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Poverty Alleviation through Microcredit: The Impact of the Oued Sbaihya Project on the Sustainable Management of Natural Resources and Rural Women's Empowerment in Tunisia

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## POVERTY ALLEVIATION THROUGH MICROCREDIT: THE IMPACT OF THE OUED SBAIHYA PROJECT ON THE SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES AND RURAL WOMEN'S EMPOWERMENT IN TUNISIA

### Alia Gana\*

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### Introduction

In Tunisia, as in many developing countries, economic restructuring movements since the late 1980s and the increasing exposure of the national economy to global competition have had major impacts on the labor market and the living conditions of large segments of the population. Reduced employment opportunities, as well as the reduction of public spending and state subsidies (for both consumption and production), have brought about major changes in patterns of social reproduction and work strategies of rural and urban farm households.

In rural areas, the changing patterns of social reproduction have been increasingly based on the diversification of household members' activities. Changing strategies for rural households have also been asso-

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ciated with increased involvement of women in commodity production and their growing contribution to household-income generation.<sup>1</sup>

In mountain areas, where forest exploitation and extensive use of agricultural land were, until recently, an essential foundation of family survival, new livelihood patterns follow an economic logic based on a more productive use of available resources. In a context where competition for land intensifies (extending even to marginal areas) and where forest areas are increasingly subjected to deferred grazing measures, the implementation of new rural development programs favors the reorganization of rural households' economic strategies.

Initiated in the early 1990s as components of policies aimed at reducing the social costs of economic liberalization and poverty alleviation, these development programs have focused on the promotion of self-employment and rural micro-enterprises as a way to compensate for declining household incomes and work opportunities.<sup>2</sup> Organizations have implemented rural development projects in most regions of Tunisia and have included micro-credit programs geared towards the promotion of household-based income-generating activities, targeting mainly women.

Based on surveys conducted in 2000 and 2004 and on interviews with members of the women's development group of Oued Sbaihya in 2010, this Essay analyzes the socioeconomic dynamics linked to the implementation of a rural development project aimed at promoting a sustainable use of forest and land resources in a mountainous area of northwest Tunisia. It highlights the growing importance of women's activities in the rural economy of marginalized areas and assesses the socioeconomic impacts of micro-credit programs that promote incomegenerating activities among women. While critically evaluating the role of micro-credit programs in improving incomes and productive capacities of vulnerable households, this Essay also draws attention to the processes of commoditization that these programs engender as well as to the changing status of women and female work in rural households.

The research methodology was based primarily on qualitative surveys that the author carried out with women beneficiaries of the development project in the village of Jimla. The author selected a sample of thirty-five women based on the diversity of their development project activities. Interviews were also conducted with representatives of the Oued Sbaihya Rural Development Project and a local NGO, Association

<sup>&</sup>lt;sup>1</sup> See Alia Gana, Agricultural Restructuring, Household Practices and Family Farm Differentiation: A Case Study of the Region of Zaghouan 244 (May 1998) (unpublished Ph.D. dissertation, Cornell University) (on file with Mann Library, Cornell University).

<sup>&</sup>lt;sup>2</sup> See Stratégie de réduction de la pauvreté: Étude du phénomène de la pauvreté en Tunisie, Programme des Nations Unies pour le développement, 4 (2004), available at http://www.tn.undp.org/files/strategie\_reduction\_pauvrete.pdf.

de soutien à l'auto-Développement ("ASAD"). The author also organized focus groups, comprised of members of a women's agricultural development group, Groupement Féminin de Développement Agricole de Oued Sbaihya ("GFDA"). Additionally, the author conducted interviews with eight male beneficiaries of the development project. These series of qualitative surveys were carried out in 2000 and 2004 with the assistance of students from the Agricultural College of Mograne in Zaghouan. The author updated thse data in 2010 through interviews with the coordinator and members of the GFDA. The data and content of the following sections, unless otherwise indicated, are based upon the interviews and surveys discussed above, and the author's own observations.

## I. THE OUED SBAIHYA RURAL DEVELOPMENT PROJECT

The Oued Sbaihya project is part of the Inter-Regional Project for Participatory Upland Conservation, which the United Nations Food and Agriculture Organization operates in several countries.<sup>3</sup> The project aims to identify methods and techniques for the promotion and consolidation of peoples' participation in the conservation and development of upland watersheds.<sup>4</sup> In Tunisia, the project covers the Oued Sbaihya watershed, which is located in the governorate of Zaghouan in the country's northwest.<sup>5</sup> The project affected three hundred families distributed in nine villages.6 A large part of the area consists of hilly lands and forests.<sup>7</sup> The state owns one-third of the forests, and families privately own the rest. Land and forest degradation is a significant concern.8 Locals use forest resources for animal grazing and firewood.<sup>9</sup> In lowland areas, grain cultivation and olive tree plantations predominate. Legume cultivation and foraging have also developed in recent years due to restrictions on land for grazing and the exclosure of forest areas. In addition to sheep and goat rearing, poultry farming plays an important role in household production, both for consumption and for sale at weekly markets. A

<sup>&</sup>lt;sup>3</sup> See Patrizio Warren, Developing Participatory and Integrated Watershed Management: A Case Study of the FAO/Italy Inter-Regional Project for Participatory Upland Conservation and Development (PUCD), FOOD AND AGRIC. Ass'N OF THE UNITED NATIONS, 11–13 (1998), available at http://www.fao.org/docrep/012/x0704e/x0704e00.pdf; see also Inter-Regional Project for Participatory Upland Conservation and Development, Home, FOOD & AGRIC. ORG., http://www.fao.org/tc/tco\_water/e-home.htm (last visited Dec. 19, 2012).

<sup>&</sup>lt;sup>4</sup> See Inter-Regional Project for Participatory Upland Conservation and Development, Project Approach and Methods, Food & AGRIC. ORG., http://www.fao.org/tc/tco\_water/eproove.htm (last visited Dec. 19, 2012).

<sup>&</sup>lt;sup>5</sup> See Inter-Regional Project for Participatory Upland Conservation and Development, Tunisia, Food & Agric. Org., http://www.fao.org/tc/tco\_water/etunisia.htm (last visited Dec. 19, 2012).

<sup>6</sup> See id.

<sup>&</sup>lt;sup>7</sup> See id.

<sup>8</sup> See id.

<sup>&</sup>lt;sup>9</sup> See id.

number of farm households also practice beekeeping. These farms are predominantly undivided small-scale holdings (60% are less than five hectares and 81% are less than ten hectares). In most households, farming is only a part-time activity, and off-farm activities play an important role in household-income generation. One or more family members (mostly males) are active on a seasonal basis outside the farm as construction workers, forest workers, and farm workers. In a number of households, women also work on a seasonal basis as farm workers for wages, picking olives, and harvesting food legumes.

The Oued Sbaihya development project began in 1995 and went through several phases.<sup>11</sup> Its main interventions included land and water conservation works, forest development and forage tree plantations, fruit tree plantations, and improvement of animal production (primarily sheep and goat rearing).<sup>12</sup> To facilitate the participation of the rural population in the water and soil conservation projects, organizers added a microcredit component geared towards promoting income-generating activities to the project.<sup>13</sup> The micro-credit program targeted small farm households and primarily women. This component included the promotion of poultry farming, beekeeping, and goat rearing. The local NGO, ASAD, was in charge of the project's implementation.<sup>14</sup>

## II. LAND CONSERVATION, DIVERSIFICATION OF FARMING SYSTEMS, AND FAMILY WORK

The Oued Sbaihya project aimed to reduce the severe degradation of forest areas and attendant high levels of soil erosion. These reforestation programs restricted users' access to grazing areas and pushed animal farmers to downsize their herds. Other coping strategies included the integration of livestock production into farming systems (i.e., barley cultivation, foraging, and food legumes to meet animal feeding needs) and the development of a more systematic use of animal feed purchases. The intensification of livestock production—related to the restriction of forest resources—was often associated with a greater involvement of women in animal rearing as men were usually occupied with off-farm work.

In order to garner community acceptance of forest protection interventions and to compensate for losses linked to the restriction of accessible spaces, the project implemented complementary initiatives for land

<sup>10</sup> See id.

<sup>&</sup>lt;sup>11</sup> See id.

<sup>12</sup> See id.

<sup>13</sup> See id.

<sup>14</sup> ASAD/Tunisie-Fondation Intermon/Espagne, Appui au développement socioéconomique de neuf localités dans le bassin versant de Oued Sbaihya, Zaghouan-Tunisie Plan d'action (Apr. 1999).

conservation and agricultural development. Local communities received these initiatives with growing interest, as the beneficiaries were able to help choose the type of land conservation works (i.e., small anti-erosion works, acacia tree plantations, and sulla plantation for pasture improvement) and were granted a small subsidy to perform them. In addition to household heads, other members of the farm household—wives, sons, and daughters—signed contracts with the NGO to perform land conservation works. Although financial incentives undoubtedly fostered the growing demand for land conservation works, the interviews with the beneficiaries indicate that the positive impact of these works on resources available to farm households also stimulated demand. Those positive impacts included increased water retention, protection against soil erosion, and production of fodder resources (including acacia, sulla, and cactus) for animal rearing and beekeeping. In addition, the strategy adopted by the project, which established individual contracts for the performance of land conservation works, encouraged housewives and daughters to engage in these activities. Because women have limited access to income sources and off-farm employment, they responded positively to the incentives of the project, and many signed contracts with the local NGO, particularly for acacia and sulla plantations. Among the incentives for farmers' daughters to engage in these activities was the prospect of developing autonomous projects (e.g., sheep rearing and beekeeping) on plots of land granted to them by their fathers. In any case, the project's individual contract-based strategy efficiently mobilized women's labor for land conservation initiatives.

Farm households also responded positively to the project's land development component—namely, fruit tree plantations and pasture improvement. Conceived as a means to reinforce the local community's acceptance of land conservation works, these initiatives also sought to reduce the mechanized cultivation of grain, an aggravating factor of soil erosion. Farmers were mostly interested in opportunities to diversify their farming systems and income sources and to improve family autoconsumption. They were also motivated because fruit tree plantations are a means to consolidate property claims on the land. The farmers themselves planted the fruit trees (i.e., olive and almond trees provided by the project), which in turn resulted in intensive family work. Women were especially involved in these activities, particularly in collecting water and irrigating the trees.

# III. THE PROMOTION OF INCOME-GENERATING ACTIVITIES THROUGH MICRO-CREDIT

As noted above, the project conceived the promotion of incomegenerating activities and the improvement of farm production systems as

a means to encourage rural communities to adhere to the project's objectives and to welcome water and land conservation works and actions related to forest development.

The idea of a micro-credit program aimed at promoting female income-generating activities rested on the assumption that women had a substantial role in the degradation of forest resources—because of their constant search for firewood, animal grazing, live coal fabrication, etc. and that these activities were very time-consuming (taking three to four hours per day). In this context, the project viewed the promotion of new income sources through microcredit as a means to reduce the importance of activities that led to the destructive use of forest resources.

The microcredit program has mainly targeted women (women constituted seventy of the one hundred beneficiaries). Financed activities included poultry farming, lamb fattening, beekeeping, and livestock improvement (i.e., sheep and goats). ASAD was in charge of the program's implementation. The credit amounts granted to women were limited but ranged from two hundred dinars<sup>15</sup> for poultry production to five hundred dinars for lamb fattening and beekeeping.

#### IV. THE PROCESS

#### Starting a Poultry Farming Micro-Project Α.

In the first phase, the project granted microcredits only to poultry farming projects. This choice was motivated by the fact that women commonly practiced poultry farming and because of a desire to avoid engaging women in risky production or in activities likely to result in high levels of indebtedness. The credit amount for poultry farming projects was limited to two hundred dinars, which allowed for the purchase of twenty hens, to be reimbursed in ten months with an interest rate of 6%. At first, women were not convinced of the profitability of poultry farming both because of the small size of the financed production units and because frequent disease caused production uncertainties. However, in most cases, the projects were successful. In addition to allowing the purchase of hens and fodder and the construction of improved hen houses, the credit program provided the beneficiaries with technical support and veterinary assistance. Among the success indicators of this activity, project officials point to the high level of reimbursement (almost 90%), the increase in the number of animals, and the shift to more important income-generating activities, such as sheep and goat rearing and lamb fattening.

The interviews with the women beneficiaries of poultry farming projects highlight the following elements. First, intensified poultry farm-

<sup>15</sup> At the time, one dinar was worth approximately one U.S. Dollar.

ing requires access to certain resources, particularly fodder for the animals. Surveys indicated that the success of a poultry-farming project is more important in households where sufficient land is available and where farm activities can provide fodder to the animals. In general, women's capabilities to reimburse a loan are closely related to the functioning of the family farm and are dependent on the financial capacity of the household.

Several cases revealed that the resources used to pay back the loan installments originated not exclusively from the activities financed through the microcredit but also from other family incomes, agricultural incomes, or incomes from off-farm wage work. In addition to the availability of land and the possibility of accessing farm resources and products, the existence of off-farm income plays a major role in women's capacity to reimburse their loans and to manage their projects successfully. Hence, respect for reimbursement deadlines should not be considered the only indicator of the success and consolidation of a microproject. Data collected reveal that, in several cases, beneficiaries repaid loans before the deadlines, indicating that those beneficiaries used an alternate income source for loan repayment. The use of an alternate source to repay loans could support a strategy geared towards quicker access to larger loans. Several women indicated that they tried to reimburse poultry farming loans as early as possible, using other income sources, in order to be eligible for loans to develop lamb-fattening or sheep-rearing activities, which they considered to be more profitable.

In several cases, income generated from poultry farming also allowed for the consolidation of the initial project and for shifts to larger-scale activities. For example, locals used income from egg and chicken sales for the purchase of a lamb, a female sheep, or a goat. This investment progressively enabled women to consolidate a herd of sheep or goats and often demonstrated a management strategy focused on consolidating a small amount of capital. In fact, among women who could secure sufficient resources to maintain their poultry farm units and generate sufficient income to reimburse their loans, management strategies aimed at the following objectives: (1) reimbursing loans, (2) satisfying particular household needs (i.e., the purchase of household equipment and clothes, purchases for children, or expenditures for health care), and (3) financing the consolidation of a small capital fund by acquiring larger animals (i.e., sheep or goats).

In contrast, women avoided using their incomes to pay for food expenses, which husbands usually pay for. In this respect, it was interesting to observe that, when families used a portion of the poultry farming products (i.e., eggs and chicken) to satisfy consumption needs, housewives asked their husbands for monetary compensation for what the fam-

ily consumed. Women usually asked their husbands to pay part of the installments as compensation for the monetary losses incurred by family consumption. What they wanted to avoid, by all means, was substituting for their husbands in covering some family expenses (food expenses in general), which would make it impossible to repay loans and save the necessary amount to accumulate capital.

In fact, when women's micro-projects failed, it was usually because part of the income generated from the microcredit-financed activity was used to cover everyday expenses, particularly food expenses. This occurred mostly in households with insufficient land and where low family incomes—often generated from wage work—were inadequate to cover family expenses. In these cases, a micro-project often increased the family financial burden and resulted in significant tensions over whether to allocate income towards family expenses or to project-related input expenses. When incomes are used for everyday expenses, reimbursement of loans becomes impossible. As Peemans-Poullet has pointed out, instead of contributing to economic empowerment of the poor, recourse to microcredit often results in women's growing indebtedness.<sup>16</sup>

One major impact of the microcredit projects was women's increased awareness that the success of their projects mainly depended on their capacity to manage their activities while also maintaining a certain autonomy vis-à-vis the household economy. Data collected revealed that women who had been successful in repaying their loans and developing their project had systematically avoided using the projects' incomes to meet household consumption needs. These management strategies indicated important changes in the economic logic that guides female activities—in this case, poultry farming—when credit finances those activities. The changes that microcredit generated were also observed in both the financial and technical management of poultry farming (i.e., the construction of chicken houses, changes in feeding techniques, sanitary treatment, and increased attention given to money management and savings).

These transformations reflected the increased commoditization of the production process on small farms. Changes in technical management of poultry farming illustrated the shift to more intensive and market-oriented small animal rearing. Necessary to increase production efficiency, technical intensification was associated with an increased integration of women's activities into the market economy. The intensive poultry farming that microcredit programs promoted was largely oriented towards the generation of monetary income, which represents a major

<sup>&</sup>lt;sup>16</sup> See Hedwige Peemans-Poullet, La miniaturisation de l'endettement des pays pauvres passe par les femmes, in 2 Cahiers genre et développement: Genre et économie: un premier éclairage 347, 352–57 (Jeanne Bisilliat & Christine Verschuur eds., 2001).

shift away from subsistence poultry production. Shifts in the economic orientation of poultry farming necessitated new marketing strategies, and locals sold eggs and chickens not only in the neighborhood but also in weekly markets. However, the monetary incomes that these intensified poultry-farming units generated remained limited to an average of fifty to one hundred dinars a month—approximately one-third to one-half of the salary of a wageworker.

The income generated from poultry farming can provide a family with additional cash, but this rarely allows for income accumulation, especially when this production is not associated with other activities. Women indicated that poultry farming remained an uncertain activity and that, beyond a certain scale, costs became too great. In their view, the main purpose of poultry farming was to increase family cash. The consolidation of a productive project allowing for a small amount of capital accumulation requires the development of larger activities and, above all, a diversification of productive activities. Therefore, women who contracted and reimbursed their first loan for poultry farming opted the second time for larger loans to finance what they considered to be more profitable activities (such as lamb fattening and sheep rearing).

## B. Consolidating the Microcredit Project Through Sheep Rearing

Under pressure from women who had successfully implemented a poultry-farming project, ASAD—in charge of executing the microcredit component—decided to grant larger amounts of credit to finance lambfattening and sheep-rearing projects. In the first stage, only women who had already contracted and reimbursed a credit for poultry farming were eligible for larger loans. Additionally, ASAD only granted loans for lamb fattening and not for sheep rearing in order to avoid aggravating existing overgrazing problems. Later, however, under pressure from beneficiaries, ASAD also granted a five-hundred dinar microcredit for sheep rearing.

For lamb-fattening projects, ASAD provided credits, for the purchase of four to five lambs, to be reimbursed within six months. Assessments of lamb-fattening projects indicate that the beneficiaries were confronted with a series of problems that reduced the profitability of their activities, primarily due to an inappropriate reimbursement scheme. Most beneficiaries stressed that they were unable to repay the loans on time because the reimbursement deadlines were too short. In addition, the obligation to reimburse the total amount of the loan in one installment was an important constraint. Finally, some beneficiaries experienced delays in the disbursement of loans for the purchase of fattening lambs, which prevented women from benefiting from periods when lamb prices were the most favorable. Such delays had negative effects on in-

comes earned from lamb fattening and often resulted in the inability to respect reimbursement deadlines. Indeed, most beneficiaries of lamb-fattening credits were unable to reimburse their loans in time.

Data also revealed that the income women used to reimburse contracted loans did not originate from the lamb-fattening activity itself but rather from other farm activities (i.e., crop production and poultry farming) or even from the production and sale of live coal, an illicit activity practiced by a number of women. These financial management practices illustrate the cash-creating function of certain activities—poultry farming in particular—and the links between poultry production and other activities promoted by women, such as sheep rearing or animal fattening. Egg sales finance the purchase of fodder for sheep, and money earned from chicken sales allows for the purchase of fattening lambs, which are then converted into female sheep.

These strategies, which consist of attempts to develop sheep production, are geared towards the accumulation of a small fund of capital. Women use immobilization of earnings in the acquisition of sheep as a means to avoid participating in everyday expenses (as chicken sales are in fact easier than sheep sales). Most women who contracted loans for lamb fattening progressively converted this activity into sheep rearing, which they considered to be more profitable and to allow for more rapid capital accumulation.

The women's preference for sheep rearing suggested that they prefer extensive animal rearing, which is more appropriate for their circumstances. Interviews revealed, however, that even when women favor sheep rearing to lamb fattening, the technical and feeding management of these activities tends to be more intensive. Several women proudly declared that their animals were better fed than those of their husbands. The women confessed that, in addition to grazing with the family herds, their animals regularly received additional (purchased) fodder. These practices illustrate the process of individuation of women's activities within the household.

Nevertheless, surveys also indicated that women did not control all the variables that influenced their activities. Several authors have emphasized this issue of women's lack of control over activities financed through microcredit.<sup>17</sup> In fact, tradition does not allow married women to personally sell their animals at weekly markets. Consequently, women have to act through intermediaries (in most cases their husbands or sons) for the purchase or sale of animals. However, when they need to

<sup>&</sup>lt;sup>17</sup> See, e.g., Anne Marie Goetz & Rina Sen Gupta, Who Takes the Credit? Gender, Power, and Control over Loan Use in Rural Credit Programs in Bangladesh, 24 WORLD DEV. 45 (1996) (discussing the comparative levels of control that men and women exercise over loans disbursed as part of microcredit programs).

purchase animals, women often know in advance of available offers and try to acquire animals from people they know. Likewise, women have recourse to trusted persons for the sale of their animals. These attitudes demonstrate their eagerness to control the diverse elements that play a role in their activities.

Strategies of autonomization were also present in the projects and aspirations of women. A number of those who were successful in developing their micro-projects and started in poultry farming sought to shift to cattle rearing, both for milk and meat production. From the women's perspectives, cattle rearing had several advantages; it can be practiced near the house, which saves them time and makes it less dependent on pasture and family labor. This progressive adaptation of women's productive projects to their particular circumstances and needs is part of a strategy geared towards the consolidation of an autonomous activity (to avoid, to the extent possible, dependence on household resources), allowing for the generation of additional monetary income and the accumulation of a small amount of capital.

## V. Organizing Collectively

To help women promoters of micro-projects better organize their activities, ASAD supported the creation of a women's agricultural development group, the Groupement Féminin de Développement Agricole de Oued Sbaihya. The group's creation resulted from the dynamics generated by both the development of women's income-generating projects and the need felt by the promoters to better organize their activities. The women's choice to organize within a GFDA, as opposed to an association, was motivated by the fact that GFDA status allows for the development of profit-making activities and creates eligibility for government subsidies. Established in 2002, organizers charged the GFDA with the following missions: (1) providing animal feed, veterinary services, and animal genetic improvement, (2) organizing marketing networks, and (3) coordinating with non-agricultural institutions to meet members' needs.

In 2003, the GFDA regrouped into forty-six members, including nineteen men. Organizers decided not to exclude men who wanted to benefit from the services offered by the women's group so as to ensure better acceptance by the community. To facilitate the initial stages of the women's group, ASAD assisted in a variety of ways, by, among other things, providing financial support for the acquisition of small equipment and farm products, organizing training activities and recruiting a facilitator among the beneficiaries of the micro-projects who was assigned the responsibility of developing and monitoring the group's activities, and coordinating with the NGO and local institutions.

Initially, the group's activities mainly consisted of the sale of veterinary products and animal feed, the rental of small equipment, and the provision of veterinary services. Interviews with the beneficiaries revealed that recipients greatly appreciated the services that the group offered. The recipients emphasized multiple advantages from the group's assistance, including input supply at lower cost, access to better quality inputs and services, and better marketing conditions.

Later, the group introduced other activities to diversify its interventions and income sources, such as the organization of a collective project of forest exploitation (i.e., the collection of Aleppo pine seeds), the organization of a collective pea harvesting project and an aromatic plants distillation project, the sale of food legume seeds, food processing activities, etc. These new activities, which ASAD financially supported, provided members of the group with additional employment opportunities and income sources. The new activities also increased women's responsibility for the management of economic activities and their knowledge of market mechanisms and prices and contributed to the consolidation of collective action.

# VI. LAND CONSERVATION AND MICROCREDIT: WHAT ROLE DO THEY PLAY IN POVERTY ALLEVIATION?

Women were the privileged targets and partners of the development projects in Oued Sbaihya, both in the land conservation program and in the income-generating activities. Women's roles in these projects were closely linked to their status in the rural community. Being poorly educated and having limited employment opportunities, the women responded positively to the project's incentives, hoping to develop productive activities on their own and to increase their family income.

The dynamics generated by the implementation of the Oued Sbaihya project demonstrated that the emergence of new practices based on the valorization of local resources and the consolidation of incomegenerating activities are highly dependent on the ability to mobilize labor available at the household level, especially among women. These results highlight the importance of gender differentiation in discerning how local actors relate to development actions. In fact, men have shown little interest in the project interventions, especially in the microcredit component, regarding the projects as too limited in relation to the men's needs and unlikely to improve their economic situation.<sup>18</sup>

Activities targeting men were not the same as those targeting women. The activities targeting women included bee keeping and genetic improvement of sheep and goat herds. The objective of beekeeping projects was to provide beneficiaries with full-time employment and a regular source of income. However, almost all of these projects failed, mostly due to the small size of the projects and their inability to provide the beneficiaries with a sufficient level of

Although cautious at first, women became increasingly interested in developing new income-generating activities. Microcredit represented something completely new in the women's lives. A number explained that, as women, they never thought that they could benefit from these programs. Providing women access to credit means acknowledging the role that women play in the farm households. This acknowledgment contributes to modifying the way in which women's activities are perceived—not only as a continuation of housework but also as a sign of increased economic status. Thus, microcredit modifies the status of women's work, which tends to bear a productive character, and contributes to individualizing women's participation in the household economy. The dynamics that the microcredit programs generated with regard to women's social position are multi-faceted, including changes in women's relationship to the family, in their relationship to money and to the market, and the development of new perceptions of women's role in the household and of women's work more generally. The changes that the implementation of women's projects generated have also had major impacts on the organization of household production and family labor.

Survey results indicate that the productive activities performed by women very often promote the intensification and diversification of family farming systems. As noted above, management practices tend to be more intensive when women keep animals than when men do. Women's strategies aimed to reduce, to the extent possible, animal dependency on forest grazing areas and to increase the share of forage cultivated on the farm and of purchased fodder in livestock feeding management. This intensification, which tends to modify the labor organization related to animal production, has some advantages as it reduces the time devoted to moving animals to the forest grazing areas, an activity that women perceive to be particularly time-consuming and burdensome.

Intensification of livestock feeding management allows women to keep their animals near their homes, which has important consequences for the organization of labor and women's timetables. The concern regarding how to better organize their labor schedules explains why a number of women were interested in shifting to intensive cattle production, especially fattening activities. When financed through microcredit, women's activities contributed in many ways to changes in family farming systems. As noted above, these changes relate to labor organization con-

income. The other activities, which targeted men, aimed at encouraging livestock farmers to acquire genetically improved goats and rams in order to increase the productivity of their herds. According to the beneficiaries, this activity had no tangible impact on their incomes. In general, micro-projects were not considered sufficiently interesting for men because such projects were limited with regard to the men's needs and not likely to change the men's economic situations. In most cases, men also performed an off-farm activity from which they received a more regular and higher income.

straints and to women's increasing cash needs. In fact, micro-projects increase households' cash income but also generate growing monetary needs. The obligation to reimburse credit pushes women to diversify sources of monetary income. In many cases, women have developed cash crop cultivation, such as fava bean and green pea cultivation, sales of which facilitate the reimbursement of installments. In addition to generating cash, these new activities contribute to the diversification of farm production systems. Paradoxically, the diversification resulting from the monetization of the household economy also induces the development of auto-consumption. Monetary earnings, which enable the purchase of farm inputs, allow women to introduce new crops. An increasing number of women have set up family gardens, the products of which improve and diversify family food consumption.

As noted above, the female activities that these microcredit projects promoted allow for the consolidation of an individual budget for women. Having a budget at their disposal, even a small one, women acquire greater autonomy in the management and allocation of the family income. Women can use their earnings to satisfy needs that may otherwise go unmet (including house equipment expenses, children's expenses, and personal purchases). Income generated from micro-projects can also be used to improve women's life and working conditions. A number of women indicated that they have invested in the acquisition of a donkey or a mule, which they use, in particular, to collect water.

Women also declared that one of the major benefits of microcredit projects was that they learned how to manage money. Autonomous income sources have also had some impact on intra-household relationships. As women can increasingly contribute to family expenses and meet particular consumption needs of household members, they take an increasing part in the household decision making process. This also modifies their relationship to the family and to individual family members (i.e., the husband and children) and changes their own perception of their role in the household.

Women also insisted that microcredit projects have reinforced their self-consciousness and self-confidence. During the interviews, several women declared that, with the development of their micro-projects, they started to think about themselves and to plan projects for the future. Among non-married women, microcredits engendered more positive attitudes towards the family farm and reinforced their confidence in the future. For a number of them, microcredits could serve as a solution to unemployment, especially for young women seeking an independent income source. The credit also provides for a means of social and economic integration. Some of the women told us that, thanks to microcredits, it will be easier for them to get married. Others stated that

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they had given up the idea of leaving their community to search for a job in the city. New possibilities given to farmers' daughters to develop a project linked to the family farm also modify relationships within the household. In several cases, fathers encouraged their daughters to develop a project by facilitating the daughters' access to the family farm's resources. The contribution to household income from daughters' projects often reinforced their position in the family. It is also interesting to note that micro-projects and the income generated from female activities contributed to reinforcing women's claims to the family land. One of the beneficiaries asserted that she will not give up her right to inheritance and that she will never sell her family's land.

Finally, women reported that, thanks to their new activities, they participated more in the social life of the local community. Microprojects tightened the links among women of the community and broadened their horizon. They participated in meetings, spoke to each other about their problems, sought information, and commuted to the village to sign their credit contracts and pay their installments. Some have even opened bank accounts.

By opening new perspectives for women, micro-projects also increased women's needs and generated a higher level of social aspirations—namely, new consumption needs, claims on work and income, and claims to the land. However, if the projects fail to fulfill their objectives and to meet women's needs, they also have the potential to increase women's frustration. Analysis of the observed situations showed that, in most cases, the economic dynamics that microcredit projects generated could not go beyond a certain threshold—incomes generated from microprojects hardly exceeded one-third of the minimum wage. Additionally, while such projects might increase the family treasury, they rarely allow for the consolidation of an autonomous micro-enterprise. In fact, activities that women promote remain fundamentally dependent on the resources available on the family farm and, in particular, on their access to land, which continues to be quite limited. Thus, in the absence of a real redistribution of resources in favor of the poor, development actions based on the promotion of income-generating activities can have only a limited role in poverty reduction. These development actions are, however, an important factor combating the monetization of household economies, and they strengthen the integration of disadvantaged areas in national economic systems.

## Conclusion

The lessons to be learned from the experience of the Oued Sbaihya project are manifold. Our analysis has highlighted the crucial role that women play in the rural economy of this marginalized area and particularly the ways in which rural development processes depend on mobilizing female labor. As in many countries, women have been the main targets of the income-generating activities component, but the success of micro-projects appears to be fundamentally dependent on resources already available in the farm household. This undermines the main assumption on which microcredit programs rest—that poor people can turn into successful entrepreneurs. It also illustrates the limits of development programs that focus mainly on the promotion of self-employment as a way to reduce poverty. The Oued Sbaihya project confirms the analyses of several authors who have pointed out that those social groups that take the most advantage of microcredit programs are not the poorest.<sup>19</sup> Additionally, though micro-projects can be safety nets,<sup>20</sup> they rarely represent a sustainable way out of poverty.<sup>21</sup> Moreover, they can also generate major risks of debt generation in poor households. As the Oued Sbaihya experience demonstrates, development and microcredit projects simultaneously generate processes of both inclusion and exclusion, as well as conflicts in the household and in the community. In fact, while reinforcing the positions of selected groups, development programs, often sponsored by international agencies, tend to aggravate exclusion effects and conflicts. This calls for a multidimensional approach to poverty alleviation, as well as for a territorial and holistic approach to local development.

<sup>19</sup> See, e.g., Élisabeth Hofmann & Kamala Marius-Gnanou, Le microcrédit est-il le fauxnez du néolibéralisme? La microfinance et les femmes pauvres: état du débat, 238 Les Cahiers d'Outre-Mer 217, 220 (Apr.–June 2007).

<sup>20</sup> See id. at 228-29.

<sup>&</sup>lt;sup>21</sup> See Isabelle Guérin, Micro donc limité?, 43 DÉFIS SUD 3 (2000); Syed M. Hashemi et al., Rural Credit Programs and Women's Empowerment in Bangladesh, 24 WORLD DEV. 635 (1996); Naila Kabeer, Is Microfinance a "Magic Bullet" for Women's Empowerment? Analysis of Findings from South Asia, 40 Econ. & Pol. WKLY. 4709, 4715–16 (2005), available at http://www.jstor.org/stable/4417357.