WOMEN’S PARTICIPATION IN AGRICULTURAL RESEARCH AND HIGHER EDUCATION

Key Gender Trends

- In 2008, the three largest agricultural research and higher education agencies in Senegal employed 200 professional staff, of which 36—or 18 percent—were female. The 2007/08 share of female professional staff, at 18 percent, represents a considerable increase over the 2001 share, which was only 7 percent.
- Of the professional staff, 13 percent of those with PhD degrees, 16 percent of those with MSc degrees, and 25 percent of those with BSc degrees were female.
- About a quarter of staff aged 50 years or younger were female, whereas of those aged 51 years and older, only 8 percent were female. The share of female professional staff with five years of service or less was slightly higher than the shares of those employed at the respective agencies for more than five years.
- None of the management positions at the two government agencies or the positions of faculty deans and department heads at the higher education agency was held by a woman.
- In 2007, female students accounted for 15 percent of the total student population in agricultural sciences, but only 7 percent of the students that graduated that year were female. No PhD programs in agricultural sciences are currently being provided in Senegal.

Shares of Female Professional Agricultural Staff by Agency and by Degree

In 2008, Senegal’s three largest agricultural research and higher education agencies together employed 200 professional staff, of which 36—or 18 percent—were female. In 2001, these three agencies employed 87 percent of Senegal’s professional agricultural staff in terms of full-time equivalents. The shares of female professional staff employed at the Agricultural Research Institute of Senegal (ISRA), the Food Technology Institute (ITA), and the National School of Agriculture (ENSA) each increased by 7–8 percent during the 2001–08 period (Figure 1).

Of the professional agricultural staff employed at the three agencies, 13 percent of those with PhD degrees, 16 percent of those with MSc degrees, and 25 percent of those with BSc degrees were female (Figure 2). Notably, the share of female professional agricultural staff with MSc-level training increased during 2001–08, from 4 to 16 percent.

Qualifications of Professional Agricultural Staff by Gender

In 2008, on average, fewer women than men held PhD degrees: 28 percent compared with 41 percent (Figure 3a). In absolute numbers, 10 women held PhD degrees compared with 68 men, and 8 women held MSc degrees compared with 42 men (Figure 3b).

Note: See page 3 for a list of agency names and categories.
Age and Seniority of Professional Agricultural Staff by Gender

All of the four professional staff members aged 30 years or younger were female, whereas more than a quarter of those aged 41–50 years were female. In contrast, of the professional agricultural staff aged 51 years or older, only 8 percent were women (Figure 4).

Of the three management positions at ISRA and ITA and the 10 positions as faculty deans and heads of departments at ENSA, none was held by a woman. Unsurprisingly, a significant share of professional and technical support staff (26 percent) was female (Figure 5).

Note: M indicates management and includes directors, deans, and department heads; SPL includes scientists, (assistant) professors, and (senior) lecturers not in management positions; PS/TS indicates professional and technical support staff; and SA indicates senior administrative staff.
Discipline Mix and Years of Service of Professional Agricultural Staff by Gender

About 40 percent or more of the professional staff trained in fisheries, food and nutrition science, and molecular biology were female. In contrast, none of the professional staff trained in crop science, ecology, entomology, extension, soil science, or water and irrigation management was female (Figure 6).

There were relatively more women with five or fewer years of service compared with professional staff that had been employed by their agencies for more than five years (Figure 7).

Departures and Promotions of Professional Agricultural Staff by Gender

For the sample agencies as a whole, four women and 14 men departed during the 2005–07 period, and eight women and 30 men were promoted (Table 1). For the purpose of comparison, numbers of departing staff represent 11 and 9 percent of the female and male staff employed in 2008, respectively, and numbers of promoted staff represent 22 and 18 percent of female and male staff employed in 2008, respectively. The resulting trends indicate that a slightly higher share of women departed agencies and was promoted within agencies.

The data in this fact sheet are derived from the following government and higher education agencies:

Two government agencies
- ISRA Agricultural Research Institute of Senegal
- ITA Food technology Institute

One higher education agency
- ENSA National School of Agriculture

For further information on the organization of agricultural research in Senegal, see http://www.asti.cgiar.org/pdf/Senegal%20_CB26.pdf.
TABLE 2. Professional agricultural staff completing training, by gender, 2005–07, and as a share of female and male professional staff employed in 2008

<table>
<thead>
<tr>
<th>Level of Training</th>
<th>Number of staff, 2005–07</th>
<th>Share of 2008 staff totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>BSc</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>MSc</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PhD</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

Training, Enrollments, and Graduations by Gender

Of the professional staff employed in agriculture at the government and higher education agencies in 2008, none of the women and few of the men obtained PhD degrees between 2005 and 2007, and none of the professional staff completed MSc degrees during this timeframe (Table 2).

In 2007, female students account for 15 percent of ENSA’s student population. Neither ENSA nor any of the other higher education agencies in Senegal offer PhD training in agricultural sciences at the current time. Only 7 percent of the students that graduated from ENSA in 2007 were female (Figure 8).

About ASTI

The Agricultural Science and Technology Indicators (ASTI) initiative compiles, processes, analyzes, and reports data on institutional developments, investments, and human resources in agricultural R&D in developing countries. The ASTI initiative is managed by the International Food Policy Research Institute (IFPRI) and involves collaborative alliances with many national and regional R&D agencies, as well as international institutions. The initiative, which is funded by the Bill and Melinda Gates Foundation with additional support from IFPRI, is widely recognized as the most authoritative source of information on the support for and structure of agricultural R&D worldwide. To know more about the ASTI initiative visit www.asti.cgiar.org.

About AWARD

The African Women in African Agricultural Research and Development (AWARD) program, supported by the Bill & Melinda Gates Foundation and the United States Agency for International Development (USAID), is implemented by the Gender & Diversity (G&D) program of the Consultative Group on International Agricultural Research (CGIAR). Competitive two-year fellowships focused on building capacity in science, mentoring, and leadership are offered to high-performing female African scientists at one of three critical career junctures: completion of a BSc, MSc, or PhD degree. To know more visit www.genderdiversity.cgiar.org.

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IFPRI was established in 1975. IFPRI is one of 15 agricultural research centers that receives its principal funding from governments, private foundations, and international and regional organizations, most of which are members of the Consultative Group on International Agricultural Research (www.cgiar.org).

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