

Literature Review: Gender and Resource Tenure

Tenure relations to resources such as land, water, trees and in “between spaces”, play a fundamental role in governing the patterns of natural resource management, as well as in the welfare of individuals, households, and communities who depend on those resources. Policies that shape resource rights can play a major role in promoting (or inhibiting) economic growth, equity of distribution, and sustainability of the resource base. If we can understand existing natural resource use and access regimes, how they are determined, and the role-played by policy in that determination, we can begin to devise policies and support programs that are geared towards broad-based economic growth, and sustainable use of biodiversity, especially in rural areas.

The purpose of this paper is to cast a gender perspective on the allocation and determinants of tenure regimes to natural resources and biodiversity. The gender dimensions of tenure are examined by reviewing existing literature on this topic. Gender issues in resource tenure are first broadly introduced, followed by academic perspectives and insights, which forms the basis for this paper. However before beginning a discussion on gender I feel it is important to conceptualize resource tenure in terms of property rights. Reviewing the concept of property rights provides a basis upon which the literature review on gender, tenure and biodiversity can be built. Property rights include far more than titles and pieces of paper specifying “ownership” of a defined piece of land or other resources. They encompass a diverse set of tenure rules, and multi-dimensional aspects of access to and use of resources. If we understand property rights to refer to an individual’s capacity to call upon the collective to stand behind his or her claim to a benefit stream (Bromley 1992), then property rights describe relationships between people, nonetheless I also recognize the limitations of building this paper on the notions of property rights - a socially constructed concept. It is also important to note here that differentials in property rights do not only occur along gender lines. Other differentials can be observed to occur along class, caste, or age lines. However even along gender lines other differentials can be examined. I want to make clear that I recognize women are not one homogenous group. There are many types and groups of women that exist in varying socio-economic, culturally and physically determined environments. This paper examines gender in resource tenure; however I must mention two points to keep in mind

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as this paper is read. Firstly, gender in this paper most often refers to women. My rationale for the strong focus on women in this paper is that women have often been the invisible managers and guardians of natural resources for centuries. Before moving towards a gender perspective and developing an understanding of gendered spaces it is important to formally recognize that women's relationships to natural spaces - their use, access and associated management regimes often differ drastically from those of men. Another important point is that the literature on gender and natural resource management most often (however not always) uses the term gender when in fact it explores women in natural resource management. As this paper is a review of current and previous literature on gender and resource relations I chose to provide commentary within boundaries determined by the constraints of the literature. Secondly, the paper does not explicitly examine or differentiate the diverse groups of women that exist within rural societies.

Tenure beyond Land: Resource Tenure

There is a need for a shift in perceptions of tenure that are focused on land, to tenure systems that include all relationships with the resources that are associated with production systems, either actually or potentially in use. Rangelands that form the livelihood of hundred of millions of people in the world may serve as an example to support the argument. They are characterized by extensive use patterns and high natural risk and are managed through sophisticated institutional mechanisms for pasture allocation, to allow for access options and rotational grazing based on collective action to maintain range activity and to prevent over-grazing (McCarthy et al., 1999; Ngaido and Kirk 1999). This management includes all key resources and infrastructures of the rangelands that are critical for livestock production, such as water, pastures and grazing corridors (to name a few), and the various relationships that exist and go beyond land and property – but rather to access, use and control.

Historically property has placed in three categories: state, private, and common. Dissociating the term property from the three categories it has traditionally been placed in may allow space to explore the multi-dimensional nature of property. The intention is not to abandon the term, but to rethink it. It is difficult to fit property and the relationships with a particular piece of property into one concrete notion of common, state and private.

Relationships to resources can have aspects of one of the three notions of property, however often there is overlap. Vandergeest (1996) suggests that we think about property not only as rules and laws but also as ordinary everyday practices. This approach implies that for research on resource tenure it may be useful to begin with observations of what people do, rather than questions about rules and laws. By examining everyday resource interactions of people and communities the complexities of property become visible. A focus on practices as opposed to rules allows us to see into the intricacies of rural resource tenure, and helps us avoid the tendency to reduce all property relations into one of the three pre-determined categories – state, private and common property.

Resource relations and practices that exist in the everyday of people around the world also take shape around gender, class, kin, political, economic, legal, and many other relationships. To understand and rethink the term property and the resource relationships that exist in rural societies, it must be recognized that property relations are ambiguous, are frequently renegotiated and are dynamic (Vandergeest, 1996).

Vandergeest (1996) identifies four factors by which property is defined:

1. The need to communicate property claims
2. A group within the relevant community is to be convinced of the claim.
3. The claim needs to be remembered
4. Enforcement

Vandergeest (1996) does states that most property is neither purely state nor local but often it is a combination, just as women's informal access to edge environments is linked to men's more easily mapped and formally recognized property claims. Due to the complexity of most resource relations, it is impossible for state agencies to record, recognize, remember, enforce and administer all the resource relations that exist for a particular area. In the example of tenure of land, most agencies do not recognize the multiple and contingent claims with resources on the land such as trees and the varying claims to different parts of a tree (Vandergeest, 1996). Agencies often assume that the owner of the land on which the tree is planted also owns the entire tree.

It is difficult to confine property rights to a few defining characteristics, as property practices are complex, dynamic and continually being renegotiated. "Rural

property rights involve a complex mix of moral economies and ethics of access for sharing resources” (Peluso, 1996).

Bundle of Rights

Property rights are often referred to in the literature (Scott, 1986; Ostrom and Schlager, 1992) as a “bundle of rights”, which are distributed in a variety of ways, if we look at particular bundles of rights, it is easier to identify specific rights that can be or are already held by users, either individually or collectively. The bundles may define rights of exclusion, transferability, or enforcement. Ostrom and Schlager (1992) disaggregate the bundles of property rights into use rights and control rights. Use rights include access and withdrawal. Control rights include management (to modify or transform the resource, e.g. by planting trees or shrubs), exclusion (to determine who else may use the resource), and alienation (to transfer rights to others, either by inheritance, sale or gift).

Class of Property-Right Holders and Outcomes

Ostrom and Schleger (1992) define five classes of property-rights holders: owner, proprietor, authorized claimant, authorized user, and authorized entrant. In their article “Property Rights Regimes and Natural Resources: A conceptual analysis” they use the example of the lobster fisheries in Maine to show that property bundles include a variety of holders and rights (access, withdrawal, management, exclusion and alienation). According to Ostrom and Schleger (1992), these rights can be conceptualized in terms of “layers”. Access is the most basic right, to which each of the other (withdrawal, management and so on) can be added, however resource rights may not always follow this sequence (Ostrom and Schleger, 1992). Communities may be able to obtain management rights with extreme restrictions of withdrawal on use rights.

“Authorized entrants” include most recreational users of public parks who may be allowed, through purchase or some other means, an operational right to enter and enjoy the natural beauty of the park. However they would not have a right to harvest forest products. Those who have both the right to enter and to harvest some form of product are “authorized users”. The presence or absence of constraints upon the timing, technology use, purpose of use, and quantity of resource units harvested are determined by

operational rules devised by those holding the collective-choice rights (or authority) of management and exclusion (Ostrom & Schlager, 1992).

The operational rights of entry and use may be finely divided into quite specific “tenure niches” (Bruce, 1995) that vary by season, by use, by technology, and by space. Niche can refer to space and landscapes (e.g., rights along field borders, areas adjacent to the house, wasteland or degraded areas (Sarin, 1995), or formal garden areas), but may also refer to other exploitable niches. A tenure niche can be thought of as ‘a discrete area of land within a landscape defined by the specialised set of tenure rules that are applied to it’ (Bruce, Fortmann and Nhira, 1993). Tenure niches may overlap when one set of users owns the right to harvest fruits from trees, another set of users owns the right to the timber in these trees, and the trees may be located on land owned by still other’s (Bruce, Fortman, and Nhira, 1993). Operational rules may allow authorized users to transfer access and withdrawal rights either temporarily through a rental agreement, or permanently when these rights are assigned or sold to others (Ostrom and Schlager, 1992).

“Claimants” possess the operational rights of access and withdrawal plus a collective-choice right of managing a resource that includes decisions concerning the construction and maintenance of facilities and the authority to devise limits on harvesting rights (Ostrom and Schlager, 1992). The net fishers of Jambudwip, India, for example, annually regulate the positioning of nets so as to avoid interference, but do not have the right to determine who may fish along the coast (Raychaudhuri, 1980).

Having at least the bundle of rights associated with being “claimants” is crucial step in enabling local users to have an effective voice in some aspects of managing resources sustainably (Schlager and Ostrom, 1993). When local users are able to make their own rules concerning how to limit the timing, location, and technology of use, they are able to begin to learn how to devise rules that fit local circumstances. One of the major problems in trying to devise management rules for an entire country from a central governmental office is that the characteristics of diverse ecological systems vary dramatically from one another in most countries with diverse ecological zones. The effectiveness of diverse management rules depends on a large number of variables such as: when the rainy season begins, how long it is, the impact of different types of

harvesting equipment on the local system, the mix of species that grow in a forest and how they depend on one another, how individual villages are located in relationship to a forest, how easy it is to monitor each other's activities, how the growth patterns of highly valued forest products respond to different silvicultural practices, and the prices of various input factors and of various forest products in nearby as well as distant markets.

The importance of having local knowledge about these kinds of variables has been ignored in many of the natural resource policies devised for developing countries (Horowitz, 1998). Since users were perceived as the source of the problems of overuse and degradation, it was presumed that central authorities could apply scientific knowledge to manage these resources successfully over time by devising uniform policies regarding all forests in a country. Unfortunately, scientific information may not be effectively used without the local knowledge about specific resource attributes, which can then help to identify which scientific findings are relevant to a particular location or problem (Horowitz, 1998).

“Proprietors” hold the same rights as claimants with the addition of the right to determine who may access and harvest from a resource (Ostrom and Schlegel, 1992). Most of the property systems that are called “common-property” regimes involve participants who are proprietors and have four of the above rights, but do not possess the right to sell their management and exclusion rights even though they most frequently have the right to bequeath it to members of their family (Bromley, 1992; Martin 1979; MaCay and Acheson, 1987).

Empirical studies have found that some proprietors have sufficient rights to make decisions that promote long-term investment and harvesting from a resource. Place and Hazell (1993) conducted surveys in Ghana, Kenya, and Rwanda to ascertain if indigenous land-right systems were a constraint on agricultural productivity. They found that having the rights of a proprietor as contrasted to an owner in these settings did not affect investment decisions and productivity. Other studies conducted in Africa (Migot-Adholla et al. 1991; Bruce and Migot-Adholla, 1994) also found little difference in productivity, investment levels, or access to credit. In densely settled regions, however, proprietorship over agricultural land may not be sufficient (Feder et al. 1988; Feder and Feeny, 1991). In a series of studies on inshore fisheries, self-organized irrigation systems, forest user

groups, and groundwater institutions, proprietors tended to develop strict boundary rules to exclude non-contributors; established authority rules to allocate withdrawal rights; devised methods for monitoring conformance, and used graduated sanctions against those who do not conform to these rules (Agarwal 1994; Blomquist 1992; Schlager 1994; Tang 1994; Lam 1998).

“Owners” possess the right of alienation “the right to transfer a good in any way the owner wishes that does not harm the physical attributes or uses of other owners” in addition to the bundle of rights held by a proprietor (Ostrom and Schlager, 1992). An individual, a private corporation, a government, or a communal group may possess full ownership rights to any kind of good including a common-pool resource (Montias, 1976; Dahl and Lindblom, 1963). The rights of owners, however, are never absolute. Even private owners have responsibilities not to generate particular kinds of harms on others (Demsetz, 1967).

What should be obvious by now is that the concept of property rights is far more complex than simply government, private, and common property. All of the above bundles of rights (entry, harvesting, management, exclusion, and alienation) held by a single individual or by groups are organized in diverse manners. Some communal fishing systems grant their members all five of the above rights including the right of alienation (Millar, 1989). Members in these communal fishing systems have full ownership rights. Similarly, farmer-managed irrigation systems in Nepal, the Philippines, and Spain have established transferable shares to systems. Access, withdrawal, voting, and maintenance responsibilities are allocated by the amount of shares owned (Siy 1982; Maass and Anderson, 1986). Additional property rights may be placed over the distinct bundle of rights, in Canada this may be illustrated in the form of riparian rights or licenses. Several parties may have different rights to a single parcel with varying degrees of ownership. For example, a single piece of crown land may contain a hydropower line easement, mineral rights, grazing leases, and a tree farm license (Bakker, 1992).

Kendrick’s (1993) research in a coastal Javanese village explores another dimension in the conceptualization of resource tenure - how resources are distributed and redistributed after they have been “withdrawn”. In this case, the apparent lack of institutions regulating access to the fisheries does not mean that there is no resource

tenure other than open access. Kendrick (1993) suggests that the villager's difficulties in restricting access to local fishery resources may in fact be the emergence of informal practices which redistribute the catch taken by larger operations, through what looks to outsiders like a free for all as the fish are transferred from boats to the shore.

Bundles of rights can also confer certain "opportunity sets" for individuals. The opportunity sets define the various lines of action open to the holder of the bundle. As well, the relative capacity of the individual to make use of the rights is important in defining opportunity sets. The available resource, technology and knowledge determine the extent to which a person can exercise property rights (Fortmann, 1995).

Both property rights and the opportunity provided by those rights are conditional to time and place. Every society describes a unique relationship between its members and to the available resource base, and thereby formulates a system of property rights that are a cultural artifact. As alluded to in the introduction, the meaning of property is not constant it changes across societies and within societies.

Why Gender?

Natural resource based assets, including soils, home sites, crops, grazing and forestland, and water are important everywhere. But in countries where agriculture dominates, ownership of resources is politically significant and directly associated with power. Command over resources is arguable, the most severe form of inequality between men and women today. Systematic differences in resource tenure rights between men and women contribute to structural inequality and to poverty for women. Access to resource and control over its use are the basis for food and income production in rural areas, and more broadly, for household wellbeing. Access to productive resources such as water and irrigation systems, are tied to tenure as well (Meizen-Dick et al. 1997). Women who become heads of households are particularly vulnerable: when their access to resources is through their husbands and fathers, they often lose their right to access after widowhood, divorce, desertion, or male migration.

Differences in resource rights of women and men, and lack of direct access to and control of resource, may place constraints on women's productive roles as well as their *power and influence in the household and the community. In many societies, resource*

rights reflect, if not determine, a person's citizenship status or degree of inclusion in the groups. Often denial of resource rights is used as an exclusionary mechanism for certain ethnic or racial minority groups. Rural women also claim that secure resource rights increase their social, economic, and political status, and improve their sense of self-esteem, confidence, security, and dignity. By diminishing the threat of eviction or economic destitution, direct and secure rights to resources can increase women's bargaining power in their families and participation in public dialogue and local political institutions.

Often research exploring relationships between gender and biodiversity is confined to an examination of gender roles and perhaps how they have changed over time. Extensive research is needed not only to document gender aspects of biodiversity management, but also to document the culturally-held perceptions of women and compare them to those of men. This would add to the growing body of literature which debates whether women and men in fact perceive their realities differently, therefore forming priorities and values associated with the management of natural resources that differ. The enormous gap between the fields of gender studies and biodiversity, has often led to ignorance in gender issues and approaches to gender in natural resource institutions.

Academic Perspective and Insights – “Gendered Spaces”

Indeed it is only relatively recently that gender roles in resource use, access, and control have been explored in academic literature and research. Boserup's (1970) work on farming systems has been noted to be the first substantial body of formal literature on the gender dimension's of resource use. More recently there has been literature available on gender differences in land and tree tenure (Fortmann 1988; Rocheleau 1988; Rocheleau and Edmonds 1997). Rocheleau and Edmonds (1997) stress the complex, multidimensional nature of tenure. They emphasize that analytical frameworks that focus on land oversimplify sophisticated rules of access to and use of plant species and their various products, which can vary according to natural and agricultural cycles. Rocheleau's research in particular has had a strong focus on how natural spaces can be gendered, and how gendering may transform over time. Although men frequently gain

formal access to land and land titling programs, women often have informal access to other, “in between” spaces. Rocheleau and Edmonds (1997) examine ‘gendered spaces,’ some of which presumably benefit women, by using the concept of ‘tenure niche’ (see Bruce and Fortmann, 1989), which reflects the multi-dimensional character of spaces. The niche concept can also refer to niches of exploitation, and thus to non-spatial dimensions as well. In bush fallow, niche often has a temporal dimension, which could be seasonal, related to fallow succession, fruiting cycles, etc. It can also be resource-specific.

The multifaceted nature of resource use and access leads Rocheleau and Edmonds (1997) to argue that protecting women’s rights may require shifting focus from day-to-day ‘operational’ and higher-level ‘constitutional-choice’ rules to ensuring equitable gender participation in decision making about ‘collective choice’ rules (Ostrom and Schlager, 1992). They contend that women’s ability to participate in resource planning and management does not reflect the extent to which they use and depend on the resource base. In fluid tenure regimes (such as shifting cultivation), negotiability may be more important than the actual structure of rights.

Meinzen-Dick et al. (1997), while acknowledging the danger’s of generalizing, attempt ‘to identify critical gender asymmetries in property rights.’ Increasingly formal rules about property (such as titling initiatives) require an examination not only of tenure, but of control over benefit streams derived from use of property, and the trade-offs that resource use change may bring. For example, land use changes favoring cash cropping or contract farming can turn women into unpaid labourers (Staudt, 1987; Watts and Little, 1994). In addition, de jure equity may be disjoined from de facto reality, and formal mechanisms for addressing resource and rights distribution, such as titling or registration programs, are often gendered (e.g., familiarity with titling or adjudication procedures, or with officials, or women’s lack of mobility where travel is required). Formal constraints aside, security of tenure without access to labour or adequate capital to take advantage of it will limit women’s potential to intensify production (Meinzen-Dick et al., 1997).

Platteau (1996) emphasizes that because of the complexity and fluidity of resource relations, customary tenure does not lend itself to land registration, irrespective of who might benefit from it. Conflicts between customary and de jure adjudication further

complicate and politicize tenure rights. As Mackenzie (1993) has shown in Kenya—while de jure changes may expand the range of opportunity, their accessibility to women (in terms of understanding and using them) may be uneven, and predictions of how they will be used—or how they might benefit women are precarious. Even in the absence of formal change, increasing resource pressure tends to further marginalize women (Platteau, 1996; Watts, 1993). Gray and Kevane (1997:16) explicitly ask whether changes in tenure status are ‘due to changing fortunes or changing rights,’ suggesting that in many parts of West Africa, many of women’s rights are ‘precarious and contingent’.

From these reviews one can identify some general points for discussion. First, women’s rights to resources are multi-dimensional. Views of tenure must accommodate a multi-use, multi-user model that addresses rights to resources, not just land. Within this framework, niche is an important concept for understanding both opportunities and barriers as it reflects the multidimensional quality of tenure (Bruce & Fortmann, 1989). Titling, the use of formal registries, cannot cost-effectively capture the complexity observed on the ground. Additionally, attempts to ‘unify’ tenure rights under fewer rights holders (such as the trend toward individualisation) will marginalize women in many areas, even if parallel efforts to achieve greater legal standing are undertaken (Feder & Feeny, 1993). Many development practitioner’s and academics are wary of de jure changes, which would lead to formal tenure arrangements, as they have the potential to further marginalize women, despite what may be good intentions. Finally, a great deal of the current literature on tenure either, implicitly or explicitly, questions the nature of women’s customary rights. Is their appropriation of niches in the landscape and resource complement secure, or subject to dynamics over which they have little influence?

Academic Perspectives and Insights - Patterns of Use, Access and Control

As established within literature and research on this topic, any analysis of gender and tenure must go beyond who holds legal title. For land, water and trees, we need to look at complex bundles of rights held by different people, rather than single owner of any given resource unit. The rights to access, withdraw, manage, exclude others from the resource, and to transmit or alienate rights all must be considered (see Ostrom and Schlager, 1992). The overlapping categories of use have been examined more extensively

for trees (see Rocheleau and Edmunds, 1997), but apply also to land, water and “in between” resources such as weeds, bushes and plants. Rights for the use of resources often vary between men and women in the following ways: for different crops, grazing, and gathering on land; for irrigating, washing, watering animals, or other enterprises using water; for timber, fruits, leaves, firewood, shade, or other products from trees.

Land rights are fixed and often enduring assets, it is less complicated to define the boundaries of the resource unit. At the other extreme, water and fishery resources are inherently mobile and transitory. Rights are usually defined in terms of access to and use of water over time, rather than ownership of a particular unit of water. However, the source of water - local streams, irrigation systems, boreholes or other single point sources - will affect its accessibility and the kinds of rights “available”. Its interchangeable nature does not necessarily constrain its use as an asset, as in the case of women’s groups in Bangladesh. These groups often consist of landless women, who own boreholes and sell the water to users (Koppen and Mahmud, 1995). Water rights have often been poorly defined, and actual distribution patterns often differ from formal allocation rules. Water rights are also often tied to responsibility for maintenance of water conveyance infrastructure.

Tree rights are similarly often tied to responsibility for planting and tending the trees. What is a tree and the nature of production of the tree is directly affected by management - where planted and whether and how it is pruned. For instance, in western Kenya, where women can use bushes not trees, judicious pruning keeps a woody species a bush (see Rocheleau and Edmonds, 1997). However, in many cases there are strong links between land, water, and trees. Water rights are often granted based on ownership of irrigated or riparian land near rivers. Rights to land may be obtained by either planting trees (where trees are scarce), or clearing trees (in forested areas).

Over a long time horizon, direct rights to land, trees, and water can be thought of as hierarchical. In many cultures clearing land of trees (in forested areas) or, conversely, planting trees (in open areas) can establish or reinforce resource rights (Rocheleau, 1997). Often the establishment of land rights confers the rights to other resources on the land, such as water. Other direct paths to resource rights include inheritance, cash purchase, and state legislation or political process, including allocations by village chiefs or elders.

These paths apply particularly to areas that would never have supported trees but also to areas that may have been cleared several generations ago (Cleaver and Elson, 1995).

Identifying these pathways to resource rights enables us to consider the gender implications of each path and the specific barriers women may face under each. On a theoretical level the markets are gender neutral, it is money that decides the power position. However for political, cultural and economic reasons women are not strong competitors in resource markets. There is less evidence on gender aspects of water markets, but Cleaver and Elson (1995) argue that women will face similar obstacles, especially where “willingness to pay” is not matched by ability to pay.

The evidence on the gender implications of various types of investment as a basis for resource claims is varied. Tree clearing is almost exclusively a male task in most societies, and thus prohibits women from establishing rights to land resources. Women are more likely to be involved in tree planting, but it is still largely a male activity. In addition, for women to plant trees, in most cases they must already have some rights to land. In some ethnic groups in Ghana, if women plant cocoa trees, it gives the wife rights to land on marital dissolution (Quisumbing et al., 1998). However this then opens up question regarding other forms of labour equity which create obstacles to women’s acquisition of rights.

Women’s access to resources for their own productive and reproductive activities is more prevalent than their control (Agarwal, 1994). The patterns of access are more complex and more nuanced. Community norms including those of gender relations interplay with economic opportunity. It is in the informal rights of access where we are more likely to see the flexibility and subtleties that characterize actual practice (Rocheleau, 1997). The effect of gender relations on formal and informal resource rights suggests that policymakers need to look beyond legal rights, to look at removing gender-based constraints to other services and rights, which combine to limit women’s access to resources (Agarwal, 1994).

Women’s Place: Customary Rights

Customary tenure refers to rights that are transmitted through social, rather than legal mechanisms, and whose legitimacy is rooted in tradition, rather than legal statute.

Women's 'bundles' of rights are often small relative to men's, and limited to the use of resources (Gray and Kevane, 1999). The importance for women to have access to resources ostensibly controlled by others lends women's tenure rights their nested character (Rocheleau and Edmunds, 1997).

There are several instances where lack of secure rights creates real hardship for women as individuals. In some African regions, upon divorce, a woman must abandon the land which she has been cultivating without any compensation for the work she has put in over the years to improve the productivity of the field. Her husband may also ask her family for the return of the bride-price, and in patrilineal societies, it would be expected that the children would stay with his family groups (van Est, 1997). She will most likely be separated from her husband's community and is unlikely to be able to stay unless she has relatives in the village. A divorcee must seek alternative means of livelihood or return to her natal village, where she may be allocated land by her family group; however this is not often the case (van Est, 1997).

The fate of a widow varies greatly according to the custom of particular societies. In many cases, a widow is not entitled to inherit any rights to resources on her husband's land, and unless she can find an alternative, she is expected to return to her own family group. In some African societies, where women's labour and child-bearing capacities are highly valued, the man's family may have paid a considerable bride price at the time of her betrothal and marriage. Women are thus considered, in effect, to be the property of the family. For this reason, a young widow may be taken as a wife by her husband's younger brother or cousin. Where the woman refuses such as re-marriage, she may find her access to resources revoked (Toulmin, 1992).

Where daughters are allowed to inherit, men may override their rights. For example, Cooper (1997) found that for urban Hausa women in Maradi, Niger, of twelve women who had inherited land from their fathers, five had lost their land. In most cases, they had left their land in a rent-free loan arrangement with their brothers, who had then sold it without their permission. Urban women are less able to keep up the social ties necessary to renew and define their claim upon resources.

Often for women to gain access to resources they must do it through a process of social negotiation in which women do not hold many cards (Schroeder, 1993). Linked to

women's lack of rights, is their lack of status or representation within local decision-making bodies, whether customary or governmental (Schroeder, 1993). In this respect, their position is akin to that of other secondary rights-holders, such as newcomers, or seasonal visitors. As a result, community decisions are made without explicit reference to women's knowledge or priorities. An important area where the priorities of women as a group may differ from those of the men in their household, relates to the management of common resources.

In many densely populated areas around towns and cities, usable resources are becoming scarce. In such conditions, resources used by a range of temporary rights holders are at risk of being reallocated to others more closely related to the landholder. Whether women's fields are targeted for reallocation depends very much on the relative status and bargaining power of the individuals involved. Often younger women who have borrowed or rented land are in weak negotiating position, particularly if there is no kinship tie, and they are more likely to be evicted than men (Hesseling, 1997).

As resources become more valuable, due to scarcity, commercialization and the introduction of more productive harvesting techniques, there is often a shift in gender roles and family responsibilities. In southern Mali, where women have traditionally been involved in *basfonds* rice production, the rise in prices following devaluation led men to show a much greater interest in these low-lying areas (NEDA, 1997). Women's fields are no longer used exclusively for subsistence, and in many cases women are keen to use their resources to earn money and secure a degree of autonomy from their husband (Staudt, 1987). As women's roles change, men react in different ways. One example from Niger, described a situation where men have come to feel that women's use of resources for generating private incomes negates the very reason why women are given access to them – to support the family- and thus their resource rights are increasingly being contested (Cooper, 1997).

Legal developments at national levels have also brought about changes in women's access to resources, which were not necessarily considered prior to enactment. Following independence, many African countries have been strongly encouraged by donor agencies to set up land registration programs to put an end to the legal uncertainty faced by customary rights holders, and to promote the development of land markets and

credit secured on property (Quan, 2000). The dangers of subsuming multiple overlapping rights into unitary landholding categories such as “private ownership”, has been pointed out by several authors. Registration of title in the name of the household head, for example, will not do justice to the customary rights of others. The most common example of the deterioration of women’s rights through registration schemes comes from Kenya, where the law implementing the Swynnerton Plan of ‘954 failed to acknowledge or protect “lesser rights” (Sorrenson 1967:189). Despite protection being granted to “customary tenancy practices”, women’s use rights were not considered at all. In most cases, outright ownership was granted to men with a title deed facilitating individual control.

Customary or Formal Tenure

An important policy issue is whether customary tenure systems that are locally enforceable and have adapted over time, or formal statutory systems that are legally or morally bound by universal conventions, can provide women with greater and more secure access to resources (Rodda, 1991). Central to this debate is the question of whether human rights, including rights to resources, are seen as universal or as relative to cultural, religious and national rights. While no clear answer exists, a simplified comparison of the two types of tenure systems reveals key challenges for policymakers aiming to improve women’s resource rights.

Resource rights, in both statutory and customary tenure systems, fall along a spectrum that thoroughly translates to degree of power. This spectrum accommodates diverse and fluctuating interests and provides different people with different bundles of rights (Peluso, 1994). The entitlements a woman holds determine where she fits on the spectrum, from full ownership with all entitlements at one end to no resources without entitlements at the other (Davison, 1988). In both systems most women are located somewhere between these two extremes.

Both customary and formal tenure systems evolve and can accommodate short-term changes and opportunities. Customary systems usually regulate access to resources according to membership in a lineage, community, or household (Shipton, 1989). These systems operate most effectively when resource is relatively abundant and most resource

user's know one another and have regular and direct contact (Ostrom, 1990). Formal systems are most effective where resource values are high and resource transactions among strangers are frequent, requiring transparency and public records to reduce information asymmetries (Grigsby, 1996).

Even in formal tenure systems, unwritten rights often coexist with the limited number of rights that are actually recorded in registries or titles (Agarwal, 1998). In practice, however, the codification of customary rights has often strengthened and concentrated resource rights of individual, senior male household heads over multiple other interests, resulting in only a small percentage of the population, and strikingly few women, having resource rights (Platteau, 1996).

The Role of Social Networks to Secure Access to Resources: Possible Area of Focus

Collective Action

Property rights and collective action affect a wide-range of resource use and investment activities in the developing world. Prominent examples include grazing land practices and investments, forest and agro-forestry resource use and management, soil fertility, management and upkeep of indigenous irrigation schemes, watershed management, and fisheries management. In many countries resource tenure agendas have concentrated almost exclusively on privatization and individual titling, even though there is a general acknowledgment that privatization may not always offer the best explanation to address certain efficiency, equity or resource sustainability objectives in either the short- or long-term.

Property rights and management institutions typically have their roots in local indigenous arrangements, and they are evolving over time with mixed success in response to growing population pressure and agriculture commercialization (Swallow et al., 1997). At the same time, many governments continue to promote such policies as sedentarization of pastoralists and privatization of shared resources, or they designate land as state owned without supplying well-defined or well enforced policies regarding access, use of those resources (Ostrom, 1994). In some cases this has led to damaging competition and conflict over resource access and use.

Programs to decentralize natural resource management are generally based on the assumption that users will take on the roles formerly assigned to the state. This requires some form of collective action to coordinate individual activities; develop rules for resource use; to monitor compliance with the rules and sanction violators; and to mobilize the necessary cash, labor, or material resources.

The term collective action “action taken by a group (either directly or on its behalf through an organization) in pursuit of member’ perceived shared interests” (Marshall, 1998), implies a conscious working together, such as in investing in a resource or excluding “outsiders” from using it. Collective action, which is sustained over time, usually includes rules and decision-making structures. In the case of natural resource, this might include rules on using (or refraining from using) a resource, as well as processes for monitoring, sanctioning, and dispute resolution (Ostrom, 1992).

Most irrigation systems, forests, rangelands, and fisheries cannot be managed at the individual or household level, because of their spatial scale (Ostrom, 1992). They require some form of coordinated regulation. This may be provided by state agencies (with greater or lesser efficacy). However, the withdrawal of the state leaves a management vacuum unless local collective action is available to manage the resources (Ostrom, 1994).

For most resources there are generally multiple uses, as well as multiple users, of these natural resources, and therefore making collective action necessary in most instances. Irrigation systems are used not only for field irrigation but also for domestic purposes, fishing, livestock, and home gardens (Bakker et al., 1999); forests are used for kindling, fodder, resins and other “minor forest products” as well as timber (DeWees and Scherr, 1996); the same land may be used for crops, a few trees, and grazing by different groups or in different seasons (Swallow et al., 1997). Many of these “secondary” uses have high economic value or are essential to the livelihood strategies of various types of households. Outside approaches that focus on resource management to maximize a single use are not likely to be as appropriate in these situations as rules that are locally developed through negotiation between different users (Stein and Edwards, 1999). Local collective action can be instrumental in finding rules and allocation of the resource between different users in a way that is seen as equitable by the users themselves. There

are therefore equity as well as productivity arguments for collective action in natural resource management.

In terms of gender “neither households nor communities are ungendered units” (Agarwal, 2000). The absence of a gendered perspective in collective action can result in missed opportunities and ineffective forms of collective action. Historically it has been observed that women have used informal forms of collective action, which are often distinct from those of men. In rural communities women have functioned in cooperative systems with traditional social networks that are often distinguished by mutual exchange (Agarwal, 2000). Often, due to women’s limited access to economic resources, their reliance on these forms of social capital is often greater than men.

Titling

Since the 1980’s, there has been a new wave of titling programs globally as government and international agencies promote the privatization of customary property and the formalization of resource rights. The process includes granting rights over a resource to an individual and issuing a title to that person, who in the great majority of cases has been the male head of household. In statutory legal terms, titling has gathered and deposited into the hands of one person the different rights, particularly use rights, once held by different people in the household and the community (Carter et. al, 1996). Thus, while different people may have held different rights to resources, titling usually gives just one of those people absolute and exclusive rights to the resource.

Formalizations of resource rights have been promoted for a number of reasons: titling not only protects a person’s access to, and control of a resource, but may benefit them in other ways as well (Bruce et al., 1993). Documented resource ownership may contribute to access to credit, agricultural resources, and services. These benefits can accrue to women if they become titleholders. In addition, recent research suggests that resource ownership increases women’s bargaining power within the household and her status as a citizen in the community (Beneria, 1992).

A principle criticism of titling programs and formal/legal property rights institutions (such as property registries) is their tendency to grant title for family/household property (land or housing) to just one person in the family/household,

usually the head of household who in the great majority of cases is male (Grigsby, 1996). While titling programs are generally gender-neutral in the sense that they usually do not have gender requirements or exclusions, they are in practice gender biased because they do not take into account constraints, particularly those based on social and cultural norms, faced by women (Gray & Kevane, 1999). This results in the impression that women are not property owners by those implementing the program and consequently very few women are given title to resources. In addition, women's customary rights to resources are not legally recognized, and women may therefore run the risk of losing those rights in practice (Feder & Feeny, 1993).

Titling programs, in their design and implementation, do not target women for numerous reasons. First, laws regulating formal adjudication and registration of property rights are often silent with regard to gender, thereby leading to de facto gender-bias in application. Second, laws relating to property ownership and management (e.g. inheritance) sometimes explicitly favor men (Bromley, 1991; Grigsby, 1996; Agrawal, 1994). In addition to these explicit or implicit legal constraints, and even where legal reform has been aware of the special concerns of women, the agencies, processes and projects associated with implementation are, at best more difficult for women to negotiate than for men (Beneria, 1992). Socio-cultural norms that do not recognize women as full and equal participants in the economy have not yet adapted to modified legal structures. Titling programs, and other such resource access programs are often staffed by men who do not share the vision of gender equity and thus, do not target or facilitate women as legitimate clients for their activities (Bruce et al., 1993). In addition, women often lack the skills and confidence to approach institutions that have traditionally been the domain of men.

The tendency not to title women as property holders is seen as problematic for both equity and efficiency reasons. Granting women title as property owners contributes to gender equity in that it recognizes women's fundamental human rights to equality and freedom from discrimination. Recognizing women's resource rights is said to heighten women's status within the household and the community, and to improve women's sense of security. On the efficiency side, given that women are economic actors, the rights to

resources and to legal title can increase their access to markets and their effectiveness as producers (Dey, 1981).

Securing Rights

There are essentially two ways to enhance women's resource rights. One is to protect or increase the security of existing rights. The other is to create new rights or increase the range of rights over which women have control. The comparative advantage of customary tenure systems is an institutional capacity to support existing resource rights, while for formal systems it is the capacity to create new rights (Dey, 1981). A woman's rights are secure when she can use or manage resources in a predictable fashion for a defined length of time. Security of tenure consists of three dimensions: definition, independent control, and enforcement (Guyer, 1987; Vandergeest, 1996).

The first component is clarity in duration and content of rights. Very few rights, such as fuel wood collection, can be secure if they endure over time. The content of customary rights can be ambiguous, since they are established through oral contracts that are frequently modified and reinterpreted (Rocheleau & Edmunds, 1997). A promising area for policy development is the clarification and documentation of women's customary use rights. Tenure security for women could be improved by establishing contracts protecting widows and children from eviction or by developing leasehold contracts documenting the duration and scope of women's resource rights to permit planning and managing of natural resources and income use (Grigsby, 1996).

A second component of security is independent control – a factor greatly diminished because of the dependent character of women's rights to resource (Bruce et al., 1993). For most women, resource rights are derived from their relationships to men: fathers, husbands, or brothers. The difficulty in distinguishing rights of different household members also contributes to the, sometimes false, assumption that women's specific resource rights need only be defined when they head households. However in most cases, unlike men, women cannot liquidate, trade, or retain derived resource rights when the male link is lost (Davison, 1988, Feder & Feeny, 1993, Dey, 1981, Rae, 1991). Continued access to resources depends on a women's fulfilling or negotiating a

constantly changing set of obligations and expectations defined by the men who hold the rights.

A third dimension of security of tenure concerns women's ability to defend and enforce their resource rights. Tenure security depends upon women's capacity to lobby for and promote their interests and upon whether the formal and customary authorities vested with the power to protect women's resource rights share these interests and have a strong imperative to uphold them (Deere, 1987; Agarwal, 1998; Rocheleau, 1997).

For improvements in tenure security to become operational, they need to be socially acceptable to formal and informal governing bodies with different norms and values. Policymakers need to identify partners capable of influencing the attitudes, priorities, and incentives that govern political and group decisions. Proposals for improved tenure security also need to be administratively viable (Feder and Feeny, 1993, Gray and Keveane, 1999). Customary natural resource based institutions are familiar and convenient to rural women, reducing the transaction costs that prohibit recourse to formal administration services. However, this social and physical proximity can also be repressive. Government offices and land registries can introduce new principles, maintain public natural resource records, and offer a neutral forum in which women can effectively press their claims, but require transparent and consistent procedures and affordable transaction costs (Bruce et al., 1993, Rodda, 1991, Platteau, 1996). In many countries these institutions are inefficient, corrupt, and complex. Few women have the political connections, know-how, money or physical proximity needed to secure resource rights. A challenge for government planners is to build natural resource administration capacity capable of more efficient natural resource transfers than customary inheritance systems. Another challenge is to develop a affordable and accessible dispute resolution procedure. Such a procedure needs to have a somewhat judicial footing, consistency in its operation, impartial and informed officials, a court-based appeal process, and the support of both men and women.

Conclusion

Enhancing women's resource rights requires that they become a political priority and a legal possibility; it also requires administrative viability, social acceptability, and

moral legitimacy. Complementary policies must address women's limitations in exercising and enjoying their resource rights. Even with assured resource rights, investments in property require access to financial markets and information, extension, and other services. Policymakers should be aware of the complexity of tenure systems and how legal principles associated with resource rights can be subverted when put into practice. To bring about substantial progress, integrated joint action is required between the different groups of stakeholders (women, formal and customary resource administration officials and services, national governments and parliaments, and the general public).

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