

# Human Wildlife Conflict Mitigation

for State Forest Service Officer  
Trainees



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# Capacity Development for Sustainable and Effective mitigation of Human Wildlife Conflict

Mitigation of human-wildlife conflict is becoming a key area of concern for not only wildlife managers and local communities, but also for the district and State administration. There is a need to create an enabling environment to address human wildlife conflict holistically, with participation from all key stakeholders and sectors.

One of the most effective ways to address the issue on a long-term basis is to invest in capacity development of key stakeholders, for facilitating them in co-creating effective and sustainable solutions for mitigating human wildlife conflict.

**A holistic capacity development system is being implemented under the Indo-German Project on 'Human Wildlife Conflict Mitigation in India (HWC') for addressing key competencies of relevant stakeholders, including forest officers who are key in implementing HWC mitigation measures in India.**

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Capacity development is the process of developing capacities of individuals and shaping joint learning processes such that the individuals are enabled to achieve sustainable results within their own system of reference.

Capacity development facilitates change among people, in three dimensions: knowledge, skills and values/attitudes. A combination of traditional and innovative capacity development measures is used to achieve the objective.

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# The Process of Curriculum Development

The Project has drafted a Competency Framework, based on which training needs are being identified for key stakeholders of HWC mitigation in India.

Following the first results of the competency framework, pilot testing of the Training Needs Assessment framework was conducted in West Bengal in June 2018. After this, the Project facilitated the process of consolidating and prioritizing the training needs for Forest sector during a National workshop on Curriculum Development in September 2018. The workshop resulted in a modular curriculum framework for key stakeholders from forest, veterinary, media and civil society. A series of three writing workshops were organized at Haridwar, Kodagu, and North Bengal, during November 20-30, 2018 for further developing the modularised curriculum.

**All the five workshops had active participation from 92 experts including several International and National experts representing the fields of capacity development, wildlife, veterinary, media and communications, private sector, social science officials from the MoEFCC as well as State Forest Departments of Karnataka, Uttarakhand and West Bengal.**

The workshops were facilitated using participatory facilitation methods, dedicated to receiving inputs from all participants and reaching joint agreements. The last three workshops also included a field visit for developing a common understanding of the training needs and identifying specific topics / cases/ methods for curriculum from the field-level officers.

# About the Curriculum

This curriculum is suitable for key stakeholder of HWC mitigation such as forest, veterinary, media, and civil society. This curriculum is also suitable for the professionals from private sector, and other key Ministries, agencies and departments that have an important stake in mitigating human wildlife conflict.

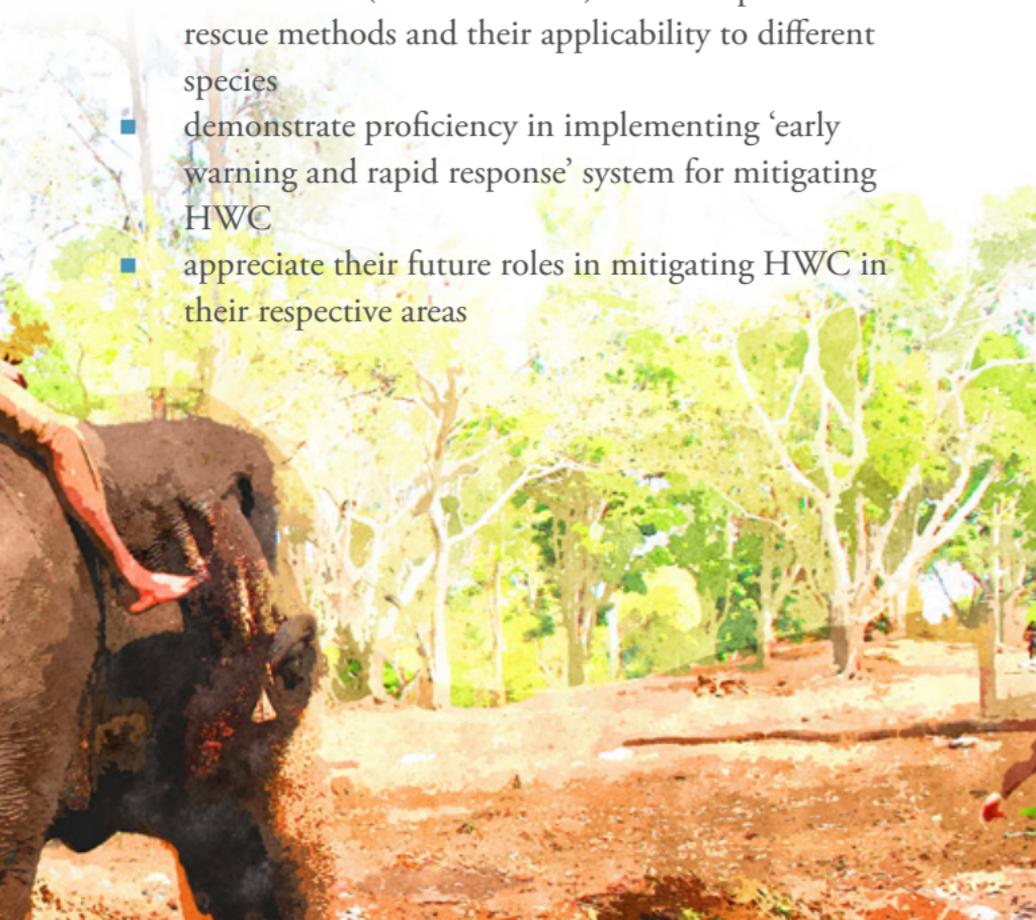
This curriculum has been designed for a stand-alone intensive course to be delivered over five-day duration. However, because of its modular structure and participatory training methods, it provides enough flexibility and can be customized for delivery over longer durations i.e. 15 days, one month as well as for shorter field expeditions.



# Learning Outcomes of the Course for State Forest Service Officer Trainees

By the end of the course, the participants will be able to:

- outline concepts and issues in wildlife management and HWC mitigation using a landscape approach
- differentiate between different conflict scenarios based on landscape, location, species involved, and community involved
- outline existing and potential HWC mitigation measures
- analyse each mitigation measure based on its effectiveness and wildlife-friendliness
- describe the success factors required for receiving cooperation from other sectors and stakeholders in mitigating HWC
- analyse legal opportunities and limitations in conflict management
- demonstrate (in a simulation) animal capture and rescue methods and their applicability to different species
- demonstrate proficiency in implementing 'early warning and rapid response' system for mitigating HWC
- appreciate their future roles in mitigating HWC in their respective areas



# Training Approach and Methodology

It is a modularised curriculum, where modules are delivered using different training methods over required time periods. The modularised structure provides flexibility to adapt the contents, methods and duration of different topics based on the training needs of the participants. **The overall course, as well as each module has its own learning outcomes. So, the modules can be used in any combination by an institution.**

There are some common modules for all key stakeholders on common issues and on basics of HWC, while specialized modules have been developed to deepen the understanding and skills of different training groups, in their respective fields.

The curriculum uses a mix of conceptual and hands-on training sessions, in almost equal proportions, to facilitate the participants in applying conceptual knowledge and skills into the field conditions, and to appreciate and understand the issue of HWC in a larger development context.

**A unique feature of the curriculum is to focus on the HWC using the "thematic triangle" of driver-prevention-damage reduction.**

For indoor sessions as well as field-exercise, the curriculum uses participatory methods of training. **A participatory training is different from the conventional way of training. In a participatory training, learning occurs through active involvement of the trainees , using specialized training methods, and it is they who develop the answers.** Following are some examples of such methods:

- 1 Group work and presentations
- 2 Dialogue and brainstorming
- 3 Knowledge Café
- 4 Role play
- 5 Simulation (case study simulation/ video simulation)
- 6 Online games and Mind Maps
- 7 Case study analysis
- 8 Fish Bowl
- 9 Icebreakers, energisers, and team-building exercises
- 10 Simulated field exercises
- 11 e-Learning
- 12 Field excursions



## Competencies-based curriculum for the wildlife managers

The curriculum uses a competencies development approach with a strong emphasis on field-based exercises using participatory methods of training and learning. The curriculum is developed by a competent team of experts drawn from forest, veterinary and media sectors and civil society groups, bringing in a truly cross-sector perspective to the whole process of capacity development.

In order to assess the competencies required for specific job profiles, a competency framework has been drafted by the Project, based on which a curriculum is developed, and the detailed training materials are being drafted.

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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.

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# An overview of the modularized course

## MODULE 1

### Introduction to Human Wildlife Conflict mitigation

This module facilitates understanding of basic concepts on wildlife management, human wildlife conflict and its mitigation and serves as the foundation for commencing further discussions and learning on the issue. The module focuses on describing 'Human-Wildlife Conflict Mitigation' in the overall landscape context, while providing an introduction to the ecosystem services provided by the wildlife, types of human-wildlife conflict, key species involved in human wildlife conflict, detailed account of the behaviour and ecology of key wildlife species that are involved in human wildlife conflict. The module also provides information on drivers of HWC, traditional and indigenous HWC mitigation measures, and key stakeholders of Human wildlife conflict in India. The module also initiates the participants into thinking into the holistic approach to human wildlife conflict mitigation, viz, drivers, prevention and reduction of impact; as well as traditional and indigenous measures, and key relevant sectors and stakeholders in India.



## Learning Outcomes

After completing this module, the participants are able to:

- describe the term biodiversity, and ecosystem services provided by the wildlife
- illustrate the concept of 'Human-Wildlife Conflict Mitigation'
- describe the 'landscape approach' to wildlife management and HWC mitigation
- describe the behaviour, population dynamics and ecology of key species in HWC in their relevant geographical areas
- analyse different types of human wildlife conflict
- analyse key drivers of human wildlife conflicts in specific situations
- appraise the concept of carrying capacity in the context of HWC
- describe the principles of HWC management using a holistic approach





## Module 2

### Setting the context: understanding HWC in a development context taking a landscape approach

This is the most comprehensive module, setting the foundation of the issue of human wildlife conflict in the overall development context. The central focus of the module is to discuss the issue of human wildlife conflict in a holistic manner viz., driver, prevention and reduction of impact of HWC. The module looks at the context of corridors and connectivity in a larger landscape, and facilitates the participants in appraising the impact of land-use change on human wildlife conflict with discussion on cross- sector cooperation. This module facilitates discussion on reducing the impact of HWC on the most vulnerable sections of the society including rural poor and women, by mainstreaming gender issues in HWC mitigation measures. To make the learning easy for participants, this module includes a simulation game on a fictitious country—Ceebano.

#### Learning Outcomes

After completing this module, the participants are able to:

- describe human wildlife conflict in the overall development context
- illustrate the landscape approach to mitigate human wildlife conflict
- describe the historical and geographical context of human wildlife conflict in their respective areas
- use the DPSIR framework (Drivers, Pressure, State, Impact, Response) in HWC context
- appraise the significance of corridors and connectivity for wildlife as the key HWC mitigation measure
- appraise the existing and potential human wildlife conflict mitigation measures for their long -term effectiveness
- appreciate the need for integrating gender perspective into HWC mitigation plans and strategies



## MODULE 3

### **Taking a holistic approach to mitigating Human wildlife conflict: existing and potential mitigation measures**

This module facilitates the participants in getting a deeper and comprehensive understanding of the holistic approach to mitigating human wildlife conflict, key elements of the holistic approach and key instruments that can be used by key stakeholders to plan, develop, implement, monitor and adapt human wildlife conflict mitigation measures using this holistic approach. The module then provides a step-wise methodology, using a pre-developed criteria, for systematic assessment of existing and potential HWC mitigation measures. The assessment will be done, using the harmonious co-existence approach, where not only the effectiveness of such measures will be assessed, but also their wildlife-friendliness.

#### **Learning Outcomes**

After completing this module, the participants are able to:

- describe the holistic approach in context to HWC
- appraise the need for applying a holistic approach for HWC mitigation in India
- analyse the key element of a holistic approach in context to HWC
- appraise a HWC conflict situation vis-a-vis drivers, prevention measures, and measures to reduce the possible impacts on humans and wildlife
- demonstrate developing HWC Management Action Plans for their division, based on the holistic approach
- demonstrate the skills for systematic assessment of existing and potential HWC mitigation measures



## MODULE 4

### **Policy, Legal and Administrative Framework for efficient mitigation of human wildlife conflict**

This module describes the conservation ethos of India, presents an outline and brief history of International conventions and treaties relevant for HWC mitigation and serves as a compendium of key regulations, policies, customary rules, guidelines and SOPs on human wildlife conflict mitigation in India. The module also provides analysis of some HWC relevant cases and specific learning points from these cases. The module provides information and guiding questions to facilitate a discussion on application of current legal provisions for mitigating human wildlife conflict in India. The module ends with a hands-on exercise to develop 'HWC Management Action Plans' for forest divisions, using a landscape approach.

#### **Learning Outcomes**

After completing this module, the participants are able to:

- discuss the conservation ethos of India
- outline key international conventions and treaties relevant to conservation of wildlife
- analyse the major regulations of the Indian legal and policy framework to be followed in the context of HWC Mitigation
- demonstrate (in a simulation) application of the legal knowledge to solving a real-life case
- demonstrate (in a simulation) identification and application of legal options for mitigating HWC and to select the mitigation options based on legal implications thereof
- appreciate the need for understanding the local legal framework in neighbouring states and countries
- analyse the relevant policy and legal framework for draft 'HWC Management Action Plans' for selected forest divisions, using a landscape approach.



## MODULE 5

### Tools and Techniques for effective and efficient HWC mitigation

This is the most practical module for wildlife managers, focusing on different steps and elements of a successful regime for developing HWC Management Action Plans. This includes planning, implementation, monitoring and evaluation of HWC mitigation measures using conventional and advanced field methods. The module will introduce participants to the key ecological sampling techniques, including field tools and techniques required in regular day to day observation, monitoring and mitigating HWC. The module will also bring in the knowledge and skills on the conventional field craft such as elephant tracking, as well as introduce selected advanced methods and tools. The module ends with an elaboration of the key economic and social techniques and methods for assessing and monitoring the economic and social impacts of HWC.

#### Learning Outcomes

After completing this module, the participants are able to:

- outline the key elements for a HWC Management Action Plan for their respective areas of work
- demonstrate a systematic approach for planning, implementation, monitoring and evaluation of HWC assessment and monitoring measures
- outline key ecological sampling techniques used in the process of HWC assessment and monitoring
- outline the key economic and social techniques and methods for assessing and monitoring the economic and social impacts of HWC
- demonstrate the integration of key ecological sampling techniques and advanced methods, including early warning and rapid response, into the 'HWC Management Action Plans'.
- appreciate the need for regular training of the front-line staff in conventional field craft such a elephant tracking

## MODULE 6

### **Social Context: Stakeholder engagement using an inclusive approach and Institution building for HWC mitigation**

The module introduces the concept of stakeholder mapping and actor analysis vis-à-vis HWC conflict mitigation, and facilitates the participants in appraising human wildlife conflict issue from the socio-economic, psychological, ecological and cultural angle. The module facilitates the participants in looking at the cultural and traditional practices and their usefulness in mitigating human wildlife conflict in specific areas, working on the methods to engage with local communities, especially women, and members of the Primary Response Teams. The module looks deeper into the role of village level institutions and institution building process for effective and sustainable mitigation of HWC.

#### **Learning Outcomes**

After completing this module, the participants are able to:

- demonstrate stakeholder mapping and actor analysis vis-à-vis HWC conflict mitigation



- appraise the socio-economic, psychological, ecological and cultural aspects of HWC vis-à-vis key stakeholders in their area of work
- appraise cultural and traditional practices and their usefulness in mitigating human wildlife conflict in specific areas
- appreciate active engagement of key stakeholders, especially local communities, for ensuring success of HWC mitigation measures in the field
- demonstrate methods of proactive engagement with local communities
- delineate the role of village level institutions and institution building process for effective management of HWC
- outline the key steps and methods to ensure that HWC mitigation measures are gender-inclusive
- demonstrate methods for engaging local community, including as Primary Response Teams, in monitoring and maintenance of HWC mitigation tools and practices



### Mainstreaming HWC mitigation: Cross-sectoral cooperation and green development

This module provides the conceptual background and introduction to why and how mainstreaming of HWC mitigation into processes and plans of key relevant sectors. To ensure that HWC mitigation elements/ planning become a part of the larger development planning process at the local, State and National level, there is a need to incorporate it into policies, strategies and operational plans of key relevant sectors and departments. The module focuses on description and possibility of application of basic and advanced evidence-based tools to understand the impact that activities of key sectors can have on the magnitude and intensity of human wildlife conflict, and also looking at the possible solutions by engaging the relevant sectors at appropriate scales. The module is delivered primarily through case studies.

#### Learning Outcomes

After completing this module, the participants are able to:

- explain the key concepts and elements of mainstreaming
- appraise the need for mainstreaming human wildlife conflict in different sectors and development programmes
- demonstrate the use of tools such as environmental impact assessment (EIA), strategic environment assessment (SEA) and land-use planning
- critically analyse existing efforts and impacts of mainstreaming human wildlife conflict mitigation into sectoral and cross-sectoral strategies, plans and programmes
- prioritize sectors, on the basis of their understanding, where mainstreaming of human wildlife conflict mitigation is of utmost importance.
- outline an operational plan to facilitate cross-sectoral cooperation for human wildlife conflict mitigation, in their area of work
- demonstrate the required competencies to liaise with key decision-makers of other sectors

## MODULE 8

### Engaging media for effective communication on HWC mitigation

This module will help the wildlife managers understand how media looks at human wildlife conflict issues. The module will introduce different tools for media relations, outlining their strengths and limitations. The module also includes case studies to support hands-on exercises, and facilitates the participants in experiential learning on communicating HWC mitigation with the media. The module focuses on how to use these tools during a crisis communication situation.

#### Learning Outcomes

After completing this module, the participants are able to:

- outline the most relevant media for communicating on human wildlife conflict mitigation issues
- analyse the potential impact of different types of media in putting forward an information
- demonstrate the application of HWC mitigation knowledge and skills to communicate effectively while engaging with media
- demonstrate an approach to receive effective cooperation from media in long-term
- appreciate the need for specialised communication training for front-line staff
- appreciate the role that Media can play in mitigating human wildlife conflict through creating mass awareness



## MODULE 9

### **Human Resource Development: Competencies for achieving the desired goal of effective HWC mitigation**

#### **Summary:**

This module facilitates the participants in further strengthening their personal competencies such as communication skills, leadership skills, skills for consensus building and community engagement, empathy and self-awareness. The module facilitates hands-on sessions to develop skills related to workplace effectiveness such as commitment and integrity, decision-making skills, result orientation, accountability, planning and coordination, resource management and crisis management. The module also facilitates the participants dealing with human wildlife conflict issues to foresee and be ready for future challenges through working on competencies such as pattern recognition, innovation and learning, change management, and critical thinking. This module is delivered throughout the training, as an embedded element in all the modules, i.e. by using specialized training methods. However, this module is also suitable to be implemented as a stand-alone training course or module in itself.

#### **Learning Journal for State Forest Service Officer Trainees**

To facilitate the participant's learning during and after the training, a learning journal has been designed to help them capture anything that is of any significance or value to them, and may help in enhancing their understanding of the human wildlife conflict mitigation. It is a place for participants to take notes on the observations that they make on habitats, species, people and events during the training.

## Learning Outcomes

After completing this module, the participants are able to:

- articulate technical information to others in language that is clear, concise, and easy to understand
- demonstrate their leadership, communication and consensus building skills in a simulated situation on human wildlife conflict
- demonstrate decision-making and crisis management skills in a simulated crisis related to HWC
- outline a strategy and action plan on resource management in their area of work, to achieve the maximum possible efficiency and effectiveness to mitigation HWC
- appreciate the need for their continuous self-efforts for getting future ready vis-à-vis human wildlife conflict mitigation in India







# About the project

Under the Indo-German Development Cooperation, the Indo-German Technical Cooperation (TC) Project on “Human-Wildlife Conflict Mitigation in India’ is commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and is being implemented (2017-2021) by Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) at the national level, and in three project partner States, viz. Karnataka, West Bengal and Uttarakhand.

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