Prelude to Development: Democratizing Power*

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Abstract

The consensus reached in the literature on development is that an exclusive focus on income per capita neglects distributional issues. Therefore, there is a need to take a more comprehensive look at well-being than personal income suggests. An extended capabilities approach, in this regard, is an improvement over income based approaches as it offers a possibility to explore questions of justice, equity, empowerment, environment, the role of institutions and power relations by shifting the focus of development analysis from personal income to non-monetary aspects of well-being. However, its analysis of institutions remains problematic as it falls short of taking into account the social structure within which the institutions are positioned. The paper attempts to give a broader understanding of institutions and their role in determining the policy choice and outcomes. The analysis mainly focuses on the environmental component of development as a linkage between development policies and the nature of the social structure. The dynamic relationship between environmental policies and social structure is analyzed by a framework exploring how the social structure affects the choice of policy and how the policy in turn shapes the social structure via its effect on power relations. The theoretical argument is illustrated by using gender norms of resource access as an example.

Introduction

Development thinking and policy making has undergone major shifts in recent years. The narrow focus on income per capita as a measure of welfare is increasingly being replaced by an emphasis on multiple dimensions of human life. Mainstream economics' concept of development is based on the utility theory. Within this paradigm, an increase in income per capita is associated with improved welfare by virtue of expanding the basket of goods and services one can purchase which is supposed to imply a higher level of utility. Although an increase in income per capita, given other things equal, can imply improved living standards, it is a rather limited way to assess well-being. Moreover, income per capita measures capture only the means that are transacted in the markets, thus leaving out externalities and non-marketable goods and services. It has been repeatedly pointed out that an exclusive focus on income per capita neglects

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distributional issues. Hence, the consensus reached is that there is a need to take a more comprehensive look at well-being than personal income suggests. One may argue that including the degree of equality of income distribution or general education level as an argument in the utility function of individuals would do the job; however, at an operational level, conducting the analysis at an individual level based on individual utilities remains problematic.

Amartya Sen, building upon a critique of personal income as a measure of development, has developed the well-known capabilities approach (Sen, 1982, 1999). One of his main aims in developing this framework was to come up with an objective measure of development, instead of the subjective one embraced by the neoclassical school, namely the utility function. The capabilities approach takes the expansion of fundamental freedoms and enhancement of what people can have/be as the centrepieces. Sen distinguishes between *endowments*, what a person initially owns, and *entitlements*, what a person can effectively command, where the former is transformed into the latter via processes such as production, inheritance, own-labour, trade, etc. This approach, therefore, is concerned with how endowments are turned into entitlements and how entitlements expand capabilities. It moves beyond the exclusive focus on income by stressing that income is one of the many tools in achieving what one values to do or to be, and the relationship between income levels and the actual lives of the people depends on a variety of personal, social and environmental factors. Sen stresses the importance of substantive freedoms, such as political rights, economic facilities, social opportunities and protective security, which enables individuals to participate in the making of decisions that concern and/or involve them.

Amartya Sen's capabilities approach is an obvious improvement, in our view, over the use of income per capita measures in assessing development. It marks a normative shift in the understanding of development. Besides, the approach has been widely embraced, at least in theory, by international development agencies and said to be operationalized in the UNDP's Human Development Index. Still, there are some difficulties with the capabilities approach. Perhaps most importantly, it offers an individualistic evaluation of well-being. Functionings, what a person can do or have, and capabilities, the ability of one to lead the kind of life s/he has reason to value, are socially

influenced and governed by social relations, such as those based on power. Moreover, there is no account of the distribution of endowments, which are taken as given. Nevertheless, as people gain entitlements from their endowments through a mapping mechanism and so improve their capabilities, initial endowments are in fact the key determinants of capabilities. These are some of the points raised about this approach; however, for our current purposes we are more interested in the implications of this approach rather than an all encompassing critique of it.

An *extended* capabilities approach indeed offers a possibility to explore questions of justice, equity and empowerment, the role of institutions and power relations. Institutions –formal and informal, at various levels- shape how endowments are mapped into entitlements and how entitlements can enhance human capabilities (Leach *et al*, 1999 among many others). It also opens up space to address the relationship between human well-being, environment and development. By shifting the focus of the development rhetoric from personal income to non-monetary aspects of well-being, it provides an opportunity to bring the environmental question into the picture. Rights to natural assets, defined as environmental sources and sinks, is an important dimension of well-being. Access to clean and healthy environment are significant determinants of human capabilities. Hence, ecological issues should be considered as an integral part of the development programs rather than as a side issue that could be dealt with some other means.

This necessitates policies directed to environmental issues. The nature of these policies will, obviously, be determined by their understanding of the nature of the environmental issue in question, i.e. by their ontological stance which in turn determines or is *a priori* determined by their methodological approach. This explains, at least in part, why various schools of economic thought have been proposing different definitions of ecological degradation, different explanations for that degradation and finally come up with different policy proposals to halt that degradation.

The paper is organized as follows. We will first evaluate the mainstream and Institutionalist approaches—as the main contenders—on the question of ecological issues. The limitations of market based solutions and the Institutionalist approach's call

for democratic and social control over environment will lead us to participatory mechanisms. We will then, turn to an institutional analysis of these mechanisms and try to answer why their practical implementations often fall short of expectations. This will bring power and institutions into the picture. An analysis of institutions, we will argue, necessitates analyzing the social structure within which they emerge, evolve and operate. We will finally claim that social structures will affect the choice of the policy at the initial stage since it implies a distribution of bargaining power which individuals/groups will realize in order to affect the choice of policy, and social structures will enorge as the equilibrium of the game that is chosen by the social structure at the beginning. This implies persistence of the same structure to the extent the ones who hold power in society will choose the very policy that will help them keep power. We will, finally, attempt to demonstrate this point by using gender norms of resource access as an example.

On the Environment-Economy Relationship: Two Main Contenders

As it is well discussed (see *e.g.* Martinez Alier, 1995, 1997; Martinez Alier *et al.*, 1998; Adaman and Ozkaynak, 2002; Costanza *et al.*, 1996; Munda, 1997)³, the mainstream approach, glorifying the couplet of methodological individualism and market relations, argues that the explanation of environment degradation can be made by reference to the lack of markets for environmental goods and services, as a result of which individuals fail to recognize the otherwise positive prices of these goods and services. It is crystal clear that this explanation implies the conceptualization of the environment as a commodity such that it can be analyzed as any other commodities. Keeping this basic premise, the theory makes a distinction between the overuse of natural resources and the waste disposal above the ecosystem's assimilative capacity. The former is explained by lack of well-defined property rights, which results in "the tragedy of commons" problem that was formulated by Hardin (1968): the resources being available too cheaply. The latter is explained by the behaviour of economic agents who enjoy a complete lack of liability to

³ The presentation of the mainstream and Institutionalist approaches will mainly follow Adaman and Ozkaynak, 2002.

third parties who suffer from environment damages—thus, the externality problem, i.e. the difference between private and social costs of an economic activity.

The theory acknowledges that these will eventually lead to two types of problems: efficiency and equity. With respect to the efficiency problem, two solutions are proposed: to introduce appropriate property rights to natural resources (following Coase, 1960) or to set up an authority to deal with ecological degradation (see e.g. Turner et al., 1994). The first proposal boils down to the privatization, hence marketisation and full commodification, of natural resources, a solution which faced many criticisms (see e.g. O'Neill, 1998). Even if these criticisms are left aside, this solution has problems at operational levels: first, the determination of the principle on the basis of which property rights should be assigned (should they be distributed equally or based on willingness to pay?); second, individualistic methodology of this framework brings about the problem of collective action which in turn leads to high transaction costs. (One may argue that, following Coase, in the absence of transaction costs the principle according to which property rights assigned does not matter, hence, it is the presence of transaction costs which raises the first operational problem.) Therefore, the assignment of property rights may not imply an improvement in environment quality (even if it is understood in the theory's own terms). The second proposal consists of a regulatory body initiating corrective measures through a set of policies either in the form of incentive-based mechanisms (such as taxes, emissions trading, marketable permits) or through command and control (such as standards and quotas) once economic profits with their accompanying environmental costs-both derived from individuals' own valuations-are identified. However, this solution comes with drawbacks. First, such a regulatory body may not exist as is the case with global problems. Moreover, even if such a body exists, it may simply fail by making decisions on the basis of favouritism rather than efficiency (known as governmental failures). This brings about other dimensions that have to be taken into account: when networks between government and interest groups (polluters and victims) are essential, the relative size of polluters and victims (in terms of ease of organising among themselves) and relative power of the two groups should be taken into account as additional dimensions (for an argument of the first dimension, see Olson, 1965).

Even in the absence of the problems stated so far, and leaving aside the problematic of obtaining monetary valuations for non-traded social goods, the theory's contingency on measuring the value assigned to environmental goods remains problematic. The solutions proposed by the theory are based on measuring the value assigned by individuals to environmental goods and services in money terms, which are given either by market prices (where the market for environmental goods exist) or by hypothetical market prices obtained by estimating monetary valuations based on individual preferences, as in the case of the contingent valuation method (where the corresponding markets do not exist). Once these individual valuations are determined, they are then aggregated to estimate the value of a specific environmental good. If the project will cause environmental damage but will have future benefits or it will bring about environmental improvement but is costly to build, actual and future costs and benefits are computed with an a priori determined discount rate, and cost-benefit analyses are conducted (Turner et al., 1994). This analysis is supposed to enable us to "compare like with like using a single measuring-rod of ... money" (Pierce et al., 1989: 57).

Regarding the equity problem, on the other hand, the theory does not go any further than accepting its existence hanging on the premise that the theory itself is valuefree. This leads to internal criticisms as the policies and distribution of endowments are mutually related: policies have impact on distribution and different initial distribution of endowments generate different environmental prices (hence policies). Moreover, the choice of an environmental policy, so the distributional outcome, is contingent on aggregating individuals' valuations for different distributional policies and this is the subject of the well-known problem of "impossibility of aggregation" stated by Arrow.

Correspondingly, the theory's position *vis-à-vis* environment with respect to three points stated at the beginning—the definition and explanation of degradation and the means to halt degradation—should now be clear. The theory bases its definition of environmental degradation, the first point, on a cost-benefit analysis: if the value of a specific environmental good, determined by aggregating the valuations of all concerned individuals, turns out to be greater than the economic value-added that can be obtained at the cost of destroying/using that environmental good, then this very economic activity

will be labelled as degradation. As for the economic explanation of degradation, the second point, the theory posits the lack of markets. Finally, the theory proposes establishing property rights or a regulatory body as ways to slow down/halt environmental degradation.

Other than the internal criticisms that have already been mentioned, the theory has been subject to strong outside criticisms as well. Considering the economic system as isolated from other domains of social life and as being composed of separate and atomistic individuals seeking to satisfy their—exogenously given—preferences, this framework is found to be unable to take into account the effects of the context in which decisions are made, i.e. the social processes, on the revealed environmental valuations. As pointed out by Adaman and Ozkaynak (2002:115), methodological individualist stance leads the theory fall into a tautological trap "for it is always possible to define individuals" interests so that whatever choice is made can be formulated as furthering their interests". Moreover, the theory does not take into account the nature of the problem it is dealing with (or it has some implicit ontological assumptions which are not explicitly acknowledged). The social nature of environmental resources implies that they cannot sensibly be allocated on an individual basis and that the commodification of these resources simply ignores and destroys this instinctive characteristic (Mulberg, 1996).

The Institutional approach (referring mainly to old Institutionalist approach), on the other hand, rejects at the outset the view that "economic processes (of production, distribution, and reproduction) can adequately be understood and analysed as closed, *i.e.* self-contained and self-sustaining, systems isolated from a social and physical 'environment' of which the economic system is a part and from which it receives important inputs and with which it is related through manifold reciprocal interdependencies" (Kapp, 1976:212-3). Therefore, the Institutionalists assume a holistic methodology, emphasising social and historical context and considering the entwined relation of *endogenous* individual preferences to social change and processes. More precisely, they stress that economic, social and ecological dimensions are inseparable: "[T]he *economic* domain of commodity production and consumption can be deemed part of the social domain of activities establishing and renewing relationships and institutional forms; and the *social* category includes culture which bears on the ways that features of the natural world are classified and appraised" (O'Connor *et al.*, 1996:236). Hence, the society-environment relation is not one of consumption. Indeed, the Institutionalists assume a critical stance with respect to monetary reductionism, arguing in favour of an *incommensurability* of environment values—*i.e.* the impossibility of reducing all relevant features of an object, service or system to a single common dimension—hence, against any quantitative comparison of social costs and benefits (Martinez Alier, 1995, 1997; Martinez Alier *et al.*, 1998). As a corollary, they propose *multicriteria decision tool*, which aims at shedding light on the nature of conflicts so as to provide information for members of the society to enable them to take informed decisions.

This attempt to approach environmental issues from an Institutionalist perspective is labelled as "Ecological Economics" (see e.g. Costanza et al., 1996; Martinez-Alier et al., 1998; Munda, 1997). A snapshot of the index of books on the shelves of Ecological Economics makes their points clear. Some examples among many: Environment Protection: Towards a Socio-Economic Policy Design; Taking Non-Monetizable Impacts into Account in an Eco-Development Strategy (O'Connor and Spash, 1999), Inequality as a Cause of Environmental Degradation; Power Distribution, the Environment, and Public Health; Democratizing Environmental Ownership (Boyce, 2002). They, particularly, propose the decisions concerning environment be taken through deliberative mechanisms and procedures, in the light of the information gathered via multicriteria analysis (involving political, economic, moral, scientific, cultural inputs). The Institutionalist approach, and ecological economics as an extension of it, considers equally the impact of power structures and power relations—conceived at local, national or international levels-on environment issues, and argue that unequal distribution of power is usually conducive to an increase in environment degradation (Boyce, 1994; O'Neill, 1997). They consider power, in general terms, as a function of individual socioeconomic characteristics and the political framework mapping these variables to power (Boyce, 1994).

Let us recapitulate the Institutionalist approach in terms of the three dimensions. The theory defines environmental degradation at a societal level through deliberative mechanisms and negotiations. The reason of degradation is considered to be the failure to embed the economic system into the social sphere and the environment, which is probably caused by existing unequal power distributions at local, national and international level. Finally, as the means to approach degradation the theory proposes political processes.

The Institutionalist approach underlined the need for democratic and social control over the environment. In fact, the limitations of market based solutions are readily acknowledged by most economists. Pearce, a leading environmental economist who advocated such solutions, acknowledged that the proposed economic solutions-market trading, taxation/subsidies, tradable certificates, standards-assumed that environmental problems were isolated cases and went on to suggest that, rather than a reliance upon indirect policy, environmental policy may be best pursued through a politically-based command structure; that is, through more direct measures. Given the ethical nature of environmental decisions, the decision making process requires a "forum" rather than a market (Elster, 1986). It requires that the interested parties engage in an "open and uncoerced discussion of the issues at stake with the aim of arriving at an agreed judgement" (Miller, 1992: 55). Participatory decision making mechanisms, which have become increasingly important recently and seen as the base of sustainable development programs, aim at achieving this agreed judgement. Although sharing the view that participatory mechanisms are the right step towards democratization of the decisions over environment, we argue that without properly considering the power dimension it would indeed be impossible to exercise the self-determination principle. Thus, the entwined relation between the working of such mechanisms and power relations should be stressed. We now turn to this issue.

Participatory Mechanisms: An Institutional Analysis

As the importance of participatory mechanisms has been recognized, co-management practices such as community-based natural resource management (CBNRM)—sharing of responsibilities for natural resource management between national and local governments, civic organizations, and local communities—have been implemented in many parts of the world (Adams and McShane, 1992; Berkes, 1995; Baland and Platteau, 1996; Borrini-Feyerabend, 1996). However, the practical implementation of CBNRM initiatives has fallen short of expectations. The reasons of this failure have been identified

as a tendency to treat the intended beneficiaries as passive recipients of the project (Pimbert and Pretty, 1995; Arnstein, 1969); a tendency for the project to be too short term and overreliant on expatriate expertise; a lack of clear criteria regarding the judgment of success (Western, Wright and Strum, 1994); and interests of certain social groups being marginalized (Hobley, 1992; Sarin, 1995). Leach et al. (1999) add two additional points to this emerging set of critiques. First one, they argue, is that CBNRM approaches assume the existence of a distinct, relatively homogenous community. Second one is the assumption of a distinct and relatively stable, local environment which has been deteriorated but has the potential to be restored. They further point out the common image underlying these approaches as one of equilibrium and harmony between community livelihoods and natural resources, which existed until disrupted by other factors.

Criticizing Sen's entitlement analysis as being focused almost entirely on entitlement mapping-how endowments are transformed to entitlements-, and paying limited attention to endowment mapping-how people gain endowment-Leach et al. develop an extended entitlement analysis.⁴ They define endowments as "the rights and resources that social actors have"; entitlements as "legitimate effective command over alternative commodity bundles"; environmental entitlements as "alternative sets of utilities derived from environmental goods and services over which social actors have legitimate effective command and which are instrumental in achieving well-being" (1999:233). Entitlements in turn enhance capabilities. They emphasize the effectiveness of command since within given power relations some claims are likely to prevail over others. Endowment mapping is explained by institutions which are defined as "regularized patterns of behaviour that emerge from underlying structures or sets of 'rules in use" (1999:237). They aim to highlight the relations of power in the mapping processes by focusing on institutions. Accordingly, institutional change occurs as social actors choose-or are forced-to act in irregular ways. The relationships between institutions, environmental endowments, entitlements and capabilities are crucial in

⁴ The presentation of this analysis is important for our paper as it is an attempt to incorporate power relations and institutions into the analysis of environmental issues.

determining who will have access to environmental goods and services. Patterns of access, in turn, have an impact on the environment and ecological change.

Although the main argument of the work of Leach et al., i.e. the need for an institutional analysis focusing on power structures from a dynamic perspective, is in line with our argument, we find their analysis problematic in some respects. First of all, by defining institutions and institutional change in terms of behaviour they fail to elaborate social structure as a reality which is, though dependent upon, irreducible to human practice (we will turn to this issue below). Second, the relation between power relations and institutions remains blurred with this conception of institutions. However, the mere existence, endurance and functioning of institutions are dependent upon the existing power relations and the latter is also a determining factor in institutional change. Finally, the analysis falls short of giving an account of the dynamic relation between power relations, institutions and, more generally, the social structure.

Following Lawson (1997), we define social structure as an ensemble of networked, internally-related positions with their associated rules and practices. Two objects or aspects are said to be internally related if they are what they are by virtue of the relationship in which they stand to one other (e.g. landlord and tenant). It is important to note that practices routinely followed by an occupant of any position tend to be oriented towards some other group(s), and moreover, any individual can occupy any number of positions at any time. Therefore, any specific collectivity can be understood in terms of its relation to other groups and of the complex internal-relationships within the group. Thus, one of the key features of social structure is its being a network of continually reproduced inter-dependencies. These dependencies are not of the individuals occupying the positions but of the positions themselves. Similarly, the rights, obligations, privileges and power are attached to the position rather than to the individual occupying them. These call for attention to a distributional problem: namely, the distribution of positions in a group, in addition to the distribution of resources among groups (Lawson, 1997). Needless to say, this distribution will depend upon the existing power structure, hence the existing distribution of positions. Then, if a change in the power structure and distribution of positions is called for, we need to change the patterns of interdependence between positions. This distribution will obviously yield the evolution of social structure. Policies which are not explicitly directed to this aim may have the same effect; however, what we mostly observe is the reproduction of power structures and interdependencies due to a lack of recognition of dependence of distributional process on the prevailing structure. This is the case with persistence of "bad institutions".

Within this framework, social structures can be considered as an institution where the latter is understood as structured processes of interaction (e.g. rules, relations, positions, norms, conventions, laws) which are relatively enduring over time and space (Lawson, 1997). However, given the diversity of institutions within the same social structure, we consider social structure as the core reality the emergence and dynamics of which is to be analysed. The questions regarding the emergence and dynamics of social structure have been asked for ages and various answers have been proposed. Though it is beyond the scope and limits of this paper to propose an answer, we think the analysis of the emergence and dynamics of the positions constituting the social structure and the internal-relations between them is a good starting point. For example, this would include the relations of production (which is the answer proposed by orthodox Marxists) but also include gender, the State, civil society and hegemony as the constituents of this ensemble of positions.

It is important to note that social rules, and hence institutions, cannot be identified with action because a social rule is a directive, code, or understanding about how an act could or should be performed without having any implication on whether the rule is implemented or not (Lawson, 1997). Social rules are best conceived of as "generalised procedures of action that, under a suitable transformation at least, can be expressed as injunction of the form: "'if x do y under conditions z'", where 'do y' part is to be interpreted as to include such junctions as 'interpret ... as', 'count ... as', 'take ... to mean' etc. (Lawson, 1997:162). Therefore, though institutions are dependent upon human thought and practice, they should not be identified with them. This raises a problem for the definitions of Institutionalists. Veblen, for example, defines institutions as "settled habits of thought common to the generality of men" (1909[1919]:239); Neale views an institution as "a usage that has become axiomatic by habitation; a collective action in control of individual action; widely prevalent, highly social habits; a way of thought or action embedded in the habits of a group or the customs of people; prescribed patterns of

correlated behaviour" (1994:402) linking it to social rules but with an understanding of the latter as "regularities or patterns" (ibid:403). As we see institutions positioned in a wider social structure which precedes human practice and thought but in turn depends upon and is shaped by them, we argue that both voluntarism (conceptualisation of structure as mere creation of individuals), determinism (conceptualisation of individual as being totally determined by, external, coercive structure) and a combination of them (since if individual is reduced to structure and structure is reduced to individual, what we have is an inappropriate account that falls short of sustaining the distinction between individual and structure) are inappropriate. This organic conception of social structure necessitates an analysis of the evolution of social structures and institutions, which is not solely determined by changes in human practice or thought. To put it more straight, consider the emergence, persistence and evolution of capitalism. Can it be explained solely through human practice and thought?

Any policy—let them be co-management, central planning, or management by the local people alone—should be viewed as implemented within social structure rather than in isolation. Therefore, the effects of policies on the evolution of social structure and the effect of social structure on the implementability and success of the policy should be taken into account. We argue that the whole social structure as an institution, incorporating all the interactions between organizations and informal rules and conventions, can be considered as an equilibrium state of an underlying game. Such a conception will allow us to analyze the mutual relationship between development policies and the social structure as well as the evolution of the latter as the outcomes of this evolutionary "game". Moreover, both the choice of the policy and the outcomes of the policy—in terms of the well-being of community members and of environmental sustainability—are determined by bargaining "games". The first bargaining is over the rules of access and command that the policy will implement. By imposing restrictions on some individuals' access to resources, environmental policy will typically alter the bargaining powers of community members. This will shape the individual well-being and environmental outcomes, in turn, as the process of policy implementation is another bargaining game. Thus, how endowments are transformed into environmental entitlements and then into enhanced capabilities depend critically on the power relations and institutions prevailing in the community.

To sum up, we claim that social structure will affect the choice of the policy at the initial stage since it implies a distribution of bargaining power which individuals/groups will realize in order to affect the choice of policy, and social structure will evolve during the policy implementation period. In the end, a new social structure will emerge as the equilibrium of the game that is chosen by the social structure at the beginning. This implies persistence of the same structure to the extent the ones who hold power in society will choose the very policy that will help them keep power. We will attempt to demonstrate this point by using gender norms of resource access as an example.

Power, Institutions and the Environment: The Case for Gender

We take gender as not merely a category of analysis, but rather as a positioned feature of the social system, being reproduced and/or transformed by processes and their products (Lawson, 2007). These processes are always context specific and they legitimize how people are allocated social positions on the basis of being female or male. Gender, made up of gendering processes and gendered products, is not empty of power relations. As we will try to demonstrate, gender is an important determinant of who participates in the decision-making, whose voice is heard and who bears the costs.

As is the case with other assets, there are often distributional asymmetries associated with access to natural assets. Gender is one of the dimensions that shape humans' access to natural assets. Gender norms often assign informal property rights over certain assets. Property rights, in turn, affect a range of intra-household decisions, including control over income and type and amount of work to be done by household members. There are multiple dimensions of gendered access to natural assets. First, there is often a separation of *spaces* in which women and men use resources and control their management. Rocheleau and Edmunds (1997) state that in Africa women's spaces are frequently found 'in-between', such as bushlands alongside of roads and fences or degraded lands along steep hillsides. Men, in contrast, have secure access to trees and their products on private lands. In addition to locality, *type of resource* and/or *products from a certain resource* can be gendered. For example, in Mali, women usually have

been gathering and grazing rights in communal or private lands controlled by men. On the other hand, men lay claim on timber tree species even if they are located on women's plots (Rocheleau and Edmunds, 1997). In most rural communities in Eastern Africa, women are not allowed to access to commercial tree species, such as timber and highly marketable fruits, but are permitted to collect the branches and leaves after men cut trees for poles or timber. *Seasonality* also adds to the variation of access across genders. Fodder trees and shrubs controlled by men during dry seasons, for example, may become available to women's use in wetter months (Rocheleau and Edmunds, ibid). Such visible gender distinction of property rights vis-à-vis natural assets and un-substitutability of female/male labour time suggest that women and men would not be affected similarly by a change imposed in the accessibility of natural assets.

Bina Agarwal's (2000, 2001) work on the Community Forestry Groups (CFGs) in India and Nepal is seminal in demonstrating how environmental policy can have gendered benefits and costs. With few exceptions, women's participation in CFG's remains low. Agarwal (2001) identifies a range of reasons for this. First of all, official rules which allow only one adult per household to be a member effectively exclude women. Even if the formal rules incorporate the membership of both the female and the male in the household, many women are not informed of it. In addition, women's traditional responsibilities such as childcare, household chores, agricultural tasks are significant constraints on their ability to attend meetings. Moreover, gender segregation of public space (village meetings are not appropriate places for women to be) and social norms of appropriate female behaviour, which can be internalized by women, impinge on women's participation. Finally, many village men as well as forest officials view women's involvement useless, largely due to the invisibility of women's productive work and do not consider their opinions valuable. Women, in turn, would not be willing to attend the meetings again after realizing that their needs are not prioritized, and that they will not have any direct benefits from the program. It is also possible that the male members of community forestry groups feel that they are the primary claimants of the forest and resist women's claims.

On the other hand, forest closure rules pose extra hardship for women because women are the ones primarily responsible for wood collection. They are forced to travel longer distances in order to meet household needs of fuel and fodder, switch to inferior sources of fuel, economize on fuel, or to undertake the risk of getting caught and fined if there are no-neighbouring sites where they can collect these items. Typically, women are not able to bargain away certain types of work, such as gathering responsibilities, domestic chores and childcare. Therefore, increased collection time increases/intensifies women's unpaid labour. It might be the case that women have to shift labour away from their independent income generating activities to cope with increased collection times. Switching to inferior sources of fuels have nutritional and health implications. Fuels such as tree shrubs, weeds and roots take longer cooking times, which can imply a shift to less nutritious food or food that can be consumed raw. They are also smokier than firewood.

Agarwal (2001) states that more firewood and fodder can be extracted sustainably than what most closure practices allow but the rules are not revised to take that into account. This observation demonstrates our earlier point about environmental policy making. Women are largely excluded from the bargaining game of policy making, i.e. they cannot voice their priorities and concerns to influence the forest closure rules. The lack of formal representation of women in the decision-making bodies of CFG's dramatically reduces their bargaining power in the policy table. After the rules are implemented, women and men are differentially affected, which would in turn have implications in terms of intra-household bargaining. As this example suggest, effective command of women over environmental entitlements impinge highly on official rules of membership and on gender norms about women's work. As a result, women bear the costs of environmental policy.

To recapitulate, the official rules of CFGs, in most cases, prevented women's participation in decision-making in terms of access and control over forest products. Although the rules do not explicitly exclude women, when one person per household is allowed to attend the meetings, it is often the male household head. Perhaps, more important than the official rules are the more implicit gendered processes and products. These include the gender division of labor, the norms of appropriate female behavior and the perceptions of women's work regarding the forests. They, whether internalized and reproduced by women or not, serve as constraints on women's command over forest resources, and consequently, on their labor time. Seemingly gender neutral forest closure

rules have higher costs for women: women are often forced to sacrifice their leisure time, rather than men sharing the cost of constrained access to forests.⁵

Concluding Remarks:

We have argued that how endowments are transformed into environmental entitlements and then into enhanced capabilities depend critically on the power relations and institutions prevailing in the community. This is, in large part, the argument of the literature on participatory mechanisms; however, we claim that a more structural analysis of institutions and power relations should be carried out. Therefore, any policy should be viewed as implemented within the wider social structure rather than in isolation. This necessitates going beyond an explanation of social structure and institutions based on routinized behaviors. Effects of policies on the evolution of social structure and the effects of social structure on the implementability and success of the policy should be taken into account. We claimed that social structure will affect the choice of the policy at the initial stage since it implies a distribution of bargaining power which individuals/groups will realize in order to affect the choice of policy, and social structure will evolve during the policy implementation period. In the end, a new social structure will emerge as the equilibrium of the game that is chosen by the social structure at the beginning. This implies persistence of the same structure to the extent the ones who hold power in society will choose the very policy that will help them keep power.

If the policy is aimed at democratization and participation, it should first identify the positions in the community and their corresponding rights, privileges and power, and the internal-relationhip between positions. This would enable us understand the impediments to participation and give a better understanding of the possible outcomes of the policy (as well as reasons for the failures of policies that have been already implemented).

⁵ This result is based on the assumption that women actually have leisure time. If they do not, the extra time they have to spend on fuel and fodder collecting would take time away from the other activities they are responsible for. In this case, the consumption of other household members would also be affected. The magnitude and the distribution of this effect depend on how much leisure time women have in addition to intra-household bargaining. Agarwal (1992) claims, for instance, that in India, women and female children are the ones who skip meals as a result of increased time spent on gathering activities.

We tried to demonstrate one of the many ways in which the implementation of environmental policy implies an allocation of bargaining power within the society. In addition to having gendered costs and benefits, CFGs' closure rules alter access to and command over common pool resources, themselves determinants of the bargaining power within the household. Therefore, the policy would have further effects via the mechanisms of intra-household decision-making. Moreover, we tried to shed light on the power relations governing the making of policy. The site of decision-making on the forest closure rules is not empty of "gendering" and power.

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