

Gender Issues and Agriculture in Senegal



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Gender and Agricultural Value Chains in Senegal¹

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Acronyms

BAMTARRE	Base d'Appui aux Méthodes et Techniques por l'Agriculture les autres Activités Rurales et l'Environnement.
FAO	Food and Agriculture Organization
GDP	Gross Domestic Project
NRM	Natural Resource Management
PCE	Projet Croissance Economique
REVA	Return to Agriculture/Retour Vers l'Agriculture
USAID	United States Agency for International Development

¹ Cover photo: Hibiscus flowers, fresh and dried. Presidents of women's groups producing hibiscus for market (taken by Deborah Rubin)

I. Introduction

Currently at 13.8% of GDP, agriculture remains vitally important to the Senegalese economy and to its inhabitants, encompassing 77.5% of the work force.² The primacy of agriculture and fishing has however been replaced in export earnings by phosphate production. Revenue from tourism is also important. Senegal's historical reliance on the domestic and export markets for groundnuts have reduced with the decline in prices and competition from new sources of production in China, the U.S., and Argentina. The sector is seeking ways to diversify agricultural production and to increase locally-based processing to add value for products sold in domestic, regional, and international markets. A recent review of donor programs in Senegal concludes that diversification into horticultural production shows the greatest promise (Matsumoto 2008: 13).

USAID identified Senegal as a major recipient of new agricultural funding starting in 2008, and is expanding its support in 2010-11 with the twin goals of improving both food security and marketed production. The programming currently (as of April 2010) involves two programs, *Projet Croissance Economique (PCE)* and *Wula Nafaa II*. Together, they have components that address such issues as technical assistance in production and marketing, post-harvest storage, capacity building, and governance among other topics. Another program provides support to the construction of wells and the organization of community-based water users' committees.

Environmental factors that shape current operations in the agricultural sector include water availability and soil fertility. Outside of key river systems, Senegal's agricultural production is largely rainfed and achieves only a low level of productivity. There are two distinct seasons: a dry season that runs from around November to June and a rainy season that occurs from July to October. The rains also vary across the country and from year to year, and have declined 35% since 1996 (Dankelman 2008). Rainfall shapes agricultural activities in general, since less than 10% of agricultural production is irrigated.

Soil fertility is also a problem in some areas that have suffered from drought, deforestation, and overproduction. Soils are particularly low in organic matter. Many households use composting techniques of different types to improve soil fertility and water retention, including the use of animal manure and household vegetable wastes. Inorganic fertilizers are also used by those households with adequate income or with access to fertilizers from government or project sources. There is also a type of acacia tree (*Acacia albida*) which is recognized as fixing nitrogen in the soil, and which can be seen in the agricultural landscape in the peanut basin in western Senegal.³

The government ministries most involved in agriculture are the ministries of agriculture and of livestock. Government policies previously subsidized many aspects of agricultural production but have become more market-oriented. From 2006-2008, the government undertook a program called "Return to Agriculture" or REVA to improve infrastructure related to agriculture and to target women and youths with trainings and the provision of farm equipment. A new effort, the Accelerated Growth Strategy (SCA), is currently underway, which targets agriculture and fishing. The government also supports the Senegalese Agricultural Research Institute (ISRA) that conducts research on crop and animal production (Matsumoto 2008).

² http://www.theodora.com/wfbcurrent/senegal/senegal_economy.html

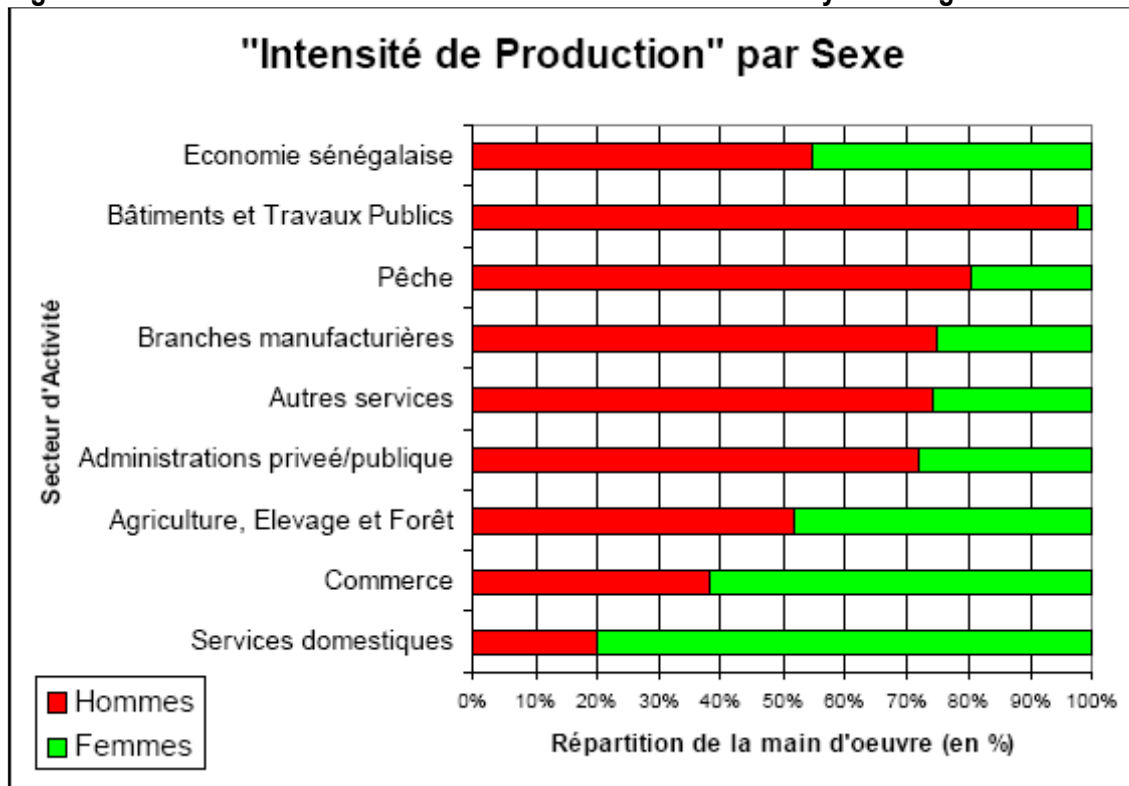
³ Nathan McClintock "A rich slice of sustainability in Senegal." Rodale Institute.
<http://newfarm.rodaleinstitute.org/international/senegal/060505/index.shtml>

II. Overview of gender issues in the agricultural sector of Senegal

Men and women are both major actors in agricultural production (including livestock), while the specific entitlements and responsibilities for men and women vary significantly across the many different Senegalese ethnic groups. However rural poverty remains high and there are significant gender disparities in access to productive resources such as land, credit, labor and other inputs. Women typically have less access to land, to labor, and to credit, the result of historical social and legal barriers that have limited their access, their educational opportunities, and their economic advancement in rural areas. Rural poverty is also caused by increasing population density and pressure on agricultural land that reduces productivity and returns to labor. In addition, the persistence of gender disparities in rural areas is shaped by a lack of technical expertise on identifying and addressing gender differences as well as agricultural sector policies and programs that have neglected to adequately consider the gender dimensions of agriculture in the design and implementation of their programs, despite Government of Senegal policies on gender equality.

As shown in Figure 1, men and women contribute nearly equally to the national economy, but their participation varies across different occupations. They are represented on par in agriculture, forestry, and in livestock, although women are responsible for much of the labor on agricultural plots and men are more heavily involved in livestock (Blackden et al 2006:29). Women across the country are heavily involved in post-harvest processing and small-scale marketing of agricultural produce.

Figure 1: Contribution of men and women to the national economy of Senegal



Source: Blackden et al. 2006:29.

Women's participation in the economy is largely concentrated in work that requires little education, such as domestic work, or which is associated with agricultural endeavours in the rural economy. Women make up

70% of the rural workforce (Gueye 2008). Yet, women “have less access than men to credit, land, housing, extension services and factors of production” (IFAD 2004).

Between 1998 and 1999 Senegal conducted a national Agricultural Census,⁴ providing the basis for Senegal’s first set of agricultural statistics regarding women’s contribution to the agricultural sector. The census reveals many discrepancies between ownership of and access to land, materials, and services, between men and women.

With the intent of mainstreaming gender into the census, many efforts were taken to collect sex-disaggregated data. During the census design phases, women’s organizations and ministries, as well as organizations who wanted better sex-disaggregated data were recruited to participate in the process. Women were recruited for data collection (FAO 2005:74) and all data collectors received training on the importance of collecting information from both male and female farmers.

Historically, women’s roles in farming had been underreported, in part because of the terminology used. For example, most Senegalese households and/or agricultural households are headed by men. If a census question only asks about who the “head of the household” (“chef de ménage”) is, then data about those who have subordinate roles, mostly women, were not shared. In the 1998/1999 census the terms sub-category terms “sub-holder” and “plot manager” were introduced to identify who actually cultivates a particular plot (FAO 2005: 72). Additionally, to elicit precise detail on who works on a farm, the census recognized a set of categories for different labor and employer types including family, non-family, paid and unpaid, permanent and temporary, season-specific, and group and individual types (FAO 2005:72-73).

Sex and age agricultural labor data revealed that there are more men than women in “the age groups up to 25 years and above 64 years” in agricultural populations, but more women between 25 to 64 years old (FAO 2005: 74). It is possible this trend reflects migration patterns out of rural-areas, which have continued to grow since 1998/99 (Blackden et al. 2006). Young women sometimes leave rural villages to earn money, but return to rural communities after marriage. Men leave rural communities to seek supplemental income for their families by working in jobs in urban areas when possible and many of whom do not return, or return only occasionally. These sex/age patterns were seen across Senegal (FAO 2005:74).

Women are the heads of 20% of households in Senegal (Blackden 2006: iv). Data regarding the sex of head of the household and holdings showed that women who are heads of households generally have access to smaller plots of land than men who are household heads and own few, if any, cattle, horses, or donkeys (Adelski 1995:2). Despite having smaller areas of land, because of the sex-segmented character of agricultural production, women manage “56% of the total area of rice cultivation, 49% of the area under hibiscus (*bissap*) cultivation, 27% of the area under bean cultivation, and 17% of the area under groundnut cultivation” (FAO 2005: 74).

Despite the push to address and highlight gender concerns in Senegal’s agricultural field, the census did not cover all crop and livestock production gender issues. Data was not collected on “individual use of agricultural equipment belonging to the family” or “gender-specific data on variables such as crop yields,

⁴ Information in this section is based on the document produced by FAO (2005) entitled “Agricultural Census and Gender: Lessons learned in Africa” which includes a chapter on Senegal that is drawn from H. Soumaré (2002) “The Integration of Gender Concerns into Agricultural Censuses: A case study of Senegal.”

time spent in relation to agricultural activities, intra-household time-use, intra-household decision-making, land ownership and use, incomes and involvement in training programmes” (FAO 2005: 75). Many of these issues required more data-collection time than the census time-frame permitted.

In 2006, the Ministry of Rural Development and Agriculture in partnership with UNIFEM conducted a pilot program to improve the gender dimension of planning and to conduct a gender budgeting study in the ministry. The activity reviewed the ministry’s policies and programs and provided training to ministry staff to improve their capacity to analyze their budgets for gender disparities.

Regional Variation (Illustrative)

Senegal encompasses a variety of climatic areas and production zones. Intensive agriculture, including horticulture, is carried out in the north, along the Senegal River Valley. This is an area which has recently received significant financial investments from donors and which is experiencing greater growth than other agricultural subsectors (Matsumoto 2008).

In the central part of the country, men and women produce cereals, groundnuts, and rice. Rainfed rice is also grown in low-lying basins. Both the Wolof and the Seerer are major inhabitants of this area. Among the Wolof, the social assumptions (or “conjugal contract”) that organize men’s and women’s production are based on the ability of men to draw on the labor of women and youth in the household in exchange for providing them both food from those fields as well as allocating to them plots for their own farming. Cereals such as maize, millet and sorghum were historically grown on these “family” plots, although these parcels of land are increasingly oriented towards the market and under the control of the household head. Women and youths are allowed to sell the produce from their own fields and to keep this income. In the past, women grew peanuts for cash; more recently they have turned to the production of vegetables and crops including hibiscus. Livestock is also important. Men own horses and donkeys that are used for transport and plowing; wealthier households also own livestock. Women raise goats and sheep and are also involved in milking of cows. When milk is plentiful, they sell it (Perry 2005).

To the south and west lies Kolda region, where about 85 % of the rural population is agro-pastoralists. Though all household members are allowed to own livestock, including children, there is a gender divide between what type of animal a person owns and how he/she uses that animal. Men usually own draft animals, horses and bulls while women own small ruminants and poultry. Both men and women own milk cows, and may sell any of their animals on their own or collect the revenue of their animal by-products; in practice, however, men are usually the only ones to sell animals (Fisher, Warner, and Masters 2000: 2005).

Among other agriculturalists in the Casamance regions in the south, men are typically responsible for producing upland cereal grain and pulse crops while women typically focus on rice, specialty crops, and virtually all domestic activities of the household. Staple grains produced in this area include rice, millet and maize while groundnuts are the most widely grown cash crop. Men often opt to work with male relatives to cultivate communal maize or millet but rarely share labor or cash benefits of groundnut production. Many farmers, usually women, produce vegetables both for home consumption and market. The limited use of animal traction and a distinct division of labor with respect to crop production characterize this system (Sullivan n.d.).

Table 1: Men's and Women's Participation to Crop Production In Senegal

	Men			Women			Total	
	Area	Part %	Part %	Area	Part %	Part %	Area	Part %
Culture	(ha)	(1)	(2)	(ha)	(1)	(2)	(ha)	(1)
Groundnut	435,950	23.22	26.81	92,431	4.92	36.78	528,381	28.14
Millet	745,837	39.72	45.86	59,451	3.17	23.66	805,288	42.89
Sorghum	189,573	10.10	11.66	15,328	0.82	6.10	204,901	10.91
Maize	48,527	2.58	2.98	5,574	0.30	2.22	54,101	2.88
Rice	20,976	1.12	1.29	26,705	1.42	10.63	47,681	2.54
Fonio (Grain)	1,799	0.10	0.11	1,621	0.09	0.65	3,421	0.18
Niébé (Legume)	91,828	.489	5.65	34,116	1.82	13.57	125,943	6.71
Cassava Root	17,647	0.94	1.09	1,156	0.06	0.46	18,802	1.00
Sweet Potatoes	65	0.00	0.004	-	-	-	65	-
Tomato	1,208	0.06	0.07	413	0.02	0.16	1,622	0.09
Gumbo	1,089	0.06	0.07	686	0.04	0.27	1,775	0.09
Watermelon	20,748	1.10	1.28	1,028	0.05	0.41	21,776	1.16
Sesame	2,373	0.13	0.15	171	0.01	0.07	2,544	0.14
Bissap (Hibiscus)	5,961	0.32	0.37	5,630	0.30	2.24	11,591	0.62
Other crops	42,786	2.28	2.63	7,005	0.37	2.79	49,791	2.65
Total	1,626,368	86.62	100.00	251,316	13.18	100.00	1,877,684	100.00

Source : Agricultural Census 1998/99 as represented by Blacken et al 2006: 43.

Note: Columns headed by (1) indicate the percentage shared by two people/sexes; columns headed by (2) indicate the percentage of one only sex.

Legal rights and institutions

Senegal has a long and still evolving record when it comes to legal barriers to the full participation of women in agriculture. The Senegalese constitution adopted in 2001 reaffirms the principle of equity and gender equality and prohibits all forms of discrimination based on gender. The government is also a signatory to all major declarations, including the Convention on the Elimination of All forms of Discrimination Against Women (CEDAW). The 2001 Constitution continued to promote secularism and affirm equality between men and women. "...Constitution prohibits the creation of political parties based on religious, ethnic, or gender affiliation" (Sow 74). A National Strategy on Equity and Gender Equality (SNEEG) was adopted in 2005. However it is widely noted that implementation of these various documents is weak and that the government lacks an adequate strategy to enact its policies. By law, women may join the cooperatives but, in practice, they seldom do. Usually the heads of household (both chefs de carre and chefs de menage) are the ones who become members of the cooperative (Creevey 1991). Gaps between policy and practice continue to bar women from fully realizing their economic potential in agriculture.

There are a number of laws in Senegal which affect men's and women's participation in agriculture. Inheritance laws and land laws are particularly problematical for women. Senegalese customary law among most ethnic groups does not allow women to inherit property directly; a man must act as an intermediary (Equality Now 1997). Although the formal laws entitle women to inherit land, they are generally unable to benefit from this legislation. If a woman becomes a widow, she can either marry her husband's brother to maintain custody of their land, a process known as levirate, or return to her family, where she will manage a

plot of land given to her by her father or brothers (FAO 2005). Men can also exert control over women's access to land by controlling the expenditure of her personal finances (Matsumoto 2008).

The current Senegalese Family Code, though intended to be a mechanism to protect women, has also limited women's integration into agrobusiness. It gives a husband sole power to decide where a family resides, to act as parent of children, and practice polygamy (if decided at the time of his first marriage). Women only exercise parental authority if "the father renders himself unworthy to exercise that power or if he assigns it voluntarily" (Equality Now 1997). The law requires that women pay more taxes on their wages since they do not receive the same tax allowances as men do even when they are the sole breadwinner, unless a husband relinquishes his status as head of household. This is considered a breach of the CEDAW provisions (Elson 2006: 78).

Islamic Law and Women's Rights

In Senegal, 94% of the population is Muslim. There is a large literature and ongoing active debate over the rights of women under Islamic Law, which itself is not a monolithic body but a set of changing principles influenced by history, culture, and economic development. Islamic law influences Senegal's secular law in three areas that intersect with agricultural opportunities, including women's status, marriage, and inheritance. Under both Islamic and Senegalese law, men are allowed to practice polygyny (marriage of a man to more than one wife) if the husband and first wife agreed to that prior to the marriage. Men are permitted to unilaterally divorce their wives under a Muslim tradition of "talaq" and have stronger rights to children after a divorce. Women, in contrast, must take their claims for divorce to court. Under Senegalese law, husbands are required to pay both alimony and child support, but they are still allowed to determine where the children live (Juta Law 2004).

III. Gender-based constraints to ownership, access, and control over productive resources

Land

Ownership and control over land is extremely complicated in Senegal. The government of Senegal passed a series of laws (in 1964 and 1972) to govern a process allowing land to transition from having no specific titled ownership, for example, where it has been used historically by families, into a system allowing for individual registration. These laws have neither been uniformly successful nor equitably enforced. In areas where these laws have been applied and land has been individually registered, it is common to find that only men have received land titles (Creevey 1991). Men continue to manage and allocate land, despite legal reforms (Ndiaye 2009). There are however an increasing number of situations where women are gaining access to land, either individually or as members of groups. A study conducted in two rural regions, Diender and Keur Moussa, reported that although formalized land purchases by women were rare, tacit agreements were the main mechanism by which women gained land in Keur Moussa. The region of Diender exhibited greater variation with women gaining land through title deeds, allocation, inheritance, and purchase. The survey results indicate the methods varied across different age cohorts and different regions land (Ndiaye 2009).

Apart from the execution of the law itself, there are problems in communicating the rights that people have to the rural populations. There are few efforts to target women as an audience for shifts in national policy or legislation. Rural land and natural resource management is decentralized and entrusted to Rural Councils

that handle local issues. Customary chiefs are often consulted before Council decisions are made (van Vlaenderen 2004).

Land speculation has also significantly decreased the amount of available land in agricultural areas, meaning "...many men and a few women use inheritance systems or their own financial position to acquire land" (Ndiaye 2009:140). This ultimately hurts women, since inheritance law continues to discriminate against women, despite national legal reform (Ndiaye 2009).

Labor and other productive inputs

Multiple sources, from small ethnographic studies to large national censuses report gender disparities in men's and women's access to key productive assets other than land, e.g., labor, improved seeds, fertilizers, and farm equipment (Adelski 1995; FAO 2005: 75; Fisher 2000; Nation 2009; Ndiaye 2009; Sullivan n.d.).

In many rural households, husbands have the right to call on the labor of their wives and children for cultivation and harvesting of the head of households fields. Perry (2005: 218) states that "men should fulfill two patriarchal obligations: to provide food for the family, and to supply land and agricultural equipment so that family members can raise cash crops. When [household heads] fulfill these obligations, women are compelled to follow their dictate." Thus, any work on the women's own fields is conducted only after her responsibilities to her husband are fulfilled. In addition, her rights to use animals for plowing or planting her fields are secondary to the needs of the household head. For example, farming equipment is generally owned by the husband ("chef de ménage"). Women are only able to access it after the husband's field have been taken care of. In some cotton growing areas of Eastern Senegal, for example, women are unlikely to access the equipment until male owned plots have been tended to, which reduces the productivity of the female-owned plots (Ndiaye 2009).

In addition, there is not yet a well-developed system of private input suppliers. Currently, USAID is working with the government's program supporting agriculture and rural development (BAMTARRE) to supply inputs to producer groups and to assist them with finding markets. One possible opening for engaging more women in agricultural value chains would be to establish programs to support their participation in the formation of microenterprises supplying agricultural inputs.

Water Resources Management

Access to water is a significant constraint on agricultural production in Senegal, both because of the variability of rainfall (noted above), the large portions of the country that are not served by significant river systems, and the relatively poor water infrastructure in the form of wells and tanks. Women's fields, with few exceptions in the river valleys, are rainfed (but see Nations 2009). The uncertainty of the rains and risk of drought is a major constraint on rainfed agriculture.

Finance

Programs to support microcredit have been increasing in Senegal in recent years, but opportunities for credit for agricultural-related enterprises are still relatively unstructured. The banks which do make loans such as Crédit Mutuelle du Senegal, typically make loans for short periods, such as six months, which do not always cover an agricultural season. Interest rates of 17%, although typical, are still high for rural

farmers with few cash-generating options. According to interviews conducted among women hibiscus producers in the Kaolack region (author's notes 2010), proceeds generated by the group's sale of hibiscus products are used as a revolving savings mechanism. In Tambacounda, women entrepreneurs also reported difficulties in obtaining adequate credit to finance cereal processing businesses. Others borrow funds from relatives and friends. There is an enormous need for more credit opportunities at all levels of the value chain so that women have funds to purchase agricultural inputs and increase productivity.

Education

Illiteracy is declining somewhat among women, but it remains at a high level (67.9% in 2008), a decrease from 78% in 1995 and 72% in 2001 (Dankelman et al. 2008). The low level of girls' education is a serious problem in Senegal. Girls are significantly underrepresented from the middle school level through to university. The underrepresentation continues at the undergraduate level and increases at the master's and doctoral levels. The main schools are ENSA (the Agricultural College), EISMV (The Inter-states Veterinary College), and CDH (The Horticultural Development Training Center). A recent global review of women's participation in agricultural higher education ranks Senegal in the second lowest position (11th out of 12 countries ranked) in the share of women in total student enrollments, with about 8% at the undergraduate level and 8% at the master's level (Beintema and di Marcantonio 2009: 4).

Agricultural Extension

Major gender disparities concerning access to agricultural extension services exist, according to the census data. Commonly, men plot managers received three times more agricultural extension services than women plot managers. In the Kaolack Region, the differences were even stronger than the national average (FAO 2005: 75). This is particularly troubling since research has shown that farmers who receive extension advice are more likely to adopt new technologies that increase their productivity.

Climate change

In its global report on climate change, the Intergovernmental Panel on Climate Change concluded that: "[P]oor communities can be especially vulnerable, in particular, those concentrated in high-risk areas. They tend to have more limited adaptive capacities, and are more dependent on climate sensitive resources such as local water and food supplies" (IPCC 2007:9 cited in Dankelman et al. 2008:6-7). As women are a significant majority of the poorest and most vulnerable populations around the world, including in Senegal, an analysis of the gendered aspects of climate change is needed.

Conclusion

To decrease the existing gender disparities in agriculture in Senegal, USAID programming can ensure that it develops a more accurate understanding of gender-based constraints relevant to the specific agricultural value chains it is now developing. At this time, gender has not been a key criterion in the choice of value chain (see Billings 2009), except to the extent that certain crops, such as hibiscus, which are historically under women's control have been included as one of several options. Economic analyses of these crops is needed, however, and more creative approaches to assist women to overcome constraints to land and credit so that they can expand their income earning potential and truly improve agricultural productivity in Senegal.

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