ROLE OF INDIGENOUS COMMUNITIES IN REDD+ PROGRAMME: EXPERIENCES FROM JFM

S.K. Gupta*
Divisional Forest Officer, Monitoring, Evaluation & Audit Uttarakhand, Dehradun, India

*Correspondence: santoshforester86@gmail.com

ABSTRACT
Forests and Climate have very strong relationship with each other. The realization that deforestation could alter global temperature, cause depletion of ozone layer and the resultant adversities of these phenomena have resulted in national and international debates, major changes in forest policies, bilateral and multinational agreements along with various programmes to check the decreasing vegetal cover. REDD+ is a programme to provide developing countries with financial and technical support for reducing emissions from deforestation and forest degradation along with conservation, sustainable management of forests and enhancement of forest carbon stock. This programme provides a platform for involvement of key stakeholders especially indigenous communities right from the readiness preparation process. India not only has long history of protecting forests and enjoying customary rights in forests by tribals, forest dwellers and local communities but experience of implementing Joint Forest Management programme through involvement of local communities in protection and management of forests. The present study elaborates challenges in effective participation of local communities and examines the impacts along with the issues related to the sustainability of Participatory Forest Management system so that the REDD+ programme may be implemented with participation of local communities in a more effective and sustainable manner.

Keywords: REDD+, Climate change, Joint Forest Management, FCPF, Attitudinal change, Indigenous communities.

INTRODUCTION
Forests provide a niche for an array of plant and animal kingdom and regulate local and global climate as well as influence earth's energy budget. Forests and Climate have very strong relationship with each other. Forests influence climate largely by absorbing atmospheric carbon dioxide and act as carbon sink. They contain 40% of all below ground and 80% of all above ground organic carbon (Srivastava et al., 2003). They also soak green house gases present in the atmosphere, which are a great cause of concern in the present state of global warming. Climate is changing very fast due to increasing accumulation of Green House Gases (GHGs) in the atmosphere, incoming ultraviolet rays from solar radiation and development of a hole in the ozone layer. According to World Meteorological Organization (WMO)/Global Atmosphere Watch (GAW) Programme, the global abundance of CO2 in the atmosphere in 2015 was 400 ppm with increase of 2.3 ppm relative to the last year and mean annual absolute increase ppm yr–1 during the last 10 years (http://library.wmo.int/opac/doc_num.php?explnum_id=3084). The present rate of warming of atmosphere is reported to be 0.2 to 0.5° C per decade. Planting trees is recognized as an effective measure to reduce atmospheric CO2 concentration through carbon sequestration resulting in decrease in rate of climate change. On the contrary, the overall forest area in 2005, all the world over, was estimated to be around 30% of the earth's land area whereas the rate of deforestation during 1990-2005 was found about 13 million hectares per year. Though the annual net loss in forest area is reducing due to tree planting and expansion of forests yet net loss in forest area during 1990-
2000 was reported 8.9 million hectares per year which further reduced to 7.3 million hectares per year during 2000-2005. It has become necessary to constrain the impacts of climate change within the tolerable limits and internationally it has been envisaged that the global average temperature must be stabilized within 2°C. This will be practically impossible to achieve without reducing emissions from the forest sector. The realization that deforestation could alter global temperature, cause depletion of ozone layer and the resultant adversities of these phenomena on mankind and biological diversity have led to series of significant developments during the past three to four decades such as national and international debates, major changes in forest policies, bilateral and multinational agreements along with various programmes to check the decreasing vegetal cover. There is a growing concern among ecologists, environmentalists, anthropologists, researchers and perceptive foresters regarding the pace at which natural diversity is being lost and causing global warming at an alarming rate. While ecologists and environmentalists are worried over global warming and climate change along with depletion of natural heritage of gene pool, the anthropologists are concerned about impoverishment of millions of people as well as concomitant erosion of symbiotic relationship between conservation of natural resources and traditional knowledge system. The Earth Summit held Rio de Janerio, Brazil in 1992 followed by Kyoto Protocol 1997 amply underline the concern and gravity of the problem.

**REDD**

Reducing Emissions from Deforestation and Forest Degradation (REDD) is an attempt to provide technological and financial support for developing countries to reduce emissions from forested lands for reducing emissions by deforestation and forest degradation. "REDD+" goes beyond deforestation and forest degradation, and includes the role of conservation, sustainable management of forests and enhancement of forest carbon stock. Thus, REDD+ stands for reducing emissions from deforestation and forest degradation along with conservation, sustainable management of forests and enhancement of forest carbon stocks (Neeff et al., 2014). As many as 64 partner countries, including India, across Africa, Asia-Pacific and Latin America and the Caribbean have adopted REDD+ programme. In fact, the REDD+ programme broadly comprises two aspects viz. (i) to reduce CO₂ emissions by reducing deforestation in developing countries; and (ii) to create an opportunity for developing countries to generate sustainable revenues by trading on the carbon market. Also, developing countries are expected to follow safeguards, as mandated in paragraph 69 of the Decision, with a view to ensure full participation of indigenous communities and other stakeholders, in conservation of natural forests during implementation of REDD activities.

This concept was firstly introduced in United Nations Conference on Conservation and Climate Change (UNFCCC) by Papua New Guinea and Costa Rica, on behalf of rain forest nations, and discussed at the 11th meeting of Conference of Parties (COP11) at Montreal in 2005 (Minang et al., 2014). India is playing a positive role and has taken a firm stance in favour of a comprehensive and holistic approach in realizing the full potential of mitigation in forestry sector under REDD+ emphasizing that REDD needs to be seen in the broader context, not in isolation and proposed that reduction of emission either by afforestation and conservation or improvement of forests should be treated at par. India's stand was finally accepted in 13th meeting of the Conference of the Parties (COP13) at Bali, Indonesia when elements of conservation, sustainable management of forests and enhancement of forest carbon stocks were added to the then existing text of REDD as part of Bali Action Plan 2007. With all the services rendered by forests to the humanity, there is now a widespread understanding of simple but profound fact that forests are more valuable left standing than felled. This understanding has come out with the concept of Forest Carbon Partnership Facility (FCPF) which is a global partnership of governments, businessmen, civil societies and indigenous people focused on REDD+. It emphatically incorporates involvement of local communities openly and honestly in the planning and implementation of a national REDD+ programme (FCPF 2013). This institution has created a normative framework for REDD+ readiness and provides a robust platform for sharing of information and knowledge on
a wide range of REDD+ design and implementation issues and covers the following four strategic objectives: i). To assist countries in their REDD+ efforts by providing them with financial and technical assistance in building their capacities to benefit from possible future systems of positive incentives for REDD+. ii). To pilot a programme-based payment system for REDD+ activities with a view to ensuring equitable benefit sharing and promoting future large-scale positive incentives for REDD+. iii). Within the approach to REDD+ to test ways to sustain or enhance livelihoods of local communities and to conserve biodiversity. iv). To disseminate broadly the knowledge gained in the development of the Facility and the implementation of Readiness Preparation Proposals and Emission Reduction Programmes. The FCPF has two separate but complementary funding mechanisms viz. the Readiness Fund and the Carbon Fund to achieve its strategic objectives. Both funds are underpinned by a multi-donor fund of governments and non-government entities, including private companies that make a minimum contribution of $5 million. The Strategic Environmental and Social Assessment (SESA) facilitates to ensure compliance with adequate safeguards by integrating key environmental and social considerations covered in the relevant safeguard policies and procedures at the earliest stage of decision making. It also provides a platform for involvement of key stakeholders, including indigenous communities who depend more on their nearby forest resources, right from the readiness preparation process. In India, there is a long history of protecting forests and enjoying customary rights in forests by tribals, forest dwellers and local communities besides having experience of involving local communities in protection and management of forests by implementation of Joint Forest Management programme during the last decade of the 20th century, which envisaged sharing of responsibility of protecting forests along with mechanism for sharing of usufructs with communities. This experience can successfully be replicated for involvement of indigenous people in REDD+ programme and frame a suitable mechanism to protect their rights and ensure fair share of forest carbon incentives for the sustainability of the programme. The Scheduled Tribes and Other Forest Dwellers (Recognition of Forest Rights Act 2006) also provides legal safeguard for community forest rights including right to protect, regenerate and manage community forest resources. India’s national strategy aims at enhancing and improving the forest cover in the country for augmenting the quantum of forest ecosystem services to the local communities as well as carbon sequestration. India intends to ensure to flow all REDD+ incentives available from international sources adequately to the local communities participating in management of forests. A part of the incentives are expected to be invested for conservation and improvement of biological diversity and NTFP. It has brought out an ambitious programme, Green India Mission under its National Action Plan. Although plenty literature is available on the importance of engagement of stakeholders in the management yet there is limited information on proper mechanism for how to best engage them and their effective participation is a challenging task. Now, we have gathered sufficient experiences of management of natural resources through community participation. There seems to be the right time in the present perspectives for examining the impacts of the programme and the issues related to sustainability of the system so that the REDD+ programme may be implemented in a more effective and sustainable manner.

Impacts

The success in Arabari Project, Sukhomajari Project and the Aravali Project through Joint Forest Management prompted Government of India to issue circular to all the states to adopt Joint Forest Management system is not insufficient in itself that this system is certainly capable of changing the entire scenario in the management of forests. Various watershed development projects implemented in different states like Integrated Watershed Development Project in Shivalik Hills in Uttarakhand, Himanchal Pradesh, Haryana, Punjab, Jammu & Kashmir; River Valley Project implemented in Jharkhand and West Bengal; works taken up by Watershed Organization Trust (WOTR) in Maharashtra etc. have proved that people understand the importance of working in
participation and organize themselves for conservation of natural resources if substantial efforts are made. Certainly, this has brought about some positive impacts in the perception about management of natural resources described as hereunder:

- People have started to appreciate participatory management as a distinguished system where they can work with rationalized planning and adequate say in decision making along with decentralization of financial authority. They express their concerns regarding degradation of natural resources, loss of symbiotic relationship between forests and communities and become ready to actively participate in planning with their knowledge and wisdom for better management of natural resources. A perceivable change is witnessed in the management of forests from timber production to biodiversity conservation, policing to involvement and participation of local communities, and revenue earning to increasing employment and income opportunities for local people. Participation of communities in planning and management is flourishing in other parts of the world too (Kakizawa 2004). The importance of transparency in the working system has been ratified. Encouraged by emanated experiences, people have started to insist on greater transparency in other government programmes too. The right to information act is also playing a facilitating role in bringing out the unearthed facts to the surface. It has also been experienced working in more than one divisions in Uttarakhand that local people come forward to complain against illicit activities provided they have full confidence that proper action will be taken against the culprits without prejudice and partial whereas it was a general complaint against local people of being non-cooperative in case of illicit activities in forest areas. It has also been experienced that communities effectively participate in forest fire control activities if they are given the responsibility to protect their nearby forest areas by providing fund to them by way of memorandum of understanding.

- The conventional and oversimplified view of villagers to use forests solely for fuelwood, fodder, grazing and timber has been channelized in the light of multiplicity of forests products. Villagers have adopted various kinds of income generating activities at household level through SHGs individually or collectively. It is frequently witnessed at the stalls in various local, state and national level fairs and exhibitions that villagers are getting benefits and particularly the women folk are heading towards self-sufficiency by these.

Challenges

But, in the present situation, the experience of Joint Forest Management system has created opportunity before us to analyze the challenges for its implementation in a sustainable manner. The sustainability of the participatory management system consists of institutional, financial, managerial and technical aspects which are discussed as hereunder:

- Institutional, the Joint Forest Management system was introduced as relatively a novel concept based on community centered, bottom up approach in which community members actively collaborate in the design and implementation of programmes as project partner with government personnel (Sherman et al., 2014) resulting in higher project performances in terms of effectiveness, efficiency, equity, flexibility, legitimacy, sustainability and reliability. Unfortunately, forest officials took Joint Forest Management as an organizational mandate and abandoned this novel working system soon after the expiry of the World Bank funded project although the Government of India continued financing the Joint Forest Management Committees (JFMCs) under Forest Development Agency and Sustainable Forest Management schemes as a measure for financial sustainability of JFMCs. A notable imperfection was also inherited in the institutional arrangement to deposit the entire amount of usufructs in a common kitty from where individual participants were to get their share. Forest personnel did not give their proper input and facilitate the programme enthusiastically. Thus, the weaker sections of
communities made themselves alienated from the programme. Here, it is noteworthy that equity and justice have been elusive and difficult to achieve, but central and can not be overlooked to make development more sustainable and to share fairly and equitably the efforts required for development as well as the benefits accrued from them (Minang et al., 2014).

Managerially, willing and effective participation of local communities is highly important for the successful implementation of any participatory programme, which can not be assured without providing them their due share in benefits. In West Bengal, Joint Forest Management was initiated in a certain number of villages, but after certain interval of time, inspired by upcoming natural stock, people from other villages also showed their willingness to be involved to acquire benefits. On denial, they got “stay order” from the judiciary and the participants could not get their due share (Anonymous 1998). Consequently, the programme faced an unwanted situation. On the other hand, the programme ran smoothly in Haryana on account of unambiguity about distribution of usufructs and every participant benefitted from the programme. For sustained participation of local communities in the management, adequate stress has to be laid on short term benefits to the community like in Madhya Pradesh, Maharashtra, Tripura, Orissa, Rajasthan, Gujrat and Punjab where hundred per cent yield from intermediary fellings along with minor forest produces were agreed upon to be provided to the local communities. During distribution of usufructs among the community members, the interests of weaker sections of the society have to be safeguarded since they are highly dependent on forests for their sustenance. If their share fails to reach them, their participation will undoubtedly be not up to the expected level and may lead to infringement of modalities. Attitudinal change among forest personnel as well as community members is the prerequisite for working in participation of communities. The community had to bear the responsibility to protect and develop the natural resources whereas the forest officials had to share their power and authority with them (Kinhal 1995). But, in Joint Forest Management programme, change in attitude remained a challenge since it needed decentralization, collective decision making and transparency which was not easy to embrace. Forest personnel could not develop required attitudinal change among themselves towards resorting to transparency and sharing of knowledge and experiences with village communities. They are still pursuing the old practices suitable to the regulatory management system and required to further improve their ability in social skills and service orientation. In participatory management, liaison techniques have to be discarded and transparency, cooperation and involvement of larger section of community in decision making is compulsory for successful implementation. Women folk are the integral part of this novel working system. Their perception about natural resources is more realistic. Without their willing and active involvement, the success of participatory programme is certainly doubtful (Sarin 1996).

Technically, it must, however, be remembered that the sustainability of any participatory management system lies most in technical aspect covering appropriate planning for which comprehensive study of village forest ecosystem and proposition of income generating activities are highly essential to maintain continuity of community participation. Our forests are under immense pressure not only due to increasing biotic interference but vast encroachments by several undesirable weeds especially Lantana, resulting in hampering regeneration and growth of valuable species. Adequate understanding of improved technologies integrating 'yellow knowledge' with innovative approach is necessary for amelioration of degrading village forest ecosystem by way of income generation activities such as furniture and articles making form lantana, bamboo and canes, basket making, NADEP compost pitting, leaf plate making, charcoal briquetting along with other forest related activities such as mulberry plantation and silkworm rearing, lac cultivation, cultivation of medicinal and aromatic plants.

etc. To promote NTFP basis for multiple product forestry with effective utilization of traditional wisdom and value system of local communities becomes important and needs serious attempts. Emphasis has to be laid on promotion of research for utilization of improved technologies for scientific collection, site processing and value addition of NTFPs (Goverdhan 1996; Mukhopadhyay 1998).

Evidently, to work in association with village communities is not a leisurely task and needs committed endeavors from all the stake-holders especially the forest personnel. The success in participatory management system depends on reciprocal impacts of forest conservation efforts and benefits from forests to the communities, which may certainly take time through a dynamic process. Local communities not only require financial assistance but technical and legal input too in executing their tasks. A judicious mechanism has to be developed in which benefits can be availed by the actual participants without chances of pilferage by non-performers in the system to further implement participatory management system. For successful implementation of REDD+, to maintain equity among all the stakeholders is important which has to be viewed in two perspectives. Firstly, the importance of recognition that local people be able to live healthy and productive under both current and future conditions, which raises the question of disparity and how to address this issue judiciously. Secondly, the strategic importance in achieving the ambition of keeping temperature increase below 2°C that without equity in process and substance, the attainment of the required goal is difficult if not impossible (Klinsky et al., 2014). Forest personnel have to keep their innate emotions alive while performing their duties instead of mere compliance of duties and use their comprehension to break off the shackles of complexities of issues with new skills, spirit and service orientation (Gupta et al., 1998). But, it is also experienced that in community based management, to place responsibility against improper implementation remained a debatable issue. Regretfully, the change in mentality is more difficult as compared to change in technology since inconsistent behaviour of government personnel as well as rural masses during interaction obstructs them to come out truthfully and retards the institutionalization of the process of working in participation. However, to improve monitoring and evaluation framework for adaptation interventions is supposed to provide better insight into the barriers and opportunities in effective participation of communities in the programme implementation.

REFERENCES


To promote NTFP basis for multiple product forestry with effective utilization of traditional wisdom and value system of local communities becomes important and needs serious attempts. Emphasis has to be laid on promotion of research for utilization of improved technologies for scientific collection, site processing and value addition of NTFPs (Goverdhan 1996; Mukhopadhyay 1998).

Evidently, to work in association with village communities is not a leisurely task and needs committed endeavors from all the stake-holders especially the forest personnel. The success in participatory management system depends on reciprocal impacts of forest conservation efforts and benefits from forests to the communities, which may certainly take time through a dynamic process. Local communities not only require financial assistance but technical and legal input too in executing their tasks. A judicious mechanism has to be developed in which benefits can be availed by the actual participants without chances of pilferage by non-performers in the system to further implement participatory management system. For successful implementation of REDD, to maintain equity among all the stakeholders is important which has to be viewed in two perspectives. Firstly, the importance of recognition that local people be able to live healthy and productive under both current and future conditions, which raises the question of disparity and how to address this issue judiciously. Secondly, the strategic importance in achieving the ambition of keeping temperature increase below 2°C that without equity in process and substance, the attainment of the required goal is difficult if not impossible (Klinsky et al., 2014). Forest personnel have to keep their innate emotions alive while performing their duties instead of mere compliance of duties and use their comprehension to break off the shackle of complexities of issues with new skills, spirit and service orientation (Gupta et al., 1998). But, it is also experienced that in community based management, to place responsibility against improper implementation remained a debatable issue. Regrettably, the change in mentality is more difficult as compared to change in technology since inconsistent behaviour of government personnel as well as rural masses during interaction obstructs them to come out truthfully and retards the institutionalization of the process of working in participation. However, to improve monitoring and evaluation framework for adaptation interventions is supposed to provide better insight into the barriers and opportunities in effective participation of communities in the programme implementation.

REFERENCES


