



**Proceedings of the
IUCN GBPNIHESD roundtable on forest landscape
restoration and assessing restoration opportunities**



Organised by

International Union for Conservation of Nature (IUCN),

and

G.B. Pant National Institute of Himalayan Environment and Sustainable
Development (GBPNIHESD)

Indira Paryavaran Bhawan, New Delhi

June 15, 2018

Background:

Forest landscape restoration (FLR):

Forest landscape restoration (FLR) is an ongoing process of restoring ecological functionality and enhancing human well-being across degraded landscapes. It is more than just planting trees – it is restoring a whole landscape to meet present and future needs and to offer multiple benefits and land uses over time.

Restoration Opportunities Assessment Methodology (ROAM):

There is a growing suite of tools to help countries, organisations and individuals interested in restoration to identify and map priority areas of restoration, potential restoration interventions and opportunities, perform cost-benefit analyses, navigate policy and more. One such tool developed by International Union for Conservation of Nature (IUCN) and World Resources Institute (WRI) is the Restoration Opportunities Assessment Methodology (ROAM). ROAM presents a flexible and cost-effective analytic framework for identifying restoration opportunities at national or sub-national levels, as well as describing how those opportunities relate to various factors such as food, water and energy security. The application of ROAM generates scientifically robust context-specific knowledge relevant to understanding and addressing forest and land-use planning and management. Through its participatory processes, the assessment provides a framework for a common setting of restoration goals at a landscape level that address immediate priorities, such as livelihoods. ROAM is being applied across more than thirty countries in the world.

IUCN, in partnership with the G.B. Pant National Institute of Himalayan Environment & Sustainable Development (GBPNIHESD), piloted the ROAM framework in the Himalayan state of Uttarakhand, in consultation with the Government of Uttarakhand. The successful implementation of this pilot study is likely to provide the Governments at the Centre and the state a possible way forward to accelerate the process of landscape restoration in order to meet the pledged targets under Bonn Challenge, as well as the other national targets such as Nationally Determined Contribution (NDC), National Biodiversity targets (NBTs), Sustainable Development Goals (SDGs) etc. As a representative of Himalayan States, the results and recommendations from Uttarakhand could be applicable across the other Himalayan States as well. IUCN and GBPNIHESD presented the findings from the study to the key stakeholders in the state through a ROAM Validation Workshop that was chaired by the Principal Chief Conservator of Forest (PCCF) and Head of Forest Force (HOFF), Shri Jai Raj on March 8, 2018 at Dehradun.

On June 15, 2018, IUCN and GBPNIHESD presented the findings of the study and the ROAM methodology to key stakeholders in the Ministry of Environment, Forest and Climate Change (MoEFCC), New Delhi to explore future strategies on how FLR can be further mainstreamed. The roundtable was organised under the Chairmanship of the Director General of Forests and Special Secretary (DGF&SS), MoEFCC, Shri Siddhanta Das at Krishna Hall of Indira Paryavaran Bhawan, MoEFCC, Jor Bagh, New Delhi. The minutes of the meeting are presented below.

Minutes of the Meeting:

Ms. Anushree Bhattacharjee, Programme Officer – Forest Landscape Restoration (FLR) from IUCN India welcomed all the delegates and introduced the speakers of the session. Thereafter, Mr. P.R. Sinha, Country Representative, IUCN-India, introduced the concept of forest landscape restoration briefly and discussed the ROAM framework. He mentioned that IUCN had been piloting this methodology to assess opportunities for restoration in the state of Uttarakhand since the last one year in partnership with scientists from G.B. Pant National Institute of Himalayan Environment and Sustainable Development.

Thereafter, Mr. Siddhanta Das, DGF&SS, MoEFCC was invited to make the inaugural address. Mr. Das spoke about the significant paradigm shift on forest management policies of India since the Paris agreement. He mentioned that the focus has now shifted from area based management (such as Protected Areas) toward landscape-level management and restoration, and highlighted the importance of involving people in the management of such landscapes. He also stressed on the need to protect and conserve soil moisture in all these priority landscapes. He informed the gathering that Uttarakhand was discussed in a recent Parliament Standing Committee meeting, where accessibility and connectivity were discussed. However, with roads being built for connectivity the question of their impacts on biodiversity also comes into play as these are very fragile ecosystems. He stressed that Uttarakhand was the right choice for this study on assessing restoration opportunities. He also stressed that along with wildlife, the communities residing therein are important stakeholders. Mr. Das spoke about the new focus to go beyond forests and the importance of Bonn Challenge and forest landscape restoration (FLR) in this context, and hoped that the findings of the IUCN-GBPNIHESD study would reveal a good strategy and way forward for the region.

The next session was the presentation of the ROAM study in Uttarakhand followed by open discussion. The presentation was given by Ms. Anushree Bhattacharjee on behalf of the IUCN-GBPNIHESD team. Ms. Bhattacharjee gave a brief background to Bonn Challenge. She explained how India has one of the largest pledges (21 million hectares to be brought into restoration by 2030) from Asia. She mentioned that IUCN in partnership with MoEFCC had produced a joint publication on “Bonn Challenge and India: Progress on restoration efforts across states and landscapes”. It is the first progress report on Bonn Challenge from any country. She then went on to explain forest landscape restoration (FLR), and introduced the restoration opportunities assessment methodology (ROAM) which focuses on producing relevant analytical input to national or sub-national land use policies and planning and also generates information that is relevant to (sub) national priorities. ROAM can provide vital support to countries seeking to accelerate or implement restoration programmes and landscape-level strategies. In this regard, ROAM will also enable countries to define and implement national or subnational contributions to the Bonn Challenge and concurrently allow nations to meet existing international commitments under the Convention on Biological Diversity, United Nations Convention to Combat Desertification and the United Nations Framework to Combat Climate Change. She then introduced the study that was conducted in the state of Uttarakhand with intensive study sites being the two districts of Pithoragarh and Garhwal (popularly known as Pauri Garhwal). She explained that the datasets for the spatial

analysis were collected from different sources, and criteria and weightage were accordingly assigned. Based on these criteria, functional degradation maps were prepared for Uttarakhand and the two intensive study sites of Pithoragarh and Garhwal (Pauri). She discussed the degradation drivers, perceived consequences and suggestions that came from stakeholder consultations. She also presented the final FLR opportunity maps that were prepared for the state as well as the two districts. She then went on to discuss the recommended FLR actions. These FLR recommendations were prepared for different elevation zones i.e., <1000m, 1000-2000m, and 2000-3000m. Above 3000m was excluded for the purpose of the study as the area was largely ice-bound. She then spoke about what could be the strategies to mainstream and upscale ROAM across the country while also implementing FLR in the landscape. She mentioned CAMPA, national missions like National Mission for a Green India (GIM), National Mission on Himalayan Studies (NMHS), Global Environment Facility (GEF), Green Climate Fund (GCF) etc. She also shared the draft report as well as the executive summary of the ROAM study with the audience, before opening up the floor for open discussion.



Clockwise from left to right – Mr. P.R. Sinha, CR, IUCN India welcoming the delegates; Mr. Siddhanta Das, DGF&SS, MoEFCC giving the inaugural address; Dr. R.S. Rawal and Dr. Subrat Sharma answering queries on the ROAM study; and Ms. Anushree Bhattacharjee presenting the ROAM study to the delegates

Open Discussion:

Mr. Soumitra Dasgupta, Inspector General of Forest (IGF) – Wildlife (WL) asked why Uttarakhand was chosen as the study area and if the ROAM framework could be applicable to other states and landscapes as well. He also spoke about the linkage of landscape

conservation with communities and wondered if the concept of sacred groves and community forestry that exist in Uttarakhand could be replicable in other states of the country. Dr. Rawal responded that Uttarakhand was a good representative of the Himalayan state. Ms. Bhattacharjee added that ROAM being a flexible framework could easily be adapted to other parts of the country. She mentioned that World Resources Institute (WRI) colleagues had taken ROAM to carry out a study in one district of Madhya Pradesh already. She also highlighted how every country applying ROAM had modified it according to their primary objectives by providing examples of the work being conducted in Vietnam, Cambodia and Indonesia. Mr. Sinha also spoke of the various countries that have carried out a ROAM analysis. He spoke of the need to restore the ecological functionality of the landscape. He spoke of the Malawi report to showcase the linkage between ecology, socio-economic and financial aspects of restoration.

Mr. Dasgupta mentioned that he felt that the interest of people in forest conservation had waned in recent years and wondered if IUCN could help with some guidance or process documentation of how to involve people in landscape conservation. He also wondered if IUCN could help develop a policy on integrating ecological functionality, forestry and community participation. Mr. Sinha mentioned how the Uttarakhand ROAM report already included people's perception on degradation, drivers of degradation as well as consequences of degradation. He briefly introduced IUCN's agriscap project with ITC in Munger, Bihar.

Dr. Subrat Sharma, GIS expert from GBPNIHESD explained the multi-criteria spatial analysis in detail. He also explained about functional degradation, and explained why each of the base layers of the spatial analysis was considered. Dr. Sharma also clarified that the human-wildlife conflict data was not in a format that could be easily depicted spatially and had to be left out of the analysis. Dr. Rawal mentioned that the Wildlife Institute of India (WII) was working on human-wildlife conflict, and once that report and data was ready, it could also be used, if found important for the study.

Mr. Pankaj Asthana, Inspector General of Forest (IGF) - National Afforestation and Eco-Development Board (NAEB) asked about the parameters and criteria used in the spatial analysis for deciding the priorities. Dr. Subrat Sharma explained the methodology in greater detail. Mr. Asthana also stressed that the information of Bonn Challenge and FLR should be shared with all the state governments.

Dr. S.D. Singh, APCCF, Forest Department, Uttarakhand wondered if the consultations could be taken as ground truthing. It was explained that the consultations were conducted before the maps were generated. He also wondered if there was correlation between areas where consultations happened and areas with low priorities for restoration. Dr. Sharma clarified that this was not the case. Dr. Rawal explained in detail the way in which the consultations were carried out. Mr. Sinha further clarified that this framework provided decision makers at the state as well as in the districts with a ready map depicting priority areas for FLR actions. This could be used in the future to make action plans for the state. Ms. Bhattacharjee clarified that

ROAM was a very flexible framework and if required, layers could always be added or removed in the future. She explained and clarified the exclusion zones used for this mapping.

Dr. Vijender Panwar, Forest Research Institute suggested that for future actions, boundaries of forest divisions be provided and considered so that implementation can be taken to divisional forest officers for future actions. He requested the DGF&SS that the required layers required for forests are prepared for the entire country.

Ms. Bhattacharjee shared a comment and suggestion from Dr. S.C. Gairola, Director General, Indian Council of Forestry Research and Education (ICFRE), who could not attend the meeting. Dr. Gairola had suggested that for India to report on Bonn Challenge pledge, there needed to be FLR plans for all the states.

Mr. Siddhanta Das asked the team if they had considered the impact of the ban on felling in this study, to which the team responded that it was not within the scope of the report. He also asked the team to prioritise even within the suggested opportunities and interventions of the report, and weigh them against the impacts of those actions. This would allow the implementing parties to identify high impact low cost interventions that could be taken up on priority basis.

Dr. Rawal then gave the vote of thanks, thanking the DGF&SS for chairing the roundtable, and all the delegates for their valuable inputs and feedback.

ANNEXURES

Annexure 1

Agenda

Date: June 15, 2018

Venue: Krishna Hall, Indira Paryavaran Bhawan, New Delhi

- 12.00-12.10: Welcome Address and setting the theme of the roundtable - Shri P.R. Sinha, Country Representative, IUCN
- 12.10-12.20: Chairperson's Address – Shri Siddhanta Das, DGF&SS, MoEFCC
- 12.20-12.50: IUCN GBPNIHESD Presentation
- 12.50-01.10: Moderated discussion and feedback from key participants
- 01.10-01.20: Summary of discussion and way forward – Dr. N.M. Ishwar, Programme Coordinator, IUCN
- 01.20-01.30: Conclusion remarks from Chairperson - Shri Siddhanta Das, DGF&SS, MoEFCC
- 01.30-01.35: Vote of thanks - Dr. R. S. Rawal, Director, GBPNIHESD
- 01.35-02.30: Lunch in Dining Hall, Indira Paryavaran Bhawan

Annexure 2

List of participants:

S.No.	Name of Participant	Designation and Organisation
1.	Mr. Siddhanta Das	DGF&SS, MoEFCC
2.	Mr. M.S. Negi	ADG (WL), MoEFCC
3.	Mr. Jigmet Takpa	Joint Secretary, MoEFCC
4.	Mr. Pankaj Asthana	IG (NAEB), MoEFCC
5.	Mr. Soumitra Dasgupta	IG (WL), MoEFCC
6.	Dr. S.D. Singh	APCCF, Forest Department, Uttarakhand
7.	Dr. Vijender Panwar	Head, Ecology & Climate Change Division, Forest Research Institute, Dehradun
8.	Dr. R.S. Rawal	Director, GBPNIHESD
9.	Dr. Subrat Sharma	Scientist, GBPNIHESD
10.	Mr. P.R. Sinha	Country Representative, IUCN India
11.	Dr. N.M. Ishwar	Programme Coordinator, IUCN India
12.	Ms. Anushree Bhattacharjee	Programme Officer, IUCN India
13.	Mr. Sandeep Gaur	IUCN India
14.	Mr. Vishnu Sharma	IUCN India