their lives and livelihoods too."

Sanjay Gubbi, Nature Conservation Foundation

CONTEXT P.11



### **SUNDARBANS**

Protecting tigers, people and their vital habitats in the Sundarban Delta of India and Bangladesh

Wildlife Trust of India and WildTeam

"The project successfully reduced the risks of human–tiger conflict by around 60% for over 900 highly vulnerable forest dependent people in six villages of Sundarban in India and Bangladesh, by effectively providing non forest based livelihood support, and also managed to integrate community support for human–tiger conflict mitigation in the form of village based response teams."

Krishnendu Basak, Wildlife Trust of India



### NORTHERN MYANMAR - INDIA

Restoring tiger and prey populations in northern Myanmar through protection and enhancing livelihoods of local communities in the Myanmar-India Transboundary Tiger Conservation Landscape

Wildlife Conservation Society

"With the strong support from this project, the second version of National Tiger Action Plan was developed and is being implemented, including in Htamanthi Wildlife Sanctuary, a critical tiger source site for Myanmar."

Hla Naing, WCS



### DAWNA-TENASSERIM

Karen Wildlife Conservation Initiative (KWCI) - Conserving tigers and indigenous knowledge in the Dawna-Karen Hills, Myanmar

Wildlife Asia

"Protection, from the bottom up, this is the way of the Karen, an effective and socially acceptable model for biodiversity management. The ITHCP project provided the support and direction for the Karen Wildlife Conservation Initiative to implement a strategic approach to tiger conservation in alignment with this community-driven approach in this incredibly rich landscape."

Clare Campbell, Wildlife Asia

CONTEXT P.12



**TANINTHARYI** 

Tanintharyi Tiger Conservation Landscape Project

Fauna & Flora International

"With ITHCP funding we have supported 20 communities in forest management and sustainable livelihoods, helped address the expansion of oil palm and confirmed southern Myanmar is an important site for the recovery of the tigers."

Mark Grindley, FFI Myanmar Programme



## RIMBANG BALING

Communities for tiger recovery in Rimbang Baling: the Beating Heart of the Central Sumatran Tiger Landscape

**WWF Germany** 

"The programme strengthened a crucial conservation foundation in Rimbang Baling by promoting an integrate approach for tiger and habitat conservation. It has supported not only tiger population and habitat, but also community and their cultural heritage tigo tungku sejarangan principle: customary, religion and intellectual [values]."

Febri A. Widodo, WWF



## LEUSER - KERINCI

Safeguarding Indonesia's Priority Tiger Conservation Landscapes

Fauna & Flora International

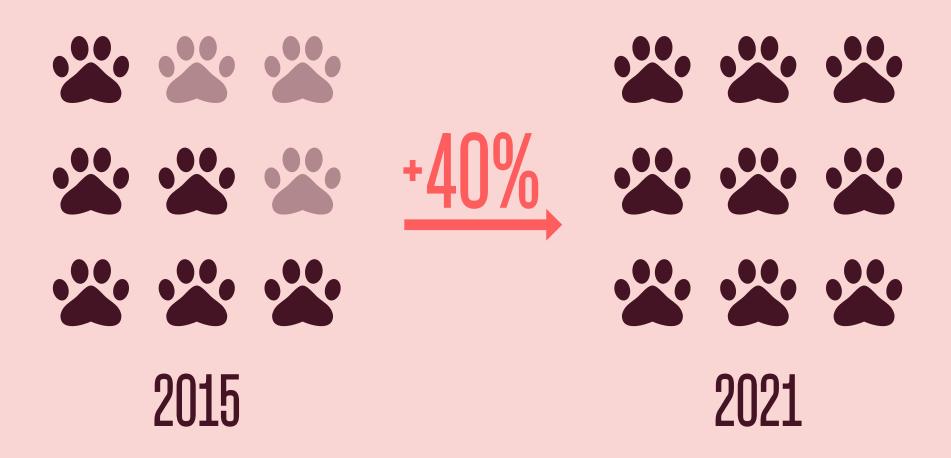
"The project has had enormous efforts on safeguarding the tiger habitats with a total area of 7.399 km2 through patrol, monitoring, combatting illegal wildlife trade, and securing forest areas surrounding the Tiger Conservation Landscape's buffer zone with social forestry scheme."

Donny Gunaryadi, FFI Indonesia Programme

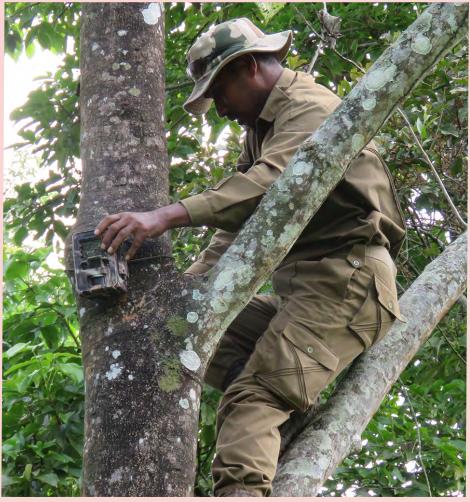
CONTEXT P.13

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### AVERAGE INCREASE OF THE TIGER POPULATION WITHIN PROJECT SITES



## TIGER POPULATION MONITORING



A team member collects the camera traps installed on a tree inside Manas National Park © Aaranyak

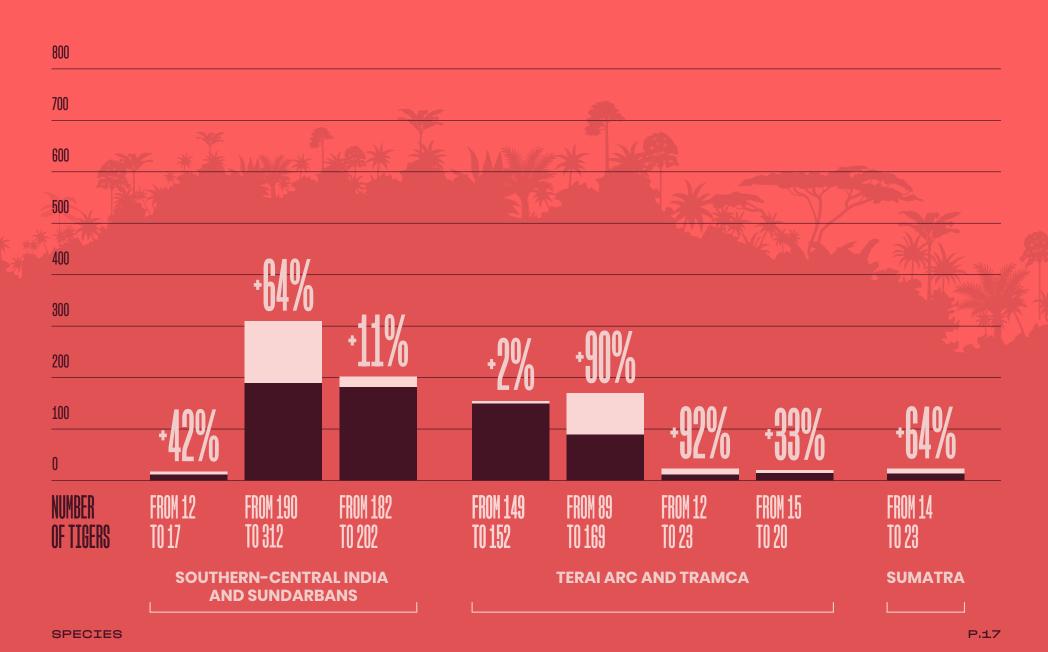
The ITHCP project portfolio of Phase I managed an estimated 24.8% of the global tiger population of 3,886 individuals living in the wild (unofficial current estimate). Over the period of Phase I. across the programme there has been an average increase of the tiger population within project sites by 40%, with the entire portfolio-wide population growing from 770 individuals to 966 between 2015 and 2021 (a 25% increase).

The graph (Figure 1) shows a great deal of variation both within different regions and across the entire project portfolio. This is because tiger populations vary hugely on a site by site basis and population increase relies on the presence of large numbers of breeding females, access to good habitat types and connectivity to other sites from which animals can colonise. As a result, some sites have shown dramatic population increases while others less so. In addition, some sites were already

at or close to carrying capacity, therefore they did not have the potential for large population increases. Populations in the Indian subcontinent (India and Nepal) can sustain large tiger populations and provide the potential for large population growth. This is because prey populations are naturally at high densities in these areas. The same is not true for Southeast Asia where prey populations are naturally at low density.

The figure 1 does not include Myanmar, where the population was estimated during the course of the projects there. In Myanmar this is currently estimated at 21 individuals across 3 projects in the country. In addition, one project in Sumatra was not included, as population estimates were refined during the course of the project itself, which does not allow to draw a meaningful conclusion with regards to the increase in population size.

## FIGURE 1: % CHANGE IN TIGER POPULATIONS FROM 2015 TO 2021, BY PROJECT ACROSS THE DIFFERENT AREAS.





Camera trap photograph of tiger in Bhutan © DoFPS Bhutan



Tiger in Royal Manas National Park © DoFPS Bhutan

ITHCP has provided over 2,000 camera traps for tiger population monitoring activities. Support to tiger monitoring is one of the main positive outputs of the programme, especially in the case of Myanmar, where projects were able to define for the first

time a more robust assessment of remote tiger populations. As a result of ITHCP projects working together in collaboration with other organisations in Myanmar, the government of Myanmar has developed the National Tiger Action Plan based on these figures.



Tiger with cub © Maharashtra Forest Department



Snare removal, Rimbang Baling, Sumatra © Sugoto Roy

## ANTI-POACHING ACTIVITIES

Some of the factors that have increased population sizes include training and equipping frontline staff who undertake patrolling. 8,207 staff have been trained, an average of 683 per project, participating in a total of 260 training courses across the entire project portfolio. Of these, 4,886 have been provided with key patrolling equipment ranging from field gear to data management hardware. One critical area of training is in Spatial Monitoring and Reporting Tool (SMART), a piece of software that helps to adaptively improve effectiveness. patrolling Three of the 12 projects have introduced SMART as a result of funding through ITHCP, from scratch.

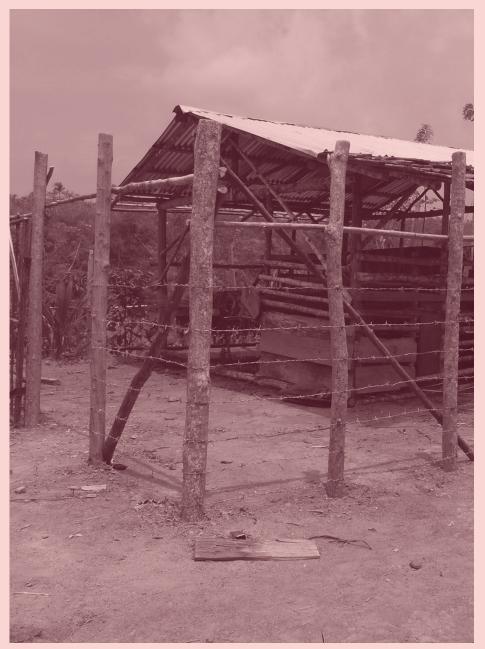


## HUMAN-WILDLIFE CONFLICT

Another key area of intervention to safeguard wild tiger populations is to improve coexistence through reduction of human wildlife conflicts (HWC). Although HWC are not a problem for all projects across the portfolio, where HWC is a key component of the project (two projects in Nepal and another in the transboundary area between India and Bangladesh in the Sundarbans) there has been on average a 75% reduction in human mortality caused by

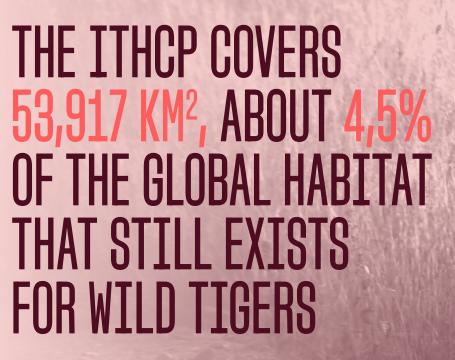
## tigers and leopards.

As part of an integrated conflict management approach, predator proof fencing is a key component of many projects. ITHCP has funded 138,228 km of predator proof fencing across the portfolio. It should be noted that some projects have used project funds to actually develop systems of HWC recording reporting and management.



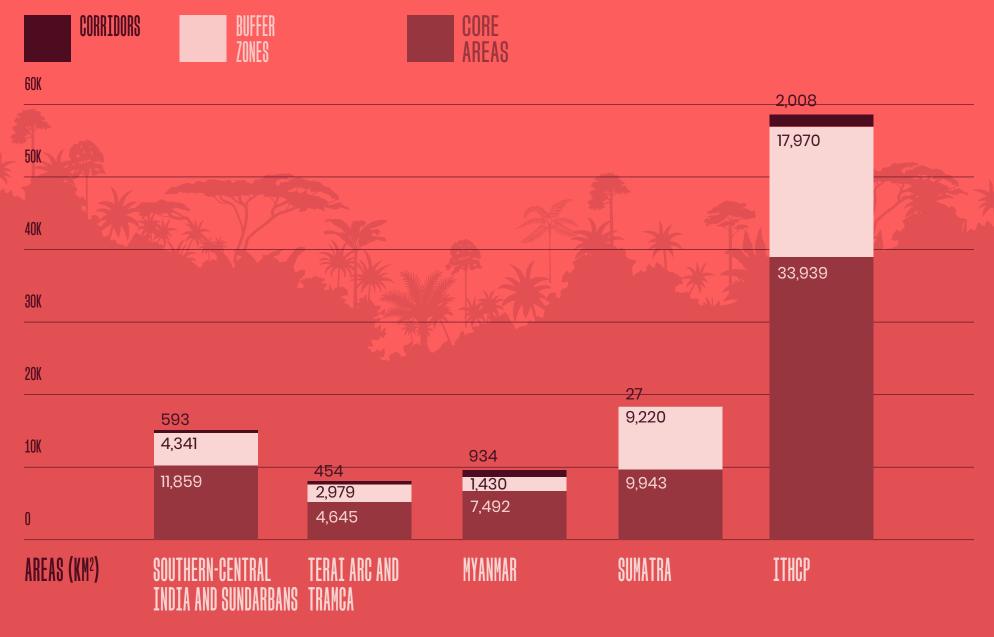
Predator proof rearing pen for livestock, Leuser, Sumatra © Sugoto Roy

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Of this, 62% is protected area, 33% is buffer/multi-use zone and 5% is corridor. A breakdown is given in Figure 2. (next page)

## FIGURE 2. BREAKDOWN OF PROTECTED AREA, BUFFER/MULTI-USE ZONE AND CORRIDOR AREAS ACROSS ITHCP IN THE DIFFERENT AREAS IN KM<sup>2</sup>.



## EFFECTIVE MANAGEMENT OF PROTECTED AREAS

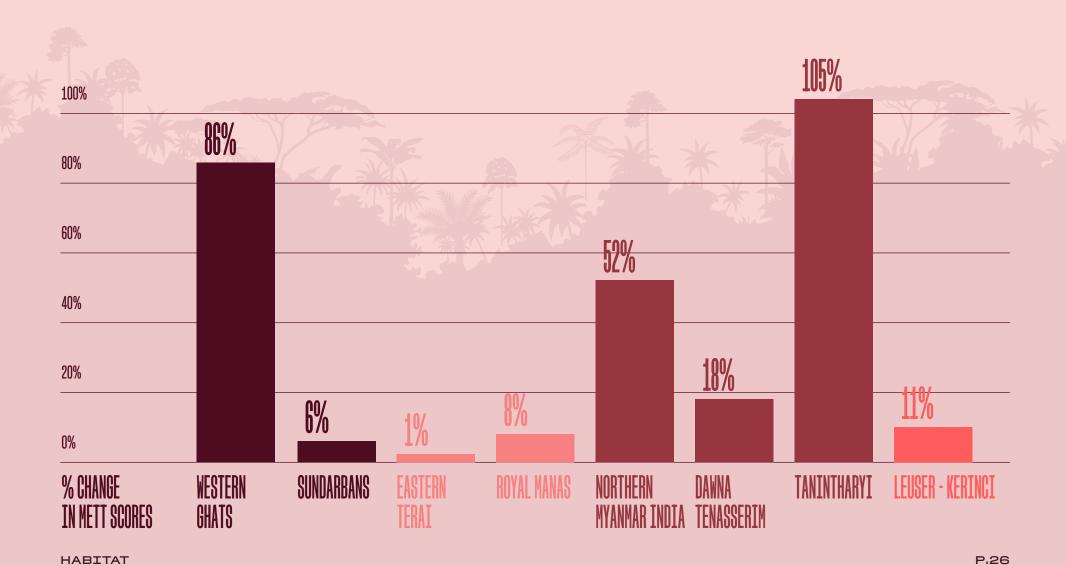
In order to ensure effective management of protected areas, projects have been providing changes in their METT scores (Management Effectiveness Tracking Tool, a widely used global system for measuring protected area management against pre-set criteria). Eight of the 12 projects have provided METT scores and have shown the project average of a 22% increase (Figure 3). METT scores have increased substantially in those projects where monitoring and evaluation was introduced for the first time as part of project reporting. Scores changes are not as dramatic in those projects that already had a degree of monitoring and evaluation prior to ITHCP project implementation. in order to improve the effectiveness of protected area management, ITHCP has provided equipment and infrastructure. These include 78 guard posts and 24 vehicles (cars, boats and motorbikes).



Guard Post in Protected Area in Nepal © Dr Gitanjali Bhattacharya

HABITAT P.25

FIGURE 3. % CHANGE IN METT SCORES ACROSS THE ITHCP PROJECT PORTFOLIO IN THOSE PROJECTS THAT RECORDED IT, FROM 2015 TO 2021.



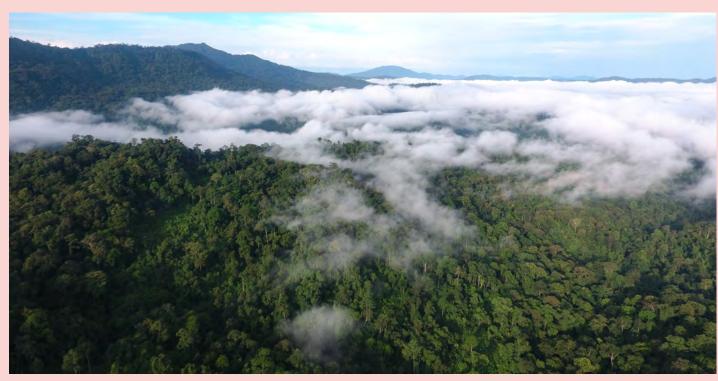


## LANDSCAPE MANAGEMENT AND HABITAT RESTORATION

Working with local inclusively communities is essential for longterm sustainability and conservation of priority landscapes.

Six of the 12 ITHCP projects of Phase I have created state-of-the-art land-use management plans together in consultation with local communities as a result of ITHCP funds. Although always an important activity, this is fundamental in areas that protected area networks, such as in Myanmar where 5,656 members of local community groups have been directly involved in land use planning. Other areas for intervention include restoration

of habitat across all three habitat categories (core areas, buffer zones and corridors). do not have well established This includes the removal of invasive species and replanting of trees. Across the portfolio, 6,717 km² of habitat has been restored with over 482,000 native trees planted.



Ulu Masen Landscape © Boyhaqi, Fauna & Flora International

HABITAT P.28



## SECURING CORRIDORS

One specific habitat category is corridor. Although this makes up a small percentage of the area covered by ITHCP, corridors are key to ensuring that individuals from different sub-populations within a meta-population remain connected and can disperse to new protected areas to find food and mates. One project focusing entirely on corridors was led by the Maharashtra Forest Department and focused

on corridor areas connecting five Tiger Reserves. Provision of alternative resources, fuel and income streams, together with equipping and training primary response teams in conflict situations has been key to improving coexistence of humans and tigers. A map highlighting the importance of corridors in this project landscape is shown in Figure 4. Pioneering work funded by ITHCP has resulted in the Indian

government developing the Dr Shyamaprasad Mukherjee Jan Van Vikas Yojana scheme. This is a government led initiative to fund sustainable development programmes and projects with communities living in corridor areas in Maharashtra.



Ulu Masen Landscape © Boyhagi, Fauna & Flora International

HABITAT P.30

## FIGURE 4. MAP SHOWING CRITICAL TIGER MOVEMENT CORRIDORS LINKING THE DIFFERENT PROTECTED AREAS (PAs) IN THE PROJECT LED BY THE MAHARASHTRA FOREST DEPARTMENT.



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## DEVELOPMENT OF SUSTAINABLE LIVELIHOODS

A key component of all ITHCP projects is the development of sustainable livelihoods for local communities living in and around critically important habitats and their prey. tigers directly affected ITHCP 81.778 beneficiaries: those receiving alternative resources, those increasing their capacity to manage existing resources sustainably and those receiving new income streams from initiatives. Of these approximately 54% are women, ensuring gender balance. A breakdown of the proportion beneficiaries by landscape/ region is highlighted in Figure 5 (next page).

Beneficiaries can be divided in three main types: those receiving **alternative** resources (e.g. improved

cooking stoves, biogas and LPG connections, alternative construction materials). those increasing their capacity to manage existing resources sustainably (e.g. agricultural and livestock improvements, fish farming, beekeeping, vegetable gardens) and those receiving new income streams from initiatives such as ecotourism and the development of new local specialist products.

In the breakdown of beneficiaries across the different landscapes in Figure 5, it can be seen that across the portfolio access to alternative resources has the highest proportion, while new income streams have the lowest proportion. In some landscapes, some categories are more important than others.

For example, in Myanmar new income streams are hard to develop as national infrastructure such as road and rail networks reduce the possibilities of accessing new markets for specialist agricultural products or ecotourism. In Nepal, especially in the Terai, new income streams such as ecotourism are easier to develop, together with an expansion in the market for high-end, specialist organic agricultural produce.

Developing new income streams such as ecotourism has less relative importance than access to alternative resources in landscapes in India. This is because ecotourism markets in India are already relatively saturated.

## FIGURE 5: NUMBER OF BENEFICIARIES IN THE DIFFERENT AREAS FOR EACH LIVELIHOOD CATEGORY





## AWARENESS RAISING

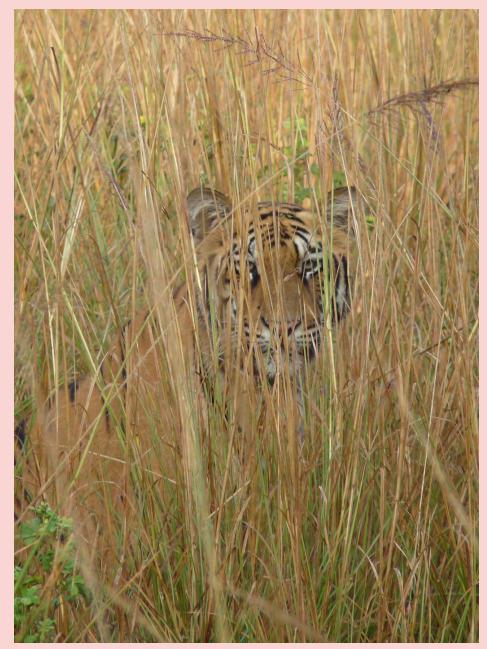
Awareness raising is a key activity to ensure local community participation in and support to the programme. The portfolio of the first phase of ITHCP has reached an estimated 440,000 local community members. Much of this has been through newspaper, TV and radio publications. 21%, an estimated 95,000 individuals, have been targeted by more in-depth knowledge transfer techniques such as conservation classes and workshops. This is in addition to the involvement of local communities in land-use planning as mentioned above.



Raising awareness for conservation © Sanjay Gubbi

**PEOPLE** 

# WHAT ONE WITH



© Sugoto Roy

As the first phase of the ITHCP draws to a close, BMZ/KfW have committed a follow-up investment with IUCN of 12.5 million Euro, which will allow to continue protecting tigers across different landscapes and supporting the local communities that live in and ground these habitats.

ITHCP future phases aim to consolidate and strengthen the achievements of selected projects funded during the first phase, by scaling up the most impactful activities. In addition, they will complement geographically and thematically the ITHCP portfolio, including working in

high altitude ecosystems, where tigers are expanding their range, as a possible consequence of climate change.

2022 will mark the new Chinese Year of the Tiger and the second Global Tiger Summit to be held in Vladivostok, which will assess the progress made in tiger conservation since 2010 and identify priorities and commitments for the future. The results of the first phase of the ITHCP will show the impacts of conservation efforts operating in a multidimensional approach integrating species, habitat and people.



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IUCN WORLD HEADQUARTERS Rue Mauverney 28 1196 Gland, Switzerland

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## KEEP NATURE STANDING