













WILDLIFE, ECOSYSTEM SERVICES AND HUMAN WELL-BEING

Biodiversity is fundamental to sustain ecosystem processes, functions and the continued delivery of ecosystem services, which are the foundation of livelihood security, health and overall well-being of human societies.

Conservation of biodiversity, including wildlife, is essential for India, not only because the consequences of biodiversity loss and the resulting loss of ecosystem services have a far reaching impact on livelihoods and overall wellbeing of human communities, but also because of the cultural heritage where coexistence is the natural way of living.

This situation in India, however, is changing. Increasing human population and consequent demand for natural resources is leading to degradation and fragmentation of natural habitats, thus creating a situation where the humans and wildlife are competing for the same resources.

The shift from 'co-existence' to 'conflict' has the potential to undermine the existing and future conservation efforts, and also hinder achievement of both Sustainable Development Goals (SDGs) and Biodiversity Targets.

HUMAN WILDLIFE CONFLICT MITIGATION

Human-wildlife conflict brings economic losses to the tune of millions of rupees to the rural communities in India every year. The increasing frequency and intensity of crop damage and the emotional stigma attached, especially to cases of killing of humans and cattle, are making the communities less tolerant to wildlife.

Mitigation of human-wildlife conflict is thus becoming one of the key issues of concern for both wildlife managers and the scientific community. Apart from the Government, there are a number of scientific institutions, NGOs and experts who are working towards finding solutions for mitigating human-wildlife conflict.

As a result, there are cases where the joint efforts from these agencies have reduced the incidence or impact of human-wildlife conflict.

There is a need to create an enabling environment for wildlife managers as well as communities to address the conflict situation and strengthen their capacities in the most efficient and effective manner. Management of Human wildlife conflict in India is an urgent and important issue. It is necessary to address the issue in a holistic manner, and co-create the mitigation solutions, with full engagement of all the relevant stakeholders.







Indo-German Cooperation on HUMAN-WILDLIFE CONFLICT MITIGATION (HWC) IN INDIA

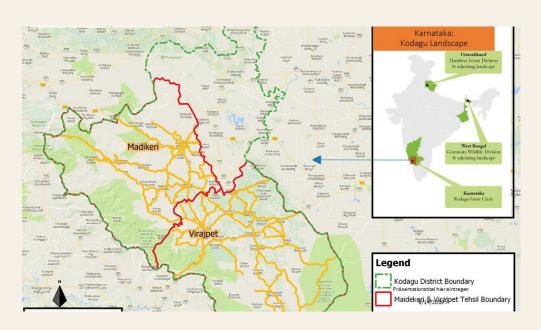
Duration	November 2017 to October 2021
Comissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Implemented by	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
Implementation Partners	Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India State Forest Departments of Karnataka, Uttarakhand and West Bengal
Resources committed by Germany	up to € 4.5 million

The project aims at providing technical support at the National level and in Partner States for effective implementation of Human Wildlife Conflict mitigation measures.

The main objective of the project is that the rural population in project areas, where agreed guidelines and tools are applied to mitigate human wildlife conflicts, is better protected against Human Wildlife Conflict. The project takes the approach of harmonious coexistence, by ensuring that both - human and wildlife - are protected from conflicts. This approach follows the modern wildlife conservation principles to balance the needs of people with the conservation of nature.

The project is working in the following three pilot sites:

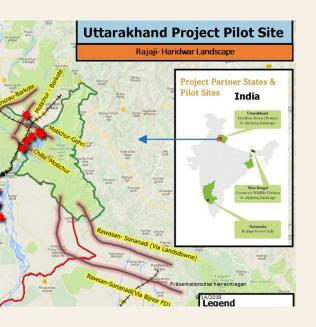
KODAGU FOREST CIRCLE IN KARNATAKA

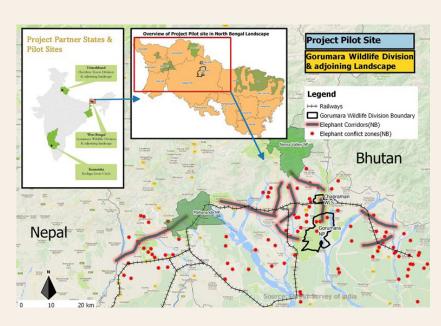


RAJAJI- HARIDWAR AND ADJOINING LANDSCAPE IN UTTARAKHAND



GORUMARA WILDLIFE DIVISION AND ADJOINING LANDSCAPE IN WEST BENGAL







PROJECT APPROACH

- Harmonious coexistence, by ensuring that both – human and wildlife – are protected from conflicts. Balance between the needs of people with the conservation of nature.
- Primary focus on capacity development through technical support
- A Multi-level approach with mutual learning feedback loop (National, selected States, Pilot sites)
- Holistic approach in addressing Human Wildlife Conflicts (HWC) by considering the "thematic triangle" of driver-preventiondamage mitigation, across three output areas.
- Engaging key stakeholders throughout the implementation of project at all levels, with focus on human well-being of the most vulnerable sections of society (e.g. rural poor and women)
- Process orientation (methods, planning and systems) in implementing mitigation instruments

Project Structure: HWC Project

HWC Output A:

Development of strategy and action plan at National level and in selected States

WP 1.1

National Strategy and action plan on HWC

WP 1.2

National database and monitoring system on HWC

WP 1.3

State-level Strategy and Action Plans

WP 1.4

SOPs for key species and key Issues

HWC Output B:

Pilot application for newly developed instruments for the mitigation of human wildlife conflicts in UK, KA, and WB

WP 2.1

HWC mitigation toolkit for UK, KA and WB

WP 2.2

Pilot Implementation of selected mitigation instruments in KA

WP 2.3

Pilot Implementation of selected mitigation instruments in UK

WP 2.4

Pilot Implementation of selected mitigation instruments in WB

HWC Output C:

Strengthening institutional and individual capacities for mitigating human wildlife conflicts

WP 3.1

Web-based National knowledge platform

WP 3.2

Strengthning Training institutions on HWC training delivery

WP 3.3

Implementation of Modular trainings for key sector and stakeholders

OUTPUT A: DEVELOPMENT OF STRATEGY AND ACTION PLAN AT NATIONAL LEVEL AND IN SELECTED STATES

National strategy and action plan to reduce human wildlife conflicts are operationalized for the implementation of pilot measures in selected states.

Project is supporting the Ministry of Environment, Forest and Climate Change (MoEFCC) in developing a National HWC Strategy and Action Plan, and supporting the Partner States of Karnataka, Uttarakhand and West Bengal in developing State HWC Strategy and Action Plans using a participatory approach to ensure that the National and the State level plans are aligned.

Support to development and implementation of HWC Management Action Plans at the division level further facilitate operationalization of the National and State level strategies on the field.

Project is supporting development of Standard Operating Procedures for 10 key species and 3 issues on Human Wildlife Conflict Mitigation. The Key contribution of the Project is to field-test these plans and procedures in a participatory manner engaging all key relevant sectors and stakeholders.

Primary aim of a National database in India is to facilitate information management and strengthening our understanding on the drivers of HWC and effectiveness of the mitigation measures. This is to support evidence-based decision-making for HWC mitigation. The database will be hosted on a webbased platform supporting visualization of HWC hotspots and other information.

Harmonious coexistence: ensuring that both – human and wildlife are protected from conflicts, the balance between the needs of people with conservation of nature is maintained.



APPROACH taken for preparation of 'National HWC Strategy and Action Plan' 'State HWC Strategies and Action Plans' and 'Standard Operating Procedures'

Holistic approach in addressing Human Wildlife Conflicts: considering the "thematic triangle" of driver-prevention-damage mitigation, across three output areas

- Addressing the drivers of Human Wildlife Conflict Mitigation
- Strengthening the measures for effective prevention of HWC incidents
- Reduction of damage to people and wildlife, via crop alteration and compensation options, damage assessment methodologies, insurance options, value chain analysis etc.

Effective participation of stakeholders and horizontal and vertical linkages

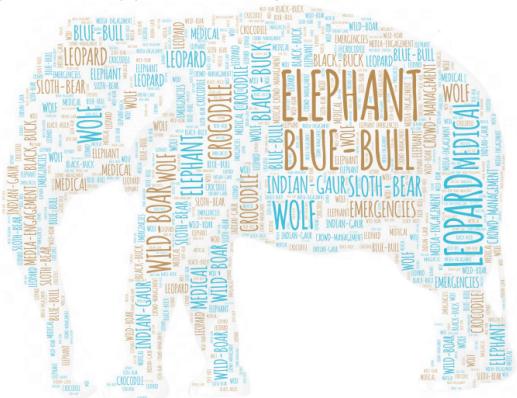
- Capacity development of key stakeholders
- Effective communication, collaboration and partnership between forest department and other key sectors and stakeholders
- Strengthening science-management linkages via-a-vis HWC mitigation research
- Effective communication between field officers and policymakers within forest sector

GUIDING ELEMENTS



SPECIES AND ISSUES FOR SOPS

Elephant | Leopard | Blue Bull | Wild Boar | Black Buck | Rhesus Macaque | Crocodile | Sloth Bear | Indian Gaur | Snakes Medical emergencies | Media engagement | Crowd management



OUTPUT B: PILOT APPLICATION FOR NEWLY DEVELOPED INSTRUMENTS FOR THE MITIGATION OF HUMAN WILDLIFE CONFLICT IN KARNATAKA, UTTARAKHAND, AND WEST BENGAL

Instruments for the mitigation of human wildlife conflicts

CONTEXT

Project is facilitating pilot application of newly developed instruments for the mitigation of human wildlife conflicts in three Partner states viz., Karnataka, Uttarakhand and West Bengal.

APPROACH

Elements of a holistic approach, aiming at harmonious-co-existence, are being pilot tested as 'Human Wildlife Conflict Mitigation Instruments' at Kodagu landscape in Karnataka, Rajaji-Haridwar landscape in Uttarakhand, and Gorumara landscape in West Bengal.

The mitigation instruments integrate the experiences of the field managers, experts, scientists, decision-makers and community in implementing the mitigation measures. In doing so, innovations that plug the gaps in the existing instruments are introduced in a targeted manner and all key stakeholders are engaged.

To institutionalize the process, and to provide a practical decision-making support for managers and experts, as well as community based institutions for mitigating HWC, Project is supporting the development of HWC Mitigation Toolkit. The toolkit will contain operational plans for implementing prioritized HWC mitigation measures. These prioritized mitigation measures would be based on a systematic assessment process taking into account the technical, legal, and financial feasibility, as well as social acceptance and wildlife-friendliness of the measures apart from looking at their long-term sustainability.





MANAGEMENT ACTION PLAN

Multi-stakeholder engagement in developing management Action Plan at each Project Pilot Site, in line with the National Wildlife Action Plan

The National Wildlife Action Plan (NWAP) 2017-35 mandates each territorial division to develop and implement a Human Wildlife Conflict Management Action Plan (HWC-MAP), for systematically addressing human wildlife conflict mitigation. HWC-MAP will facilitate bottom-up feedback to the State and National level strategies and action plan on good practices in HWC mitigation. This integration of field knowledge and experiences in the National and state level plans will ensure that the approach taken by the National and State Governments is reflected in the local level planning and implementation.

Since all operation planning related to wildlife management is done at the division level, it is critical to integrate HWC mitigation into the same plans.

However, since most of the large wildlife species-in-conflict use large areas at the landscape level, it is important that the plans take into consideration factors related to conflict at the landscape level. The HWC-MAP also provides anchoring points and instruments for cooperative planning and implementation between different forest divisions in the same landscape.

This plan provides the divisional forest officer with guidance to implement HWC mitigation measures using a holistic approach, and to facilitate higher efficiency and effectiveness of HWC mitigation measures being implemented in respective landscape/s.



OUTPUT C: STRENGTHENING INSTITUTIONAL AND INDIVIDUAL CAPACITIES FOR MITIGATING HUMAN WILDLIFE CONFLICTS

CONTEXT

Project measures focus on facilitating system level capacity development, strengthening institutional capacities and individual competences for mitigating human wildlife conflicts. The project also facilitates in implementation of training courses for key stakeholders, in partnership with the key National and State-level training institutions.

At the institutional level, the project is facilitating key training institutions -for forest and other relevant sectors - at national and state levels, in integrating relevant knowledge and information as well as conceptual innovation for the mitigation of human wildlife conflicts into their existing curricula, supporting them in designing new curriculum on HWC, providing exposure to participatory

training methods and training systems such as monitoring and evaluation of the training courses, support in development of training materials and methods suitable for delivering HWC mitigation trainings, as well as training of the trainers.

APPROACH

The Project has worked on a competencies framework indicating the professional competencies required for human wildlife conflict mitigation in India. This competency framework is being used to conduct Training Needs Assessment, subsequently guiding the way to develop curriculum and training materials for trainings on human wildlife conflict mitigation in India. Innovative and participatory training methods are used to deliver the training material.

COMPETENCIES-BASED CURRICULUM IS A WAY OF APPROACHING **PROFESSIONAL** TRAINING THAT PLACES **PRIMARY EMPHASIS** ON FACILITATING THE PARTICIPANTS IN **FURTHER DEVELOPING** THEIR COMPETENCIES. WHICH ARE REQUIRED TO ENABLE THEM IN PERFORMING THEIR JOBS MORE EFFICIENTLY AND EFFECTIVELY, IT AIMS AT PREPARING PEOPLE MORE EFFECTIVELY FOR REAL WORKPLACES.

GUIDING ELEMENTS

Holistic approach to capacity development

Address the key participants **Participatory**

competencies of the

Training of trainers at the partner training institutes

Competencebased **Effectiveness** curriculum

participatory development

Training approach

Nationally standardized vet locally customized curriculum and training material

eLearning courses to reduce dependence of training institutes on external experts

Capacity needs assessment

Innovative learning mechanism

Training

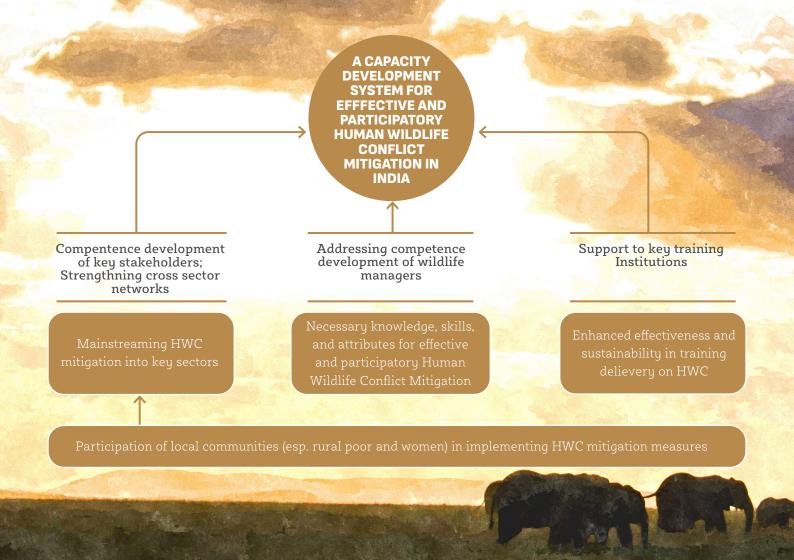
Methods

Inclusion of all kev stakeholders **Sustainability** of training measures

Training institutions engaged in entire planning and implementation from the beginning

Streamlining the curriculum and training materials into the training management system at the partner institutes

Facilitating a network of training institutions: crosssector knowledge exchange, supporting visits of faculty and experts to other states/ institutes









Indo-German Technical Cooperation Project

Human Wildlife Conflict Mitigation (HWC) in India

Commissioned by: German Federal Ministry for Economic

Cooperation and Development (BMZ)

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