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The Hidden Side Of Group Behaviour: A Gender Analysis Of Community Forestry Groups

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Communities managing common pool resources, such as forests, constitute a significant example of group functioning. In recent years community forestry groups have mushroomed in South Asia. But how participative, equitable and efficient are they? In the short term, many have done well in regenerating degraded lands. Are they, however, performing at their best potential, and will they sustain? Equally, are the benefits and costs being shared equitably between rich and poor households and between women and men?

The paper demonstrates that seemingly successful groups can cloak significant gender exclusions, inequities and inefficiencies. It argues that these outcomes can be traced especially to rules, norms, perceptions, and the personal and household endowments and attributes of those participating. Reducing the gender bias embedded in these factors would depend on women's bargaining power with the State, the community and the family. The paper outlines the likely determinants of women's bargaining power in these arenas, and analyses ground experience in terms of progress made and dilemmas encountered

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THE HIDDEN SIDE OF GROUP BEHAVIOUR: A GENDER ANALYSIS OF COMMUNITY FORESTRY GROUPS

I. INTRODUCTION[1]

Rural community forestry groups, managing State or community-owned forest resources, represent one of the most rapidly growing forms of collective action in the developing world. They thus provide an especially useful study in how groups function. This paper focuses on South Asian experience to illuminate how such groups, ostensibly set up to operate on principles of cooperation, and meant to involve and benefit all sections of the community, often effectively exclude significant sections, such as women. While seemingly participative, equitable and efficient, they cloak substantial gender-related inequities and inefficiencies. The chapter also analyses what underlies such unfavourable outcomes and how the outcomes could be improved.

The interactive effect of one outcome on another is examined as well. For instance, excluding women (often the principal users of community forests) from a group's decision-making bodies could have a range of negative efficiency fallouts, such as the framing of inappropriate or inequitable rules which are difficult to enforce. I analyze these issues here mainly from a gender perspective, since they typically cut across class/caste divisions. Where relevant, the interplay of class/caste with gender, in defining outcomes for different categories of women, is also outlined.

The paper argues that the outcomes of group functioning are determined especially by rules, norms, and perceptions, in addition to the household and personal endowments and attributes of those affected. All these factors can work to the disadvantage of women, both separately and interactively. To what extent they can be changed in women's favour will depend on their bargaining power *vis-a-vis* the State, the community, and the family. The factors that are likely to affect women's bargaining power in these three arenas are also spelt out. While the context here is community forestry, the overall conceptual framework would be relevant to understanding gendered dimensions of group functioning in a number of other contexts as well.

The paper is based largely on exploratory fieldvisits that I made during 1998-99 to 87 community forestry sites across five states of India (Gujarat, Karnataka, Madhya Pradesh, Orissa, and the Uttar Pradesh hills) and two districts (Kaski and Dang) of Nepal.[2] This is supplemented by existing case studies and some earlier visits to selected sites in a few states. Information was obtained mostly through unstructured interviews with villagers, at times conducted with women and men in separate groups, at other times jointly, in addition to individual interviews with key informants, especially office bearers in the executive committees of the community forestry groups.

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[1] This is a shorter and updated version of a paper (Agarwal, 2000A) presented at the Conference on 'Group Behaviour and Development', held at UNU/WIDER, Helsinki, September 1999. I am most grateful to Judith Heyer for her comments on the present version.

[2] In India, the term `state' relates to the biggest administrative divisions within the country and is not to be confused with `State', used throughout in the political economy sense of the word. In Nepal the biggest administrative divisions are `districts'. In India, districts are smaller divisions within states.

II. BACKGROUND

For rural households in South Asia, forests and village commons have always been important sources of basic necessities and supplementary livelihoods, providing firewood, fodder, small timber, and various non-timber products. Especially for the poor and women who own little private land, they have been a critical part of survival. In India's semi-arid regions in the 1980s, the landless and landpoor procured over 90% of their firewood and satisfied 69-89% of their grazing needs from common pool resources (Jodha, 1986). In that period, firewood alone provided 65-67% of total domestic energy in the hills and desert areas of India and over 90% in Nepal as a whole (Agarwal, 1987). Today, firewood remains the single most important source (and for many the only source) of rural domestic energy in most of South Asia, and is still largely gathered, not bought.[3]

Over the decades, however, people's ability to fulfil such needs has been eroding with the decline in communal resources, due both to degradation and to shifts in property rights away from community hands to State and individual hands. The formation of community forest management groups in recent years represents a small but notable reversal in these processes of statization and privatization, toward a reestablishment of greater community control over forests and village commons. Indeed there is now a mushrooming of community forestry groups (CFGs) in South Asia.[4] Some of these groups are State-initiated, others self-initiated by communities, and yet others catalyzed interactively by non-governmental organizations (NGOs), villagers, and local state officials.

In India, these CFGs include: (a) the groups formed under the State-initiated Joint Forest Management (JFM) programme launched in 1990, in which village communities and the government share the responsibilities and benefits of regenerating degraded local forests; (b) self-initiated groups, started autonomously by a village council, youth club or village elder and concentrated mainly in Bihar and Orissa; and (c) groups with a mixed history, such as the *van panchayats* or forest councils in the hills of Uttar Pradesh (UP) initiated by the British in the 1930s. Some of them have survived or been revived by NGOs. JFM groups are the most widespread, both geographically and in forest area, and over time the programme is expected to include all Indian states. To date, virtually all Indian states have passed JFM resolutions. These allow participating villagers access to most non-timber forest products and to 25-50% (varying by state) of any mature timber harvested. There are some 36,000 JFM groups today, covering 10.2 million hectares (mha) or 13.3% of the 76.5 mha administered as forest land (Bahuguna 2000). In addition, there would be a few thousand groups of the other types.

Nepal's community forestry programme launched in 1993,is largely State-initiated. Here the State transfers even good forest land to a set of identified users who form a forest user group (FUG) and who are entitled to all of the benefits.[5] In 1996, there were 5356 FUGs in 1996 covering 0.36 m ha or 6.7% of Nepal's 5.8 m ha of total forest land (Joshi, 1996). By 2000, the number had increased to 9100 FUGs involving one million households and covering 11.4% of forest land (Government of

[3] For India, see Natrajan (1995).
[4] I will be using CFG as a general term to cover all types of community forestry groups.
[5] The government, however, retains the right to reclaim any forests seen to be mismanaged by the FUGs.

Nepal, 2000), the target being 61%. In both India and Nepal, NGOs can act as catalysts or intermediaries in group formation and functioning.

However, unlike the old systems of communal resource management, which typically recognized the usufruct rights of all village residents, the new CFGs represent a more formalized system of rights. Typically these rights are based either on membership (as in the state-initiated groups), or on rules specified by selected (often self selected) community members (as in the self-initiated groups). In other words, membership, or some other formal system, is replacing village citizenship as the defining criterion for establishing rights in the commons.

This raises some critical questions, such as: how are the CFGs performing in terms of participation, equity and efficiency from the perspective of women, especially the poor? Are the benefits and costs being shared equitably, or are they creating a system of property rights in communal land which, like existing rights in privatized land, are strongly elite and/or male centered? The section below focuses on these concerns.

III. OUTCOMES: PARTICIPATION, EQUITY AND EFFICIENCY

In terms of forest regeneration, many CFGs have had notable success. Often all that is involved is restriction of entry, and protection, although, in some cases, replanting is also undertaken. Even with simple protection, natural revival is often rapid if the rootstock is intact. Within five to seven years of protection, many of the severely degraded tracts in semi-arid India have been covered with young trees; and areas with some vegetation, but notably declining, show encouraging signs of regeneration. In fact in most ecological zones, as a result of the CFG initiatives, beneficial results are noted, and in a number of cases incomes and employment are reported to have increased,[6] seasonal outmigration fallen,[7] the land's carrying capacity improved, and biodiversity enhanced.[8] Some villages have even received awards for conservation (Shah and Shah, 1995; my fieldvisits during 1998-99).

Viewed from a gender perspective (and especially the perspective of poor women) however, these results look less impressive on several important counts: effective participation; equity in the sharing of costs and benefits; and efficiency in functioning.

3.1 Participation

In both India and Nepal, the state-initiated groups broadly have a two-tier organisational structure, consisting of a general body with members drawn from the whole village and an executive committee (henceforth called EC) of some 9-15 persons. Typically the general body meets once or twice a year and the EC meets about once a month. Both bodies, interactively, define the rules for forest use and benefit sharing, the structure of fines for rule violation, the method of protection (e.g, guards, patrol groups, etc.), and so on. Which set of persons have a voice in the general body and the EC

[6] See, e.g., Raju et al. (1993), Kant et al (1991), and SPWD (1994).
[7] See, Viegas and Menon (1993) and Chopra and Gulati (1997).
[8] Raju, et al. (1993); Arul and Poffenberger (1990); also my fieldvisits in 1995 and 1998-99.

has a critical bearing on how well these organisations function, and who gains or loses from them.

Women's effective participation in CFG decision-making would require not only that they become members of the group (the general body, the EC, etc); but that they attend and speak up at group meetings, and (at least some of the time) are able to ensure that decisions are in their interest. Such participation can be seen as important both in itself, as an indicator of democratic institutional functioning, and for its effect on cost and benefit sharing and efficiency. To what extent do women in general, and poor women in particular, so participate?

(a) Participation in management

Women usually constitute less than 10% of the general bodies in most JFM groups;[9] they are usually absent in the self-initiated groups;[10] and are few or none in the *van panchayats.*[11] A study of 50 *van panchayats* found that only 9 had any women members (Tata Energy Research Institute, 1995). Their presence in Nepal's FUGs is similarly sparse. A study of seven FUGs in eastern Nepal found that only 3.5% of those recorded as users in the FUGs were women (Dahal, 1994: 78).

In India, the eligibility criteria for membership in the JFM general body and EC vary by state. Eight out of the 22 states for which there is informatioin allow general body membership to only one person per household. This is inevitably the male household head. In 8 other states, as a result of amendments in the initial orders, both spouses, or one man and one woman, can now be members, but this still excludes other household adults. Only three states allow membership to all village adults. In the self-initiated autonomous CFGs, the customary exclusion of women from village decision-making bodies has been replicated. In Nepal's FUGs, again, the household is the unit of membership, and in male-headed households it is the man's name that is entered in the membership list (Seeley, 1996).

Without being CFG general body members, women usually hear little about what transpires at meetings. Many women complain:

> Our husbands don't tell us about meetings. They simply say they have a meeting and go when the watchman brings around the notice for the meeting (woman to author, Five village mouza, Orissa, 1998).
>
> When we ask them what happened at the meeting, they say: what will you gain by knowing? (women to author, Five village mouza, Orrisa, 1998).
>
> Typically men don't tell their wives what happens in meetings. Even if there is a dispute about something, they don't tell us; nor do they volunteer information about other matters (women to author, Kheripada village, Gujarat, 1999).

Women's representation in the ECs is also typically low, although there is some variation by context.

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[9] Roy et al (1992), Guhathakurta and Bhatia (1992), and Narain (1994); also my fieldvisits 1998-99.
[10] Kant et al. (1991), Singh and Kumar (1993), and my fieldvisits 1998-99.
[11] Sharma and Sinha (1993), Tata Energy Research Unit (1995); also my fieldvisits in 1998-99;

In a study of 20 JFM groups in West Bengal (east India) 60% had no women EC members, and only 8% of the 180 EC members were women. Also landless families, while present in most general bodies, were barely represented in the ECs (Sarin, 1998). In many states, recent JFM resolutions require the inclusion of women in the EC, ranging from a minimum of 2 or 3 to one-third women, but I found that the women so included were rarely chosen by other women as their representatives. Sometimes male EC members chose the women in their absence and even without consulting them. Such women are seldom active or effective. In Nepal again, women have only a nominal presence in the ECs. Those who join are usually poorly informed of their FUG's activities (Upadhyay and Jeddere-Fisher, 1998); some are even unaware that they are EC members (Moffatt, 1998: 42).

Whether from a lack of awareness, or the constraints discussed later, only a small percentage of the women who are general body or EC members usually attend the meetings. If they do attend they rarely speak up, and if they speak they find their opinions are given little weight.

> What is the point of going to meetings. We would only sit silently (women to author, Panasa Diha village, Orissa, 1998).
>
> Men don't listen, except perhaps one or two. Men feel they should be the spokespersons (woman to author, Garbe Kuna village, Kaski district, Nepal, 1998).
>
> They did not listen to me, even when I spoke up (woman EC member to author, Ghusra village, Dang district, Nepal, 1999).
>
> I attend *van panchayat* meetings, but I only sign, I don't say much. Or I say I agree (woman *van panchayat* member to author, Sallarautela village, UP hills).

Having a voice in the EC is important since this is the site for discussions and decisions regarding many critical aspects of CFG functioning. As matters stand, women are not party to many crucial decisions. An analysis of JFM decision-making in 5 Gujarat villages revealed that all major decisions on forest protection, use, distribution of wood and grass, and future planning, were taken by men. The only joint decisions with women were those concerning tree nurseries (Joshi, 1998). Women are also often left out of the CFG teams that go on 'exposure' visits to other sites, or that receive technical training in new silviculture practices.

Within this rather stark scenario, there are some contrasting, although atypical, examples of all-women CFGs and mixed CFGs with a high female presence. All-women CFGs, for instance, are found especially in the UP hills and parts of Nepal where there is high male outmigration, and a scattering of them have emerged in other regions, catalyzed by a local NGO, a forest official, or an international donor.[12] There are no consolidated figures for India, but in Nepal, in 2000, all-women FUGs constituted less than 3.8 % of all FUGs, controlling 11.2% of all FUG forest land. They typically had very small plots of largely barren land needing tree planting: 50% had 10 ha or less (and seldom over 50 ha), while mixed FUGs commonly controlled a few hundred hectares and

[12] E.g., Mukerjee and Roy (1993), Correa (1997), Adhikari et al (1991), Mansingh (1991), Regmi (1989), Singh and Burra, 1993), and Raju (1997); also my fieldvisits in 1998-99.

usually of the natural forest.[13] Similarly, mixed groups with a high female presence (say 30% or even 50% women in the general body) are found only in selected pockets, as in parts of Gujarat and West Bengal.[14]

(b) Participation in protection

Despite their limited presence as formal members, many women still play an active role in protection efforts.

In formal terms, protection of the bounded forest area is usually done either by employing a guard, with CFG members contributing the wage, or by forming a patrol group from among the member households. In terms of gender composition, the typical pattern is to have a male guard or an all-male patrol. These two methods characterized 45% and 18% respectively of the 87 sites I visited. Only a small percentage of patrols were constituted by both men and women, or by women alone, and there was a rare female guard. Occasionally, there are shifts from all-women to all-men patrols, and vice versa. More commonly, women patrol informally. In some villages of Gujarat and the UP hills, they have formed separate informal protection groups parallel to men's because they feel men's formal patrolling is ineffective.

Women's informal vigilance improves protection in important ways. In most villages I visited, women told me that they had apprehended intruders both from other villages and from their own, and that when they caught women intruders they sought to persuade them not to break the rules. In fire fighting, likewise, women join the men. In several instances, the forest was saved only due to women's alertness.

On the one hand, therefore, most women are excluded from CFG membership and management; on the other hand, many women contribute in substantial ways to protection efforts, indicating their stake in forest regeneration. However, women's limited involvement in the decision-making process has implications for both equity and efficiency.

3.2 Equity

How equitable are the CFGs in the sharing of costs and benefits?

(a) Cost bearing

The costs of forest protection are broadly of two types: those associated with protection and management and those associated with forgoing forest use due to closure. The former would include costs such as membership fees, the forest guard's pay, the opportunity cost of patrolling time, and so on -- costs largely borne by men. The latter would include the opportunity cost of time spent in finding alternative sites for essential items such as firewood and fodder, other costs (identified below) associated with firewood shortages, the loss of livelihoods based on non-timber forest

[13] Calculated from figures given in Government of Nepal (2000).
[14] Narain (1994), Viegas and Menon (1993); also my fieldvisits in 1998-99.

products, and so on. These types of costs fall largely on women.

Consider the effects relating to firewood collection. In many villages, women have been barred from collecting even dry twigs. Where the land was barren anyway this caused no extra hardship. But where earlier they could fulfil at least part of their needs from the protected area, they are now forced to travel to neighbouring sites, involving additional time, energy, and the risk of being caught and fined.[15]

In the early years of JFM, Sarin (1995) had noted that in some protected sites in Gujarat and West Bengal, women's collection time for a headload of firewood had increased from 1-2 hours to 4-5 hours, and journeys of half a kilometer had lengthened to 8-9. In some households, women were compelled to take their daughters along, spending over six hours a day to walk five times farther, for the same quantity of fuelwood (Shah and Shah, 1995). Over time this could negatively affect the girls' education. In Pingot village (Gujarat), women, when asked about a recent award for environmental conservation conferred on the village, expressed only resentment: 'What forest? We used to go [there] to pick fuelwood, but ever since the men have started protecting it they don't even allow us to look at it!' (Shah and Shah, 1995: 80).

The picture has not changed dramatically since. Of the 87 CFGs I visited in 1998-99, firewood was available in 80. Of these 45 (60%) had banned firewood collection, with 21 not opening the forest at all and 24 opening it for a few days annually for drywood collection and/or cutback and cleaning operations. The remaining CFGs allowed some collection, usually only of fallen twigs and branches. Even after years of protection, women thus reported a persistence of firewood shortages in most of the villages I visited in Gujarat, the UP hills, Karnataka, parts of Madhya Pradesh bordering Gujarat, and in the Kaski and Dang districts of Nepal. The exceptions were some parts of Orissa, Karnataka and Madhya Pradesh with thicker forests, where protection had increased the firewood supply.

Some common responses by the women are given below:

> We go in the morning and only return in the evening. Since the end of the rainy season, we have been going every day. I go myself and so does my daughter. Earlier too there was a shortage but not as acute (woman EC member to author, Kangod village, Karnataka, 1998).
>
> It is women who need the forest, they need firewood to cook. ... Men preach to women about not cutting trees, but what can women do? They cannot cook food without firewood and they cannot collect firewood from other places (group discussion with women in Kabhre Palanchok, Nepal, cited in Hobley, 1996: 147).

Women try to substitute other fuels where they can. A few are able to switch to biogas (essentially where there is an effective NGO programme), but most turn to twigs, dung cakes, agricultural waste, or even dry leaves. Fire from these latter fuels needs careful tending which increases cooking time and prevents women from simultaneously attending to other work. In a number of villages

[15] Sarin (1995), Agarwal (1997a), also my fieldvisits in 1998-99.

women report economising on fuel by forgoing a winter fire for space heating (even in the subzero temperatures of the Nepal hills), not heating winter bath water or heating it only for husbands, and so on.

Usually women from both middle and poor peasant households report such domestic energy problems, since even in the former, firewood is typically gathered and not purchased. Most do not have many trees on their private land. Women of landless or landpoor households are, however, the worst off, since without private land they also have no crop waste or trees of their own, and few cattle for dung.[16] In fact, forest closure has necessitated many to sell off much of their animal stock. As a poor woman in Khut village (UP hills) told me: 'We don't know in the morning if we will be able to cook at night'. Another added: 'Our bahus (daughters-in-law) have to undertake a full day's journey to get a basket of grass and some firewood from the Reserve Forest.' Her daughter-in-law pitched in: 'But even in the Reserve Forest you can be caught by the forest guard. I paid Rs 20 as a fine to retrieve my axe, and all I was doing was cutting a fallen log.' Similar concerns were expressed in several field sites in Nepal. For example, in Tallo Goungonda village (Kaski district) a group of poor women told me: 'We go at night and take a stick to find our way in the dark. Other women have gas and stoves, but we are poor, so we have to steal.'

Similarly, since grazing is usually banned, households have to procure fodder in other ways and stallfeed animals. Since cattlecare is usually women's responsibility, if the household cannot afford to buy fodder women have to spend additional time in finding other sites for fodder and in stallfeeding. In parts of Gujarat women report an extra workload of 2-3 hours due to stallfeeding alone. Where some of the better-off households have replaced their goats with stallfed milch cattle, it has further increased women's labour.

As the forests have regenerated, at best these hardships have been alleviated; they have not disappeared. Firewood shortages, for instance, continue to be reported even 8-10 years after protection in many regions, despite the quite large areas being protected. In nine of the 19 Gujarat sites I visited, the protected area exceeded a hundred hectares. By one estimate, some Gujarat villages have many times the per capita forest land needed for self-sufficiency in fuel and some other basic needs (Shah, 1997). Even allowing for overestimation, it appears likely that more can be extracted sustainably than is currently being allowed. In many places, therefore, the scarcities that women are experiencing appear to have less to do with aggregate availability than with women's limited bargaining power in the community.

(b) Benefit sharing

There are also gender inequities in benefit sharing. In some cases the benefits are not distributed at all. Among Orissa's self-initiated groups, for example, a number of all-male youth clubs have banned entry into the local forest and have been selling the wood (obtained from thinning and cleaning operations), as well as other forest produce. The quite substantial funds so obtained have in many cases been spent on an annual religious festival (my fieldvisit, 1998), or on a clubhouse or club functions (Singh and Kumar, 1993).

[16] See also Jodha (1986) on differences between landed and landpoor rural households in India, in their relative dependence on the commons for firewood and fodder.

In other types of CFGs also, the money is normally put in a collective fund to be used as the group deems fit. Women typically have little say in how it is used:

> The money obtained from grass and firewood is kept by them in their fund. We have not seen one penny of it. We buy grass, which is auctioned by bundles (women to author, Ghusra village, Dang district, Nepal, 1998).

Where the CFGs distribute the benefits, say in the form of firewood or grass, as in some of the JFM groups, women of non-member households usually receive none, since entitlements are typically linked to membership. Often these are poor households whose members have to migrate for work, or are out all day on wage labour and cannot easily contribute to patrolling or the guard's wages.

Even in member households usually men alone receive the benefits directly, either because only they are members, or because entitlements are on a household basis, so that even if both spouses are members they get only one share. Of course women can benefit indirectly in some degree, say if the benefits are in kind (such as firewood); or where member households continue to enjoy the right to collect dry wood or leaves from the protected area.[17] But where the CFGs distribute cash benefits, money given to men does not guarantee equal sharing, or even any sharing, within the family. In fact, outside the context of forest management there is substantial evidence of men in poor households spending a significant percentage of their incomes on personal items (tobacco, liquor, etc.), with women spending almost all their incomes on basic household needs.[18] Not surprisingly, this pattern is repeated in the context of CFGs. In many cases, the men spend the money on gambling, liquor, or personal items.[19]

Women are usually aware that unless they receive a share directly (rather than through male members), they may get nothing. When asked their views on this at a meeting of three JFM villages in West Bengal, in which both women and men were present, all the women wanted equal and separate shares for husbands and wives (Sarin, 1995). Being members in their own right would be one way by which women could get the benefits directly, provided that the individual and not the household was the unit of entitlement.

Inequities also arise because people differ in their needs, or in their ability to contribute or to pay. Broadly, three types of principles/norms can underlie the distribution of forest products: market-determined, contribution, and need. While seemingly neutral, these distributive principles have notable gender and class implications. The market principle (or willingness to pay), embodied in practices such as the auctioning of grass to the highest bidder, tends to be both unequal *and* inequitable, since those that cannot afford to pay have to do without, even if they have contributed to protection either directly (say by joint patrolling), or indirectly by deferring forest use. Since rural women, even of rich households, tend to have less access to financial resources than men, market-determined distribution through auctions tends to be both anti-poor and anti-women. Distribution according to contribution, say, by giving each household that contributes to protection an equal

[17] Kant et al. (1991), ISO/Swedforest (1993), and Arul and Poffenberger (1990); also my fieldvisits in 1998-99.
[18] See, Mencher (1988) and Noponen (1991) for India.
[19] Guhathakurta and Bhatia (1992), and my fieldvisits in 1998-99.

number of grass bundles, would be equal but inequitable for those more dependent on the commons for grass, such as the poorer households and women in general. Moreover, women's ability to contribute could be circumscribed, since even if they want to join patrol duty, norms of seclusion may prevent them from doing so. Where distribution embodies some concept of economic need, such as where poor women are given exclusive use rights to a special grass patch, in addition to grass bundles as above, the distribution is unequal but relatively more equitable, in that those most in need get more.

In my fieldvisits I found that contribution was the most common criterion underlying distribution. In most villages, all those who were CFG members and had contributed toward protection had equal claims to the fuelwood or grass cut during the forest opening days. There were, however, occasional cases of auctioning in some villages, such as the auctioning of grass in the UP hills and Nepal, and the auctioning of other forest produce among some of the self-initiated groups in Orissa. Seldom did economic need guide distribution. Hence for poor women, in particular, even with an equal distribution of grass or firewood the outcome tended to prove inequitable.

In recent collective action literature, questions of equity have been raised largely in terms of whether existing economic and social equality (or its lack) affects the possibility of collective action and efficient institutional functioning.[20] There has been a relative neglect of whether or not the *outcomes* of collective action (in terms of, say, cost and benefit sharing) are equitable, and how those outcomes impinge on the sustainability of collective action. As argued above, equitable outcomes need to be seen as important in themselves, for evaluating institutions governing the commons, quite apart from the links between equity and efficiency (as between participation and efficiency) that are elaborated below.

3.3 Efficiency

Women's lack of participation in CFG decision-making, and gender inequities in the sharing of costs and benefits from protection, can have a range of efficiency implications. As a result, some initiatives may fail to take off at all; others may be unable to sustain the gains, or there may be a notable gap between the gains realized and those realizable (in terms of resource productivity and diversity, satisfying household needs, enhancing incomes, etc.). Inefficiencies could stem from one or more of the following problems (see also, Agarwal, 2000B).

First, there are rule violations. In almost all the villages I visited there were at least some cases of violation, and at times this was a frequent occurrence. Violations by men are usually for timber for self-use or sale (the latter in areas with commercially valuable trees). Violations by women are typically for firewood. Where a CFG bans collection without consulting the women or addressing their difficulties, many are under great pressure to break the rules, given their daily need for fuelwood. Sometimes, in situations of acute need, women enter into persistent altercations with the guard. In one Gujarat village the guard threatened to resign as a result. Only then did the EC address the issue and agree to open the forest for a few days annually.[21] In Agrawal's study of a *van*

[20] See e.g. Ostrom (1990), Bardhan (1993), and Baland and Platteau (1996, 1999).

[21] E.g., Shah and Shah (1995), Singh and Kumar (1993), and Agarwal (1997a); also my field interviews during 1998-99.

panchayat village, women constituted 70-80% of the reported offenders between 1951 and 1991, many of them belonging to poor and low caste households.

A second source of inefficiency lies in the lack of adequate information sharing with women. Information about the rules (especially membership rules), conflicts encountered, or other aspects of forest management, does not always reach the women (my fieldvisits, 1998-99). Similarly, male forest officials seldom consult the women or seek their feedback when preparing micro-plans for forest development. Some women hear about the plans through their husbands, others not at all (Guhathakurta and Bhatia, 1992). These communication problems can prove particularly acute in regions of high male outmigration.

Third, inefficiencies can arise if the male guard or patrol fails to notice resource depletion. During my 1995 fieldvisit to Gujarat, a women's informal patrol in Machipada village took me to their patrol site, and, pointing out the illegal cuttings which the men had missed, noted: 'Men don't check carefully for illegal cuttings. Women keep a more careful lookout'. During my 1998-99 fieldwork, this difference was apparent in several other field sites. Part of the gender difference arises from the fact that women, as the main and most frequent collectors of forest products, are more familiar with the forest than men.

Fourth, and relatedly, there are problems in catching transgressors. In virtually all the regions I visited, all-male patrols or male guards were unable to deal effectively with women intruders because they risked being charged with sexual harassment or molestation. Threats to this effect were not uncommon when non-member women, or women from neighbouring villages, were caught. In some incidents, women and their families had even registered false police cases against the patrol members, or beaten them up. Equally, however, women on their own find it difficult to do night patrolling or to confront aggressive male intruders. By all accounts, the most efficient solution appears to be a patrol team constituted of both sexes. Recognizing this, in some regions male patrollers have included some of their village women into their patrol group, but this is not a typical response.

When women voluntarily set up informal patrols, even where there is a male guard or patrol, the efficiency of protection can improve notably. In their study of twelve *van panchayats*, Sharma and Sinha (1993) found that the four which could be deemed 'robust' all had active women's associations. However, in so far as women's groups are typically informal, they lack the authority to punish offenders who still have to be reported to the formal (typically all-male) committees. This separation of authority and responsibility introduces inefficiencies in functioning. For instance, sometimes the male EC members fail to mete out punishments to the culprits women catch, causing the women to abandon their efforts. I found several such cases in Karnataka, Gujarat and the UP hills. Also, when women catch intruders, they are seldom party to discussions or decisions on appropriate sanctions.

Fifth, and relatedly, efficient functioning requires effective methods of conflict resolution. This is made difficult with women's virtual exclusion from the formal committees, especially where the conflict involves women, as is not infrequently the case with firewood-related intrusions.

A sixth form of inefficiency stems from taking little account of women's knowledge of plants and

species when preparing plans for forest regeneration. Women and men are often privy to different types of knowledge due to differences in the tasks they perform, and in their spatial domains. Women as the main fuel and fodder collectors can often better explain the attributes of trees than men (Pandey, 1990); and can identify a large number of trees, shrubs and grasses in the vicinity of fields and pastures (Chen, 1993). In general, women are better informed about the local environment where they gather and collect and men about species found in distant areas (Gaul, 1994). Women's systematic exclusion from decision-making and management of new planting programmes is thus likely to have negative efficiency implications, by failing to tap women's knowledge of diverse species for enhancing biodiversity, or their understanding of silvicultural practices when planting species about which they are better informed.

A seventh form of inefficiency can arise from ignoring possible gender differences in preferences, say regarding when grass should be cut or which trees should be planted. I found that in the rare cases when women were consulted, they often came up with alternative, more suitable, suggestions on when the forest should be opened for grass collection. Women are also known to usually prefer trees which have more domestic use value (as for fuel and fodder), while men more typically opt for trees that bring in cash.[22] This might be less so where fuel and fodder are ample, in which case women too might prefer commercial species (Chen, 1993), but where there are shortages women tend to prefer use-related varieties. Their greater involvement in forest planning could thus better fulfil household needs and increase commitment to the initiative.

Basically, when examined from a gender perspective, it is clear that the CFGs are violating many of the conditions deemed by several scholars to be necessary for building enduring institutions for managing common pool resources. This includes conditions such as: ensuring that those affected by the rules participate in framing and modifying the rules; that the rules are simple and fair; that there are graduated and appropriate sanctions against offenders; that there are effective mechanisms for monitoring the resource and resolving conflicts; and so on.[23]

Despite women's low involvement, forests might regenerate, but some of the initiatives might not be sustained, and others might produce less than the full potential benefits.

IV. WHAT DETERMINES OUTCOMES?

The gender-related efficiency outcomes discussed above are in large part *secondary* outcomes, stemming from women's low participation in the CFGs and from inequities in the rules of forest use, benefit sharing, etc. Efficiency outcomes are therefore not discussed separately below. Rather, I focus on what underlies women's low participation and the inequities in cost and benefit sharing.

In broad terms, the degree of participation and the distribution of costs and benefits can be seen to depend especially on the following factors: rules, norms, perceptions, the person's individual endowments and attributes, and their household endowments and attributes (which define where they fall within the structural hierarchies of class, caste, etc).

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[22] See, e.g., Brara (1987), and Hobley (1996).
[23] See, especially, Ostrom (1990), Baland and Platteau (1996).

4.1 Factors affecting women's participation

Rules: In formal CFGs, such as the JFM groups in India or the FUGs in Nepal, rules determine membership in the general body or EC. As noted earlier, where the rule allows membership to only one person per household, it is typically the male household head that becomes a member. The rule that allows one man and one woman per household is somewhat more inclusive; but for a rule to be truly inclusive all adults must be allowed to join. This is rare.

A lack of awareness of rules, or of changes therein, can also constrain women's participation. In West Bengal, for instance, a study of 19 CFGs showed that even four years after the state order was amended to allow women's inclusion, barely 2/5ths of the members knew of the change (Raju, 1997).

Among the self-initiated groups (that lack formal membership rules), long-standing conventions, which traditionally excluded women from public decision-making forums, also deny women entry into the CFGs.

Social norms: Even when membership rules are favourable and women join, they seldom attend or speak up at meetings because social norms place strictures on their visibility, mobility, and behaviour. These norms, whether internalized by women or imposed on them by threat of gossip, reprimand, or even violence, impinge directly on their autonomy and ability to participate effectively in CFGs dominated by men.[24]

Some communities have quite strict female seclusion norms. But more pervasive is the subtle gendering of physical space and social behaviour. For instance, norms often dictate a gender segregation of public space. Women of 'good character' are expected to avoid village spaces where men congregate, such as tea stalls and the market place (Agarwal, 1994). For older women, the restriction is generally less, but never fully absent. As a result, many women feel uncomfortable going to CFG meetings, unless explicitly invited by the men:

> The meetings are considered for men only. Women are never called. The men attend and their opinions or consent are taken as representative of the whole family - it's understood (woman in a *van panchayat* village, UP hills, cited in Britt, 1993: 148).
>
> Rural women and men can't sit together. But we convey our decisions to them (man to author, Chattipur village, Orissa, 1998).

The gender division of labour is another pernicious norm. The fact that women bear the main responsibility of childcare and housework, in addition to the load of agricultural work, cattle care, etc., makes for high work burdens and logistical constraints. This seriously restricts women's ability to attend lengthy meetings held at inconvenient times. As some of the women in Barde village (Karnataka, south India) told me in 1998: 'There are problems in attending meetings since we need to cook and serve the evening meal. The meeting is long. We also have to feed the cattle'. Men are

[24] See also Stewart's (1996) more general discussion on the function of norms in hierarchical contexts.

usually reluctant to share not just domestic tasks and childcare, but even cattle care. Most women in the *van panchayat* villages she studied told Mansingh (1991) that they did not have time to 'sit around for [the] four hours that it took to have a meeting in the middle of the day'. As a result women's attendance tended to thin out over time.

Norms also reduce women's participation by creating subtle gender hierarchies, such as by requiring women to sit on the floor while husbands and older men sit at a higher level on cots, or requiring women to sit at the back of the meeting space where they are less visible and less able to raise a point effectively. Moreover, where senior male family members are present, women either do not attend meetings, or do not oppose men publicly. The hierarchy that marks 'respectful' behaviour in the family also marks community gatherings.[25]

Social perceptions: Incorrect perceptions regarding women's abilities impinge on men's willingness to include women in the CFGs. Men often view women's involvement in CFGs as serving no useful purpose and tend to downplay their potential contributions and abilities. Some of men's direct responses to questions are indicative:

> There is no advantage in having women in the EC. We have been told by the forest officials that we must have two women in the committee, that is why we have included them (male to author, Pathari village, Karnataka).
>
> Women can't make any helpful suggestions (man to author, Arjunpur village, Orissa, 1998).
>
> Women are illiterate. If they come to meetings, we men might as well stay at home (EC chairman to author, Ghusra village, Dang district, Nepal, 1998).

In some cases, when I asked the men who were decrying my paying attention to the women on the grounds that they were illiterate, whether they themselves were literate, I found that several of them weren't!

Entrenched territorial claims: Men oppose women's inclusion much more strongly once their own claims are entrenched. For instance, where CFGs start out with only male members, or where men feel they have a prior claim to the land, they resist new claimants. Some young men in Banasur village (Karnataka) reacted to the idea of including women in CFGs as follows: 'Women have DWARCA,[26] they have savings groups, why don't you leave the CFGs to us men?' In Kudamunda village, Orissa, when I asked the women who wanted to take up their own separate patch for protection why they needed to do so, they responded:

> If we have our own forest, we would not need to ask the men each time for a bit of wood.
>
> They are not willing to give us even a patch to protect. Why would they be willing to give us

[25] See also, Raju (1997).

[26] DWACRA: Development of Women and Children in Rural Areas. This is an anti-poverty programme of the Indian government under which, among other things, women's groups are given subsidised loans for income-generating activities.

a whole tree if we asked?

Personal endowments and attributes: Women's lack of personal property or political connections in greater degree than men's, also reduces the weight of their opinions. In addition, illiteracy and limited experience in public interaction undermines their effectiveness in public forums. While many male members too are illiterate, women's literacy levels are significantly lower. Some of these disadvantages can be overcome in part if the women are older, married, have leadership qualities, and the self-confidence to speak up. In many CFGs, the few women members are widows, or older married women living in their parental homes (Narain, 1994; Britt, 1997).

Household endowments and attributes: Finally, factors such as the class and caste position of the woman's household is likely to matter where the village is multi-caste and dominated by the upper-caste, or where the CFG is constituted of several villages that are caste/class homogeneous in themselves, but that differ hierarchically in this respect from other villages in the CFG.[27] But the caste factor works in complex ways. On the one hand, being low-caste and poor can adversely affect a person's ability to bargain for a better deal within a predominantly upper-caste community, and even low caste men (like women in general) often hesitate to speak up at meetings in such contexts. On the other hand, low-caste women are less subject than upper-caste women to norms of seclusion, restricted mobility, and soft speech.

4.2 Factors Affecting Distributional Equity

Similar (*but not identical*) factors affect gender inequitable outcomes in terms of costs and benefits. The principal factor underlying gender differences in cost sharing appears to be social norms governing the gender division of labour. As already discussed, women's primary responsibility for firewood and fodder means that the bulk of the costs of forgoing forest use fall on women.

Benefit sharing is likely to be affected especially by five types of factors. One, there are the rules regarding entitlements to benefits. Here both entry rules and distribution rules matter. As noted earlier, access to some types of benefits is linked to membership. However, even if both spouses are members, the woman may not get a separate or additional share if the CFG has decided that the household rather than the individual will be the unit of distribution. In recent years, this has in fact proved to be a bottleneck in inducting women members in some regions such as Gujarat, where women are demanding shares on an individual basis as a condition for their joining. Hence while women's low participation in CFG decision-making affects equity of outcome through the distribution rules, inequitable distribution rules can, in turn, restrict women's participation.

Two, the norms/principles (willingness to pay, contribution, or need) underlying distribution affect equity of benefit sharing. At present (as noted earlier), contribution (in terms of membership, protection efforts, etc.) is the dominant criterion underlying distribution rules in most CFGs, which allow equal access or amounts of firewood/fodder to those contributing. Auctions are undertaken in a few cases, and distribution in accordance with economic need is rare.

Three, perceptions about need, contribution, and deservedness matter. Even if we were to shift from

[27] My fieldvisits in 1998-99. See also, Sarin (1998) and Hobley (1996).

contribution to need as the defining principle, whether or not women get a better deal can still depend on whether they are *perceived* as deserving more (Agarwal, 1997b, Sen, 1990). There can be and often is a divergence between what a person actually contributes, needs, or is able to do, and perceptions about her/his contributions, needs and abilities. Hence, for instance, women's contribution to household income is often undervalued, both by family members and by those implementing development programmes, because of the 'invisible' nature of many tasks that rural women perform within the home. These tasks are often economically invisible since they usually do not bring in cash returns, say, where women are working on family farms, or collecting firewood, fodder, etc. And the tasks are rendered physically invisible when they are done within the home compound (such as cattle care, stallfeeding animals, grain storage and processing, etc.). In the present context, women *seen* to be participating in forest management would thus be in a better position to claim equal benefits with men in that their contributions would be better recognized.

Four, whether or not the outcome is equitable depends on pre-existing personal endowments and attributes. Given that women as a gender (even if not all women as individuals) have fewer personal endowments, CFG shares given only to male members typically result in inequitable outcomes for women in both rich and poor households. Again, women's personal attributes such as age and marital status can affect intra-household distribution by influencing perceptions about deservedness.

Five, as we've noted, how acutely women are affected by forest closure or shortages is also influenced by their household endowments and attributes, in particular by where the households are placed in terms of class, caste, etc. However, in some respects, this can work in both directions. Women in households that own land and animals can get some fuel and fodder from private assets, but they are also likely to face greater strictures on their mobility, which limits their options of alternative collection sites. Moreover, for fuelwood, except those able to afford cooking gas, the class difference may not be substantial, since many women even of middle peasant households have to depend mostly on what they can themselves gather.

V. IMPROVING OUTCOMES: THE BARGAINING FRAMEWORK

How can the noted factors, such as rules, norms, perceptions, women's personal endowments and attributes and their household endowments and attributes, etc., be acted upon to improve outcomes?

Broadly rules are made at two levels: at the level of the State and that of the community. For instance, membership criteria for the general body or the EC under JFM are determined at the State level, but whether there should be total or partial closure of the protected area, or how different forest products should be distributed, is determined largely by the community. And social norms, social perceptions, and endowments, are constituted and contested at all levels -- within the State, the community, the family, and various institutions of civil governance (including NGOs).

A promising analytical framework for examining the possibilities for change on all these counts is that of bargaining. Women's ability to change rules, norms, perceptions and endowments in a gender-progressive direction would depend on their bargaining power - with the State, the community and the family, as the case may be. What would affect women's ability to bargain effectively in these

three arenas?

5.1 Bargaining: Some conceptual issues[28]

The State: First, consider bargaining with the State. To begin with, the State too can be seen as an arena of bargaining at multiple levels. For instance, the State may formulate gender-progressive laws at the highest level, but it could face resistance in implementation from the local bureaucracy. Or some departments or ministries may pursue gender-progressive policies within an overall gender-retrogressive State structure (women's ministries are cases in point). Likewise, there are often some gender-progressive individuals within State departments who play key positive roles, typically but not only in response to demands by interest groups.[29] In other words, the State is an arena of contestation between parties (such as policy making and policy implementing bodies), and/or between different regional elements of the State structure, with varying commitment to gender equality.

The State might respond positively to demands by gender-progressive groups/NGOs because such groups could build up political pressure, say with the support of opposition parties and/or the media, with implications for voting patterns; or because of pressure from international aid agencies; or because the State recognizes the inefficacy both of market mechanisms and of its own machinery in implementing essential development programmes. In India, the State's attempts since the mid-1980s to enlist NGO support for various developmental projects, including that of community forestry, reflects this recognition.

We would expect women's bargaining strength with the State to depend on a complex set of factors, such as, whether they function as a group or as individuals; and the cohesiveness and strength of the group. The bargaining power of such a group is likely to be higher the larger and more unified it is; the more the political weight carried by the castes of which it is composed; the greater its command over economic resources; the more the support from NGOs, the media, academics, international donors, and the State; and the more State officials are influenced by gender-progressive norms and perceptions.

The Community: The second important arena of bargaining is the community. Implicit or explicit bargaining can occur between an individual (or a subset of individuals) and the community over the rules and norms governing, say, economic resource use, and social behavior, and over the enforcement of those rules and norms. Non-compliance with CFG rules could be seen as a form of implicit bargaining.

As with the State, women's bargaining power within the community would be enhanced if they had support from external agents such as NGOs and the State. Group cohesiveness and strength is also important. For instance, an individual woman breaking seclusion norms could easily be penalized, say by casting aspersions on her character. Such reprisals are less possible if a group of women decide to transgress the norms.[30]

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[28] For elaboration, see Agarwal (1997b, 2000A).
[29] See also, Sanyal (1991) and Agarwal (1994).
[30] For elaboration and illustrative examples, see Agarwal (1994).

In addition, in a multi-caste/class-heterogeneous village, we would expect women's bargaining power to depend on the socio-economic composition of their group and their ability to command funds. In the sharing of communal resources, for instance, the negotiating strength of low-caste or poor peasant women, even if they formed a group, is likely to be weaker than that of high-caste or rich peasant women whose caste or class as a whole commands greater power in the village.

The family: The third major arena of bargaining is the family. Intrafamily bargaining for a more equitable sharing of benefits or tasks, or for greater freedom to participate publicly, is perhaps the most complex aspect of bargaining. This complexity is spelt out in Agarwal (1994, 1997b), but broadly four types of factors are likely to impinge on a woman's bargaining power in the home: her personal endowments and attributes (educational level, whether or not she earns an income, property ownership, age, marital status, etc.); her ability to draw upon extra-household support from friends, relatives, women's groups in the village, gender-progressive NGOs outside the village, and the State; social norms (which might define who gets what, or who does what within the household); and social perceptions (say about deservedness).

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Some of the common determinants of bargaining power in all three arenas discussed above, are support from external agents, social norms and perceptions, and group strength. Norms, perceptions, and group strength require some elaboration.

Social norms can affect bargaining power in both direct and indirect ways. For instance, norms that restrict women's presence in public spaces directly reduce women's ability to bargain for rule changes within CFGs. In addition, they do so indirectly by reducing women's ability to build contacts with NGOs or State officials. Social norms can also influence how bargaining is conducted: e.g. covertly or overtly; aggressively or quietly. In cultures or contexts where social norms stifle explicit voice, women may be pushed into using covert forms of contestation within the family, such as persistent complaining or withdrawing into silence (Agarwal, 1994). Moreover, attempts to change social norms can itself constitute a bargaining process.

Social perceptions can affect women's bargaining power in so far as women's contributions and abilities diverge from perceptions about their contributions and abilities. As noted earlier, a good deal of what women do is rendered invisible and therefore undervalued by both families and communities. To the extent that women internalize these perceptions, they can self-restrict their range of options or what they seek to change and bargain over. To enhance women's bargaining power within the community or the family, a necessary step would thus be to change women's own perceptions about their potential options and abilities, as well as the perceptions of their families, the community and the State regarding their abilities and the legitimacy of their claims.

Group strength can prove to be a critical factor at all levels of bargaining - the State, the community and the family - and in all forms of bargaining (including over social norms and perceptions). Here village women's group strength derives not merely from the number of women who would like, say, a change in rules and norms, but from their willingness to act collectively in their common interest, an interest predicated on gender. In other words, it would depend on whether gender is a basis of

group identity, over and above the possible divisiveness of caste or class. The creation of such group identity would need to be part of the process of improving outcomes for women.

Let us now consider the actual experience of attempts to improve women's participation and distributional equity in CFGs. These experiences do not illustrate all elements of the bargaining framework spelt out above, but they reveal some key elements.

5.2. Bargaining: Actual Experience

The State: JFM experience indicates that bargaining with the State for changing the initial rules of entry is not very difficult to bring about. Pressure from external agents such as gender-progressive NGOs and key individuals, for instance, has led a number of Indian states to make JFM membership rules more women-inclusive. Here village women did not have to explicitly bargain for changes, but the women's movement in South Asia has brought about a sufficient shift in perceptions regarding gender inequalities to make such issues easier to resolve with the State, through outside intervention. Village women, on this count, thus start from a position of some bargaining strength.

The community: Bargaining with the community to ensure that more women-inclusive membership rules are implemented, and to increase women's effective voice in CFGs, has proved more difficult. On the positive side, some of the gender-progressive NGOs, forest officials and donors have used their bargaining power with the community to bring about changes in women's favour, sometimes at their own initiative, at other times when village women approached them.

For instance, some Indian NGOs have made high female membership in mixed groups a condition for forming the groups. In Gujarat, one NGO uses its bargaining strength to insist on 50% women when starting new CFGs. Similarly, some state-level officials in India have increased women's membership in mixed groups, by stipulating that there should be at least 30% women in the general body, or by refusing to start meetings unless the men also invite the women (Viegas and Menon, 1993; Sarin, 1998). For distributional equity, likewise, the staff of a Gujarat-based NGO took up women's complaints about firewood shortages at a CFG meeting. This resulted in a shift from total closure of the forest to its opening up for a few days annually. However, for a larger and sustained impact, an active input is required from women themselves.

Left to themselves, women have typically relied on covert forms of bargaining for changing distributional rules, such as simply ignoring the closure rules, challenging the authority of the patrol group or the guard who catches them, persistently complaining, and so on. In some instances, this had led village committees to open up the forest for short spells. However, complaining or breaking rules (with the risk of being caught and fined) are seldom the most effective ways of changing the rules. For effective change, women are likely to need more formal involvement in rule making and the bargaining power to ensure changes in their favour.

Experience on the ground suggests that to bring this about, for a start, a critical mass of vocal women is necessary. This can give women more voice in mixed forums, and help them challenge restrictive social norms and perceptions. As some women interviewed by Britt (1993: 146) in the UP hills stressed: 'without a good majority of women present it is impossible to express opinions.' There is a growing consensus among gender-progressive NGOs and elements of the State

apparatus that to build a critical mass of vocal women within CFGs will need, as a first step, the formation of separate women's groups. Maya Devi (a Nepalese grassroots activist, with long experience in group organizing) puts it emphatically:

> In mixed groups when women speak men make fun of them, so women need to learn to deal with this... When women join a [separate] group they gradually lose their fear of making fools of themselves when speaking up... Women need their own small groups. This is what I know from my 22 years of experience working with the government and NGOs.

There is less consensus, however, on what type of group this should be. Where all-women CFGs have been formed, many of which have done well in terms of protection and increasing women's self-confidence. However, so far, all-women CFGs (as noted earlier), have usually arisen in special circumstances, and are still marginal in terms of numbers and area protected. Also, they cannot solve the problem of women's low presence and lack of effective voice in the more typical all-male or mixed CFGs. For this, other kinds of efforts are likely to be needed. Toward this end, some rural NGOs have been forming all-women savings-and-credit groups, which, unlike CFGs, do not involve a resource over which there is a generalised community claim. In some regions, more multi-functional women's groups, such as *mahila mangal dals* in the UP hills, or *amma samuhs* in Nepal, are also doing well.

Such separate women's groups (organised around savings or some other issue) have helped build women's self-confidence and experience in collective functioning and promoted a sense of collective identity. They have also increased women's ability to deal with government agencies, altered male perceptions regarding women's capabilities, and brought about some change in social norms which earlier defined only the domestic as legitimate female space. The response below is fairly typical:

> Men used to shut us up and say we shouldn't speak. Women learned to speak up in a *sangathan* (group). Earlier we couldn't speak up even at home. Now we can be more assertive and also go out. I am able to help other women gain confidence as well (woman leader to author, Vejpur village, Gujarat, 1999).

In fact, these experiences are not dissimilar to those of many other rural women's groups across South Asia. These too indicate that group strength, external agency support, and activities that enable women to make a visible contribution (especially in monetary terms) can alter social norms and perceptions, and increase the social acceptance of women in public roles. But in many villages, separate women's groups have also sharpened gender segregation in collective functioning. Often women's savings groups are seen as 'women's groups' and the CFGs as `men's groups'. Basically, working collectively in separate groups does not adequately challenge unequal gender relations or noticeably change the dynamics of *mixed* group functioning. In other words, forming separate women's groups appears to be a necessary condition but not a sufficient one for women's effective participation in the CFGs.

For effective integration, more concerted efforts appear necessary. In a few cases, NGOs working with both women and men have sought to integrate all-women groups with the CFG. An NGO in rural Karnataka, for instance, encourages the women's savings groups to discuss CFG functioning, collect CFG membership dues, and persuade women to join the CFG. As a result, in several of its

villages, some 80-90% of the women in the savings groups are now in the CFG general body.[31] To bring this about, however, has taken many years of persistent effort and trust building between the NGO, the women, and the villagers.

An alternative approach (to my knowledge yet to be tried) could be to form a women's sub-group within each mixed CFG. Such a subgroup could first meet separately to discuss women's specific forest-related concerns, and then strategically place these concerns in the full CFG meeting. This could also enable women EC members to better represent women's interests.

The family: Bargaining within the family has received the least attention. Most rural NGOs do not directly tackle intra-household gender relations, although forming all-women groups can have indirect positive effects. For instance, during my fieldvisits I found a number of cases where a women's group had supported individual women in their negotiations with husbands, or where being a group member had improved women's situation at home.

> There are one or two men who objected to their wives attending our meetings, and said you can't go. But when our women's association came to their aid, the men let their wives go (women to author in Almavadi village, Gujarat, 1998).

> My husband feels I contribute financially, take up employment, obtain credit for the home. This increases his respect for me (woman to author, Almavadi village, Gujarat, 1998).

In other words, group strength and women's visible contributions can help loosen restrictive social norms, and may change a man's view of his wife's deservedness. However, certain types of norms, such as the gender division of domestic work, are particularly inflexible. Also gender inequalities in economic endowments remain entrenched, putting women in a considerably weaker bargaining position in the family, relative to men (Agarwal, 1994, 1997b).

Finally, any group, including a CFG, is likely to be affected not only by its immediate locale, but also by the wider context of structural and cultural inequalities within which it is located. For instance, both participation and distributional equity are affected by the pre-existing inequalities predicated on the caste and class of the women's households, as well as on gender. These inequalities are unlikely to decline substantially within the parameters of CFG functioning. They would need more wide-ranging measures to improve the access of women, and of poor and low-caste households in general, to land and other assets.

VI. CONCLUSION

CFGs are a significant example of group functioning. While many have done reasonably well in regenerating the environment (at least in an immediate sense), they have been less successful in bringing about women's participation in decision-making, or in ensuring gender equity in the sharing of costs and benefits from forest protection. As a result, they have also failed to tap the full potential of the collective effort. Improving participation and equity is thus important both in itself and because

[31] Personal communication in 1998 from Pratibha Mundergee, former worker in this NGO.

it can prove complementary to (rather than, as usually assumed, in conflict with) efficiency.

The analysis shows that for more participative, equitable, and efficient outcomes, changes in factors such as rules, norms and perceptions, and the pre-existing structural inequalities in endowments and attributes of the women's households and of women themselves, appear necessary.

The paper argues that it is useful to conceptualize such change within a bargaining framework, and to act on the factors that will strengthen women's bargaining power with the State, the community and the family. This has been achieved to some degree through the intervention of external agents, such as NGOs, forest officials and donors, who have acted both directly and indirectly, the latter especially by forming separate women's groups at the village level to enhance women's self-confidence and collective strength. At the same time, the analysis cautions that such separate women's groups could also lead to greater gender segregation, unless conscious steps are taken to integrate these women within mixed CFGs. An alternative approach of forming women's subgroups within each CFG might work better. In either case, these would be only a few steps among the many needed to transform mixed CFGs into more gender egalitarian institutions.

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