



Bridging Knowledge to Action: Strengthening Stakeholder Capacities for Climate Resilience

Report on Capacity Building Activities for Stakeholders in Mahilong, Namkum, Ranchi, Jharkhand



Department of Forest, Environment and Climate Change Government of
Jharkhand

Department of Forest, Environment and Climate Change
Government of Jharkhand



Ravi Ranjan, IFS

Additional Principal Chief Conservator
of Forests (APCCF)-CAMPA
Dept. of Forest, Environment and Climate Change
Govt. of Jharkhand



Climate change is one of the most pressing challenges of our time, and addressing its impacts requires collaborative efforts at all levels of governance, particularly in regions vulnerable to climate risks like Jharkhand. As the state moves forward with its climate action initiatives under the National Mission on Strategic Knowledge for Climate Change (NMSKCC), it is crucial to empower multiple stakeholders including local communities and frontline staff with the knowledge and skills necessary for effective climate adaptation. The capacity-building programs conducted in Mahilong, Namkum, Ranchi have been instrumental in fostering climate resilience by engaging community leaders, forest staff and local villagers in direct climate action. This report highlights the significant strides made through these programs, providing a foundation for continued learning and adaptation. By enhancing the capabilities of these stakeholders, we are ensuring the successful implementation of climate resilience strategies, contributing to a sustainable future for Jharkhand. We are committed to reaching and training all the stakeholders throughout the state in the coming future



Vijay Shankar Dubey, IFS

Deputy Conservator of Forests
Director- State Forest Training Institute, Mahilong
Dept. of Forest, Environment and Climate Change
Govt. of Jharkhand



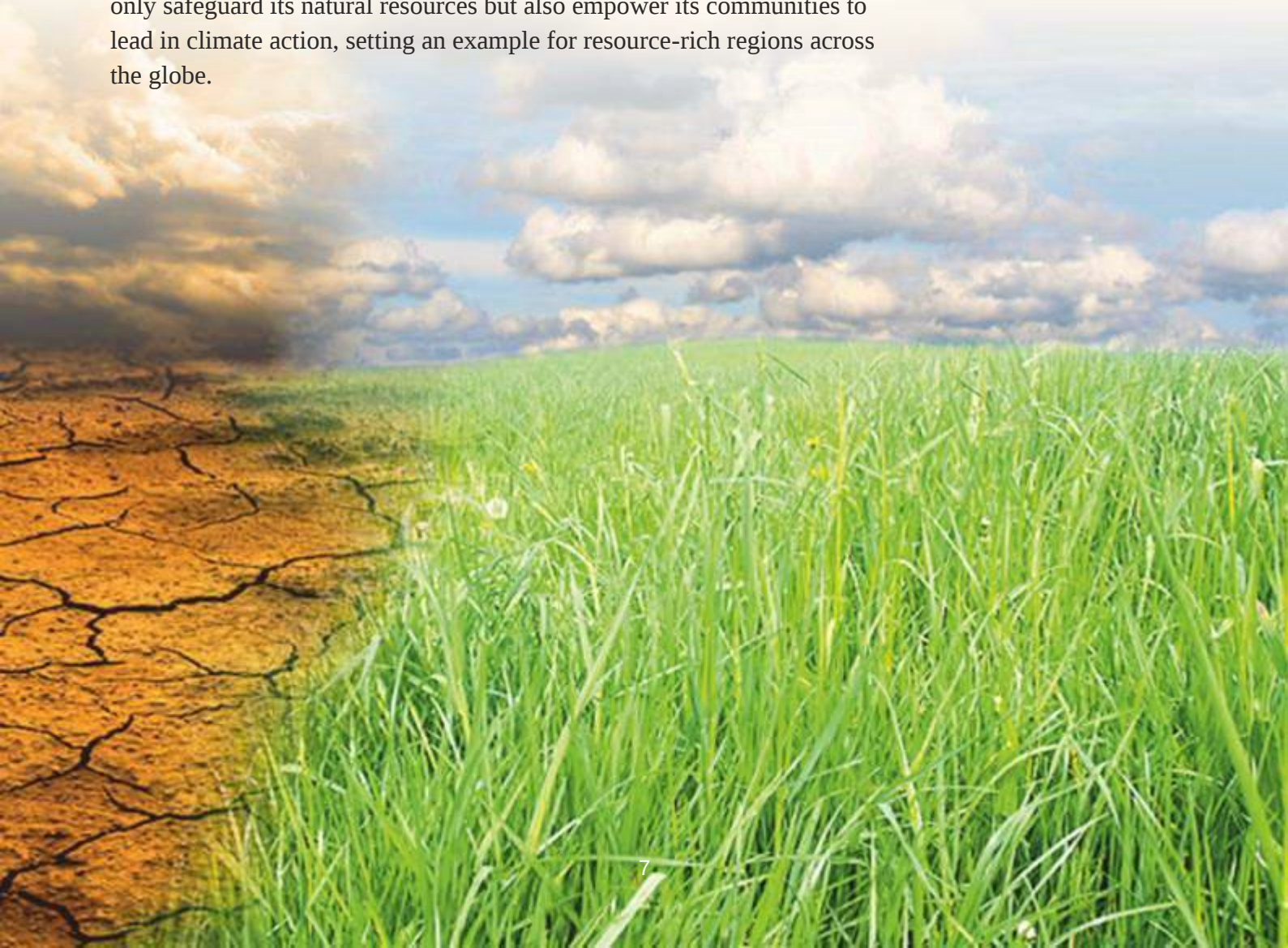
As the Director of the State Forest Training Institute (SFTI), Mahilong, I am proud to be part of the transformative climate change capacity-building efforts in Jharkhand. The frontline forest staff plays a pivotal role in implementing climate adaptation strategies at the ground level. Our training programs have been tailored to equip them with the knowledge, practical skills, and innovative approaches necessary to tackle the emerging challenges posed by climate change. The successful delivery of the NMSKCC program has resulted in greater awareness among forest guards and field staff, positioning them as champions of climate resilience in their communities. These trainings are not just theoretical but emphasize hands-on learning and real-world solutions. I believe that through continuous skill development and collaborative action, we will be able to build a resilient and sustainable future for both our forests and the communities dependent on them.

Climate Change and Jharkhand: Perspectives from a Resource-Rich State

Jharkhand, a resource-rich state nestled in the heart of India, stands at a critical juncture in addressing the dual challenges of development and climate change. Renowned for its vast reserves of coal, minerals, and forests, the state has historically depended on resource extraction for economic growth. However, the changing climate around the globe has also impacted the state significantly, bringing additional challenges. The impacts of climate change, such as rising temperatures, erratic rainfall patterns, prolonged droughts and increasing incidences of extreme weather events, have further amplified vulnerabilities in the state. For a state where a significant portion of the population depends on agriculture, forests, and natural resources for their livelihoods, climate change poses a direct threat to food security, economic stability and community well-being.

At the same time, Jharkhand's unique socio-economic and environmental landscape provides an opportunity to pioneer innovative climate resilience strategies. Leveraging local knowledge, fostering sustainable livelihood practices, and integrating community-driven approaches with suitable climate adaptation methods can transform these vulnerabilities into strengths. With a robust framework for capacity building, the state can not only safeguard its natural resources but also empower its communities to lead in climate action, setting an example for resource-rich regions across the globe.

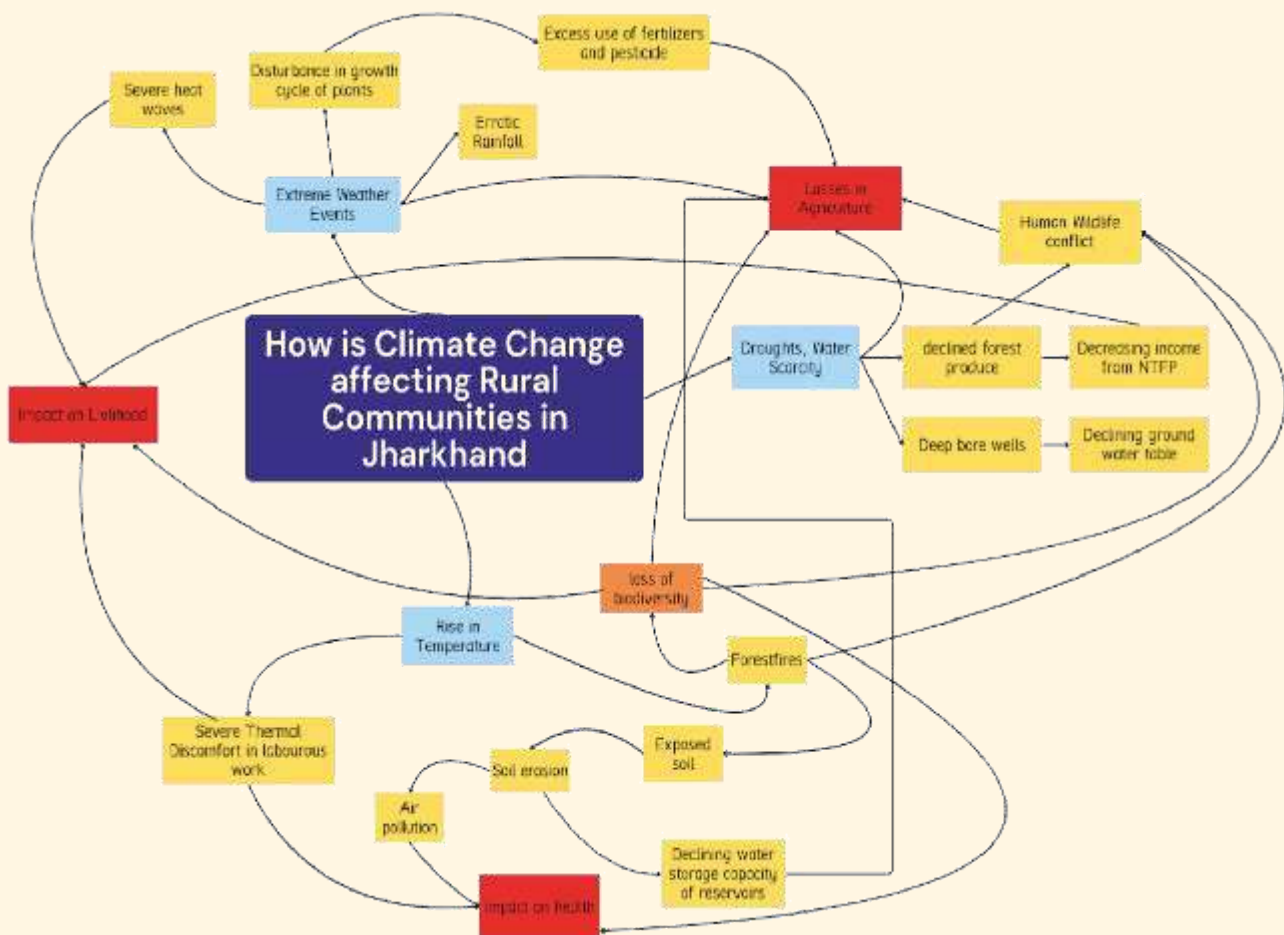
Leveraging local knowledge, fostering sustainable livelihood practices, and integrating community-driven approaches with suitable climate adaptation methods can transform these vulnerabilities into strengths.





Climate Vulnerability in Jharkhand: Key Issues in Focus

The diagram showcases the interconnections of climate change impacts on rural communities, emphasizing a chain of cascading effects that exacerbate vulnerabilities. The rise in temperature and erratic rainfall serve as primary drivers, leading to diverse issues such as forest fires, loss of biodiversity, degradation in commons and human-wildlife conflicts. These environmental changes disrupt plant growth cycles and reduce water availability, creating a ripple effect on agricultural productivity. Biodiversity loss solely has a very large effect on rural communities. Forest produce, native plants and animals form an integral part of rural communities. For instance, the loss of pollinators like bees directly impacts agricultural productivity, while the depletion of forest cover affects livelihoods dependent on forest produce. Moreover, declining biodiversity weakens the resilience of ecosystems to adapt to climatic changes, thereby exacerbating the vulnerability of communities that rely on these resources.



Water scarcity, compounded by practices like deep boring, leads to a declining water table, further aggravating agricultural losses. This, in turn, forces farmers to adopt increased use of pesticides and fertilizers to cope with harsh weather conditions, potentially impacting soil health and sustainability. Losses in agriculture directly translate into financial hardships for rural communities, reducing their

income and resilience. This leads to overexploitation of commons for firewood, fodder and water.

Simultaneously, extreme weather events contribute to a decline in forest produce and intensify the aforementioned challenges. State like Jharkhand doesn't have many livelihood options, if mining is excluded, forest produce and agriculture are the only livelihood sources and as we can sense from the chart how climate change has multifaceted impacts on these two main livelihood sources, they are most affected by climate change, leaving rural communities grappling with compounded social, economic and environmental vulnerabilities.

Commons, such as community forests, grazing lands, water bodies, and other shared resources, are increasingly under threat from the impacts of climate change. Forests, an integral part of the commons, face deforestation and biodiversity loss, reducing their ability to act as carbon sinks and protect against soil erosion. Water bodies are exploited when the groundwater table declines, this increasing pressure on commons leads to conflict within communities and prevents them from being self-sustaining, making their restoration challenging if they are overexploited.

Commons, such as community forests, grazing lands, water bodies and other shared resources, are increasingly under threat from the impacts of climate change.

Why Jharkhand Needs an Innovative Capacity Building Program Towards Climate Resilience?

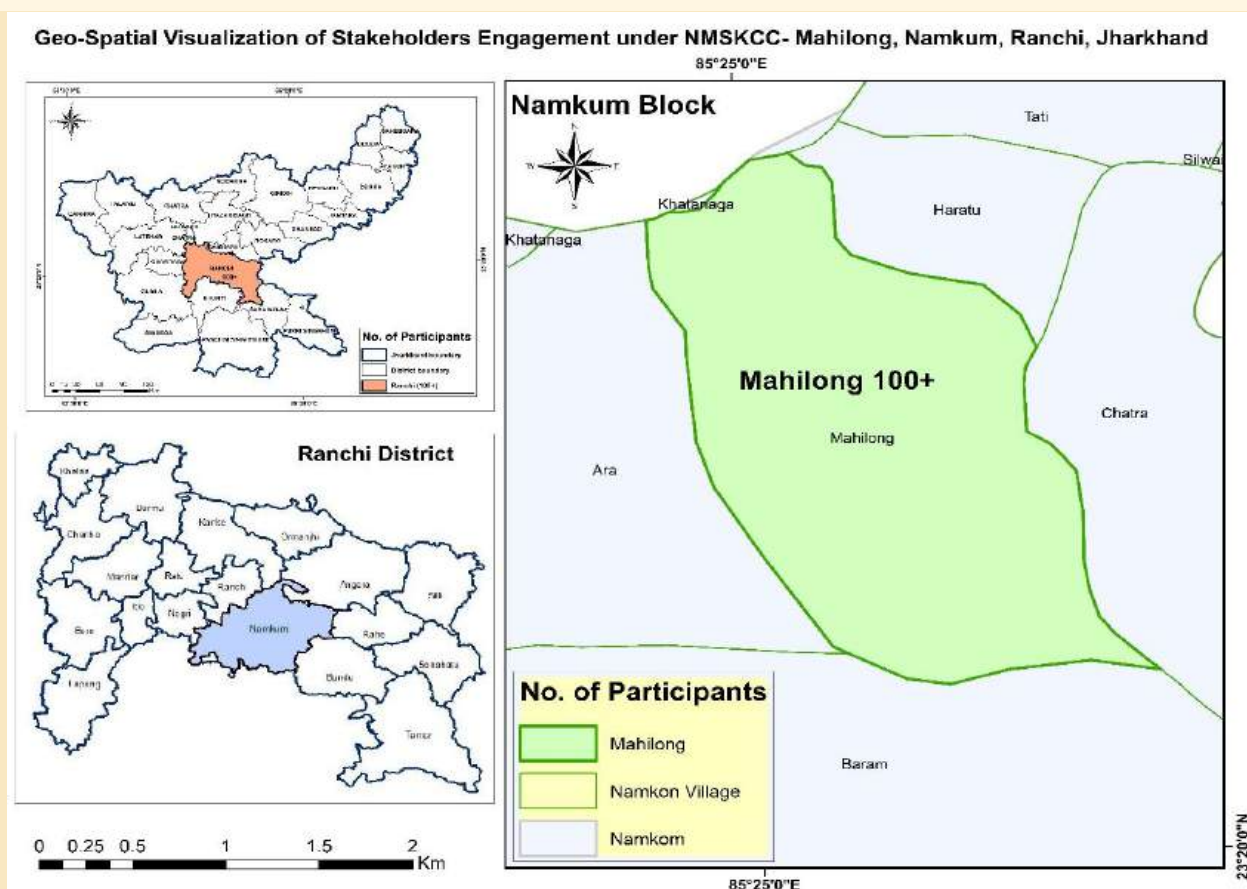
Innovative and multi-stakeholder capacity-building activities through training programs, awareness generation and skill development programs are not just a necessity but an opportunity for Jharkhand to transform its resource wealth into a catalyst for climate resilience and inclusive growth.

- With a significant portion of its population dependent on agriculture and forests for their livelihoods, the lack of adaptive capacities and sustainable practices leaves communities exposed to climate shocks.
- The intricate link between governance, community participation, and the implementation of climate action plans necessitates targeted interventions.
- By integrating localized knowledge systems, modern adaptation techniques and hands-on training, such initiatives can empower communities to take proactive measures.
- Adopting climate-smart agricultural practices, diversifying livelihoods and strengthening grassroots governance.
- Equipping stakeholders with the tools to assess vulnerabilities and implement resilient solutions will foster a sustainable pathway for development.

Initiatives by the Department of Forest, Environment and Climate Change, Jharkhand under the NMSKCC Project

The Department of Forest, Environment, and Climate Change, Government of Jharkhand, in partnership with multiple grassroots organizations like Asar, SIDHA and PanchSafar, has successfully organized training programs under the National Mission on Strategic Knowledge for Climate Change (NMSKCC) in different regions of the state targeting various levels of stakeholders like rural communities, frontline forest staff, farmers, members of Panchayati raj institutions (PRI) and many more. More than 300 people are trained so far across several districts of Jharkhand. The department is dedicated to training 5000+ people at different levels by the end of 2025. This report includes the details of Mahilong, Namkum, Ranchi training-cum-capacity building programs organized by the department in Ranchi districts of the state.

More than 300 people are trained so far across several districts of Jharkhand. The department is dedicated to training 5000+ people at different levels by the end of 2025.





State Forest Training Institute, Mahilong, Ranchi

Training-cum-Capacity Building of Frontline Forest Staff

Date: 31 December 2024

Location: Mahilong, Ranchi

About the Program

A comprehensive training-cum-capacity building program was successfully conducted at the State Forest Training Institute (SFTI), Mahilong, Jharkhand, where more than 100 frontline forest staff, including forest guards, participated. This training was part of the National Mission on Strategic Knowledge for Climate Change (NMSKCC) initiative, focusing on equipping these vital personnel with the necessary skills and knowledge to address the challenges posed by climate change.

Frontline forest staff play a crucial role in the field, as they are the first line of actors in implementing climate adaptation strategies and other environmental programs. Their on-ground presence and expertise are essential for the successful execution and monitoring of various climate resilience initiatives, including afforestation, watershed management, and local community adaptation practices.

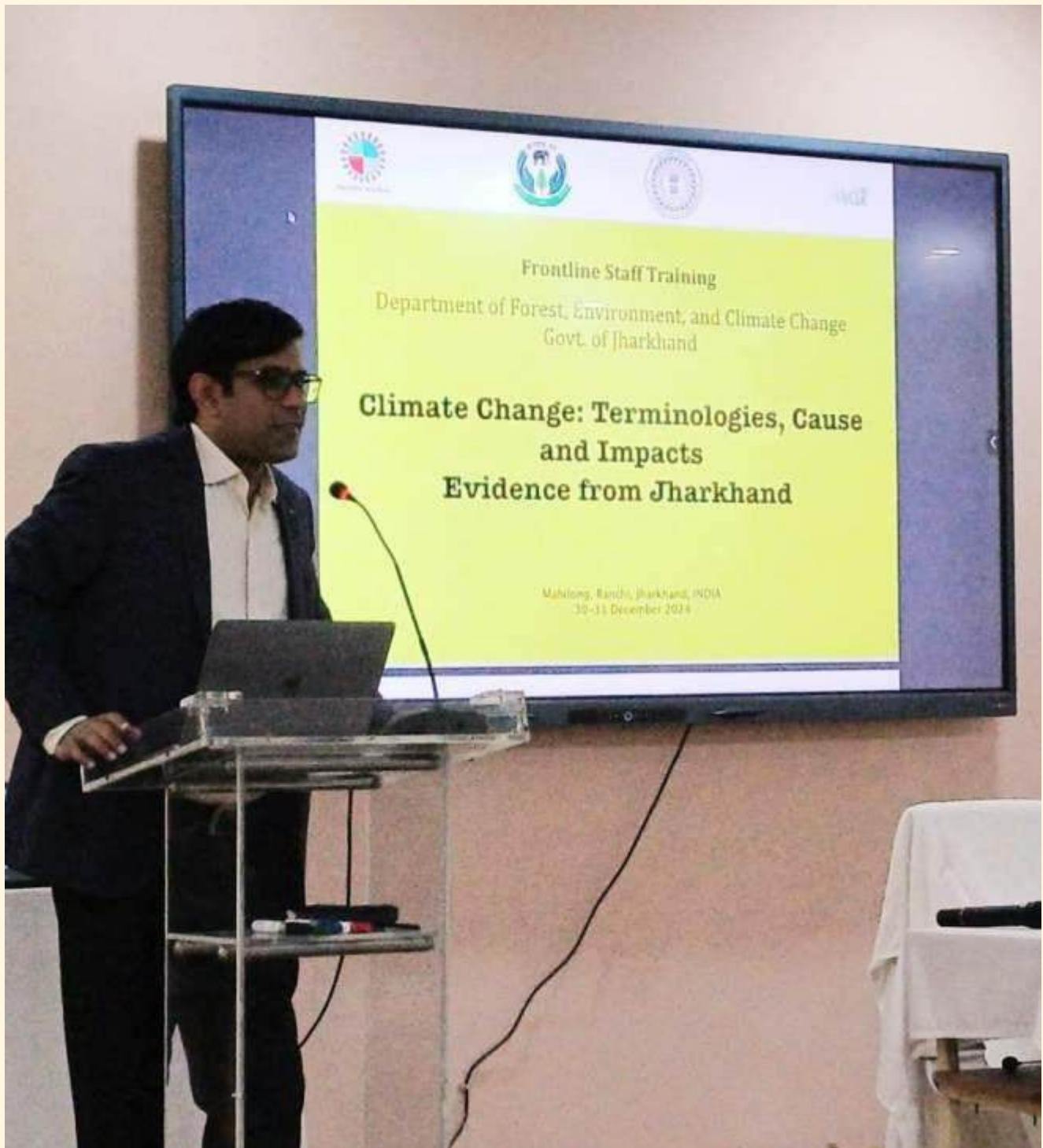
By training these frontline workers, we ensure that they are empowered to take effective action and support the larger goal of building climate resilience at the grassroots level.

Frontline forest staff play a crucial role in the field, as they are the first line of actors in implementing climate adaptation strategies and other environmental programs.



Frontline Forest Staff Training: Session 1

Session 1 was led by Dr. Manish Kumar from Social Initiative through Development and Humanitarian Action (SIDHA), who delivered a comprehensive session on climate change, focusing on its key terminologies, fundamentals, causes, impacts, and evidence specific to Jharkhand. The importance of understanding climate change was emphasized at both global and local levels, particularly in the context of Jharkhand's unique environmental challenges. The session also highlighted the insights into the strategies of adaptation and mitigation that are crucial for addressing the state's vulnerabilities to climate change. This fundamental session was instrumental in building a foundational understanding among the frontline forest staff, enabling them to identify climate risks and explore solutions relevant to their work.



Key Takeaways from Session 1:

- **Climate Change Terminologies:** Introduction to basic terminologies and concepts surrounding climate change.
- **Fundamentals of Climate Change:** Understanding the science behind climate change and its global implications.
- **Causes of Climate Change:** Identifying human and natural causes contributing to global warming and climate disruption.
- **Impacts of Climate Change on Jharkhand:** Highlighting evidence of climate change effects in Jharkhand, including shifts in weather patterns, forest health and local livelihoods.
- **Adaptation and Mitigation Strategies for Jharkhand:** Discussion on localized strategies to adapt to and mitigate climate change impacts, with a focus on forestry, agriculture and rural communities.

Frontline Forest Staff Training: Session 2

In Session 2, Shri Hemant Kumar, Secretary of SIDHA, took the lead in delivering an insightful session focused on the National Adaptation Fund for Climate Change (NAFCC) project's best practices and success stories in Jharkhand. It was highlighted how these projects have positively impacted local communities and the environment.

Various components of the National Mission on Strategic Knowledge for Climate Change (NMSKCC) project were discussed, emphasizing the critical role of frontline forest staff in its effective implementation. Further, a forward-looking perspective was curated on the future of climate change projects in Jharkhand and the opportunities they present for strengthening climate resilience.

To enhance the learning experience, the session included demonstrations of field studies and experimental methods used in forest areas, showcasing practical approaches to addressing climate challenges at the ground level.



Key Takeaways from Session 2:

- **NAFCC Project Best Practices and Success Stories:** Insights from successful climate adaptation projects under the NAFCC initiative, including case studies and real-world impacts.
- **Components of NMSKCC Project:** Overview of the NMSKCC project's components and their relevance to climate action at the local level.
- **Role of Frontline Forest Staff:** Emphasizing the critical involvement of frontline staff in implementing climate adaptation strategies and facilitating the success of climate-related projects.
- **Future Prospects of Climate Change Projects in Jharkhand:** Discussing upcoming climate resilience programs and their potential impact on the state.
- **Field Studies and Demonstrations:** Practical sessions with live demonstrations of field studies and experimental methods for forest areas, showcasing hands-on techniques for addressing climate change impacts.

Frontline Forest Staff Training: Brainstorming Session and Group Activity

In this highly interactive session, the participants engaged in two key activities aimed at fostering collaborative thinking and developing localized solutions to climate change challenges. The session began with the screening of impactful documentaries showcasing the current climate change situation and highlighting best practices implemented in Jharkhand under the National Adaptation Fund for Climate Change (NAFCC) project. These documentaries set the stage for the group activities by providing real-life context and lessons learned from the field.





Following the documentary session, the participants were divided into 9 groups, each tasked with discussing a specific climate-related issue affecting their forest divisions. The groups were asked to identify the key challenges related to their assigned topics and brainstorm potential solutions tailored to the local context of their respective forest divisions. After a period of deliberation, each group selected a representative who compiled the group's insights and presented them to all the participants.

The topics discussed during the brainstorming sessions were:

- **JFMC (Joint Forest Management Committee) Related Issues:** Challenges and solutions for effective community engagement in forest management.
- **Biodiversity-Related Issues:** Threats to biodiversity and possible measures to preserve and enhance it.
- **Forest Fires:** Identifying fire prevention methods and adaptive measures for forest fire management.
- **Wildlife-Related Issues:** Conservation strategies to protect wildlife in the region.
- **Loss of Traditional Knowledge:** Strategies for preserving and reviving indigenous knowledge systems.
- **Water-Related Issues:** Addressing water scarcity and enhancing watershed management.
- **Livelihood-Related Issues:** Solutions for Improving the livelihoods of forest-dependent communities in the face of climate change.
- **Law and Order-Related Issues:** Tackling challenges related to law enforcement and forest governance.
- **Role of Forest Guards in Raising Awareness on Climate Change:** Exploring the key role that frontline forest staff can play in educating and empowering local communities.

This interactive group activity not only promoted a deep understanding of local climate change issues but also empowered the participants to think critically about actionable solutions, helping them to better implement climate change adaptation strategies within their respective forest divisions.

Details of Participants

Name	Division Name
Sukuwan Mikal Suren	Khunti
Manoj Singh	Khunti
Praveen Kumar	Lohardaga
Gautam Ram	Lohardaga
Rajesh Kujur	Gumla
Nawal Kishore	Gumla
Dheeraj Kumar	Bokaro
Santosh Kumar Sharma	Ramgarh
Aanand Kumar	Ramgarh
Pawan Kumar Agrawal	Ramgarh
Gaurav Kr Nirala	Medinagar
Vipul Kumar	Medinagar
Jyjayndra Kumar	Latehar
Viswash Dev Pandey	Latehar
Deelip Oraon	Latehar
Upendra KumarRam	Garhwa
Rajnikant Mahato	Garhwa
Omprakash Oraon	Garhwa
Hemant Kumar	Garhwa
Rajveer Kumar Modi	Godda
Naina Madhu	Palamu (Medinagar)
Sukeshi Bading	Palamu (Medinagar)
Rakait Kr Pandey	Palamu (Medinagar)
Rajkishore Kr Ram	Palamu (Medinagar)
Manoj Kr Sahu	Simdega
Niraj Kumar Dubey	Latehar
Pranesh Kr Singh	Latehar
Pankaj Kumar	Ranchi
Gangesh Kr Mahato	Ranchi
Sansan Saxena	Ranchi
Rambhtra Singh	Garhwa
Tapesh Kumar	Ranchi
Pummy Minz	Ranchi
Sanjeev Arvind Kindo	Ranchi
Umesh Kumar Ravi	Garhwa
Vivek Kumar Verma	Simdega
Indrajeet Kumar	Ranchi
Sanchin Prasad	Simdega
Kuldeep Singh	Khunti
Sashi Kr Mahato	Khunti

Avdhesh Mahato	Lohardaga
Nitish Kumar	Simdega
Vijay Kumar	Bokaro
Yashwant Kumar	Ramgarh
Nitesh Kumar Rajwar	Ramgarh
Sakit Hussain	Ramgarh
Rajesh Gupta	Medinagar
Roshan Kr Singh	Medinagar
Suraj Kr Singh	Latehar
Raghuwandu	Latehar
Bharat Bhusan Sahabadi	Latehar
Uttanm Kr Ravi	Garhwa
Gautam Sagar Toppo	Garhwa
Arpan Kumar	Garhwa
Sachiv Kachhap	Garhwa
Sourav Kumar	Godda
Niraj Kumar	Palamu (Medinagar)
Ravi Ranjan Singh	Ranchi
Shiv Shankar	Simdega
Pradeep Kullu	Simdega
Chandan Kr Yadav	Latehar
Sunita Kumari	Latehar
Sahid	Garhwa
Devendra Prasad	Garhwa
Suraj Narayan Singh	Garhwa
Subhash Kumar	Palamu (Medinagar)
Aarti Khash	Ranchi
Amresh Kr Pandey	Palamu (Medinagar)
Muneshwar Ram	Gumla
Ratan Ray	Bokaro
Sarita Kumari	Ranchi
Bharat Kumar Mishra	Palamu (Medinagar)
Ravi Vimal Minz	Lohardaga
Bal Kishor Minz	Ranchi
Chandragupt Swasi	Ranchi
Shasi Baik	Ranchi
Anil Kumar Soy	Khunti
Sandeep Kumar Ram	Lohardaga
Suraj Singh Yadav	Lohardaga
Sunil Ram	Ghumla
Ranjit Singh Buiyan	Simdega
Lakhvinder Kumar Singh	Simdega
Durga Hembrom	Bokaro

Anil Kumar	Ramgarh
Sanjay Kumar Mahto	Ramgarh
Nilesh Chandra Poddar	Ramgarh
Ranjit Kumar	Medinagar
Kaushal Kumar Dubey	Medinagar
Om Prakash Singh	Medinagar
Aditya Kumar	Latehar
Abhishek Kumar Srivastav	Latehar
Ramashankar Prasad	Garhwa
Jai Prakash	Garhwa
Sunil Rai	Garhwa
Daya Shankar Singh	Garhwa
Amit Kumar Sah	Godda
Devendra kumar Dev	Palamu (Medinagar)
Chandan kumar	Palamu (Medinagar)
Navin Lakra	Simdega
Ramanand Prabhakar	Latehar
Vinay Kumar Rajak	Latehar
Om Prakash Pandey	Latehar
Anitesh Kumar	Ranchi
Shadev Mahto	Ranchi
Lallan Kumar	Birsa Javeek Udyaan
Ragini Kumari	Garhwa
Pravesh Kumar	Ranchi
Shomen Chel	Ranchi
Kiran Kumari	Bokaro
Ajay Kumar Gupta	Ranchi
Shatrugan Kumar	Khunti
Gurudhayal Singh	Palamu (Medinagar)
Sanjay Kumar Yadav	Garhwa
Kumari Vibha Sirwar	Ranchi
Ranjit Ekka	Simdega

