



# National Hackathon on Human Wildlife Coexistence

# **Engaging Youths for Innovative Solutions**

Organized by

Ministry of Environment, Forest and Climate Change, Government of India

With the support of

Wildlife Institute of India, Dehradun



## 1. Background

Human-Wildlife Conflict: Ever-expanding human population and resultant degradation and fragmentation of habitat, inadvertently affected wildlife and increased the interactions between humans and wildlife severalfold. Very often, these human-wildlife interactions pose challenges to conservation initiatives due to the significant damage faced by both sides, especially in the form of livestock depredation, human-mauling/killing, crop loss and retaliatory killing of the concerned species. In order to mitigate the human-wildlife conflict, identifying the underlying reasons behind such conflict scenarios and actions thereon would be the very first step, based on which, potential conflict mitigation solutions can be executed and scaled up. It is expected that human-wildlife conflict is a direct outcome of a high degree of human-wildlife interface. However, in India, the prevalence of human-wildlife conflict is primarily due to rich biodiversity and associated developmental activities in and around forest areas. High degree of dependence on natural resources driven by poverty and expanding human population also continue to impact adversely on biodiversity, which subsequently increased the human-wildlife interface and conflict scenarios due to highly overlapped resource use. Therefore, humanwildlife interaction and conflict mitigation could be quite complex and dependent on several factors. Amongst the several species, conflict with terrestrial mammals has a significant impact on human health and livelihood worldwide, and such interactions have been investigated widely to understand the nature and extent of conflict and, more importantly, to devise innovative and effective solutions regarding mitigation.

Engaging for Solutions: Given the multifaceted nature of human-wildlife conflict, any effective mitigation strategy must be equally comprehensive, involving a wide range of stakeholders working in collaboration. In recent years, biodiversity conservation has increasingly embraced innovative and participatory approaches, including the integration of citizen science and the active solicitation of ideas from young people. Harnessing such approaches could add a new dimension to the long-term success of conflict management efforts in India. Besides being the most populated country in the world, India also boasts of harboring the largest youth population globally. This demographic is a powerful, yet often underutilized force for conflict resolutions. The energy, creativity and problem- solving mindset inherent in young people make them well-positioned to contribute meaningfully to addressing complex environmental challenges, especially the human-wildlife conflict.

Hackathon: A hackathon is a collaborative event where teams come together to tackle a defined challenge, often linked to technology, innovation, or social impact. It's structure and objectives align closely with inquiry-based learning, as participants engage with real-world problems and develop solutions through exploration, investigation, and innovation. In this setting, individuals or teams actively question, research and experiment, thus mirroring the inquiry-based approach where learning is driven by curiosity and problem-solving. Throughout the event, participants are encouraged to seek information, test different strategies, and collaborate with peers, fostering essential skills such as critical thinking, creativity and teamwork. In the context of human-wildlife conflict mitigation, a hackathon serves not merely as a competition, but as a dynamic platform for knowledge exchange, interdisciplinary collaboration and real-world problem-solving. It is evident that the human-wildlife conflict has become a global challenge for the conservation of biodiversity, especially in human-dominated landscapes; hence, an effective approach towards a solution would be to prepare appropriate and innovative mitigation measures for conflict resolutions. Engaging young minds to understand and then address the growing concern of conflict through various potential means (e.g., technological, financial, conservation education, etc.) would be one of the best ways to ensure their meaningful participation and contribution to the well-being of society. Thus, the proposed national hackathon aims to engage the youth minds of India in order to identify and recognize the best solutions regarding the prevalent human-wildlife conflict situations, leading to a substantial addition of benefits to the community.

### 2. Theme and Sub-Themes

The theme for this hackathon is proposed to be "Human-Wildlife Coexistence: Engaging Youths for Innovative Solutions". Under this broad theme, there are four sub-themes that were identified based on the nature/category of human-wildlife conflict (HWC) mitigation measures required, as below:

- 1. **Technology Solution**: Develop technology-based solutions for HWC management.
- 2. **Financial Solutions**: Identify sustainable financial model including insurance, compensation or incentives/rewards to deal with HWC situations.
- 3. Community Solution: Propose sustainable community engagement model for HWC management.
- 4. **Species-specific Solution**: Offer species-specific strategies in HWC management [Tiger, Lion, Leopard, Snow Leopard, Elephant, Bears, Wild Pig, Nilgai, Langur, Macaque, Birds such as peafowls, parakeets, etc., Crocodiles, Snakes, and other relevant species are involved in conflict]

# 3. Process of Conducting Hackathon

Announcement: The Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India through Wildlife Institute of India, invites applications for participation in the National Hackathon on Human-Wildlife Coexistence: Engaging Youths for Innovative Solutions focused on developing innovative, practical, and scalable solutions for mitigating human- wildlife conflict in India. This prestigious event is aimed at engaging graduate students in science, technology and allied disciplines from across the country to address pressing challenges in conservation through creativity, research, and teamwork. Participants will register under one of four subthemes (as mentioned above), each representing a critical dimension of human-wildlife conflict mitigation. The proposal must be in the prescribed format as given below and include relevant details so that these details can be captured adequately by the evaluation matrix that would be developed by the organisers and to be given to relevant juries at the time of evaluation.

- 1. **Application Format:** The format of application for each entry will be as below:
  - **Team Details**: Name of the participants in the team, not more than 04 and with details of education level, age, gender, permanent address, college/institution address, etc.
  - Introduction: Project theme and title.
  - **Problem Statement**: Statements about the identified problem/challenges.
  - **Project Details**: Details of the project/solution including description, methods, solution, scalability and cost-effectiveness.
  - Conclusion: Statements of the novelty, problems faced to achieve the solution and take-home message for the audience.
  - Reference/Annexure: Present key references, not more than 10 and also important annexures that can provide more details (such as charts, diagrams, infographics) about the solution.
- 2. Eligibility: Eligibility is restricted to graduate and postgraduate-level students pursuing studies in science, technology or related fields from recognized institutions and youths from NGOs with similar age group. Each participating college, university or institution/NGO shall be represented by a single team consisting of three to four participants, along with a designated supervisor or mentor (optional).

- Revised Dates:
- Registration & Submission Deadline: 27 September 2025
- o Screening of Applications: 28 September 2025
- o Preliminary Rounds (Online): 29-30 September 2025
- o Grand Finale In-person at Dehradun/New Delhi/Coimbatore: 5 October 2025

## 4. Process of Evaluation and Shortlisting

The hackathon will consist of one idea-one team submission and shortlisting session, followed by preliminary round to narrow down the competition and refine project ideas progressively to the final round.

### **Preliminary Rounds and Shortlisting**

- **Submission**: The preliminary rounds juries would forward the top nominees from each subtheme.
- **Format**: The shortlisted teams will make video-presentation of their ideas in the Hackathon before the juries.
- **Selection**: On 29<sup>th</sup> and 30<sup>th</sup> September 2025, the jury will review the qualified teams through online Hackathon and select the top teams for finale.

### **Grand Finale**

- **Format**: There will be a concise presentation (e.g., 10-15 minutes) along with demonstration as may be the case, followed by an open discussion session.
- Selection: 5<sup>th</sup> October 2025 (at Wildlife Institute of India, Dehradun or MoEFCC, New Delhi or Coimbatore).

Note: The teams selected for the grand finale will have their travel and accommodation expenses fully covered by the organizers.

### 5. Recognition and Prize Distribution

The participation certificate will be distributed to all teams after the preliminary round. There will be three finalists in the grand finale.

- First Prize: ₹1,00,000 and a Certificate. Further, there will be an opportunity to implement a field-based project valued up to ₹5,00,000 based on the quality of the proposal and deliverables. The project fund will be awarded to the parent institution of the winning team. The institution/ organization will ensure the proper utilisation of the fund, while the youth team will implement of the project, but under the supervision of the faculty mentor.
- Second Prize: ₹60,000 and a Certificate. Further, there will be an opportunity to implement a field-based project valued up to ₹3,00,000 based on the quality of the proposal and deliverables. The project fund will be awarded to the parent institution of the winning team. The institution/ organization will ensure the proper utilisation of the fund, while the youth team will implement of the project, but under the supervision of the faculty mentor.
- Third Prize: ₹40,000 and a Certificate. Further, there will be an opportunity to implement a field-based project valued up to ₹1,00,000 based on the quality of the proposal and deliverables. The project fund will be awarded to the parent institution of the winning team. The institution/ organization will ensure the proper utilisation of the fund, while the youth team will implement of the project, but under the supervision of the faculty mentor.
- Consolation Prize to all other teams in the finale: ₹10,000 and a Certificate