



Reaping REDD+ Benefits in Uttarakhand



REDD+ is now widely recognized as financial incentive to the communities for their contribution in reducing GHG emissions from forests through reduction in deforestation, forest degradation and enhancement of forest carbon stocks through forest conservation and sustainable management of forests.

REDD+ Opportunities to Synergize Mitigation and Adaptation

REDD+ is primarily a climate change mitigation effort. However, deforestation and forest degradation are accompanied by the loss of numerous vital ecosystem services which provide a variety of income opportunities, material welfare, livelihoods, security, resilience and social wellbeing. These ecosystem services, and their continuous supply, are becoming increasingly important in the context of adaptation to climate change. REDD+ program and actions if implemented properly, has a potential to contribute towards mitigation and adaptation to climate change and at the same time providing financial incentives to the participating communities.

Scope of REDD+ Implementation in India

With nearly 200,000 villages classified as forest fringe villages in India inhabiting an estimated 350 million rural people constituting about 30% of India's population, there is obviously large dependence of communities on forest resources. About 25% of India's forests are being managed through more than 1 lakh **Joint Forest Management Committees (JFMCs)**. There is ample scope and opportunities for integrating REDD+ initiative with the community controlled/managed forest and Joint Forest Management (JFM) programme of activities. JFM has enabled protection and regeneration of existing forests which will contribute in conservation of forests and also the carbon stocks. This approach matches with the objectives of REDD+ programmes. Promoting and integrating REDD+ actions in JFM activities to increase sequestration of carbon stock will meet both national objectives of Climate Change mitigation and international obligations as a responsive member of international community.



REDD+ and Carbon Market

In addition to the cost for the actual implementation (planning, capacity building, improved forest governance), the fundamental principle behind REDD+ is that the payments will be made to compensate for incomes that are foregone when forests are not cleared (the *opportunity cost*), i.e. Result Based Payments. The results-based payments can be implemented in at least three ways:-

- Entirely independently from both offsets and markets by distributing part of the publicly financed compensation for REDD+ based on the results achieved.
- As offsets at the national level by allowing countries that provide public finance for REDD+ to count emissions reductions against their national commitments; or
- As carbon credits that can be traded in carbon markets.

India's Readiness for REDD+ Implementation

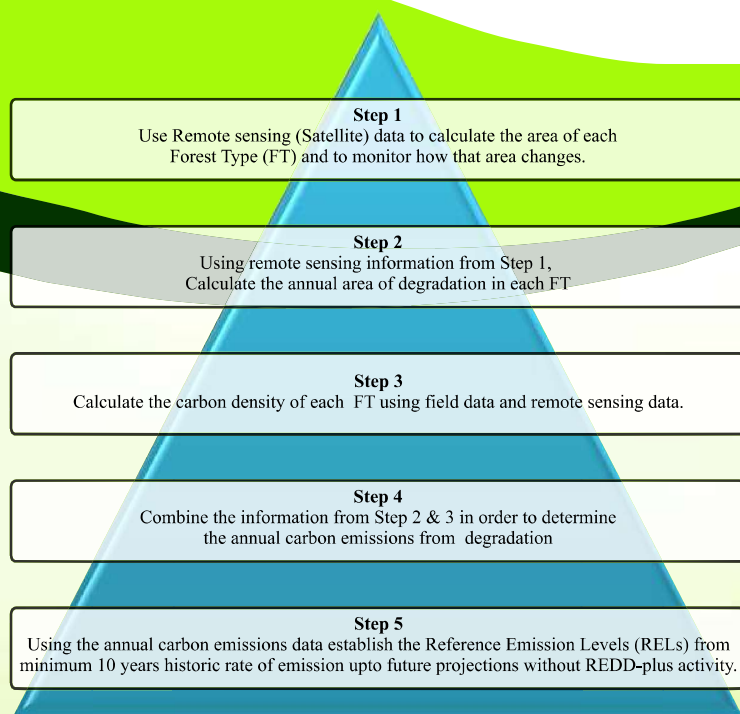
Financial support for REDD+ at bilateral and multilateral level led many countries to initiate REDD+ readiness programme and pilot projects at domestic level. At national level Government of India has established a REDD+ Cell at the Ministry of Environment, Forest and Climate Change (MOEF&CC). The road map of actions that need to be for the REDD+ implementation in India is as follows:

- Development of National REDD+ strategy and action plans, Capacity building programmes. Identification of collaborating partners at national and international level.
- Development of Reference Emission Levels/ Reference Levels (REL/RL) and MRV systems.
- Start demonstration/pilot activities at sub national level.
- Quantification of REDD+ benefits, developing benefits sharing mechanism with REDD+ communities and a Safeguard information system (SIS) for REDD+.
- Finance for REDD+ actions. Performance based payments for emission reduction

Compensatory Afforestation Fund Management and Planning Authority (**CAMPA**) funds can also complement or contribute to REDD+. The CAMPA funds are intended for undertaking compensatory afforestation, assisted natural regeneration, conservation and protection of forests, infrastructure development, wildlife conservation and protection and other related activities. Carbon revenue accrued from these activities could also be shared using a similar provision used for other forest produce sales revenues by participating communities. The CAMPA objectives are also in tandem with REDD+ objectives.

Voluntary Carbon Standards

Various carbon accounting standards for REDD+ projects emerged in the voluntary market. Verified Carbon Standards (VCS) in combination with Climate Community and Biodiversity (CCB) standards is most popular among the project developers. VCS issues tradable carbon credits (Verified Carbon Units) that correspond to the emission reductions. The CCB standard includes climate impact requirements (projects deliver benefits to local communities and for biodiversity). CCB does not issue any credits but it adds value to the credits generated by a project.



Flowchart of measurement steps involved in REDD+ Project implementation.



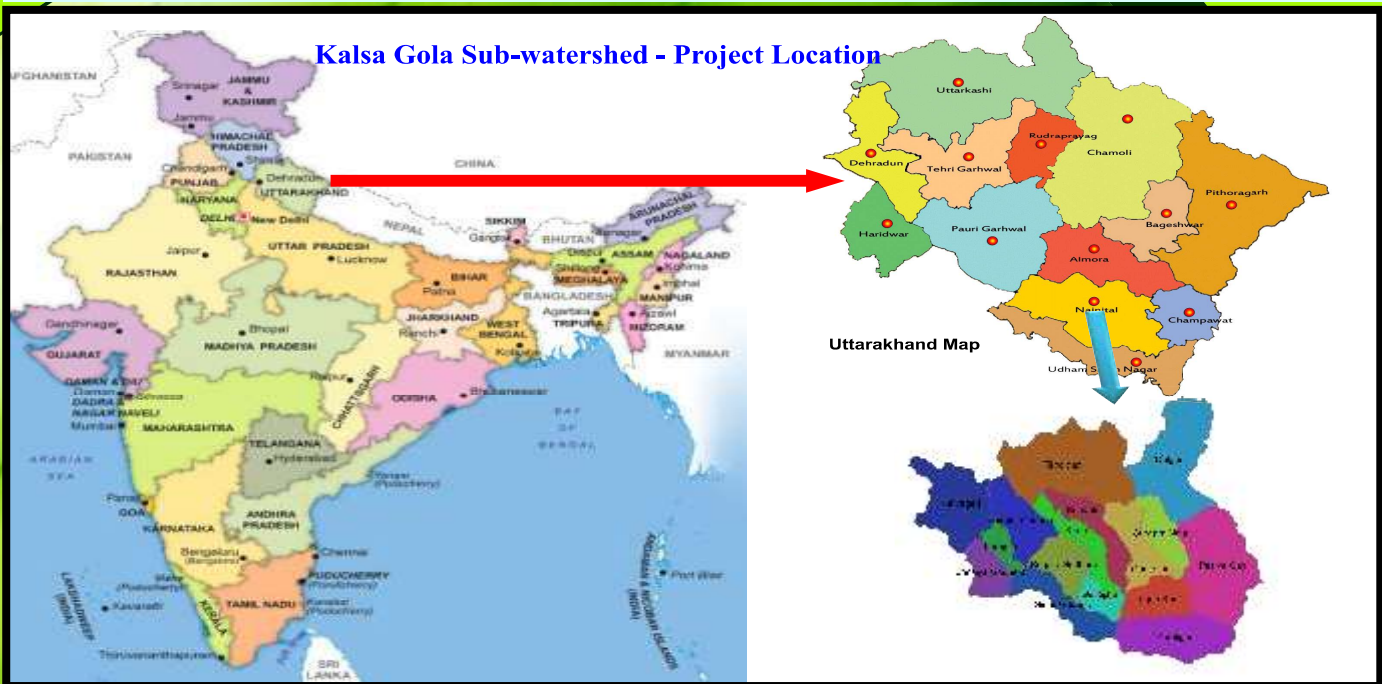
REDD+ Pilot Project in Uttarakhand

A REDD+ project with involvement of local communities can make a success at local (sub-national) and national level. Uttarakhand has a tradition of community controlled forest management like Civil and Soyam Forests, Van Panchayats, JFM Committees (under forest department). There is a great potential of initiating a pilot REDD+ project in the Van Panchayats of Uttarakhand who have been traditionally protecting and conserving forests.

Acknowledging the scope and opportunities for integrating the REDD+ initiative within the community controlled/managed forest (Van Panchayats) and JFM activities, ICFRE in collaboration with Uttarakhand Forest Department (UFD) has initiated a REDD+ pilot project in Uttarakhand. For this purpose, methodologies, modalities and procedural framework is being worked out to ensure people's participation, empowerment and sharing of the benefits accruing from REDD+ incentives.

Broad Objectives of the Uttarakhand REDD+ Pilot Project

- Estimate carbon status in different carbon pools in the selected study area.
- Empowering forest dependent communities for forest carbon conservation and developing an Measuring Reporting and Verification (MRV) system for REDD+.
- Develop a system of respecting and reporting of safeguards in accordance with the international REDD+ agreements.
- Get the project registered in Voluntary carbon market for carbon credits.



ICFRE, in consultation with Uttarakhand Forest Department has initiated a REDD+ project in the Kalsa Gola Sub-watershed of Nainital district of Uttarakhand.

The project will be registered under Verified carbon Standard (VCS). The Project would be developed in accordance with the modalities and procedures for VCS so that the payment of carbon can be devolved to the participating communities.



Uttarakhand REDD+ Project Profile

Project Zone	Forest Area (ha)	Total Area (ha)
Project Area (Kalsa Gola)	42,916	60,594
Leakage Area	53,226	69,167
Reference Area	2,50,124	4,23,532

Microwatershed under REDD+ Project Area

S.No.	Microwatershed	Forest Area (ha)	Total Area (ha)	S.No.	Microwatershed	Forest Area (ha)	Total Area (ha)
1.	Bansiya Gadhera	1765	2175	9.	Kuna	1368	2444
2.	Barjala Gadhera	1644	2631	10.	Kuriyagad	4164	5419
3.	Bhimtal Gadhera	874	3300	11.	Lamjola	908	1063
4.	Dolgad	5608	7094	12.	Logda Khal	2053	2694
5.	Ghat Gad	2402	3169	13.	Pasiya Gad	4813	7431
6.	Gullajala	964	1331	14.	Sinar Gadhera	1851	2881
7.	Kanyali	1907	2856	15.	Surgara Nala	1801	2225
8.	Karaligad	3895	4775	16.	Tandigad	6899	9106

Multiple Benefits from REDD+ project: Non Carbon Benefits



ICFRE-Uttarakhand REDD+ Project Team

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