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“A Woman’s Field is Made at Night”: Gendered Land Rights and Norms in Burkina Faso

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1. Introduction

Women farmers in sub-Saharan Africa confront a complex set of social pressures and constraints. Lineage elders may restrict their access to land. Extension workers and irrigation projects may ignore their requests for inputs and advice. Husbands may control the use of their time. A woman may not have even chosen her husband, nor may she have had any voice in her husband's decision to marry a second or third wife. These pressures and restrictions have an effect on agricultural output, and indeed a number of recent studies find significant inefficiencies in the allocation of inputs in West African households (Judith Carney and Michael Watts 1989; Christine Jones 1986; and Christopher Udry 1996). The inefficiency may be attributed to problems inherent in the structure of households as units of economic organization. While households are supple institutional forms for raising children and for providing common goods like domestic services, love, or insurance, they may not be the most effective for coordinating agricultural production. As the Mossi proverb from Burkina Faso goes, "women's fields are made at night" (*pág puug tòogdà yūngō'*). The 'night-time' evoked by the proverb signifies the household bargaining conducted between husband and wife, and in many cases also among co-wives, that determines access to productive resources such as land and labor.

These inefficiencies, however, may also be due to gender conflicts in broader social arenas outside the household. Men's fields are 'made' in the full light of day, in the sense that a man's right to obtain and own property is not questioned. A woman has to bargain at night because society determines that the only person she can bargain with over access to land is her husband. As Bina Agarwal (1997a:2) has noted, the arenas that make these determinations include "socio-economic and legal institutions within which households are embedded." Institutions and norms structure the work that people do, the interactions they have with others, and also of course the organization of the household itself. That social institutions may be gendered in ways that have strong efficiency and equity effects is especially true for land tenure institutions in sub-Saharan Africa. Across the continent, a burgeoning literature documents a common pattern in the gendering of land tenure that transcends

ethnic, cultural and national boundaries (Jean Davison 1988; Catherine Coquery-Vidrovitch 1994). Women are typically not 'owners of land' but rather are 'owners of crops'.² They have rights to cultivate, and rights to dispose of crops and crop income, but not rights to allocate or alienate land. Their ultimate rights to use land are associated with their position toward men- as mothers, wives, sisters and daughters. This gendering of land rights has implications for both equity and efficiency. It may exacerbate the limited bargaining power of women within the household, and lead to consumption patterns that favor men and boys. The disparity in control over land, especially when paired with unequal access to labor (see Penelope Roberts 1988), may be at the root of significant differences in schooling of girls, utilization of health care, life expectancies, and access to political power.³

Burkina Faso in West Africa (hereafter Burkina) is a case in point. This land-locked nation of 10 million people is home to dozens of ethnic groups, including the majority Mossi, and in almost all of them women are restricted in their rights to use and dispose of property. Recent research suggests that the gender disparity in rights over land may indeed be responsible for inefficient allocations of inputs in agricultural production. Udry (1996), for instance, in his analysis of a panel sample of farm households from Burkina Faso, compares production efficiency on plots controlled by male members and those controlled by female members of the same household. (There are few female- headed households in the area.) He finds that yields of the same crop for the same year are lower on women's plots than on men's plots. But, on average, women's plots have a higher total value of output per hectare than men's plots, because women's cropping patterns contain a mix of higher value crops. He further notes that the lower yields of specific crops on women's plots cannot be attributed to factors such as inferior soil quality, gender differences in fixed travel costs or in the technology used, or to women being overly constrained by child "training" duties. Rather, underlying the crop yield differences is the heavy concentration of fertilizer and labor on men's fields. Udry et al. (1995) estimate that a reallocation of such inputs from men's to women's plots could raise household agricultural production by as much as 10-20 percent.

Here intra-household bargaining power (and the notion of households as sites of bargaining) can be seen as important. Differential bargaining power can affect the intra-household distribution of productive resources

between women and men. Lisa Smith and Jean-Paul Chavas (1997) demonstrate that allocations of resources vary according to whether households have diverging preferences and unequal distributions of bargaining power between women and men. Literature reviewed in Udry et al (1995) indicates that changes in extra-household options (fertilizer subsidies, rights in common property resources, guaranteed employment) could alter the threat points that determine bargaining outcomes. Agarwal (1994) outlines how extra-household options would themselves be affected by differential bargaining power. Linking bargaining power and land rights in particular, she argues that in the rural context bargaining power is both affected by and reflected in gender differences in land rights. Women's lack of strong land rights and associated weaker bargaining power can reduce their access to production inputs not only within the household but also outside it -- the latter by weakening women's ability to successfully negotiate with state institutions that deliver agricultural inputs, extend credit, and provide infrastructural services and information (Agarwal, 1994). All this has consequences for both equity and production efficiency.

These considerations suggest the importance of closer investigation of the gendering of property rights. This paper proposes to do just that, combining an extensive review of the literature on Burkina with results of field surveys conducted by the authors. Our investigations lead to a more nuanced understanding of the gendering of land tenure. Three findings are critical. First, the gendering of tenure in Burkina is more complex than the standard story. We argue that although in the 'customary' canon of virtually all ethnic groups in Burkina women have no direct access to land, women do have considerable 'indirect' rights of access to land, particularly through marriage. More importantly, these indirect rights are complex and variable, especially with regards to compensation for working on fields of the husband. Access to land must be viewed in context of a range of choices and restrictions that both women and men face. For example, women's rights to property obtained from men in the household may be coupled with obligations and other restrictions on use. The land rights of men may also be circumscribed. In many cases men are obliged to surrender a share of the harvest to their wives; wives are more like sharecroppers with rights to cultivate than landless laborers.

Second, tenure may be changing in ways contrary to conventional wisdom. According to that view, when land becomes scarce or rises in value women's rights to use land are revealed to be secondary and tenuous. Men use their position of dominance in society to 'expropriate' women's land.⁴ Women, whose rights to farm a plot of land were guaranteed by marital or kinship status, lose these rights and face a diminished tenure status that underlies and reinforces a greater economic and social insecurity. But as we shall see in Burkina, the complex structures of local tenure may produce the opposite result, where certain kinds of rights for women are strengthened rather than undermined. A case study of women in three villages (Bereba, Dimikuy and Sara) from two ethnic groups (Bwa and Mossi) reveals unusual changes in women's access to land.⁵ This research conducted by the authors involved multiple surveys of farmers as well as participant observation during the 1995 agricultural season. Enhanced crop and market opportunities, population growth and large-scale internal migration, have changed interpretations of local custom. While the impact of these changes on women has been mediated in important ways by ethnicity, overall the barriers to obtaining land outside of the household seem to have been eroded. Concretely, the changing value of land has also created an incipient market for land, where land is obtained outside of customary channels through more anonymous arms-length transactions. Women in some regions of Burkina are also obtaining land through this new avenue, strengthening their access to resources.

Third, government intervention in the gendering of tenure seems also to have multiple effects. Changes like those occurring in the three villages of Bereba, Dimikuy and Sara are mediated by government policy. State interventions in land tenure are modifying land allocation and may alter women's access to land in ways that impede changes in gendered tenure norms. While many government projects increase land access for women at the 'communal' level (as members of women's groups), much of the evidence from Burkina suggests that women's individual rights are substantially eroded even when government projects explicitly try to 'incorporate' women as 'partners' in land-use programs (Della McMillan 1995; Simon Batterbury 1993) .

These findings are of general interest. Only recently in economics, with articles by Nancy Folbre (1997) and Agarwal (1994a, 1997a), have the 'external' social processes that condition the bargaining and cooperation

that goes on within households received the full attention they deserve. This paper shows that a research agenda focusing on ‘extra-household’ determinants of input allocations in a particular country generates interesting and important observations and hypotheses. Moreover, the study of extra-household processes generates a number of very clear suggestions for improving studies focusing on intra-household issues. Bargaining between men and women in households takes place within a context of complex and gendered rights to use land. This context shapes the decisions that men and women take about whether or not to cultivate personal fields, and how to cultivate them. Without an understanding of this context, it may be difficult to correctly interpret findings of variation in agricultural yields of men and women. Findings of lower yields, like that of Udry (1996) discussed above, could be partly due to gendered restrictions on land use and gendered structures of access to land. Specifically, we suggest that two effects, that we label selection effects and restriction effects, may explain part of the yield differentials that Udry and others attribute to inefficiencies inherent in bargaining without enforceability. Consider the selection effect. It may be more profitable for a woman to work hard on her family field from which she receives a share of the harvest. Or it may be more profitable to work as a wage laborer on the cotton fields of her husband and others. With these choices, women who cultivate independent fields may have characteristics different from those who do not cultivate. Differences in yields between fields of women and fields of men may partly be due to self-selection.

2. Women’s Limited Direct Access to Land in Burkina⁶

Before describing the specifics of land rights in particular communities, a few words are in order here about the nature of land rights in sub-Saharan Africa. In much of sub-Saharan Africa, land has not historically been held by individuals, but controlled by corporate groups. The primary way cultivators gain rights is from membership in groups, but also through the application of labor or by the investment of capital. Farmers obtain land through inheritance, from their extended families or lineages, through the market, and as members of organizations and associations. Parker Shipton and Miriam Goheen (1992) describe how rights fall into several

broad categories: use, transfer and administration. Use rights may be exclusive, with the rights-holder able to exclude all other uses of the land, should he or she wish, or 'diluted', with the rights-holder having only a narrow ability to use the land. Many times fields are "subject to overlapping and competing rights and claims" (Angelique Haugerud 1989:62). This is particularly evident with tree crops, such as in rights to collect tree products, or a right to farm but not to plant trees, a right retained by another owner. Thus we find situations where farmers have rights to cultivate vegetables on tree plantations, but once the trees are grown the ground is shaded and the right to plant crops becomes meaningless (Richard Schroeder 1993). Transfer rights typically depend on status within a corporate group; they may also depend on age, gender and wealth. 'Renting' land is common, but rental transactions are usually undertaken in complex social settings of rights and ritual duties, and usually do not involve monetary compensation, and so researchers prefer the terms 'lend' and 'borrow'. That is, the 'rental' agreements are often complex, incomplete and implicit agreements involving non-pecuniary transfers. To these categories, we should add the category of security of land rights. This idea of security characterizes the probability that use and transfer rights will continue through time. Security also depends on status. Rights for some people (migrants for example) end when they stop cultivating their fields. Rights change with the length of time a parcel is cultivated. For women, rights frequently end with divorce, with widowhood, or with failure to have sons.

Consider now the specifics of women's land rights (or lack thereof) in two important ethnic groups in Burkina, the Mossi and the Bwa. The Mossi are the majority ethnic group of Burkina. They have a tradition going back six centuries of participating in an independent and powerful polity that is markedly hierarchical and patriarchal (Elliot Skinner, 1989). At formal independence most of the important leaders of the new state (then called Upper Volta) were Mossi. Farming is the primary occupation for most of the Mossi population during the short rainy season from June to November. Sorghum and millet have been the dominant crops, although there is considerable diversity and exploitation of micro-climatic variation (Coffi Prudencio 1993). Hand cultivation is common. Tractor use and plowing remain rare. Following the severe drought of the early 1970's and second

drought of the early 1980's, Mossi started migrating southwards and westwards, particularly to the newly opened areas along the Volta rivers (following eradication of river-blindness). One of the primary destinations for Mossi migrants has been the Bwa area of southwestern Burkina.

The Bwa are famous among anthropologists as a prime example of an acephalous society (a society without institutionalized political hierarchy or chief) consisting mostly of autonomous village settlements sharing similar cultural norms and traits (Jean Capron, 1973). The Bwa region in the south-west of Burkina is characterized by relatively abundant and fertile land resources. The region has seen considerable agricultural innovation. Sorghum has been increasingly displaced by maize, and minor cash crops like tobacco by cotton. Cotton production, accompanied by animal traction and fertilizer use, and heavy use of tractors in some villages, is growing rapidly, as are government institutions for organizing farmers.

Women are responsible for much agricultural labor, though in Burkina men also work long hours. Jean-Paul Lahuec (1980:57), in fact, finds that Mossi men do work in agriculture more than women, but both work long hours during the rainy season- the equivalent of 88 eight hour days for married women and 114 eight hour days for married men. Data from the ICRISAT survey of six villages conducted over the period 1981-1983 shows that among the Mossi and Bwa households women worked more than men on farm operations after initial soil preparation. This same result is confirmed by Gerard Ancy's (1983) detailed time allocation study where women and men worked in fields roughly equal amounts per day during the agricultural season, except in May when land preparation is carried out and men worked twice as much as women. (Over all activities during the year, Ancy finds that women worked about 20% more than men.) Our own survey of time allocation in the village of Bereba found that women worked an average of roughly 25% of their days in agriculture, with peaks at the time of land preparation and later in November with harvesting. The work done by women has thus long ceased to follow the gender segregated patterns described by early anthropological work. On the major crops- cotton, maize, sorghum, millet and groundnuts- women can be found guiding plows and leading oxen in the initial land preparation. Participation in weeding and harvesting is, however, more common than land clearing and preparation.

Women mostly work on fields controlled by men. Both Mossi and Bwa (and other ethnic groups of Burkina) frame land tenure in mystic or religious terms: ancestors or spirits watch over the 'well-being' of land and punish transgressions. The ancestors entrust an intermediary, the earth priest or *chef de terre*, with authority to resolve land tenure issues. This authority is derived from his descent from the 'first' people to occupy the land; his ancestors are buried there, his ancestors were the first to approach local spirits. An individual cannot, therefore, claim to have rights to land independent of those rights granted to him by the ancestors or spirits, via the *chef de terre*.

In practice the power of the *chef de terre* is limited. Having granted usufruct rights to members of his and other lineages, and having granted usufruct to migrants and conquering groups, he no longer influences land use. Moreover, his right to refuse land to non-kin is not usually credible; a refusal of a request for land risks punishment from the ancestors. Basically his only right is to stand as a jural symbol of the inalienability of land from the group, and as custodian of the rights of those lineage groups living in a particular area, against claims and encroachment by neighbors. The power that comes with this right varies from group to group and village to village. That it is a right is clear; no arbitrary person, no matter how powerful, can claim to be a *chef de terre*. Even the most powerful class in Mossi society, the *nakomse*, who conquered a large part of the country centuries ago, continue to recognize the status of the *teng-soba*, the *chef de terre* of the 'indigenous' groups.⁷

Unfortunately for women local rules of tenure give them no direct standing as holders of rights to land. A woman cannot be *chef de terre*, nor can a woman have permanent rights to use land. The major published interpretation of Mossi 'customary law' states quite clearly that women never have a permanent land right (Robert Pageard 1969:230, 248, 256). In the south-west of Burkina the lack of direct rights to land is equally clear.

For most ethnic groups of Burkina, the only case of a woman having direct control over land is a widow who may assume responsibility for the land of her deceased husband. The literature contains references to cases of widows cultivating on their own account, appearing to control land directly. Lahuec (1980:55), in the small

Mossi village of Zaongho, finds two widows, and one woman whose husband had left for Cote d'Ivoire, managing their own farms. But these cases are not common: women who are widowed do not inherit their husband's land, rather, they are themselves 'inherited' by one of their deceased husband's sons or younger brothers.⁸ The institution of wife inheritance, the levirate, is of course very fluid, with the widow having considerable leeway in refusing a proposed partner from her husband's family and remaining on her own, or returning to her natal village. But refusal may entail significant loss in economic standing, especially for the widow of a wealthier man. A woman who chooses to leave her husband's village upon his death and return to her own village may obtain land there.⁹ Her lineage is obliged to either incorporate her into their own production group, or they must give her a piece of land for her own use. (It is not clear at all whether this right is solely for widows, or also holds for divorced women who have fled their husbands.) Suzanne Lallemand (1977:55-58) suggests that younger widows have the advantage- they are incorporated into the family field with its high level of complementary inputs and higher fertility, while older widows are given a plot of land to cultivate on their own.¹⁰

While only under exceptional and incidental cases will a woman in Burkina have direct control over land in the 'customary' tenure environment, women in many ethnic groups do farm small plots independently of their husbands.¹¹ Women obtain these fields from their husbands, and in many cases are said to have a right to fields. For the Mossi the rights seem clear. Jean-Yves Marchal (1987:451) asserts that a Mossi woman can demand parcels from her husband's lineage, should he be unwilling or unable to grant her request for land. As long as she is married she has rights to the husband's land for her personal use. His study (1983: 346) of the village of Say finds that separate parcels of married women amount to 234 hectares, 26% of total land under cultivation. Only 36 of these 234 hectares were borrowed from someone outside the lineage of the woman's husband (ibid., p. 353). Anne Weidener (1973:14) states clearly that in Mossi areas a woman has to cultivate the fields of her husband, but is also strictly entitled to private fields where the husband cannot exercise any influence. The income from these plots is hers without encumbrance.

In the south the situation is more variable. Ousmane Nebie (1988:274) finds that Bwa may in some instances get plots, Pougouli women never do. J.L. Boutillier (1964) and Capron (1973) believe that Bwa women almost never receive plots; the only exception being tiny tobacco fields alongside the village.¹² Jack Goody argues that Dagara women only possess “rights of use as the wife of her husband, for farmland is inherited patrilineally through males (1967:33).” Madeleine Pere (1973:63) observes that Lobi women have no personal fields, have no access to any sort of land, and participate little in agriculture. Michele Dachet (1992) is skeptical of the general presumption of these rights to husband’s land; Goin women who are married far from their mother’s village can ask for land (to cultivate rice) from their husbands, but he will make them pay rent.

These gendered differences in rights over land lead to great inequality in control over land. Women have little control over the large family fields, and their own fields are small. The average size of a woman’s plot is typically around one-tenth the size of the household plot. Since the average household is less than ten members, her independent fields are smaller than the area cultivated per household member under the management of the husband.¹³ But while the plots are small, very often the crops grown are higher value crops than those of men (Udry 1996). Women’s field then have economic significance greater than their size alone would indicate.

3. Women’s Indirect Access to Land

As the section above shows, rights to land vary across ethnic groups. Perhaps more significantly, rights are far more complex than simple control or use rights. Rights to usufruct very frequently carry encumbrances on the use of income. Marchal (1987:449-51) and Pageard (1969:143) note that the ‘rights’ of women to separate plots are often entangled with ‘obligations’ to provide for joint sustenance. While a Mossi woman from the Yatenga region may have her own field, the household will use *her* grain first for consumption, and only when her grain runs out will the husband’s granary be opened. Thus her right to a field is illusory, because she does not control the output. Similarly, Henri Barral (1968:48) suggests that Lela men encouraged their wives to have personal fields because they would then have to use the proceeds to pay their own head tax, normally the

responsibility of the husband. He further observed that Lela women were responsible for feeding themselves and their children, and their husbands when necessary, out of their own grain. Jacques Dubourg (1957:297) finds that in the village of Taghalla near Kaya the family head uses his grain first, and only if it runs out does he appeal to household members to open their personal granaries. In Dakola village the same holds, according to Jean Marie Kohler (1971); men can appropriate women's grain only after the 'common' granary is finished. On the whole, there does not seem to have been any systematic work disentangling the various residual rights to granaries, or their incentives for allocating labor.

Another complication of tenure rights is that in many ethnic groups women obtain land within marriage by having a right to a share of the family field. While Pougouli women do not have their own fields, half of the family grain is divided among women of the household (Armelle Faure 1993:66). As we will see below, Bwa women in the Bereba area also receive shares of the harvest. The division is rather unusual: after the maize is harvested the maize is divided into two piles, one with all of the large, unbroken cobs for the head of household, the other with the broken and small cobs for the women to divide up amongst themselves. The women's share can be quite substantial, with each co-wife receiving several sacks of corn for her personal use. Likewise, Lela women receive the small and poor quality cobs, in amounts according to their number of children (Barral, 1968:49). A wife in this situation is like a sharecropper. Having a right to share land- regardless of whether the husband works side-by-side with his wife, or if they cultivated separate plots or even separate furrows- means that the woman has a kind of tenure right.

The upshot of these complications to tenure rights is that members of the family have separate claims to output, and sometimes state-contingent claims to output (i.e. only if the seasons is bad and the household grain is exhausted can the family appropriate a woman's granary). These denser descriptions of tenure rights and obligations, and their variation across ethnic groups, make it more difficult to know how to measure and explain the effects of tenure institutions.¹⁴

4. Effects of economic and demographic change

Tenure institutions, in addition to being varied and complex, are also mutable and changing over time. Rules, rights and obligations regarding land evolve in response to economic and demographic change. This is quite evident in southwestern Burkina, where in the span of a decade population has almost doubled through large-scale migration of Mossi households to Bwa areas. Cotton has emerged as the single most important economic activity. Animal traction has replaced cultivation by hoe. Extensification of land under cultivation has led to land scarcity and cotton cultivation has increased the value of labor and land.

These demographic and technological shifts have affected the position of women in agriculture and the access of women and men to land. Within both ethnic groups, the effect has been to increase women's access to non-household land, by enabling women to borrow land from men in other households and ethnic groups, signifying perhaps an incipient erosion of the norm of indirect rights obtained solely through marriage.

For Bwa women in the villages of Bereba, Dimikuy and Sara, involvement in agriculture used to be limited. Their work on family fields was confined to certain tasks such as seeding that had ritual significance (planting related female fecundity to soil fertility) or harvesting that relieved labor bottlenecks (Capron 1973, Solange Tibiri 1987). Bwa women did not usually cultivate personal fields. As noted earlier, the growing importance of cash-crop production has expanded the role of Bwa women in every phase of agricultural production. Cotton is especially demanding in terms of labor. Women are now involved in the seeding, weeding and harvesting of cotton. They have also started cultivating personal fields. In Bereba approximately one-fourth of Bwa women (17 out of 60) had their own plots in 1995.¹⁵ Most grew groundnuts, although several older women or widowed women also grew grain crops. Many said that 1995 was the first season they had cultivated fields. About half of the Bwa women who cultivated gained the land either from relatives or neighbors rather than from their husbands.

Unlike the Bwa, Mossi women have historically been much more heavily involved in agricultural production, both on family plots and individual fields. Mossi women have a long history of cultivation of personal

fields, although their permanent access to particular plots of land is circumscribed by their marital status. In the villages of Bereba, and neighboring Dimikuy and Sara, most Mossi women had their own autonomous production. In Bereba, of the thirty-three Mossi women sampled, only three did not have their own personal fields. The rights of Mossi women to obtain fields seemed to be evolving away from a generalized obligation on the part of the husband to provide his wife or wives with personal fields. The land Mossi women farm is being increasingly obtained from men outside of the women's households.

Access to land for Mossi migrants is a very delicate issue throughout the southwest, if not throughout the country. In the department of Bereba over half the population are Mossi migrants. While these migrants may borrow land, they are strangers and can never fully control land. Bwa farmers argue that the land always belongs to them because their ancestors are buried there. The Mossi migrant farmers obtain permission to cultivate from Bwa families who have a historical claim on land, and must perform annual rituals or give prestations of grain after the cropping season to Bwa elders. Generally, Mossi who migrated before the 1980's and have good relations with their Bwa hosts have fairly secure access to land they have borrowed. Both Bwa and Mossi agree that it would be difficult to ask them to leave a field unless they somehow egregiously violated local custom. The situation for newer migrants is more tenuous. Because of a generalized impression that space is being occupied very quickly by Mossi migrants, it has become much more difficult for new migrants to find land and to keep land already under cultivation. The Bwa of Dimikuy, for instance, decided in 1993 not to allow any more Mossi to settle in the village. While there have been one or two exceptions, it is now difficult for a Mossi family, even one who has been there for a fairly long time, to gain access to a new piece of land. In Bereba, Dimikuy and Sara, some Bwa have started to ask Mossi to leave land that they have borrowed. This has caused great tension between the Bwa and the Mossi; government officials have been called in to mediate conflict.

The reduction in land available to Mossi migrants directly affects Mossi women. In Dimikuy and Bereba, where land is for the most part still available, almost all Mossi women indicated that their husbands had given them plots on family fields. Women often prefer to cultivate near family fields because they can work before and

after work on family fields has finished. Most women said their husbands also wanted them to cultivate next to the family field. Furthermore, all of these women had great continuity in cultivation; most had farmed the same fields for the past five years. In Sara, however, where land shortage has become acute for migrants and Bwa alike, we find a very different situation. Half of the twenty-one Mossi women in Sara declared they could not farm near their family fields. Their husbands had not given them land on the family fields because they did not have enough land. Some women in Sara took matters into their own hands, going outside of their husband's lineage to obtain land. One woman stated "My husband doesn't have enough land- that is why I asked my father." Other women searched for suitable parcels themselves and worked out arrangements for borrowing fields, often giving part of the harvest to the person controlling the land. One result of this outside search for land was that unlike Dimikuy and Bereba, Mossi women in Sara had very little continuity of cultivation on the same field. Ten of the eleven women with fields next to family fields cultivated one field in the last five years, whereas women who borrowed land tended to have less stability, spending an average of only three years on one plot.

If Sara represents the shape of things to come in terms of villages with significant land shortages, we may increasingly see a 'withering' of the rights of women to land through their husbands. The men are more reluctant to give up the land they have fought hard to defend against their less hospitable Bwa hosts; women increasingly succumb to the wisdom of 'rationalizing' agriculture by cutting down on separate plots. Bwa women similarly are also obtaining land from men other than their husbands. These landholders who have excess land are increasingly willing to lend to women, because women cannot claim permanent rights. The husband of the woman is fully in favor her obtaining land from outside the household: the marginal product of his wife's labor on his own land may be very low. Tractors and animal traction are making land, not labor, the scarce input in production. Gradually this rising incidence of land borrowing by women may evolve into a general right to cultivate independently. That is, women increasingly may gain the right to obtain land through the market.

This evolving situation is described in Table 1. The first panel outlines a general characterization of land rights for women in terms of forms of access, nature of access, and incidence of access. Forms of access include

obtaining land from husbands or kin, from neighbors, or through the market. These various forms have vary in terms of use rights, transferability and security. Thus land obtained from a husband may be very secure (especially for Mossi women whose husbands are well-established settlers), while land obtained from a neighbor may be less secure. Finally, the incidence of these various forms of access may vary and change across ethnic groups and over time. Panels (b) and (c) summarize the discussion above. The key point is that access through other institutions, including the market (i.e. from kin, neighbors and strangers rather than from the husband), is low, but increasing among the Bwa and Mossi. New rights are being created by Bwa and Mossi women.

Table 1: Characterizing Land Tenure Status

a. General Characterization

<i>Forms of access</i>	<i>Nature of access</i>	<i>Incidence of access</i>
Through husband, state, market...	<ul style="list-style-type: none"> ● use rights ● transferability ● security 	low, medium, high

b. Stylized Characterization for Bwa Women in Province de Tui

<i>Forms of access</i>	<i>Nature of access</i>	<i>Incidence of access</i>
Through husband	<ul style="list-style-type: none"> ● many husbands do not permit wives to farm; only eight out of sixty women gained temporary use rights from husband ● no rights of transfer unless explicitly granted to widow upon husband's death ● because no norm of women farming individually, little security 	low, but increasing
Through relatives or neighbors	<ul style="list-style-type: none"> ● temporary use rights ● no rights of transfer ● little security 	low, but increasing

c. Stylized Characterization for Mossi Women in Province de Tui

<i>Forms of access</i>	<i>Nature of access</i>	<i>Incidence of access</i>
Through husband	<ul style="list-style-type: none"> ● husband has authority over use, but depends on husband's tenuous access ● no rights of transfer ● security depends on marital status 	high, but declining
Through relatives or strangers	<ul style="list-style-type: none"> ● rights of use if remain close to father ● no rights of transfer ● little security 	low, but increasing

5. Government and project intervention in tenure

In a context of evolving land rights, government policy can have important effects on tenure institutions. On the whole the literature suggests that these effects are negative for women . For example, Carney and Watts (1989), one of the classics in this field, shows how an irrigated rice project directly strengthened the male bias in land tenure and labor allocation institutions within and across households.

Case studies from Burkina likewise detail the biased nature of government interventions. The state typically reinforces ‘traditional’ tenure institutions in favor of men. Prevailing gendered institutions are affirmed rather than altered. On the planned settlement projects of the Volta rivers, for long underpopulated because of river-blindness (onchocerciasis), schemes replicated what were believed to be ‘traditional’ tenure systems. In the process, women cultivators were ignored. Plots were allocated to men, under condition that they be cultivated as blocks according to technical specifications. Della McMillan (1995) describes how land use and tenure norms changed when Mossi villagers from Damesma were resettled in scheme villages with fertile soils. Married women previously had access to fields. Though they did not inherit rights to land, they could request a piece of land from their husbands or from their own families. As a consequence, 24% of area planted was controlled by women. After resettlement, however, the incidence of women having separate fields declined dramatically due to two factors. First, as noted, the scheme did not give women land. S.A.E.D. (1977) surveyed 100 women in six resettlement villages; 39% claimed they could no longer obtain land from their husbands and could not farm. Second, women had far less time for work on their own fields. McMillan (1995 :94) describes how “it was more difficult for women to squeeze in one or two hours of work on a private field in the early morning and at the end of the day.” Women found that the new production patterns mandated by the resettlement authorities, particularly cotton cultivation, increased the labor requirements of their husbands. Men generally compensated their wives who came to work on the ‘family’ fields by reserving for them a portion of the cotton harvest proceeds. The old pattern of separate fields did re-emerge gradually. Most of the settlers’ wives in McMillan’s study did end up cultivating

small areas (but only 8% of total area was in women's fields after almost ten years of settlement), along the borders of fields and homesites. Moreover, McMillan (1987:311) found that the pattern of obligations and responsibilities had changed: "In contrast to what we discovered in the settlers' home area, almost all the women's grain was sold rather than used for family consumption." The resettlement project thus telescoped in a few short years some of the complex evolution in rights seen elsewhere. Women increasingly confronted varied forms of access to land, under varying degrees of security.

An irrigated project in the village of Niassan in the province of Sourou further illustrates the common male opposition to unbiased government intervention (Armelle Faure, n.d.). Local women had historically not cultivated individual fields. They had specific tasks in family agriculture, such as seeding and harvesting. Irrigation technology and concomitant intensification had changed the traditional roles. Women organized group labor for harvesting and requested irrigated plots. They complained that the irrigation authority (the *Autorité pour la mise en valeur de la vallée du Sourou*) refused to give them parcels. Husbands opposed the granting of parcels to women. The men cited a case where a woman was granted a parcel: the field enabled her to accumulate 100,000 CFA, and she fled the village. The men asked rhetorically: "If all the women have their own fields, who will bring food to the men?"

The very latest changes in land policy in Burkina over the past decade explicitly favor women's interests. The Burkina state has adopted two comprehensive land tenure policies: the *Réorganisation Agraire et Foncière* (RAF), enacted in 1984 amidst the revolutionary fervor of the Sankara regime, and the *Gestion de Terroir* approach, embraced during the present more conservative Compaore regime. The RAF stipulated that land was 'owned' by the state, and agents of the government had the right to supersede the claims of the *chef de terre*.¹⁶ The *Gestion de Terroir* approach uses that authority to bring about fundamental changes in land use. Villagers are now expected to negotiate a contract with project officials to locally manage land. The contract delineates land zones and usage. Decisions about land use, under *Gestion de Terroir*, are no longer made exclusively by the male holders of usufruct rights; a new entity, the 'village', as embodied in a representative committee, is being

encouraged to define a corporate identity with control over land. The committees are supposed to include customary village leaders as well as under-represented groups such as women, girls, young men, Fulani pastoralists and migrants.

To the extent that women are considered members of the corporate identity that is the village, the *Gestion de Terroir* approach may open up a new avenue for indirect access to land. Examples of this are already evident. Projects have promoted women's organizations, some of which are organized around farming activities. Simon Batterbury (1993) describes two villages on the Mossi plateau where women cultivate groundnuts on communal fields. *Gestion de Terroir* programs have promoted collective tree planting by women; the village plans and approves a piece of land to be given over to a women's group to tend a forestry project. *Gestion de Terroir* regulations and applications have led to an increased involvement of government officials in land disputes. In their attempts to manage this situation of land degradation and tenure conflict, authorities frequently acted to open up room for women in general to acquire novel indirect rights to land. Government officials use the regulations to justify granting land to village-level institutions (women's groups, cooperatives, irrigation projects). These institutions in turn often reallocate land without regard to previous lineage rights (P.J. Laurent and P. Mathieu 1994).¹⁷

Not everyone is optimistic about the prospects of women under *Gestion de Terroir*. The new corporate group, the 'village', remains dominated by men.¹⁸ One common outcome is for the village to 'agree' to carry out conservation projects using collective labor. Batterbury (1993:6) contends that "women gain little political or material gain from soil and water conservation projects to which they frequently contribute more time and labor than men...despite participating equally in meetings with outsiders, benefits for such work come only indirectly through increased yields on their husband's household plots." Faure (1992) also notes that women provide much of the labor for constructing stone-lines. Aside from enabling men to legitimize more direct control over the labor of women, the projects may also indirectly undermine women's tenure rights to land. With improvement, the return

to working on the husband's 'collective' field is now higher, and consequently the incentives to invest in a personal field are lower.

6. Implications of gendered land rights

Most recent research on gender issues in agriculture has focused on the efficiency of resource allocation within the household (for general overviews see Cheryl Doss 1996 and Agnes Quisumbing 1996). This research challenges the assumption of the unitary household and of efficient intra-household allocations. If the interests of husbands and wives do not coincide, and their ability to make enforceable contracts among themselves is limited, and they control different resources, men and women may allocate their resources in ways that improve their bargaining power, even though these allocations may not maximize joint profits.

Studies of West African households find significant inefficiencies; households seemingly could be better off through simple reallocations of land, labor and other inputs. Jones (1986) was the among the first to empirically test this hypothesis of inefficient allocations in a West African context. On the basis of a small but detailed sample of women farmers in north Cameroon, she showed that women tended to devote too much time to relatively less productive sorghum fields, and not enough time to the more productive rice fields controlled by their husbands. Jones attributed this result to a breakdown of bargaining between men and women. Rather than submit to intense work pressure for only nominal compensation, some women worked for outsiders for wages, or worked on their own less productive sorghum fields, rather than on their husband's fields. Another study, by Rati Ram and Ram Singh (1988), used a sample of Mossi farm households from Burkina to estimate earnings functions. The authors found that women's time input had a greater impact on household farm income than men's time input (it is not clear from their work whether the total income includes that from personal fields).¹⁹ The implication of large differences in marginal products (assuming labor is roughly comparable) is that resource allocations are not efficient. Joachim Von Braun and Patrick Webb (1989) also found large differences in yields between men and women in rice and groundnut-growing households in The Gambia. Finally, as noted in the introduction, Udry

(1996) has been even more definitive in his refutation of the claim that household resource allocations are Pareto efficient. All this evidence suggests that the unitary household model does not provide an appropriate characterization of the household and alternative characterizations, such as of households as bargaining entities, would better capture reality on the ground.

The nuanced description of tenure in Burkina given above also suggests some alternative explanations for yield differences between man and women controlling separate plots within the same household. These explanations focus on the gendered nature of land rights, rather than on the bargaining that goes on within the household. Specifically, differences in yields per hectare between fields controlled by men and fields controlled by women could be due to what might be called a 'selection effect' and a 'restriction effect'.

The selection effect arises when women either themselves elect to cultivate separate plots, or are so selected by their husbands. We noted above that obligations to surrender shares of harvests, either directly at harvest time or through the year as consumption unfolds, may have strong implications for resource use. Suppose that women have rights to cultivate either as quasi-sharecroppers on the fields of husbands, or on fields of their own. If it is the women who decide on the arrangement, then women who are most capable farmers elect to cultivate separately, while women who are less capable farm as sharecroppers on their husband's fields. If it is the men who decide, then we might see the reverse, with the less capable women sent off to farm their own plots rather than share in the family fields. (Note that this echoes Lallemand's assertion regarding the fate of widows, old or young, discussed above.) In the latter case, yields would be higher on men's plots, on which the more capable women are concentrated, and lower on women's own fields where the less capable women are concentrated. Input use, complementary to farmer capability, would also vary in the way observed, with the less capable women farming independent plots using fewer inputs, while the more capable women farming with their husbands use more inputs. The institutional 'rules of the game' regarding the rights of women to cultivate separate plots or cultivate as quasi-sharecroppers generate a labor allocation similar to that described by Udry, but in this case there is no presumption of inefficiency due to bargaining. Cross-sectional studies that examine efficiency and input-use

on women's plots may be biased if they ignore the possibility of women in some ethnic groups having the equivalent of personal plots in the form of sharecropping agreements with their husbands. A problem of self-selection may distort the interpretation of empirical results.

The restriction effect can generate a similar pattern of differential yields between men's and women's fields. In the usual reasoning, women have lower output on their fields because men, who own inputs like manure, and control family labor, cannot be induced to work on the women's fields, nor can women be induced to let men use their fields. Marcel Fafchamps, (1997) emphasizes the problem of commitment failure; even within the household there are high transactions costs associated with intertemporal trades to reallocate inputs. A husband (like a firm) who wants his wife (like an employee) to work on his fields faces the problem of how to assure her of compensation, since the return to the work will only be available after the harvest. Since any feasible compensation scheme distorts incentives, allocations will be inefficient.²⁰ (Of course, this is simply to say that all allocations in the real world will be inefficient compared with an ideal world of no transactions costs and perfect enforceability.) But an alternative line of reasoning is that women do not have lower yields because of a commitment problem in the household, but rather because of a commitment problem more generally in land tenure. We have suggested that for some land owners the condition of women's access is precisely that their husbands do not work on the field. The land owner wants to minimize any chance that the husband can claim the land. If he sees the husband working the land, or the husband's oxen on the land, he may refuse to lend the land the following year. Women then cannot use the inputs and resources of their husbands. The fields under their control have lower yields, not because of a household commitment problem, but because of more general insecurities in tenure. The general uncertainty in land borrowing and tenure status may lead to arrangements for borrowing land that specify productive practices, even if these happen to be inefficient.

7. Conclusion

This paper has argued that it is necessary to pay closer attention to implicit contracts and informal sharing rules that structure allocations of land and labor within and among households. These gendered rules characterize many ethnic groups in Burkina. The temporary land use rights of women in Burkina are accompanied by other rights or duties: the right to a share of the harvest of the husband's field, and the obligation to spend the woman's harvest on specified goods. A simplified picture of tenure rights, which has served so well in terms of inspiring recent empirical research, actually masks some important rights that confound straightforward ideas about tenure rights and women's involvement in agriculture. Examining rights to land makes clear that these norms about rights and duties are shaped at the extra-household level. When studying gender and agriculture, researchers thus need to look beyond the bargaining that goes on within households between men and women. Moreover, gendered social institutions of tenure also change and evolve over time. In situations of increasing tenure insecurity, for example, landowners are reluctant to lend land to people who may claim rights through use. Their strategy may increasingly be to lend to women. This may eventually enhance women's access to independent fields. Finally, government action may have strong effects in changing or reinforcing tenure institutions. Far from stimulating tenure change by adopting land titling and privatization, as many researchers submit, governments may in fact delay dynamic evolution in tenure rights and instead reinforce the old order.

Notes

1. Doris Bonnet (1982:123), glosses the proverb as referring to the dependence of the women on her husband for land, and on her field for any autonomous income she may have for her own use. She is thus constrained, as it were, to farm at night (because during the day she farms her husband's field). The double-entendre is that at night, in the privacy of the conjugal quarters, the women (especially in polygynous households) "will know how to obtain what they want".
2. Robert Harms (1974:6), for example, notes that among the Nyanga in Zaire men who receive land from the patriarch of a *motondo* landholding group are called "owners of the land", while women who receive fields are called "owners of the crops". Other instances of the metaphor are Miriam Goheen (1988:93), on the Bamenda 'grassfields' of Cameroon, and Henrietta Moore and Megan Vaughan (1994:214) for northern Zambia.
3. See Gilbert Tarrab (1989) and the regular columns 'Feminin-Pluriel' by Monique Ilboudo in the Burkina newspaper *L'Observateur*. For a recent study from Ghana see Cheryl Doss (1997).
4. Coquery-Vidrovitch (1994:116) reminds us that one of the primary mechanisms of this expropriation was the colonial reformulation of marriage laws, strengthening the control of elders and men, by taking a harsh view of single women- the 'femmes libres' of French Africa. See also Martin Chanock (1985).
5. The questionnaire included sections on the agricultural practices on women's personal fields, access to labor, and avenues through which land was acquired. The sample is not a completely random sample, and so must be used with a measure of caution.
6. This summary is based on numerous sources (many of which are detailed case studies of single villages); the seminal reference is J.L. Boutillier (1964). See also Volker Stamm (1994). For the Gourmantche, see Gerard Remy (1967:55). For the Mossi, see Jacques Dubourg (1957), Peter Hammond (1966:72-77), Jean Marie Kohler (1971:140-44), and Jean-Paul Lahuec (1980:62). For the far north, see Georges Dupre and Dominique Guillaud (1988) and Guillaud (1992), who suggest that tenure is secured through marriage alliances rather than through usufruct rights. In the south-west, see Georges Savonnet (1969) for the Dagari and Cecile de Rouville (1987) for the Lobi.
7. Three comments are in order. First, that 'indigenous' and 'Mossi' are distinct in cultural status is not always clear. At a general level historians and anthropologists see the question of boundaries among various 'identities' of Moré speakers as being relatively open. There is evidence that in a large number of 'Mossi' villages people do not see themselves as belonging to separate groups; see Herbert Butler (1975:74-83), Gregory Finnegan (1976:112-52), Michel Izard (1970), and Robert Pageard (1969:109). Second, Butler (1975:183, 203) provides examples of how the chief of a village can come to acquire direct rights to land that does not 'belong' to his lineage. Third, there are cases where an ethnic group has taken over control of land from another. R.E. Ford (1982:409-22) believes that conquering Fulani took over land tenure responsibilities (from indigenous Dogon) in the village of Banh in northern Burkina, and share the land amongst themselves and their former followers, the Riimaaybe.
8. This 'inheritance' is not as compromising of a woman's rights as it sounds; in general a widow can refuse the brothers of her husband and choose to return to her natal village, or live alone in her house in the husband's compound. Suzanne Lallemand (1977:179), however, suggests that the remarriage of a widow, while nominal only, is a powerful symbol, reminding women that they have no rights.
9. Finnegan (1976:158) and Grace Hemmings-Gapihan (1985:157) present evidence that the sons of sister's married outside the lineage, to another village, for example, may also return to their mother's village and claim land. The rights of these 'sister's son's'- who clearly belong to a different patrilineage- and their mothers, are not

extensively specified in any ethnography. On this subject Skinner (1964) is a classic text.

10. Theoretically it is possible that a man may explicitly leave some land to his wife in his oral will or testament (Jean-Yves Marchal, 1983:361, citing Pageard, 1969:252). This was certainly rare in the past. But the influence of Islam and Christianity, coupled as they are with situations where individuals endeavor to break with traditional solidarities, may be changing that. Marchal (1983:362) attributes the cultivation by widows, in the village of Say, of 68 tiny parcels totaling 6.9 hectares (out of a village total of almost 900 hectares), to the growing influence of Islam. Presumably a more devout man felt the need to demonstrate his faith by deliberately instructing his lineage members to honor his wife's desires to continue to cultivate her parcels. Neither Marchal, nor any other source, gives an example of a woman/widow passing on land to *her* heirs.

11. In Burkina most customary law has not been formally codified. Robert Pageard (1969) discusses some of the codification of Mossi custom. There is one significant exception to the generalizations about women's land rights. In the far south of Burkina, Senoufo and Goin ethnic groups have evolved systems of land tenure that give women very strong rights to rice land (Boutillier 1964:144, 164). In both cases, it appears that men retain a 'fundamental' right to ultimate control, and transfers and inheritance among women will often be veiled in the language of transfers among men. Nevertheless, it seems clear that women have the right to pass on land to their daughters and sisters, as long as they remain in their natal village, or nearby.

12. Writing at roughly the same time, Savonnet asserted that only men cultivated the 'champs de case' around the village; there seems to be much local variation across villages even within ethnic groups, limiting the power of generalization on the basis of single-village studies, and of course observers see things differently.

13. Sources from the Mossi area include J. Th. Broekhuysen and Andrea Allen (1988) [3.40 hectares for the household field, 0.35 hectares for women's parcels]; Marchal (1983:369) [11.47 h. for household, 0.88 h. for women]; Remy (1972) [3.38 h. for households, "very small" for women]. Kohler (1971) finds that 90% of the land in Dakola village is in collective fields, and Lahuec (1980) finds that 17% of Zaongho land is cultivated as personal fields, of which some part is cultivated by young, single men, or younger brothers, rather than women. The only exception to the findings of very small sizes appears to be Ancey's (1983:190) finding that in Koudougou over 40% of the area is in personal fields, most of them controlled by women. Ancey believes this large area cultivated by women to be a sign of a "profound disorganization of productive structures", presumably because farming efficiency requires that land be under the control of the male household head, who controls the complementary inputs to farming.

14. Recent papers by Anne-Sophie Brasselle, Frederic Gaspart and Jean-Philippe Platteau (1998), Peter Matlon (1994), Robert Ouedraogo, Jean-Pierre Sawadogo, Volker Stamm and Taladia Thiombano (1996), and F. de Zeeuw (1997) discuss the multiple dimensions along the land rights of men need to be measured, and the tradeoffs involved in constructing general indices of rights. The discussion here suggests that measuring the dimensions of land rights for women is even more complex.

15. The forty-three women in Bereba who did not cultivate their own fields during the 1995 season gave a variety of reasons for restricting their time to their husband's fields. Twenty said that they had had fields in the past but have given them up due to time constraints and late rains. One Bwa woman responded, "I work with my husband so I don't have enough time to farm my own field." Several women declared that their husbands did not allow them to have personal fields. One woman stated that "If I want to cultivate a field, my husband will say that my three co-wives can also cultivate their own fields, and there won't be enough time to work on his fields."

16. The goal of the *Gestion de Terroir* approach is to serve as a project paradigm that will improve natural resource management at the level of the village "*terroir*", a unit of analysis which links both the social environment and natural resource base. Project staff meet with villagers to delimit village land and determine land

use patterns and natural resource capacities. Then all parties who have interests in that *terroir* - leaders of village communities (indigenous ethnic groups, migrants, and pastoralists), production organizations (*groupement villageois*) and representatives of often-ignored groups such as women and young men groups- are encouraged to jointly define problems and solutions to village resource management problems (Faure 1992; Thomas Painter, James Sumberg and Thomas Price 1994). The projects then undertaken vary. Soil-water conservation projects and projects promoting intensification through use of manure and compost are common. Many projects hope to improve resource management through mapping and zoning village lands. Pastoralists and their animals are granted grazing areas; large areas are set aside for regeneration; families living in the bush are ordered to move back to the village. Village land is typically rezoned into three parts- one for farmers, another for fields in fallow and the final area for grazing.

17. These interventions are not completely new. See Boutillier (1964:65) and Butler (1975:201).

18. Brigitte Hannequin (1990) reports in detail how Mossi village organizations continue to be dominated by men, even though some are set up deliberately as women's projects. See Agarwal (1997b) for a more general discussion of this issue.

19. Ram and Singh admitted that some of this effect may have been due to measurement error or sample bias; women working on fields were typically much younger than men and especially younger than the male head. But the very large size of the male-female difference suggests that more fundamental determinants like the incentive system and gendered tenure rights may have caused women's labor to be highly productive.

20. One solution to this problem is to grant specific plots of land to the wife, assigning her the right to control the income from those fields, in return for her agreement to work on the fields of the husband. This arrangement is similar to that used in Latin American *latifundia*, where workers are given small plots of land to cultivate on their own.

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