

Gender, Resource Rights, and Wetland Rice Productivity in Burkina Faso

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Women are acknowledged to be responsible for 70–80 percent of food production in Sub-Saharan Africa. They operate within the institutional arrangements of the farm household, the single most important institution for agricultural production. This chapter illustrates why and how the ways in which production and related resources rights are organized along gender lines are critical to smallholder agricultural growth in the continent. It also illustrates how policies and intervention programs based on an inadequate understanding of gender relations are bound to fail.

Such failure was the experience of the wetland rice improvement project in Comoé Province in southwestern Burkina Faso, presented here. The project Développement de la Riziculture dans la Province de la Comoé, or in short Opération Riz (OR), was a conventional formal infrastructure development project, attached to the Ministry of Agriculture and Livestock of Comoé Province and financed by the government of Burkina Faso and the EU. France and the Netherlands provided technical assistance during the period studied. The project aims were to improve swamp rice cultivation in the small valleys in this area that were already used for rice cultivation by constructing infrastructure for better water control and introducing high-yielding varieties, fertilizer, and pest management. The technical construction of the central drains and contour bunds was accompanied by the expropriation of land and reallocation of the improved land.

In the first project phase of OR from 1979 to 1986, which is the period studied, seven schemes totaling 860 ha were constructed. Technically, the intervention

was largely the same for all schemes. Socially, however, the land-expropriation and reallocation processes, which implicitly also determined membership of water users associations and targeting of other project benefits, differed. In the first two schemes (A and B),¹ improved land was reallocated to male household heads, based on the notion of the unitary farm household—which also shows that farm-household concepts and analysis are not just academic exercises but touch deep-rooted beliefs that profoundly shape concrete action on the ground. Those schemes collapsed.

However, in schemes C and D and in all later schemes this reallocation policy changed, and expropriated land was reallocated to existing plot holders, mainly women. These schemes were productive, illustrating that interventions based on an adequate gender analysis of household and community production relations and resource rights are win-win for all involved. Such gender-sensitive intervention provides incentives to the producers and considerably reduces transaction costs for the agency. In spite of two decades of further gender analysis and mainstreaming since this project in the 1980s, the concrete operationalization of gender analysis into intervention and the empirical evidence of positive impacts on productivity are still scarce—and hence, still worth emphasizing.

18.1 Concepts

As mentioned, the concept of the farm household is central in this case study—and in much of the literature on gender and agriculture (Safilio 1988; Haddad and Hoddinott 1995; Quisumbing 1996; Haddad, Hoddinott, and Alderman 1997; Quisumbing and Mallucio 2000). In particular, the incentives that appear to be key to higher productivity are control over labor and over the fruits of one's labor and secure resource rights. These requirements may seem evident—and are widely acknowledged to be so for men. Women producers appear no different. Hence, intrahousehold bargaining over labor and its fruits and over resource rights are at the heart of institutional economics that seeks to understand agricultural production. These bargaining processes are much more adequately described by the new model of household relations (accounting for bargaining by the different members) than by the model of the “unitary household” (in which intrahousehold dynamics are supposed to be insignificant).

The intrahousehold aspects of family labor—the most critical production factor in Africa's smallholder agriculture—determine whether production relations are antidevelopment by fostering rent seeking, in this case by (elder) males from women's labor, or prodevelopment by optimizing incentives for all household members, including the youth, to enhance labor productivity. Indeed, many studies (Jones

1986; Carney 1988; Quisumbing 1996) corroborated how African women's incentives to enhance productivity are strongly related to their control over the output. This case study confirms that relationship.

This study also corroborates how land tenure affects the outcome of the bargaining processes over labor and outputs. Thus it underpins the growing recognition of the need for enhanced land-tenure security for women in land reform in Sub-Saharan Africa, which seeks to redress gender-inequitable customary arrangements through support by formal institutions. However, this case study shows that even the opposite of the desired result can occur: the formal institutions, the project itself, completely eroded the customary land rights that women had, at least in the first two schemes. In later schemes, the women (but also the men and community leaders) themselves reinstated and then formalized women's customary resource rights. Avoiding weakening of women's customary land rights is in itself a major contribution that formal organizations can make to women's land security.

Gendered production relations at the household level, including labor obligations and norms about the control over produce, are entirely embedded in wider customary resource rights and other arrangements, as elaborated in Section 18.3. Therefore, formal institutions' blindness to gender issues goes hand in hand with the project's general lack of appreciation of customary production relations and resource rights. The case study illustrates the risk that African governments, intervening agencies, and especially their foreign experts and donors, not only fail to recognize the productivity of customary gendered smallholder agriculture but also destroy what exists at the expense of every party involved (Sections 18.4.1 and 18.4.2). Section 18.4.3 presents the resilience of customary arrangements, leading to project redesign, to the benefit of all.

18.2 Methodology

The case study is based on interviews with female and male rice producers; male and female local authorities and administrative authorities; project field officers; sociological, agronomic, and technical project staff; and project direction and expatriate assistants for all schemes. Project archives at the project's office in Banfora, Burkina Faso, and the head office of the Delegation of the Commission of the EU in Ouagadougou, Burkina Faso, were also studied. The fieldwork was carried out between 1991 and 1994. This field study was part of the Research Program *Aménagement et Gestion de l'Espace Sylvo-Pastoral au Sahel* of Wageningen Agricultural University, Wageningen, the Netherlands. In this chapter, quotations from project documents in French are translated by the author.

18.3 Context: Local Farming and Land and Water Tenure in Comoé Province

18.3.1 The Gendered Farming System

Agriculture is the main source of income in Comoé Province; off-farm employment, especially for young men, is limited to the province capital and Côte d'Ivoire. In the uplands, rain-fed maize, millet, sorghum, sesame, groundnuts, and the cash crop cotton are grown. In the low-lying wetlands swamp rice is cultivated using flooding from runoff and rising shallow or deep subsoil water sources.

The organization of agriculture is gendered. Men are the farm decisionmakers in upland cropping, where they also hold the customary primary land titles. They mobilize the labor of their women and children according to culturally defined norms. Men are obliged to give part of the food harvests to their wives. Men sell food and cash crops partly for family needs and partly to spend as they like. Most men in Comoé who need rice for their own needs (for ceremonies, visitors, or during the Islamic fast) buy or exchange it on the market or with their wives. Few land chiefs hold their own rice plots, which are cultivated by their wives. With the exception of one valley, very few men have their own rice plots, which is never their primary activity. As one respondent commented, "if one sees a man going down into the valley, one knows he has finished upland cropping."

Women up to their mid-40s both cultivate their rice plots and work on their husbands' upland fields. Especially among two ethnic groups, the Turka and Gouin, labor obligations on men's fields are intensive and compete with women's own rice cultivation. In the customary "week" (of five days) of these ethnic groups, there is one "day of the woman," which women can devote to their own activities, and one day for the local market. During the other three days men can command their wives' labor. Senoufo and most Dioula women, in contrast, have fewer obligations and are free to start rice cultivation even when the plowing and sowing of rain-fed upland crops have not yet finished. Younger wives use their rice to feed themselves, their children, and their husbands, as well as to sell. It is also used for gifts, especially to their maternal kin, and for ceremonies.

Elder women are "liberated" when sons or nephews become adults and take over women's labor obligations on their husbands' fields. From then on, these women can dedicate themselves full-time to their own rice cultivation, and, incidentally, to upland cropping. However, as women stop providing labor on their husbands' fields, the latter are no longer obliged to share their food with them. Rice cultivation then becomes women's main source of food and income.

Both younger and older women mobilize labor for their plots in multiple forms of mutual help among daughters, mothers, and maternal aunts, as well as of unpaid

and paid working groups or laborers. The time that men, especially sons, assist (mainly during harvesting and threshing) is less than 3 percent of total time input required for rice cultivation (Van Koppen et al. 1987).

Women's general predominance in swamp rice cultivation in Comoé Province and elsewhere in Africa is probably related to the fact that swamp rice is labor intensive compared to dryland crops. As men control cropping and land tenure in uplands, women as a gender chose the second-best option of valley cultivation.

18.3.2 Female and Male Land and Water Chiefs

Typically for Sub-Saharan African land tenure, uplands and wetlands in Comoé Province belong to what could be called a large family, with many members who have died, some who are alive, and innumerable members still to be born (Bachelet 1982; Ouedraogo 1986). The clans that came first assumed the authority of land chief. In these matrilineal clans, the function of land and water authority in rice valleys is often carried out by women, such as the married sisters or daughters, mothers, or sisters' daughters of the male land chiefs. Land inheritance is also matrilineal. Sons inherit uplands from the brothers of their mothers, and daughters inherit their mothers' plots in the valleys. Nowadays matrilineal inheritance is gradually changing to patrilineal inheritance, especially in the uplands and among the Senoufo.

Women and men land chiefs protect collective interests. Their first function is in land coordination and allocation. Chiefs are the living memory and administrators of land titles (Le Roy 1982, 55). Fallow upland or valley land can be cleared by anyone, including newcomers, but the norm is that the land chief concerned has to be informed and must give formal permission for new land use. Such permission is always given, because as many respondents said, "one cannot deny people to feed themselves and their children." Actual land use strengthens the users' claims on the land over years and generations. Land chiefs cannot take land back, because by so doing one is seen to go against the will of his father (Ouedraogo 1978). Yet proprietors are not allowed to transfer or sell land to persons outside the group.

A second function is dispute resolution, often over inheritance. In valleys, land chiefs also intervene in water disputes between neighbors. Water management conflicts arise, for example, when neighbors continue enlarging their own fields from both sides at the expense of the small earthen bunds or ditches that separate their fields to the point of collapsing. Also, neighbors may suffer from overdrainage and the sand and weeds coming from an upstream user. Conflict resolution at the lowest level possible is fostered by the rule that both parties have to pay if the case has to be taken for conflict resolution, even the party who is judged to be right. A rule with a similar effect is that the land will be taken away from both if they fail to find a solution.

A third function of land chiefs, particularly in rice valleys, is to give the sign to start rice cultivation as soon as hydrological conditions seem fit. This authorization contributes to a more-or-less simultaneous cropping calendar, which is important to harmonize crop water requirements, to avoid the concentration of attacks of birds on isolated early maturing crops, and to allow for early entrance of animals into the valleys after the growing season. Land chiefs also indicate when fishing from ponds, a male activity, can start. Water from ponds or shallow wells in the valleys is used for drinking and domestic purposes during the whole year.

Finally, land chiefs play a central role in several socio-religious customs, such as fixing totem days on which no hoe may touch the soil and making sacrifices. Special sacred bushes or woodlots in the valleys and uplands are reserved to this end. Meant as a recognition of the authority and functions of the land chief, the land users in his or her area give some 10 percent of the harvest and provide labor on the chief's rice plots during one or two days per year.

In the valleys, women land chiefs perform most functions, although women who want to request a rice plot may have to address themselves first to the male land chief, who then delegates the actual work to his female relatives. His agreement may also be required in dispute settlement. He can have a say over the crop shares offered and over the harvest of the rice field to be cultivated by the users on the land under his command. In other cases women are the decisionmakers. In some villages, there is even a taboo on male chiefs going down into the valleys during the cropping season. "This would cause inundations and make cultivation impossible; a sacrifice would be needed to put things right," reported a female chief. However, the slaughtering of animals is strictly forbidden to women chiefs "because women give life," as several respondents asserted. If there are public meetings, women may take their sons, with the justification that "he has to slaughter the animal." Neither are women allowed to participate in the village council of elders (Ouedraogo 1990), so when land issues are discussed there, they depend on mediation by their male relatives. Moreover, male land chiefs often keep representing the clan to outsiders—including those implementing projects.

18.3.3 Women's Land Rights

There are three ways in which a woman obtains rice plots: through maternal relatives, her husband's family, and the land chief. As one rice cultivator expressed it, "women have two to four plots: one from the mother, one from the maternal aunt, one from the husband, and one the woman herself asked from the land chief." This flexibility allows women to adapt the total size of land to their labor availability during their life cycle. In all of these cases women control the output of their lands. This benefit is accompanied by specific obligations to partially or fully feed her children,

herself, and sometimes her husband. Often husbands are not even aware of where the plot is located.

Mother's lineage: women's independent rights. In this case the rice plot passes from mother to daughter without interference of male kin or land chiefs. Rice plots are a treasure that women pass on to their daughters. Women keep these plots in case of divorce, during illnesses when the plot can lie fallow for several years, or after neglect of obligations to work on the land chief's field (Somé 1991).

Husband's lineage: women's exclusive use rights. If there are no plots in the matrilineal to inherit or if a woman marries far away in these virilocal (living with husband's family) societies, she receives a rice plot from her husband's family, especially when she grows older. Her husband—but even more so her husband's mother, sisters, and aunts—are obliged to find this plot for her. Generally husbands prefer their own wives to grow rice rather than their sisters, who are going to feed another family. However, husbands can refuse their younger wives' land requests, if that would jeopardize their wives' labor obligations on the men's upland fields.

Request to the land chief: establishing new rights. The growing population pressure in Comoé Province increasingly leads to clearing unused land. In that case women ask the land chiefs for permission to occupy such land. Women themselves (or their mothers on behalf of their daughters) negotiate with a land chief (Van Etten 1992). In several villages and ethnic groups, husbands accompany their wives in their formal requests, or brothers accompany their sisters. However, one male land chief commented, "nowadays women should not bother their husbands any more and should address themselves directly to the land chief."

In some areas where the demand for land is high, land chiefs increasingly prevent people from establishing longer term use rights by allocating land for 1–4 years only. In one such case, all 20 women interviewed, including the wife of the land chief, criticized him for keeping a reply to a request for a plot too long in suspense, imposing the choice of the site, and demanding crop shares that were too high. Therefore, two of the women interviewed preferred the state to come and manage the valley (Somé 1991).

18.4 Project Intervention

18.4.1 Project Design Phase

As in many infrastructure projects in the 1980s, the initial planning by OR took place with hardly any knowledge of the abovementioned farming system and arrangements for land and water tenure. The limited information available was not used in the design. Thus the project imposed concepts and practices that were completely alien to the rice-growing communities in Comoé Province.

In 1978 the project started with a hydro-technical study by a French engineering bureau, which was largely incorporated into the project document. The engineer visited 11 valleys over 10 days (OR 1980a) and selected eight sites totaling 1,000 ha (Faye 1978). Without further explanation, he proposed a plot size of 0.25 ha, assuming that each cultivator would get one plot and that the total number of beneficiaries would be 4,000. When phase II of OR was formulated in the mid-1980s, similar hasty technical appraisals were carried out, either in the field (OR 1985) or, later, on the basis of satellite photography (CEDRAT 1989). On the basis of these technical criteria, sites were selected where the project was to first construct central drains for quick evacuation of floods, with storage and irrigation facilities for dryer periods, and then build bunds according to the contour lines for improved dispersal of peak floods and water retention in dryer periods. The project paid all construction costs, including paid wage labor for men. As in most construction projects, funds were allocated on the basis of a rapid technical preliminary design and an estimate of the construction costs. Construction constituted 72 percent of the budget.

After the site selection and construction plans had been decided upon, sociologists were appointed to solicit people's buy-in and to assist in the required procedure for land expropriation and reallocation (Ouedraogo 1978; SAED 1978). These researchers communicated mainly with male village chiefs, male land chiefs, and other men but with only a few women rice cultivators. The report of the first sociological study failed to mention matrilineal inheritance and ignored the role of female land chiefs. Instead, husbands were categorically ascribed a decisive role in both the distribution of land to women and in management of rice plots. Women were seen as cultivators only. Male land chiefs were recognized to be critical for regulating the upcoming intervillage problems regarding changing the land tenure in the valleys (Ouedraogo 1978).

Without explaining where the idea originated, the sociologists in this first study somehow thought "that perhaps the selection criteria will not leave any chance to have a plot allocated to women." They sought reactions to such reallocations of land from women to male household heads or to young unmarried men—and raised men's expectations and women's fears accordingly. For example, one man reacted positively: "We, the men, do not cultivate rice and are obliged to buy rice from our women. If the scheme comes we will take plots and devote some of our time to the rice in order to have rice for marriages and funerals." But the report also mentioned that "more than half of the men interviewed agree that their wives will have plots for themselves." Young men were "very interested to get a plot. They find that after the improvement, women should rejoin their husbands in the collective plots enabling them to benefit from plot allocation. Then they [the men] would not have to go and

suffer in Côte d'Ivoire." In contrast, all women interviewed disagreed. "During one interview the men and women almost started fighting because one man (the village chief) wished that the women would rejoin their husbands on one single plot. Some women got really worried when I raised the problem of common plots or individual plots. One woman said to me: "If my husband obliges me to cultivate rice with him that will not work out. I will never agree because he himself was born finding that women cultivate rice" (Ouedraogo 1978).

The notion of collective plots in which women join their husbands, reflecting the unitary household model, re-emerged in the second sociological study, which further refined allocation criteria (SAED 1978). Unlike the first study, this report clearly stated that new rice plots would be allocated to the former rights holders and cultivators—thus predominantly to women. This decision was justified on the basis of women's existing role in rice cultivation and the willingness that women had expressed to adopt new practices. The authors also seriously doubted whether male family heads would be willing to spend their efforts in labor-intensive rice cropping, because they already cultivated food crops and groundnuts as a profitable cash crop (SAED 1978, 41). In addition, allocation to women was expected to be the outcome if the mode of allocation was left to the villagers (SAED 1978). This opinion was the conclusion of their discussions in almost all valleys.

The authors of this second report had problems in reconciling the numbers of new plots that the engineers had decided on, of existing rice cultivators, and of potential holders of new plots. This third category was assumed to be all women between 20 and 60 years old, so on the basis of the limited demographic data available, it was calculated that there were 6,748 rice cultivators. But this estimate outnumbered the planned 4,000 plots. As the authors realized that the population would react badly if only some of the actual rice cultivators could benefit from a plot, they proposed two solutions (SAED 1978). One was simply to reduce the plot size from 0.25 to 0.15 ha, which would easily fit the entire target group. The other solution was to re-engineer social farm units to fit the 4,000 plots (SAED 1978). Taking the available demographic data on extended families and reviving the notion of the family plot, they imagined the allocation of so-called family farms (*exploitations familiales*). But the calculated 2,167 family farms were far below the planned number of 4,000 plots. Taking demographic data on nuclear households (*ménages*) to be 6,301, the required number of "nuclear household plots" was again too high. The report (SAED 1978) stopped at this point and failed to propose a procedure for the reallocation of the improved plots. The later project document, however, promised without any ambiguity that the women, who already cultivated rice in the valleys to be improved, would be the primary beneficiaries (DCCE 1978).

18.4.2 Project Implementation in Schemes A and B

In 1979 OR simultaneously started implementation of schemes A and B. The major job to be done under great time pressure to achieve the ambitious construction goals was to refine the technical design, expropriate land, and undertake construction. With the support of male village chiefs, land chiefs, and the administrative leaders, women's rice lands were readily put at the disposal of OR. Many male wage workers earned good wages. For the unpaid construction of field bunds, the project engineers also asked men to assist and supervised them (SNV 1984).

At the moment of expropriation for construction, the women had been led to believe that they would receive individual plots on the day of land distribution. The project never discussed the reallocation procedure in these women's groups. This oversight is even more remarkable, because by 1981 the project had organized women into 58 extension groups, out of which 57 groups were exclusively female. The groups focused on labor and agronomic skills, completely parallel to decision-making about resource rights (OR 1980d, 1981b, 1984).

Only in 1980 did the project's expatriate management, an engineer and an agronomist, start any procedure for the reallocation of land. They initiated formal demographic surveys with the aim of evaluating the total population concerned, to get an idea of the number of men and women cultivators in the valleys in order to proceed to what the authors saw as a more rational redistribution of plots after the construction (OR 1980b). The questionnaires were addressed to the male household heads and comprised questions on the number and ages of all family members, the number of adult men and women, and sons and daughters, active on the family field and on individual fields, including rice plots. It was also asked whether the family had a rice plot in the valley to be improved or wanted to have one. Some field officers complemented this information with the tax lists of the tax offices, which included liberated women who had to pay tax individually.

In scheme A, the survey found that in 191 families there were 243 older women, 498 younger women, and 50 men cultivating rice, giving a total of 791 (OR 1980c). Although the survey data did not reveal that there were family rice plots, the project management made a new distinction in its interpretation of the survey results. It referred to 191 families who were cultivating a rice plot in the valley and 791 persons who also cultivated an individual plot. On this basis the project management reasoned that one could reasonably allocate 0.25 hectare to each family and 0.125 hectare to those who cultivated an individual plot (OR 1980b). Without empirical grounding, the family rice plot was invented.

In 1981, just before construction was finished and schemes A and B were to be handed off to the farmers, the project management's "family plot" came up again, but now, critically, as the only criterion used to allocate the improved plots. In scheme

A it was reported that information and sensitization meetings on the land distribution and cultivation requirements had been held in scheme A in the presence of the village chiefs, land chiefs, and authorities. Those meetings led to the decision, which the authors claim to be unanimous, that one or more plots would be allocated to the family heads according to the number of active members (OR 1981a,c). Not surprisingly, the small group of land chiefs and men present agreed to any form of distribution. Thus the project managers proposed, if not imposed, to vest local chiefs and men with power and control over land they had never had before.

In scheme B land was also reallocated as family plots to men, ironically, in the name of equity and fairness. Before the project there were 484 rice cultivators, almost exclusively women. Their number was greater than the number of plots designed by the engineer, which was 360 (OR 1980d). However, male heads of households were fewer in number. So to distribute a scarce resource among a large number of eligible claimants, the rights of these eligible claimants were nullified and vested in a smaller category of people with hardly any existing rights. Again, this blatant gender discrimination was underpinned by the concept of the household as a unit, in which the male head can dispose of all "family resources" according to his discretion and cultural norms.

The land distribution itself in both schemes A and B did not use any demographic list. The project's field officers, the village chiefs, administrative authorities, and male candidates passed through the valley. Plots were allocated on the spot to any man who presented himself. This process was closely witnessed by the land chief of that portion of the valley. Rumors abounded that people sent others in their name, that the same person presented himself twice, and that the most powerful land chiefs put their own families on their portions and even allocated plots to babies.

Women had not been informed of how and when the actual land distribution would take place. When women saw the group of men passing through the valley, a number of them came themselves to negotiate for land. In scheme A, a few widows were able to obtain plots, and they immediately paid their contributions to the maintenance fund to confirm their claims. All women felt that the men had betrayed them. In scheme B the two sisters of the most powerful land chief commented:

Our brother, and the village chief, and the people from the project told us that there would be a list of the women wanting a plot. We thought that each woman would select her own plot. The day of the distribution we came too late, because we were not informed. Part of the plots had already been distributed. Then they told us that the plots would not have been enough for all women, because many women would have wanted them, including those who had no plot before. Therefore, they had decided to allocate to the chiefs of the extended households. Our brother had already

selected our plots. But he does not know the good sites, and he selected a bad site. We are women. We could not do anything. Then the chiefs of the families divided the plots they had received. First they took a part for themselves, and the rest they divided into small parts for the older women in their family. We have never seen a list.

The project reports either did not mention the actual process of distribution or stated that the plots had been distributed in alphabetical order (SNV 1984, 19).

As predicted by the sociologists, the newly imposed gendered organization of rice cultivation was totally counterproductive. Neither in scheme A (Ouedraogo 1990) nor scheme B did men abandon their upland food and cash crops to cultivate rice. On virtually all plots, rice cultivation remained exclusively women's work. In scheme A, most often, women were obliged to cultivate their husbands' plots. Yet, on their husbands' plots, women could not dispose of the harvest as they could before the project was implemented (Ouedraogo 1990). In scheme B, it was equally observed that, after plot allocation to family heads, the latter divided those among their women after taking a portion for themselves. Thus the women cultivated half or two-thirds of the plot for the men, and they themselves had only a small portion. This gave women very little, in comparison with the labor burdens they were bearing. The project realized that it needed to revise their status, as the women wanted to be owners of the plots they cultivated. This would motivate them more strongly (OR 1987).

As formal plot holders, men were also responsible for infrastructure maintenance, but most of them refused to do it. Moreover, the male village elite in schemes A, B, and C used the project's maintenance fund to repair a school (schemes A and C), a road, and a prefect's office (scheme B). Other funds completely disappeared (scheme B), or were said to be used by the land chief for his pilgrimage to Mecca (scheme C).

Frustrations rose further when the technical "improvements" turned out to be no improvements at all in parts of scheme A and in the whole of scheme B. Oversizing of the central drain, inadequate leveling, and earthen constructions that could not resist the force of floods had spoiled the valley to the point that all cultivators interviewed wished the project "to fill up this bad hole and leave." In 1988 parts of scheme A were rehabilitated. Scheme B is now called the lost scheme. One wonders whether women rice producers would have accepted the technical design had they been involved in construction work (Dey 1980).

18.4.3 Gender-Sensitive Land Allocation in Later Schemes

After 3 years of project implementation, the project management still had no idea how to prevent women's frustration in the subsequent two schemes (C and D). In

1983, the director of the regional department of the Ministry of Agriculture and Livestock of Comoé Province, who was also formally in charge of the OR, made the most accurate in-depth study on women in rice production and clearly highlighted the role of women land chiefs and the widespread matrilineal heritage in rice cultivation. However, he thought that formal state administrative law was more important than productivity and well-being (Séréme 1983, 7):

Before land improvement, rice cultivation was almost the exclusive domain of women, who are both actors and beneficiaries as a result of the original land allocation. After public intervention, the administrative allocation ignores women whose juridical existence is only through the family head. This new distribution of rice land induces a new nature of land operation in which the woman is still the principal actor but no longer the exclusive beneficiary. The improvement worsens the situation of women, and, as a consequence, the situation of children whose care is fully delegated to women.

It is significant indeed that the win-win solution for all parties involved in the next two schemes, C and D, emerged from the communities themselves: women, their husbands, and land chiefs alike, in consultation with receptive local project staff. They developed land expropriation and reallocation procedures according to the productivity and equity considerations embedded in customary arrangements. Local project staff did so in spite of their management's instructions. The crucial enabling factor was simply time: 2 years elapsed between the first contacts with the projects, in which the more equitable allocation to both men and women was announced, and the actual start of construction.

Moreover, in Scheme C the Senoufo women rice cultivators had been warned by the events in both scheme B (at some 8 km distance) and one of the earlier irrigation schemes (more than 30 km away) that women had been pushed out (Ouedraogo 1978). As Senoufos "they are not ashamed to express themselves in front of men, unlike the Gouins." Senoufo women also have fewer labor obligations on men's fields and devote themselves fully to their rice plots. Furthermore, the women were already organized in a women's group by the regional department of the Ministry of Agriculture and Livestock. And last but not least, the women had time to negotiate.

In an interview, the woman leader of scheme C narrated the course of events after OR established its first contacts:

The field officer registered all women per quarter. Some men asked for plots, because the field officer said that if it succeeds everybody will have rice. But men do not like the work of rice. Some abandoned them and left

them to their women. If you do not work you cannot take the benefits. During the land distribution women negotiated their own plots while men observed, because the women cultivate. For the collective maintenance work, men help. Everybody eats the rice.

Thus in scheme C every woman with former land rights received a plot; many daughters got individual plots as well. Although the project had given ample opportunity to men to apply for land, only 4 percent of the new title holders were male (OR 1986).

In scheme D, the project's field officer took the initiative to visit the land chief immediately upon his arrival in 1980. He asked the chief about the actual plot users. Registering the inventory of existing rights holders took only a couple of hours. Although the roundabout demographic surveys were still compiled, they were never used during the actual plot distribution in 1984.

This bottom-up approach for identifying existing plot holders and reallocating first to them before assigning plots to others (both men and women) further crystallized in the three schemes constructed from 1984 to 1986. From 1987 on the project gradually committed these tested, consistent, equitable, and transparent procedures for land expropriation and reallocation to paper (*cahier des charges*). In the next three schemes, constructed under phase II of OR, this process was further refined and documented. It effectively guided the interactions between the project and villagers and between project and prefects and other administrative authorities.

The procedures stipulate that, first, open meetings are to be organized, to which the current farm decisionmakers and anyone else interested are invited. The participants at the meetings are then informed about the project—the technical aspects, the land redistribution, and proposed organizational design. Before any construction is started, field officers make an inventory of current plot holders in the field. They register name, sex, age, quarter or village, ethnic group, whether a woman is liberated or nonliberated, number of plots cultivated, and number of plots held in neighboring schemes that have already been improved. The names are checked with the male or female land chiefs.

The project retains the authority to determine the plot size, and thus how many landless individuals can also benefit from the intervention. Interested new candidates register with the field officer. In practice, women appear to remain the majority of new applicants. In some cases male land chiefs submitted requests. Only in a few regions where fertile uplands have become scarce are men increasingly reported to register and start cultivating rice (OR 1997). These men have to negotiate their wives' labor and also to pay women wage laborers. Their upland crops remain their priority.

Rice cultivators from the same quarter or village are placed in the same portion of the improved scheme for reasons of social cohesion. Further plot selection is at random. On the days of distribution, plots are distributed according to lists of rights

holders and topographical maps. A committee of project staff and male village and administrative authorities—but still not the female land chiefs or other women users—supervises the process (OR 1991).

After construction and land reallocation, plot holders become members of the new water users associations, fulfill their maintenance obligations, and elect their leaders. Men remain overrepresented in the committees. The increasing role of the state has led to a decrease in the crop shares that cultivators give to the land chiefs. Land chiefs regret this erosion of their traditional power (SAED 1988; Ouedraogo 1990).

Overall, the procedure, which begins at the start of intervention, is considerably shorter, has considerably lower transaction costs, and is seen as legitimate. Local knowledge, like the knowledge of the land chiefs, is used.

18.4.4 Again: The Family Farm

In 1988 phase I of the OR was evaluated to formulate recommendations for the next phase (SAED 1988). This report adequately described the prevailing production relations, in which both older and younger women cultivate rice and older women have no labor constraints. Male land chiefs were reported to insist on the continuing inclusion of older women, as they depend on rice for their survival. Local men do not disagree with plot allocation directly to their wives. The report explicitly acknowledged that the concept of the family farm is problematic in the local farming system. It was found to be difficult to distinguish between family fields and individual fields of men, because both types of field are cultivated by the same family members (SAED 1988).

However, contrary to all evidence cited, the imaginary family rice plot, managed by the male head of household, suddenly emerged again in the concluding recommendations (SAED 1988, 35–36, author's translation from French):

The field studies show that traditional rice cultivation is a quasi-exclusive women's affair, especially of older women. Should such a situation be continued by allocating land exclusively to women? This raises the following questions:

- The problem of infrastructure maintenance. Could one count on their contributions to ensure maintenance of the infrastructure?
- What attitude would men have if they saw economic power concentrated in women's hands?
- What future would the project have if it is only carried out by older women? Would the objective of production increase be achieved? Could the cooperative spirit be initiated?

- Would the objective of self-management be possible?

In fact, the basis should be laid now for a progressive elimination of presently predominant production forms (exclusively female) in favor of familial and collective forms. Those forms would allow growth in production by installing a credit system. Therefore, we suggest that in plot allocation one allocates both individual plots and family plots. Individual plots of 0.25 ha will be allocated to the women already present in the valleys that will be improved. Family plots will cover 0.50 ha. With the expected profits, the production conditions [*cahier de charges*] that will be imposed on men to work on the plot will bring rice cultivation to a higher level than that of secondary crop, as it is at present.

This recommendation was never implemented, but illustrates the persistent prejudice that agricultural productivity can only *really* be enhanced through a mode of production that subjugates women's labor to men and erodes women's resource rights.

18.5 Conclusions

How representative is the case of OR? How important are the findings of intra-household and intracommunity institutional arrangements in Burkina Faso for the design of agricultural policy in Sub-Saharan Africa as a whole? Is the mode of agricultural growth in this area, which profoundly differs from northern agricultural patterns characterized by the male-dominated family farm, more generally applicable to the continent as a whole? Has past inertia in operationalizing policy intentions and gender analysis in implementation programs contributed to the well-documented stagnation of smallholder agriculture in Sub-Saharan Africa? Will stagnation persist if the gender relations are persistently ignored?

If one accepts that 70–80 percent of agricultural production is the responsibility of women and that labor is the key production factor, the answer is clearly: yes. Existing and especially potential land-tenure arrangements, as currently promoted in land-reform measures, vary, but they are in many cases (certainly in matrilineal societies) not so different from the rice valleys in Burkina Faso as they seem at first glance. The related key questions are: Do African women farmers produce in their own right, or as unpaid family laborers without incentive to increase their productivity? What does this mean for their productivity?

The answer to the last question from past literature and this case study boils down to the common-sense observation that women are human beings, too, and

that farmers who control the output of their efforts are more motivated to increase their productivity than those who do not. Long-term use rights to the land cultivated are important but are not the only condition for such control. In Asia, these basics of institutional economics have not only been widely recognized for male tenants and land-poor men, but have also been operationalized in policies and programs for land reform and tenure security that “vests land in the tiller.” In Sub-Saharan Africa, a similar approach to gender relations in the farm household and in other informal and formal institutions would contribute considerably to agricultural growth and gender equity.

Note

1. Scheme A is the scheme of Koutoura, scheme B is the scheme of Dakoro, scheme C is that of Moadougou, and scheme D that of Niofila.

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