Enabling Spaces and Supporting Structures - Enhancing Women's Participation in the Self-initiated Community-based Forest Management in Odisha

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Abstract Gender and equity studies on participatory natural resource governance in India have remained highly concentrated only to the aspects of men vs. women in the joint forest management (JFM), and the reasons for failure and non-participation of the women in JFM. Research studies thus far on gender lacks focus on the diversity existing among women as a forest resource user group. Earlier studies have also ignored the role of women in large scale self-initiated CBFM systems found in the states of Odisha, Jharkand and Bihar. Although, earlier studies mentioned about the spaces and supporting structures that would enable better participation of women in participatory natural resource management programmes, however, they did not identify the spaces and structures that are in operation at the grassroots. A case study adopting the multiple case study approach was conducted on the self-initiated community-based forest management in the Indian state of Odisha to identify the enabling spaces and supporting structures that might be helping women to participate actively in participatory forest management in Odisha. In this article based on our case study we present the enabling spaces and supporting structures that were perceived to be enhancing women's participation in the self-initiated community-based forest management in the Indian state of Odisha.

Keywords Gender and Forestry, Women in Conservation, Women in Forestry, Community-based Conservation, Joint Forest Management, Odisha

1. Introduction

The impact of women's participation in the participatory natural resource governance is indisputable; however, gender and equity studies related to participatory natural

resource governance in India have remained highly concentrated only on two aspects. Research studies thus far on gender in participatory natural resource governance in India were confined mostly to men vs women in joint forest management (JFM), and the reasons for failure and non-participation of women in JFM (Agarwal, 2001, Martin and Lemon, 2001; Kameswari 2002; Sarker and Das, 2002; Kelkar and Nathan, 2003; Gupte, 2004; Upadhyay, 2005; Agrawal and Chhatre, 2006; Mallik, 2006; Acharya and Gentle 2006; de Vries and Sutarti 2006; Syamsuddin *et al.* 2007; Komarudin *et al.* 2008; Agarwal 2009; Nuggehalli and Prokopy, 2009; Agarwal, 2010a; Agarwal, 2010b; Reed, 2010; Behra, 2011; Saxena, 2011; Mwangi *et al.*, 2011; Das, 2011; Bandiaky-Badji, 2011; Lewark, Gerge, and Kermann, 2011; Buchy, 2012; Giri, 2012; Manfre, and Rubin, 2012; Coleman, and Mwangi, 2013).

Furthermore, research studies thus far on gender lacks focus on the diversity existing among women as a forest resource user group. Although, earlier studies mentioned about the spaces (Agarwal, 2001; Subramaniam *et al.*, 2002; Gupte, 2004; Arora-Jonsson, 2005; Agarwal, 2010a; Giri, 2012; Manfre, and Rubin, 2012) and supporting structures (Kelkar and Nathan 2005; Agarwal, 2009; Desposato and Norrander, 2009; Saxena, 2011; Giri, 2012; Buchy, 2012; Larson 2012; Manfre, and Rubin, 2012; Coleman, and Mwangi, 2013) that would enable better participation of women in participatory natural resource management programmes, however, they did not identify the spaces and structures that are in operation at the grassroots. Last but not the least, except for few studies (Singh, 2000, Singh, 2001; Siripurapu, 2012) or cursive indication of women in self-initiated Community-based forest management (CBFM) (Jeffery *et al.*, 1998; Kelkar and Nathan 2005; Saxena, 2011) research studies on gender in participatory natural resource management in India were confined mostly to participation of women in JFM but ignored the role of women in large scale self-initiated CBFM systems found in the states of

Odisha, Jharkand and Bihar.

In this article we present the methodology, brief review of the studies thus far on women in participatory forest management in India, a short description about space and supporting structures that enables participation of women in participatory forest management in Odisha, findings of our preliminary study on the role of women in community-based forest management in Odisha, followed by conclusion. The study has its own limitations, first, our preliminary study comprises of multiple case study of nine villages hence it may not be possible to generalize the findings of our study. Second, our findings are preliminary, a full length, in depth research study is necessary to bolster out preliminary findings. Third, our findings were based upon the opinions shared by the respondents (local NGOs, community leaders, executive committee members of the forest protection groups, and women) of the sample villages. Fourth, no statistical models were applied to derive the results; hence, the results may not be statistically significant. However, the veracity of the findings cannot be dismissed as the opinions were collected from personal interviews and focus group discussions.

2. Methodology

Adopting Arora-Jonsson (2005) rather than focusing on why women were absent and how they might be included in forest organizations, we chose instead to study the spaces where women were present, how they themselves chose to work in relation to the forests and what they wanted from local control. This approach brings to light a different understanding about the role played by women in participatory forest management. The methodology includes multiple case study (Yin, 2009), of nine villages of three districts (*Nayagarh*, *Deogarh* and *Sundargarh*) in Odisha. Sample villages were selected through random sampling technique. Data collection (year 2009 – 10) was through general discussions, personal interviews with local NGOs, community leaders, executive committee members of the forest protection groups, and through mixed group, and focus group (women) discussions, adopting Participatory Appraisal of Natural Resources (PANR) technique (Mukherjee, 2003). Semi-structured open-ended questions were prepared for the purpose of this study.

Societies Where Women Are (un)equals

Although the terms of gender is about both men and women and examines the role that power and institutions play in determining differences between them (Cornwall 2001; Manfre, and Rubin, 2012). However, the above mentioned studies on gender in participatory natural resource management have focused mostly on women. Furthermore, those studies not only oversimplified gender, lumped the women together as a homogenous group (Bradley, 1991; Nabane, 1997; Jeffery et al, 1998; Agarwal 2001; Sithole, 2005), often stereotyped them as the conservers of nature or

as the primary users of forests in their activities related to fodder and fuelwood collection (Jeffery et al, 1998) but also downplayed the knowledge and role of men in conservation (Sunderland, et al., 2014). Jeffery, et al, (1998), points out that studies on gender stereotyping, argue against such homogenizing assumptions about women's relationships to the environment because people have diverse relationships to their local environments (Agarwal 1992; Jackson 1993). Women's situations differ considerably, both between different localities and within them, on the basis of class, caste/tribe and household circumstance. (Jeffery, et al, 1998). For example, Buchy, (2012) points out that "not all women share the same constraints, as a woman's economic status or religion may be more important in determining what she can and cannot do than her gender per se. Many poor men, such as *dalis* in Nepal, face more constraints and discrimination than some women." In another example, Jeffery et al., (1998) mentions their experience of a woman's meeting held at Lapanga village in Odisha, which highlights the tensions among women. "Initially, the *Harijan* women were seated around the edge of the room. When the team researchers asked them to come forward and sit on the *dari* (carpet), women from the upper castes tried to discourage them by pointing out different places to sit. The *Harijan* women were irked by this and walked out after a few minutes."

Discussing about women's status in the tribal societies of India, Mani (2014) points out that regressive manifestation of patriarchy is absent in most of the tribal societies in India. *Adivasi* (tribal) women enjoy a better status within their own communities than women in mainstream Indian society (Kelkar and Nathan, 1991; Sarin, 1998). For instance, elder women can be granted the status of the chief of a village while men are sometimes seen cleaning, taking care of children and cooking at homes (Mani, 2014). Furthermore, "women in tribal cultures, generally face fewer restrictions compared with women in non-tribal communities. In tribal communities in South Gujarat, a sizeable number of women hold land in their own names and can decide what they want to do with it. The social norms of tribes and non-tribes with regard to gender relationships are different, with non-tribal women generally facing far more restrictions than do tribal women. Furthermore, upper caste and lower caste women are markedly differentiated, while tribal women are much more homogenous. Thus, women play very diverse roles in their own households as well as the society. Tribal and non-tribal women from similar economic backgrounds may be very different from one another. For example, upper caste nontribal women do not collect wood from the forest even if the household needs fire-wood, but the tribal woman do. Lower caste women of the non-tribal households may perform the same functions outside the house as tribal women. In contrast to the lower castes, higher caste daughters-in-law hardly ever work outside their homes but such differentiation is now necessarily so marked among tribals." (Jeffery et al., 1998).

Manfre, and Rubin, (2012) points out that oversimplification of gender fail not only to account for the

interdependence and connectedness of men's and women's livelihoods but also the diversity and complexity that exists among women (Jeffery et al., 2012). By constantly pitting men and women against each other and ignoring the differences existing among women not only fails to leave room for understanding how men and women work together and complement each other but also how women work together and complement each other. For example, as Rocheleau and Edmunds (1997) explain, a focus on separate spaces and places of resource control ignores the 'in-between spaces' where women occupy land that is above, below and in between men's crops and trees. Oversimplification also obscures the interplay between genders, within the gender and other social variables, such as ethnicity, age, marital status and race (Manfre, and Rubin, 2012).

Are Women Synonymous to Failure and Non-participation?

Besides oversimplification and ignoring the diversity existing among women, most of the research studies on gender only glorified the reasons for failure and non-participation of women in the participatory natural resource management. However, not enough attention was given to the success stories as much as the attention given for the failure of women in participatory natural resources management in India. Research studies on gender thus far, found the following reasons for failure or non-participation of women in participatory natural resource management programmes like JFM. For instance, Behra, (2011) found the following reasons for non-participation of women in JFM, "i) women were not informed about meetings; ii) unsuitable time for meetings when women could not be free from household work; iii) social customs restraining women from attending such meetings; iv) women perceived no gain from attending such meetings; majority of the women held the opinion that meetings are mere formality, being held for demonstration to the visiting dignitaries and serving no useful purpose." (Locke, 1999; Sarker and Das 2002; Kameswari 2002; Saxena, 2011; Coleman, and Mwangi, 2013).

Saxena (2011), refers to Correa's field survey (1999) in Uttara Kannada suggests that at every stage of JFM process, participation of women was practically non-existent due to three main points. First, although there was official report on participation of women, the active participation of women was limited to cooking the meals of official staff. Second, the minutes of meeting systematically excluded the views of any women who might have attended the meeting (Kameswari 2002: 98-99). Third, women who were the members of the managing committee did not know anything about JFM. They did not know anything of their being members of the managing committee; nor were they practically concerned about the fact that they have to carry out the conclusions of its deliberations. Furthermore, women often resigned from executive body (EC) of village forest protection committees (VFPCs) as their husbands did not approve them taking part

in public activities; moreover, assault them if they attend the EC meetings (Kameswari 2002).

The other factors found to have deleterious effect on women's participation in JFM were, the lack of access to institutions (Manfre, and Rubin, 2012), skepticism among the forest department officials (Agarwal, 2009), gender stratification (Gupte, 2004), lack of ownership rights (Agarwal, 2010a; Coulilay-Lingani, *et al.*, 2009; Ostrom, 1990; Rocheleau and Edmunds, 1997), gender biases in technology access and dissemination, women's labor or skills constraints, or their lack of sanctioning authority (Bandiaky-Badji, 2011; Lewark, Gerge, and Kermann, 2011; Nuggehalli and Prokopy, 2009; Reed, 2010; Sunderland, *et al.*, 2014), lack of special efforts and inadequate training and orientation of the lower Forest Department staff (Behra, 2011), while (Sarker and Das (2002) blames the policy framework as individual state resolutions and project policies in JFM 'lack clarity regarding the role of women' etc. However, Agarwal (2001) argues that women's participation is influenced mainly by 6 factors. According to the Agarwal (2001) model, women's participation is a function (f) of 6 variables: Women's Participation = f (rules; norms; social preferences; entrenched claims; personal endowments; household endowments). (See also: Coleman, and Mwangi, 2013).

However, it is necessary to notice that the determinants of participation define not only inclusion, but also the grounds for excluding certain groups or individuals (Manfre, and Rubin, 2012). 'Participatory exclusion' can remove people from decision making institutions or create exclusionary practices within participatory institutions (Agarwal 2001). Manfre, and Rubin, (2012), refers to other studies which noted women's exclusion from decision making processes in the forestry sector (Saigal 2000; Agarwal 2001; Gupte 2003, 2004; Benjamin 2010; Buffum *et al.* 2010; Giri and Darnhofer 2010; Sunam and McCarthy 2010). Furthermore, there is a tendency to think of participation as having only positive attributes; that is, having no costs but simply benefits. However, women can face significant costs in terms of time (Manfre, and Rubin, (2012). Manfre, and Rubin, (2012), pointed out that "given the unequal division of household labour, women manage a tightly scheduled day and participating in meetings may be hard to fit in. Moreover, there are risks involved in transgressing the social norms and beliefs that define the terms of participation, including loss of reputation, guilt or shame. For some, challenging norms may lead to public censure, the loss of kinship or social networks, or worse. The institutional efficiency arguments for participation do not consider the high cost exacted from men, women and the communities that take on greater responsibilities." Jeffery et al, (1998) points out "Is it appropriate to expect women who are hard pressed for time to add to their burdens by engaging in forest protection or attending forest protection committee meeting? Should outside agencies feign ignorance of cultural restrictions on women's participation and insist that they become involved?"

Women in Self-initiated CBFM – the Cinderella of Participatory Forest Management!

Research studies on gender in participatory natural resource management in India were confined mostly to the participation of women in JFM but ignored the role of women in large scale self-initiated CBFM systems found in the states of Odisha, Jharkhand and Bihar, except for very few studies (Singh, 2000, Singh, 2001; Siripurapu, 2012) or cursive indication (Jeffery et al., 1998; Kelkar and Nathan 2005; Saxena, 2011) about women in the self-initiated CBFM. As mentioned earlier that research studies on gender thus far were not only confined to participation of women in JFM but also glorified the reasons for failure and non-participation of women in JFM. However, the findings of our preliminary studies on the role of women in self-initiated CBFM in Odisha provided a very different picture.

Our findings also support the earlier studies (Jeffery et al., 1998; Singh, 2000; Kelkar and Nathan, 2005; Agarwal, 2009; Mehra, 2011; Saxena, 2011) which found that women have played an active role in initiating forest protection and in several cases women's committees (*Mahila Samitis*) have been managing the forests in India. How could it be possible for women to take a proactive role and successful in self-initiated CBFM, when the existing literature overwhelmingly suggest that women do not participate in forest management? Is that because researchers have been searching in places where women were either poorly present or absent, like in JFM? Or is that because the earlier studies did not search for places and spaces where women were present (Arora-Jonsson, 2005), like in self-initiated CBFM?

If the findings of our preliminary studies found active participation of women in self-initiated CBFM, then the question is; what was enabling women to take an active role in self-initiated CBFM, but restrained them in JFM? Could the concept of enabling spaces (Agarwal, 2001; Subramaniam *et al.*, 2002; Gupte, 2004; Arora-Jonsson, 2005; Agarwal, 2010a; Giri, 2012; Manfre, and Rubin, 2012), and supporting structures (Kelkar and Nathan 2005; Agarwal, 2009; Desposato and Norrander, 2009; Saxena, 2011; Giri, 2012; Buchy, 2012; Larson 2012; Manfre, and Rubin, 2012; Coleman, and Mwangi, 2013) holds few insights. In the following section we present the definitions of spaces and structures, their relevance to the present context, and share our preliminary study findings.

Enabling Spaces and Supporting Structures in Self-initiated CBFM

Manfre, and Rubin, (2012) suggests that recently, research and policy on gender has started focusing on issues related to women's influence than failure. Which in other words, that efforts are being made to identify the point at which women's participation begins to influence or effect change in institutions. Here, we identify those points of influence as enabling spaces and supporting structures in the context of self-initiated CBFM. Spaces as defined by Subramaniam *et*

al., (2002), "may be horizontally and vertically linked as temporary realms in which women (or other marginalized groups) interact, share, and strategize for action, and build ties."

Structures are the reinforcements surrounding those enabling spaces and supporting them. Argued by the scholars, supporting structures for instance are the policies, quota and leadership positions of women, women's networks, and gender units in forestry departments and better understanding of how power is lived, contested, argued and consolidated (Agarwal, 2001). Likewise, Giri, (2012) and others argue for re-examining forestry programs by assessing benefits/trade-offs, needs and rights, and rights and responsibilities (Buchy and Subba 2003). Agarwal, (2010b) points out that some correctly emphasize structural factors, such as an entrenched gender division of labour and other social norms, and caution against essentializing women as being different or more moral qua women. However, to overcome the traditional cultural barriers of excluding women from public forums, Gupte (2004) suggests that space could be created for women's participation through facilitating tools like the creation of women's self-help groups, conducting separate meetings for women, ensuring a critical mass that emboldens women to speak, recruiting women into the field staff, and small-scale income generating activities for women (Subramaniam *et al.*, 2002).

Saxena, (2011) refers to a study of four villages from Vidarbha Region in Maharashtra, in which Mehra (2011) examined the role of women in local forest governance from the angle of gender equity and benefits from forests and found that there are factors that can facilitate women's active participation such as all-women groups, presence of gender-progressive NGOs, policy back up, etc. Agarwal, (2009) suggests that the proactive component of protection arises from women's participation in the actual process of protection. Agarwal, (2009) further adds, if included in the executive committee (EC), women are likely to be more motivated and better placed to actively participate in protection themselves, by forming a patrol or keeping an informal lookout as they work in the fields. They could also motivate other village women to join or form a patrol group, or simply be more vigilant.

I. Enabling Spaces in the Self-initiated CBFM

Sense of Ownership and Collective Effort

What is particularly heartening about the self-initiated CBFM is, unlike JFM, it was born out of people's own volition, seldom or without any support of the Forest Department. Many forest dependent villages have been protecting the forests all by themselves with an explicit rejection of any government involvement. They have promulgated their own set of rules and regulations which allow no hunting, and are zealously safe guarding their forest patches against illegal felling and encroachments (Khare 1998). Furthermore, the beauty of self-initiated CBFM in Odisha, unlike JFM, is the great diversity that it encompasses.

There is no uniform pattern in motivation, methods, management practices and institutional structure of forest protection initiatives found across the state. While acute scarcity of fuel wood, fodder and small timber has motivated the communities to create their own forests (Behra, 2011) at few places, villagers have protected forest as an economic asset in the other. Furthermore, cultural identity, environmental degradation, or even village pride has been the motivating factor for the initiation of self-initiated CBFM at many places in Odisha (Pattanaik 2002; RCDC, 2004; Sarin 1994a; Sarin 1995; Poffenberger 1995; Sarin 1996b; Vasundhara 1996; Khare 1998; Pattanaik 2002; Sarap and Sarangi, 2009; Vasundhara, 2010).

Saxena, (2011) refers to the studies by Kelkar and Nathan (2005) which found the presence of self-initiated CBFM in India where women have played an active role in initiating forest protection and several cases where women's committees (Mahila Samitis) have been managing forests. In the documentary produced by Vasundhara (2013) on community conservation initiatives, one could witness, when we watch the brave women of one of the community-based forest management villages in Odisha say, "We were losing our forests, it has started getting barren, all of us women, decided to guard the forest ourselves, in that meeting we decided to form the committee, and guard the forest on shift basis." (min: 45:13–45:20). In the same documentary (Vasundhara, 2013) one can also witness the women proudly saying, "This is our forest..., if we don't protect it, it will be destroyed, what can forest department do here? They have become corrupt and handed over the forest to anti-socials, after we took charge, it was saved now." (min: 50:40-50:51).

Our preliminary studies found that forest protection has been initiated by the villagers at all the sample villages as a response to forest degradation which affected their survival and livelihoods. The decrease in forest cover has led to scarcity of forest products vital for their survival. Indisputably, "*livelihood security*" has been the "common factor" and "*contact point*" for the initiation of forest protection at all the sample villages but it is also obvious that different actors played crucial roles to kindle, galvanize and precipitate the entire process. For instance, the elders and community leaders, the village youth, members of the forestry federations or the local NGOs have played a vital role to initiate forest conservation at these villages. Forest conservation was a collective effort of three villages at one of the sample villages (Siripurapu, 2010, Siripurapu and Mishra, 2010). Likewise, Mishra (2010) also found that the women of *Gundalba* village of Odisha have pioneered community-based conservation initiatives (CBCIs) in the area by forming the *Pir Jahania Jungle Surakhya* (*Pir Jahania* Forest Protection) Women's Committee in the year 2000. Mishra (2010) found that women's groups from seven villages along with *Gundalba* village have driven CBCIs successfully to conserve the forest and coastal biodiversity in Odisha. In another study by Ulman and Deo (2013) found that the women of *Gaudadiha* and *Bagdiha* villages were the first to notice and raise an alarm about the destruction of

forests in the name of state promoted eco-tourism project. Ulman and Deo (2013) reported that women took an active role and led the protest against the state promoted eco-tourism project, more than 300 women along with the local youth protested at the eco-tourism project construction site, following which the project has been stalled.

On the other hand, there is a lack of sense of ownership and collective effort of the local communities in the state promoted JFM programme. As Sarap and Sarangi (2009), points out that the JFM committees have been formed on the basis of an administrative order of the Ministry of Environment and Forests (MoEF) of India. There has been a lack of proper participatory process, either at the outset or post-formation: local people's participation in the preparation of the "micro-plan" is generally marginal, as the forester exerts major control over this. In the VSS executive committee and general body meetings, important decisions are taken by elites, including the forester (who is the secretary). Sarap (2007) found that self-initiated groups were found to be relatively more participatory than the forest protection committees (FPCs) formed under the state promoted JFM programme. Pattanaik (2002) points out the disappointing part of the implementation JFM especially in Odisha. Studies on the implementation of JFM in Odisha have found that the state driven JFM programme has either created frustrating hurdles for the local initiatives or, worse still, killed them altogether (Sarap and Sarangi, 2009). Furthermore, the traditional and self-initiated CBFM groups were often not officially recognized under JFM rules, a problem still persistent even after the implementation of the Forest Rights Act 2006. Moreover, in many cases the traditional and self-initiated CBFM groups were forced to change their institutional structure and functioning in order to be officially recognized and receive benefits associated with JFM (Sundar 2000; Khare *et al.* 2002; Mohanty 2006).

Flexibility and Elimination of Opportunity Costs

One of the main reasons cited in the literature for non-participation of women in the JFM meetings was the unsuitable time for meetings when women could not be free from household work (Behra, 2011). Manfre and Rubin, (2012), point out that "given the unequal division of household labour, women manage a tightly scheduled day and participating in meetings may be hard to fit in. The other reason as pointed by Behera and Engel (2005) the main cost of attending JFM meetings is the opportunity cost of time spent at the meetings. The reason for women incurring opportunity cost and hard pressed for time for attending the meetings in JFM is because the meetings are conducted during the day and as per the flexibility of the forest department officials. Women on the other hand will be busy with their daily household chores and income generation activities during the day and it is impossible for them to sacrifice household chores and income generation activities for attending the JFM meetings.

Interestingly, the women in the self-initiated CBFM villages in Odisha could overcome such taxing impediment

by adopting a simple, yet, effective solution which is also a part of their traditional system. The villagers (women) usually convene the general body and EC meetings related to the village and forest governance at night after completing all their daily activities (Vasundhara, 2013, min: 55:00–55:40). Such flexibility helps them in eliminating the opportunity costs and emancipates the women from the compulsion of sacrificing their day time daily chores and income generation activities. This arrangement not only allows the villagers to carry out their daily activities necessary for livelihood but also enables them to communally discuss and take important decisions related to forest governance (Siripurapu, 2010, Siripurapu and Mishra, 2010; Siripurapu, 2012).

Sharing of Patrolling Duties

Saxena (2011) suggests that if included in the EC, women are likely to be more motivated and better placed to actively participate in protection themselves, by forming a patrol or keeping an informal lookout as they work in the fields. They could also motivate other village women to join or form a patrol group, or simply be more vigilant. Agarwal, (2001), Martin and Lemon, (2001) and Agrawal and Chhatre, (2006) found that increased involvement of women improves the control of illegal activities. Jeffery et al., (1998) in their study found that in *Mayurbhanj* District of Odisha, there is an all-woman patrol group and the executive committee comprises entirely of women.

Jeffery et al., (1998) also found that, unlike men's patrols, all-woman patrols can prevent other women from entering the forest without being accused of molestation or rape. They can also stop a man from stealing or felling a tree by encircling him until help arrives, as he would not try to break through the ring for fear of accusations of impropriety. In addition, when the protected forest patch is near to the village men and women sometimes keep an eye on it. Jeffery et al., (1998) for example, the people of Tilemal, another Sambalpur village, have not appointed a watchman. The women who go to the forest to collect minor forest produce or fuelwood can watch for offenders without formally patrolling. In another instance of Singh, (2000) found that at *Baghamunda* village in Odisha, the *Mahila Samiti* (women committee) took over the forest protection and management responsibility in 1998 after the local youth club proved to be ineffective. The *Mahila Samiti* deploys five members on a rotational basis for guard duty every day. The women combine their guard duties with household responsibilities of collecting fuel-wood, fodder and other forest products to meet their livelihood needs.

Likewise, our preliminary study found that although, women at the sample villages are not a part of the traditional village governance systems but their role in the natural resource governance systems is phenomenal! Social fencing has been adopted as a strategy to protect the forest and to deter the perpetrators at all the sample villages. Villagers patrol the forest in groups; usually in a group of 04 individuals daily on rotational basis. These individuals are

locally called as *Palia*. Except *palias* others are not allowed to wander in the forest. If anyone other than the "*palias*" is found in the forest, they are brought before the committee for further action. The forest patrolling duties are assigned to the individuals on a rotational basis. A baton is used for handing over the patrolling duty hence; this arrangement is locally called, "*Thengapali*" (Siripurapu, 2010, Siripurapu and Mishra, 2010; Siripurapu, 2012).

Forest patrolling was earlier confined to day at all the nine sample villages but the villagers were compelled to extend it round the clock due to increase in the timber theft incidents at nights. Now the patrolling duties are shared among the men and the women. Women usually patrol the forest by the day and men patrol the forest at night. Women were found to have assumed a crucial status in the management of natural resources, which reflects at all the nine sample villages. One of the most remarkable and historic events took place at one of the sample villages, when the women challenged around 200 illegal loggers and successfully foiled their efforts and recovered the illegally felled timber. When forest protection efforts came to a stand-still following a dispute among men, women took over forest patrolling and protection responsibility at two of the sample villages. Women have been actively involved in forest protection at all the nine sample villages (Siripurapu, 2010, Siripurapu and Mishra, 2010; Siripurapu, 2012).

Exclusive Women Forums

Gupte (2004) suggests, in order to overcome the traditional cultural barriers of excluding women from public forums, space could be created for women's participation through facilitating tools like the creation of women's self-help groups, conducting separate meetings for women, ensuring a critical mass that emboldens women to speak, recruiting women into the field staff, and small-scale income generating activities for women (Subramaniam et al., 2002). Manfre, and Rubin, (2012) suggests that, although women have less access than men to the institutions that govern forest management and use. Yet, enhancing women's participation in decision making committees in community forest institutions has been shown to improve forest governance and resource sustainability (Agarwal 2009, 2010). Research also shows that when there are women in community forest user groups, and in decision making positions in those groups, the outcomes are better (Acharya and Gentle 2006). For instance, the *Bharaki-Urgam* Van Panchayat was established in 1951, is one of the richest in *Chamoli* district of *Uttarakhand* with a cash reserve of INR 2,93,085 as on May 26, 1998 and a woman *grampanch* is at the helm of affairs (Hazra, 2002). Women's participation was also found to mitigate capture of benefits by elites during decentralization and to improve access to district level budgeting processes (de Vries and Sutarti 2006; Syamsuddin et al. 2007; Komarudin et al. 2008).

Interestingly we found in our preliminary study the presence of exclusive women executive committees at three out of the nine sample villages. All the three executive

committees have women as the chairperson and secretary. Even the decision making power is vested with the women which is remarkable! The number of women in the executive committees at rest of the sample villages is either 03 or 04. Men at one of the sample villages said: “we have realized the importance of involvement of women in the entire process and emphasized, that unless women are educated and sensitized, nothing is going to be fruitful. Women play a major role in our society when it comes to livelihoods which include collection, processing and sale of minor forest products (MFPs). Hence, their active participation and involvement should be ensured in forest protection efforts.” (Siripurapu, 2010, Siripurapu and Mishra, 2010; Siripurapu, 2012).

II. Supporting Structures in the Self-initiated CBFM

Forest Federations and Networks

Buchy (2012) refers to the influence of FECOFUN, a nationwide forest federation network in Nepal, there is no doubt that networking at the national level is a must to strengthen social movements. According to (Buchy, 2012) forest networks play an important role in balancing power through advocacy and in giving local people a voice, and serve as an important space for information sharing and dissemination, and a source of capacity building for members (Borgoyary, 2006). Such a federation can also be a role model by developing and implementing within the organization itself a gender policy. The community-based forest network of Nepal integrates the issues of social equity and poverty reduction in its work. The network encourages the participation of women and marginalized groups and works closely with the member community forest user groups to help them design and deliver programs for the poor (Khanal, 2007). Interestingly we found in our preliminary study about the presence of one such active state level self-initiated forest federation in Odisha. The Participatory Forest Management Networks of Odisha, also known as Odisha Jungle Manch (OJM), is a network of community based forest protection groups formed into a federation on the self-initiative of communities themselves (Sarin *et al.* 2003; Borgoyary, 2006; Raju, 1998; Siripurapu, 2013).

Our preliminary study shows that local civil society organizations and forest federations have played a vital role in influencing and motivating the local communities to initiate forest protection. Individuals such as the *Convener of Deogarh Zilla Jungle Manch*, played a vital role and motivated the villagers at two of the sample villages to initiate as well as resume the otherwise abandoned forest conservation efforts at both the villages. Forest federations such as *Zilla Jungle Mancha of Deogarh*, and *Maa Maninag Jungle Surakhiya Parishad (MMJSP) of Ranpur*, helps the villagers in dealing with forest related conflicts, acts as an interface between villagers, forest department, other government agencies, NGOs and politicians. Members of the forest federation have been playing a vital role in resolving

issues and conflicts associated with the forest. They conduct meetings regularly to create awareness among the villagers and keep them abreast with current affairs related to forest policies and conservation. It is the presence of these federations that helped the women in Odisha to take active participation in forest conservation. These networks and political formations also provide an opportunity for creating institutional space for women's involvement at various levels of decision-making / influencing, policy advocacy, and interface with external organizations. Parallel women's networks are also a useful means to bring forth women's concerns and demands. One of the remarkable initiatives is the *Himawanti*, a federation of women's groups working on forest rights issues, which is an example of effective women's networks playing crucial role in advocating for women's rights (Singh 2001).

Unexpected Opportunities

The SC and ST (Prevention of Atrocities) Act, 1989, in India

‘Scheduled castes’ (SCs) and ‘Scheduled tribes’ (STs) are groups listed in a special schedule of the Indian Constitution. In recognition of their history of being socially oppressed (scheduled castes were historically considered ‘untouchables’) they are eligible in India for affirmative action measures in education, employment, and political office (Government of NCT of Delhi, 2014). In South Asia (including Nepal) many scheduled castes also self-designate themselves as ‘*dalits*’, literally meaning oppressed (Agarwal, 2010a). Furthermore, the well-established culture and traditional values in association with the strong legal protection provided to the Schedule Caste (SC) and Schedule Tribes (ST) through the provisions of the SC and ST (Prevention of Atrocities) Act, 1989 of India, have also provided these women to successfully defend themselves from a potential attack by the timber mafia (usually men) thereby, providing them the advantage over male counterparts in successfully foiling the conflict with outside men. Studies have shown that women resort to vicious abuses and accusations of attempted molestation, sometimes filing police cases against male watchers or even physically attacking them being prevented from collecting fuelwood; communities like the *Lodhas* have taken up armed fights with traditional weapons to retain access to their source of livelihood (Singh 1996; Poffenberger et al. 1996; Sarin and Sarthi 1994; Sarin 1994a; 1994b; 1996a; Singhal 1995a; 1995b). The awareness among women about the power of the above said Act and the inability of men to stand against local traditions and law provided these women the power needed to confront the adversaries with added courage and confidence. Although not reported at any of the nine sample villages, nevertheless, it was learned during the informal discussions with the local NGOs and villagers that in general, women around the sample villages of Odisha often threaten the forest guards of filing an attempted molestation case against them whenever they restricted them from collecting

forest products from the forest areas.

3. Conclusions

The preliminary results of the study were based upon the villages that were predominantly Schedule Tribe (ST) communities. It is necessary to notice the fact that the societies of the ST communities are more equal in terms of gender. Women in the ST societies enjoy more freedom and equal rights when compared to the mainstream Indian society. The sample villages have not claimed their ownership rights on the forest land when this study was conducted. Hence, the impact tenure security as a supporting structure for enhanced women participation could not be established during this study. As these findings were preliminary, we consider that there is a need for conducting an in depth study on the role of women especially in the post Forest Rights Act 2006 scenario.

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