

ZAMBIA FACT SHEET

December 2008

WOMEN'S PARTICIPATION IN AGRICULTURAL RESEARCH AND HIGHER EDUCATION

Key Gender Trends

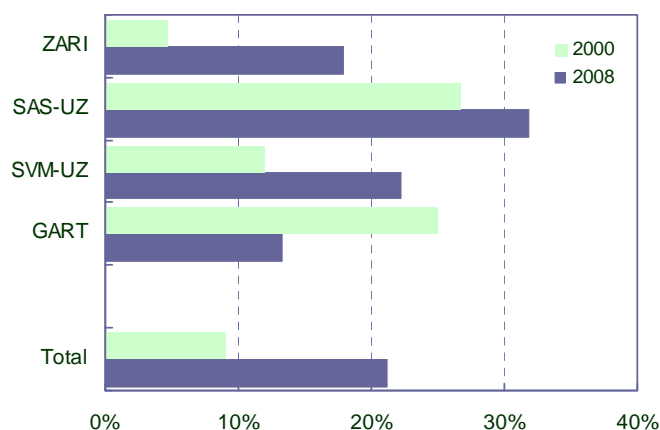
- In 2008, the four largest agricultural research and higher education agencies in Zambia employed 203 professional staff, of which 43 were female. The 2007 share of female professional staff represents a considerable increase over the 2001 share, from only 5 percent to 21 percent.
- Only 9 percent of all PhD-qualified staff were female, compared with 26 percent of staff holding MSc degrees, and 25 percent of staff holding BSc degrees.
- Whereas more than 40 percent of the professional staff aged 30 years or younger were female, only 11 percent of those aged 41 years or older were female; no clear gender trends were identified in terms of years of service at the respective agencies.
- The share of women in management, including positions as deans of faculties and head of departments, was 13 percent.
- The shares of female professional staff who obtained PhD and MSc degrees during 2005–07 were higher than the comparable shares of male staff.
- In 2007, female students accounted for more than 20 percent of the total student population in agricultural sciences; a slightly higher share of the students that graduated that year were female.

Shares of Female Professional Agricultural Staff by Agency and Degree

In 2008, Zambia's four largest agricultural research and higher education agencies together employed 203 professional staff, of which 43, representing 21 percent, were female (Figure 1). In 2000, these four agencies employed 76 percent of Zambia's agricultural research staff in terms of full-time equivalents. The share of female professional staff at the Zambia Agricultural Research Institute (ZARI) increased substantially, from 5 percent in 2000 to 18 percent in 2008. During 2000–08, ZARI's total professional staff numbers declined by 30 percent, but the number of female staff increased from 8 to 21. The shares of female staff at the University of Zambia's School of Agricultural Sciences (SAS-UZ) and School of Veterinary Medicine (SVM-UZ) also increased during this period. In contrast, the share of female research staff at Golden Valley Agricultural Research Trust (GART) decreased from 25 to 13 percent during the 2000–08 period.

Of the professional staff employed at the agricultural research and higher education agencies, only 9 percent of those with PhD degrees, 26 percent of those with MSc degrees, and 25 percent of those with BSc degrees were female (Figure 2). Notably, the share of professional female staff with BSc-level training increased from 2 to 25 percent during 2000–08. The share of PhD-qualified female staff increased by only 2 percent during this timeframe.

FIGURE 1. Female share of professional agricultural staff by agency, 2001 and 2008



Note: See page 3 for a list of agency names and categories.

Qualifications of Professional Agricultural Staff by Gender

In 2008, on average, fewer women than men held PhD degrees: 12 percent compared with 30 percent (Figure 3a). Notably, the gap has widened since 2001, when 19 percent of female staff held PhD degrees compared with 25 percent of male staff. Also interesting is the decline in the overall number of male professional staff from more than 200 in 2000 to 160 in 2008 (Figure 3b). This partly explains the increase in the share of female researchers over time.

FIGURE 2. Female share of professional agricultural staff by degree, 2000 and 2008

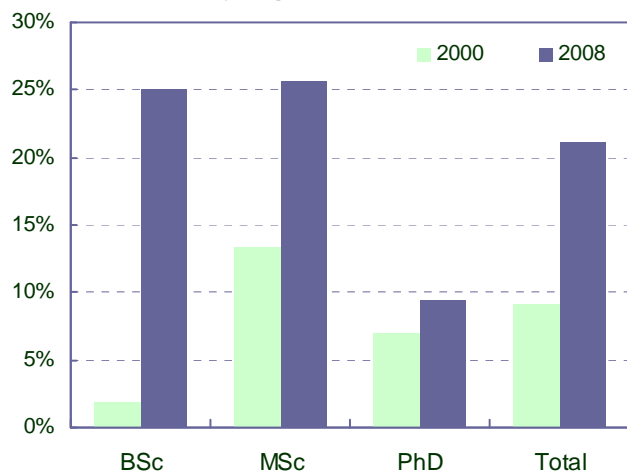


FIGURE 3a. Qualifications of professional agricultural staff by gender, 2000 and 2008 (shares)

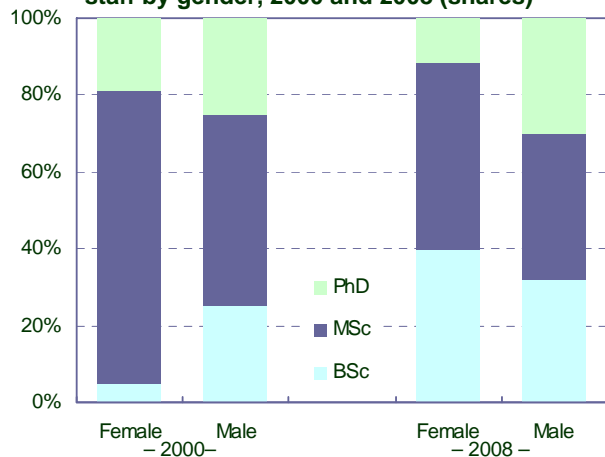
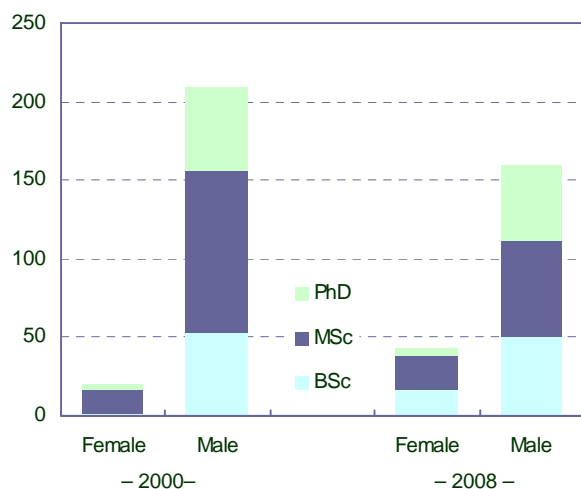


FIGURE 3b. Qualifications of professional agricultural staff by gender, 2001 and 2008 (headcounts)



Age and Seniority of Professional Agricultural Staff by Gender

Of professional staff aged 30 years or younger, more than 40 percent were female, whereas, of those aged 41 years or older, only 11 percent were female (Figure 4).

Only 1 of the 11 faculty deans and heads of departments at the University of Zambia's School of Agricultural Sciences (SAS-UZ) and School of Veterinary Medicine (SVM-UZ) was female, while 2 of the 13 management positions at ZARI and GART were held by women. Unsurprisingly, the female share of senior administrative staff was comparatively higher (Figure 5).

FIGURE 4. Age of professional agricultural staff by gender, 2008

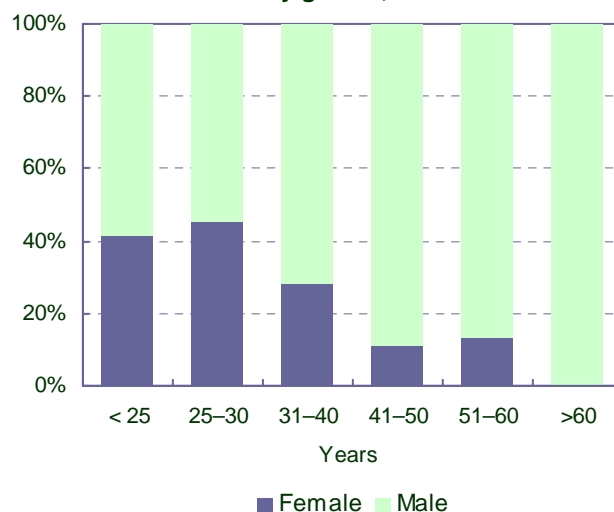
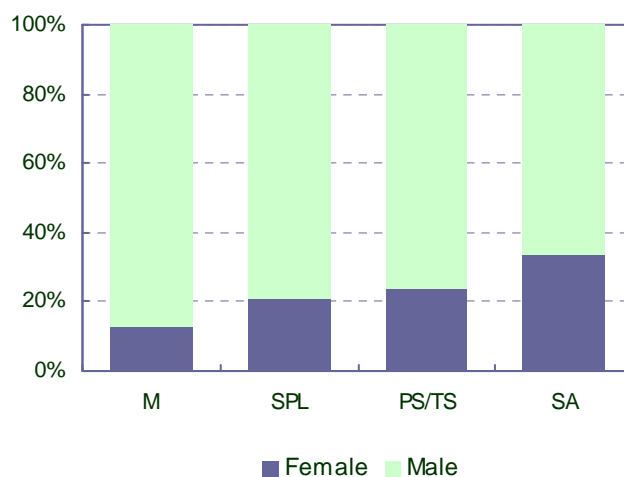
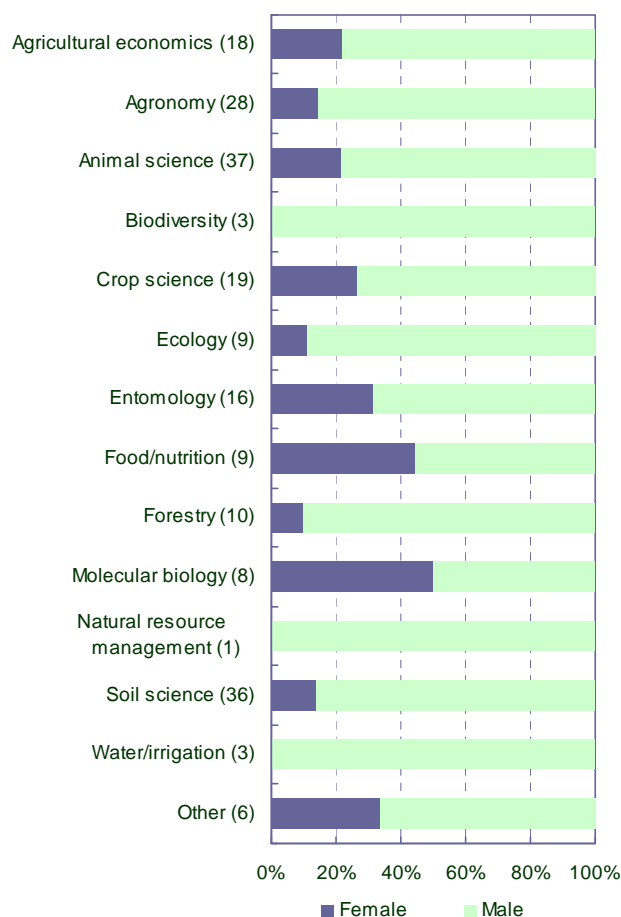


FIGURE 5. Seniority of professional agricultural staff by gender, 2008



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.

FIGURE 6. Discipline-mix of professional agricultural staff by gender, 2008

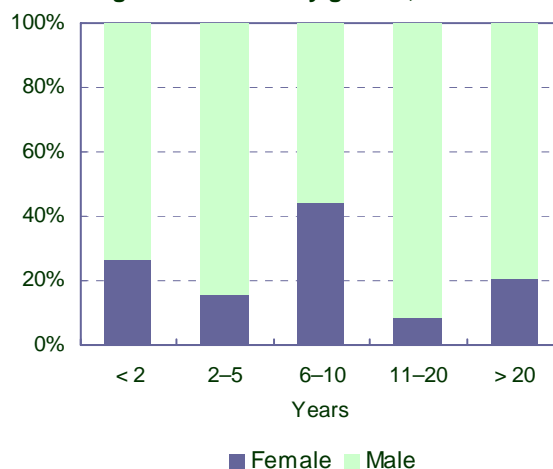


Discipline Mix and Years of Service of Professional Agricultural Staff by Gender

Close to half of the professional staff trained in food and nutrition science were female. In contrast, few women were trained in forestry, ecology, soil sciences, and agronomy (11–14 percent each), and none of the professional staff working in biodiversity, water and irrigation management, or natural resource management was female (Figure 6).

No clear relationship was observed between the proportion of female professional staff employed and their years of service at either the government or higher education agencies (Figure 7).

FIGURE 7. Years of service of professional agricultural staff by gender, 2008



Notes: The number of staff within each category is shown in parentheses. None of the staff at the four sample agencies was trained in extension or fisheries in 2008.

TABLE 1. Departures and promotions of professional agricultural staff by gender, 2005–07, and as a share of female and male professional staff employed in 2008

Status	Number of staff, 2005–07		Share of 2008 staff totals	
	Female	Male	Female	Male
Departures	3	38	7%	18%
Promotions	17	34	40%	21%

Departures and Promotions of Professional Agricultural Staff by Gender

For the sample agencies as a whole, 3 women and 38 men departed during the 2005–07 period, and 17 women and 34 men were promoted (Table 1). For the purpose of comparison, numbers of departing staff represent 7 and 18 percent of the female and male staff employed in 2008, respectively, and numbers of promoted staff represent 40 and 21 percent of female and male staff employed in 2008, respectively. The resulting trends indicate that a higher share of men departed agencies, and—interestingly—a larger share of women were promoted within agencies.

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

One government agency

ZARI Zambia Agricultural Research Institute

One nonprofit organization

GART Golden Valley Agricultural Research Trust

Two higher education agencies

SAS-UZ School of Agricultural Sciences, University of Zambia

SVM-UZ School of Veterinary Medicine, University of Zambia

For further information on the organization of agricultural research in Zambia, see http://www.asti.cgiar.org/pdf/Zambia_CB18.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

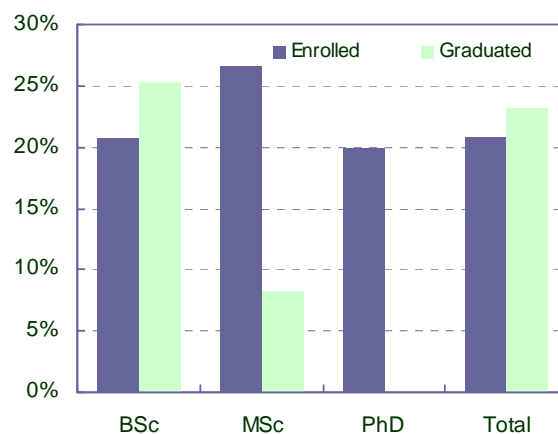
Level of training	Number of staff, 2005–07		Share of 2008 staff totals	
	Female	Male	Female	Male
BSc	4	3	24%	6%
MSc	6	9	29%	15%
PhD	2	4	40%	8%

Training, Enrollments, and Graduations by Gender

Of the female professional agricultural staff employed in research and higher education agencies in 2008, comparatively more of them obtained their PhD, MSc, or BSc degrees during 2005–07 (Table 2). This is the result of the adoption of gender policies by the government that have increased access to training opportunities for women. The Ministry of Science and Technology and Vocational Training, for example, has scholarships specifically for female students in the field of science.

In 2007, the share of female students enrolled at the main higher education agencies, SAS-UZ and SVM-UZ, was 21 percent, whereas 23 percent of graduating students were female (Figure 8). Four male students and one female student were enrolled in PhD studies in 2007, but none graduated that year.

FIGURE 8. Share of female students enrolled at and graduating from the University of Zambia's agricultural schools, 2007



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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