

Social Forestry Program - An Antidote for Climate Change

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Abstract. Since the 1990s, social forestry has been adopted in India. It aims at diverse outcomes, such as ensuring food security, afforestation, and availability of fodder and fuel wood. In the wake of the onslaught of climate change, it is considered one of the formidable methods to contain and curb the degradation of the environment. In this paper, a bird's eye view is given of social forestry in the entire globe in general and India in particular. The paper through a discussion of successful models tries to advocate for decentralized governance to truly explore the benefits of adaptive collaborative management of forests' resources. The paper looks at how different ideas from the stakeholders can be put together and work on a smaller scale and be wary of scaling up social forestry programs. It also pitches for keeping it flexible and working towards actual conservation of forests and refurbishing the biodiversity which is endangered due to near depletion. The study especially supports and calls for the success of community forests in Indonesia which should be emulated in terms of their governance.

Keywords: Social Forestry, Decentralized Governance, Adaptive Collaborative Management, Biodiversity.

1 Introduction

In all the changes that are taking place in the human and the natural world, it is difficult to separate the two as both are organically connected. The changes which strike especially in nature are the anthropogenically induced changes in climate[2]. Human society because of its insatiable, ambitious desires for development through industrialization and modernization seems to have had a lop-sided understanding of this connection. We have taken much more than nature can endure and have systematically disturbed the ecological balance. In the latest UN Conference of the Parties (COP 2023) on global climate change, the leaders of one of the action streams titled 'The Glasgow Leaders' Declaration on Forest and Land Use put it this way- "to meet our land use, climate, biodiversity and sustainable development goals, both globally and nationally will require 'transformative further action' to meet the multiple requirements as well as to address the needs of the different constituencies affected by it"[2] The true transformative strategy may be to be more adaptive, work organically

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with nature itself and the communities in these forested areas. It's as if in trying to maintain a balance now seems like too late to turn the clock back. Already the clock is ticking, as if sounding the death knell for our planet which is bleeding profusely due to the wounds on it due to resources ripped off and that is challenging not just at present but its power of resilience to withstand the pressures of production and consumption. In India today, we see a nonchalant frenzy continuously invoked by the politics of populism at a feverish pace now, without a care for the institutional measures in place for keeping 'the checks and balances' in this sector and for the communities who have been living in the vicinity of biodiversity regions which if disturbed might do further irreparable damage to the biosphere as also result in disasters and natural calamities much more than they are happening now and in turn cause tremendous loss of life and civilization.

2 Social Forestry: The Concept

Social forestry has two aims in general. One is the conservation of forests as in plant and tree species which refurbish the biodiversity and the second is income generation through alternate modes such as agriculture based- farming, animal rearing and fisheries and meet the challenges of livelihood new ideas of income generation which directly is related to lessening the dependence on forests and products from it. It is a strategy to reduce the dependency on forests as well as the pressure on the natural resources. Hence to reduce the pressure on the forest cover, the community members who are the users of the forest (read forest products)are also one of the critical stakeholders in terms of resources used from these through other plausible alternative resources as well as technologies. There are various ways in which social forestry is implemented. One is through the State itself, others are private players mainly companies and lastly, the user groups who inhabit the area around the forest. If it is implemented through the State then like any other state-driven programme, even though it was meant for the benefit of the people, it was oriented towards alternative income generation programs which directly impacted the forested area by enhancing it[4]. it was the idea to either restore the green cover from open forest to bring it to enhancing its denseness and bring it to the level of a close forest as well as enhance the biodiversity. However, the rigid structures of government programs and the lack of community involvement made all see that it would take a lot to bring it on.

3 Renovation and Innovation in Social Forestry

With the rapid changes occurring over and over again, there is also a requirement now for new methods which have not been followed earlier. The bureaucratic method, top-down approach and rigid structure of intervention programs have now become a thing of the past and have to be replaced pronto with localized action plans with the participation of active communities. The localized approach has to be complemented by multiple stakeholders and also should be collaborative. It also seems that we are unable to predict which way all of this will go hence we are unable to pre-plan and come to action proactively. The attitude of treating social forestry as a be-all and endall - the panacea, the sure-shot solution to our problem has to be stopped. The share and interest in environment management also should be equally or near equally distributed. Rather than trying to put up a 'one size fits all' kind of program structuring and implementation it has to be mutually built up, taking into consideration the needs of all stakeholders.

4 Impact of Social Forestry

We should reckon that very significant is the aspect of inequalities wherein certain constituencies' interests are not being met or being overlooked or going unnoticed. Due to this, there are various groups which are rendered much more vulnerable. These are women, poor, lower castes, marginalized ethnic groups and indigenous people. As it is, they receive the residual portion of the resources and now their share gets further depleted. For instance, due to the stereotypical roles of home and hearth resting with women, the creativity and ingenuity used by them are not taken into consideration. This results in the exclusion of ideas triggered by ingenuity which may be absent altogether from the repository framed of success stories. It may result in totally missing out on certain ideas because that perspective has not been taken into consideration. In other cases, the resource management ideas do not have any perspectives of the local communities and unless the communities own it up it remains a highly program-driven kind of effort which may die a natural death, the moment the program management objectives have been met with. It is the local communities who can breathe into the program the human factor which may come from cultural practices which are scientific and have multifaceted solutions. It has recognized the living conditions that enable people who have to be fit enough to survive but in such a way that they cause no harm in fact or do not disturb the ecological balance. The beauty of such ideas and practices is that they continue and have an inbuilt dynamism which adapts to the times and the requirements of the local people themselves. It is well recognized that many programs of social forestry have failed because they tend to not understand at all the ways of the people in this regard as to not being process-oriented and also lack of ownership by the local communities. Bespoke solutions are found to be more contextually relevant. When we say contextually relevant, it is also said that the ideas of solutions are practical, adaptive and realistic. It takes into account the fact that just like in the case of funding so also, it should come by mobilizing the community. that's because self-funded projects

5 Decentralized Governance: Success Decoded

The responsiveness of local people by thinking of ideas for solving local problems can fire the imagination of the local people to come out with the best solutions. Most of the communities seen in this regard who have forest dependence as well as have programs of agencies such as the government or their partners and ally agencies being implemented are found to be generally the indigenous communities [4]s. These are the communities who have survived symbiotically with the forests and know very well due to common sense and culture, where to draw a line about resource use and how much may be too much in this regard. It is understood well that considering and giving them control as well as access in making important decisions in this regard is by and large giving them their due by way of recognition and respect of their age-old repository of experiential knowledge which has every possibility of saving the day in this regard. Instead of imposing ideas that are laboratory-made or at best created by people who are far removed from the forests and have preconceived ideas which may not be adoptable may result in half-hearted program implementation and miss out on ideas and agents who are far more practical and hold the promise of sustainability in the real sense of the word. Hence the catchwords are not just one but many, each indubitable tied to the other such as collaboration and inclusion.

It also should take into consideration structural changes which amounts to a preventive mode taking into consideration the possible obstructions and which have far more important role to play in the damage done and coming in the way of sustainable ideas. This calls for policy-level interventions that are *de facto* in every which way to prevent the most important stakeholders from carrying on to make practices sustainable in this regard.

In the contemporary understanding of forest governance, decentralized management of forests is one of the key approaches being taken. It is considered to do well in terms of conservation of biodiversity. In this approach, the key stakeholders are the forest dwellers or those who live in the vicinity of the forests as well as other local stakeholders represented by the state. In terms of important aspects such as decision-making, implementing policies and evaluating the outcomes are all done in a decentralized fashion and are an incentive for proactive engagement of the communities. It is a state technology to preserve and protect the forests wherein the state transfers certain rights and responsibilities to the local communities. This is the model of social forestry used in Indonesia. Largely it is adaptive and flexible. The transfer of rights and responsibilities to the user groups positively influences the objectives, the implementation and the outcome of the social forestry. This is very different from the conventional mode of forest management which is technically called 'community forestry' and is different from social forestry. This was widely practised by the local communities before the state technology was introduced. It was based on local and indigenous knowledge. Either approach has benefited significantly in both ways - community welfare as well as forest conservation.

If we look at the traditional approach i.e. community forestry- we see that it was quite scientific and multi-purpose oriented. It was adaptive in nature and the human environment relationships kept changing as the environment kept changing - this made it dynamic too. There are various advantages in comparison to the modern-day social forestry approach. It harnesses the participation of people at the community level; the existing repository of knowledge in the community which has been there for ages; reciprocity is key in the profit sharing; cultural identity is well maintained. Even if it amounts to the community selling forest products, it is never seen with capital orientation.

6 Success Stories Worth Emulating: Indonesia

There are a plethora of examples of the successful economic and ecological benefits accruing from community forestry by the indigenous groups/communities who have cultural practices by way of dos and don'ts as in customs and taboos regarding the relationship with different aspects of the forests. For instance in India, among the tribes, you have a system of totems wherein either plants or animals are protected and they impose boundaries so that that particular flora and fauna are not poached beyond a certain limit. This is the way forests have been preserved much before the state came in to preserve and protect them. Similarly, you can see customary practices in other countries too. Customary forests are protected by specific ethnic groups in Indonesia. The "limbo larangan" or "the prohibited forest". This refers to a certain natural forest unit, that is protected and maintained as a "permanent forest" for hydrological preservation. Another local conservation area called "pangale" functions as a protected area, mostly located on top of a mountain or at a slope above 40 degrees to prevent erosion and landslides. There are many other conservation concepts unique to Indonesia's specific regions which are based on local customs and lead to maintaining the critical balance between consumption and conservation. If we look at these two examples one of India and the other of Indonesia, we see that the latter has a social forestry approach in which there is income enhancement as well as sustainability practices which are successfully carried on. In the present times, it is something that the world can learn from the customary practices- the age-old and very scientific understanding of soil health, trees, scrubs and land management which is highly beneficial to the people and results in conserving the green cover by way of permanent forests.

At the same time though in certain regions such as Bali and Sulawesi, these customary practices have had gigantic successes, but in many other parts of Indonesia, the truth is a high level of deforestation even till around 2016. In these parts, the contemporary social forestry approaches have been used. Here the communities who are the user groups of the forests have less say in comparison to the other stakeholders such as forest companies. Only about 4% of forested areas are managed legally by the local people/communities. Since the requirements surpassed the access allowed to them, the state has gone for forest management through social forestry. This is done through several other methods such as the Village Forest Scheme better known as the VF Scheme. In cases where poverty exists structurally as about limited access to resources and there are requirements such as alleviation of the people which loom large and make them use the forests and thus are a cause of deforestation. Here social forestry aims to provide the people with basic needs of livelihood, income generation and food security as alternatives to their using of the forest resources and

in this way to conserve the forest area. This too has significantly contributed to the income enhancement of the communities surrounding the forests. We see this too successful in many ways in many countries. For instance in India and Indonesia. This has largely been through various models of agroforestry and linking them to national and international markets has resulted in the prosperity of the people, especially the farming community. In Indonesia, it has been successfully done in several regions resulting in profit sharing of the small landholders through the cooperative system. It aims at diversification of tree crops and building the capacity of people to optimize land management. In India too there are various success stories alike to Indonesia wherein many of the Non Timber Forest Products such as mohul, tendu etc are collected by the communities and regulated by the Forest Department.

7 Maintaining the Ecological Balance

Having discussed the spectacular ways in which Indonesia is managing its forests by giving more leeway to the most significant stakeholders which are the communities the fact remains that it is also one of the most vulnerable ecosystems where there is habitat loss, habitat degradation, genetic isolation of certain species and the threatened extinction of many species. Most of the habitat loss has occurred due to various forested areas being converted for agriculture. Most deforestation is due to the need for land and not the need for timber like in India for instance. A very alarming fact is that one million species became extinct due to agriculture and fisheries wherein pesticides were used and due to this many species are now extinct even though the pests towards whom these toxic substances were used are still there, resistant to the pesticides used. All of this loss of biodiversity has taken place within the last three years. Much of it is also due to the forested areas and the biodiversity within them.

Of course, biodiversity has been greatly damaged due to illegal hunting and illegal trade in forests or animal products either for medicine industries or because the animals are considered pests, as accessories and many other such marketed products which throng the sale counters not just in the country of origin but internationally even. This is also many times done through the help or support of the surrounding community members. Due to their impoverished situation, they engage in many of these illegal hunting and trading too. This becomes a common means of subsistence for them. In Indonesia, social forestry is implemented through the CBFM concept [4]t. CBFM is short for Community Based Forest Management. This has enabled the protection and conservation of biodiversity for instance. Forest cover, forest products, biomass and carbon stock all of these have improved much due to the CBFM[4].

Deforestation and degradation of forests have singly been caused by human activity. The members of nearby communities have excessively logged the forests[7]. They do not know sustainable forest management techniques. Environmentally friendly ideas should be started in the forest areas such as eco-tourism, carbon

offsetting etc can be plausible innovative methods of taking the pressure off the forests and also giving livelihood options which are also ecologically sound.

Another issue is that entirely one department or ministry of the government mainly environment and forests is the sole planner and implementor of the social forestry approaches used. There has to be a collaborative effort with strong networking established between this department and other connected departments of the government to bring in results.

8 Conclusion

However, the fact remains that despite its success stories, social forestry has had its pitfalls. It has not substantially resulted in a reduction of deforestation for one. Secondly, in some categories of forests such as community forests and village forests-the forest loss has heightened due to issues such as a lack of financial resources to keep the communities at bay and not engage in deforestation-related activities. Also, lack of knowledge as well as a lack of capacity-building programs, the social forestry techniques connected to biodiversity conservation have not been that successful.

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