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CGIAR GENDER PROGRAM

WORKING PAPER, NO. 15

1997 CGIAR HUMAN RESOURCES SURVEY:

International Staffing at the CGIAR Centers with a Focus on Gender

Prepared by
Deborah Merrill-Sands

CGIAR Secretariat
and the
CGIAR Gender Program
World Bank
Washington, D.C.
October 1997

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LIST OF WORKING PAPERS

Working Paper, No. 1	Status of Internationally-Recruited Women in the International Agricultural Research Centers of the CGIAR; Deborah Merrill-Sands and Pammi Sachdeva; October 1992.
Working Paper, No. 2	Spouse Employment in Organizations Around the World: A Toolkit for Developing Policies and Practices; Madelyn Blair, December 1992.
Working Paper, No. 3	Spouse Employment at IRRI: A Case Study; Deborah Merrill-Sands; March 1993.
Working Paper, No. 4	Strengthening the Recruitment of Women Scientists and Professionals at the International Agricultural Research Centers: A Guidelines Paper; Sarah Ladbury; October 1993.
Working Paper, No. 5	Recruitment Resources in Europe: A List of Professional Organizations; Stella Mascarenhas-Keys and Sarah Ladbury; October 1993.
Working Paper, No. 6	Filipino Women Scientists: A Potential Recruitment Pool forInternational Agricultural Research Centers; ISNAR and PCARRD; October 1993.
Working Paper, No. 7	Recruitment Resources in the United States: A List of Professional Organizations; Bonnie Folger McClafferty and Deborah Merrill-Sands, January 1994.
Working Paper, No. 8	Inventory of Gender-Related Research and Training in the International Agricultural Research Centers, 1990-1995; Hilary Sims Feldstein with Alison Slack; October 1995.
Working Paper, No. 9	CGIAR Human Resources Survey: 1991, 1994, Key Observations on International Staffing with a Focus on Gender; Deborah Merrill-Sands, October 1995.
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ACKNOWLEDGEMENTS

This paper and the survey data upon which it is based represent a collaborative effort between the centers, the CGIAR Secretariat, and the Gender Staffing component of the CGIAR Gender Program. Appreciation is extended to the staff in the centers who had to devote considerable time and effort to compiling the data upon which this aggregate analysis is based. Special thanks also go to Selcuk Ozgediz and Pammi Sachdeva in the CGIAR Secretariat for their valuable comments on an earlier draft of this paper. We also wish to acknowledge the support of Zarine Vania in providing current statistics on Board membership.

The CGIAR Human Resources Survey has been carried out jointly by the CGIAR Secretariat and the CGIAR Gender Program at three-year intervals since 1991. It is conduced in response to requests from the Directors General and the members of the CGIAR for periodic monitoring of the profile of internationally-recruited staff system-wide using gender disaggregated data. An earlier version of this paper was circulated for comments to the centers in August 1997. It was also provided as a background paper for the System Review.

The CGIAR Gender Staffing Program is coordinated by the CGIAR Secretariat and is implemented by the Simmons Institute for Leadership and Change at Simmons College in Boston Massachusetts, USA. The program, which began in 1991, is funded by the members of the CGIAR. The goal of the program is to support the centers in their efforts to strengthen the recruitment of highly qualified women scientists and professionals and to create work environments that are equally supportive of the productivity, advancement, and job satisfaction of women and men.

Deborah Merrill-Sands is the Program Leader for Gender Staffing for the CGIAR Gender Program. She is also the Program Director for Gender and Organizational Change in the Simmons Institute for Leadership and Change.

SUMMARY OF KEY OBSERVATIONS ON INTERNATIONAL STAFFING - 1997 AND 1991

Aggregate analysis

- The number of internationally-recruited staff (including visiting and postdoctoral scientists) totaled 1190 in mid-1997. This represents an 8% decrease from 1991, but includes two new centers – CIFOR and ICLARM – with mandates for forestry and fisheries research.
- Most centers have experienced significant changes in international staffing levels since 1991. Six centers – CIAT, CIMMYT,CIP, ILRI, ICRISAT, IRRI – had declines of 15% or more. Five centers -- ICARDA, ICRAF, IFPRI, IPGRI, WARDA -- had increases of 15% of more. CIFOR has increased by 50% since 1994, the first year for which data are available.
- The number of senior and principal scientists has declined by more than 25% from 568 in 1991 to 426 in 1997. At the same time, the centers have increased their reliance on younger scientists and postdoctoral fellows. The number of these staff has increased by 16%. The number of internationally-recruited scientists across all levels has been reduced by 12% from 956 in 1991 to 841 in 1997.
- The number of internationally-recruited administrative and program support staff (e.g. specialists in training, information, and computers) decreased by 26% from 108 to 80.
- Crop scientists represent 36% of the internationally-recruited staff, followed by socio-economists (16%), and biological scientists (13%). Eleven percent of the staff have advanced degrees in disciplines related to environmental and natural resource management sciences.
- Staff from developing countries comprise 41% of the internationally-recruited staff, representing a modest decline from 43% in 1991.
- Staffing has been relatively stable with an annual attrition rate of 12% between 1995-1997.

Gender analysis

- The number of female internationally-recruited staff increased 23% from 153 in 1991 to 188 in 1997. Similarly, the percentage of females increased from 12% in 1991 to 16%.
- Women comprised 10% of the managers and 14% of the scientists and senior scientists in 1997, up from 5% and 9% respectively in 1991. These data indicate that women are gradually moving into positions of decision-making and influence. Similarly, women on the Boards have increased from 10% in 1991 to 20% in 1997.
- The inclusion of women among internationally-recruited staff varies markedly among the centers. In three centers – ICRISAT, ISNAR, and WARDA -- women make up less than 10% of these staff while in two centers – IFRPI AND CIFOR – the percentage of internationally-recruited women has reached 25%.
- Women now comprise, on average, 14% of the applicants for international posts as compared to 4% in 1990. Women constituted 25% of new staff to appointed to positions between 1995-1997.
- The average annual attrition rate of women between 1995-1997 was 15%. This was higher than the 12% rate of men. The difference in attrition rates between men and women was highest among managers (14% for women and 9% for men).

I. INTRODUCTION

1. **Survey**. Since 1991 the CGIAR System has made a concerted effort to draw more effectively on the expanding pool of female scientists and professionals world wide and to increase the participation of women among the professional ranks of the centers.

   In 1991, the CGIAR Gender Program carried out a human resources survey of internationally-recruited staff in the centers with gender disaggregated data to establish a base-line of quantitative information.[1] At the request of the CGIAR members and the Director Generals, the same survey was conducted again in 1994 and most recently in June 1997 in order to monitor changes that have occurred since 1991.[2] This paper summarizes the key observations emerging from the analysis of the 1997 data and compares it with the 1991 base-line data with respect to:

   - the profile of international staff as a whole;
   - the profile of female as compared to male staff.

   Annex 1 includes charts comparing 1991 and 1997 data. Annex 2 includes summary tables of data on key human resource indicators from 1991, 1994, and 1997. These data are useful for understanding dynamics in the staffing of the CG System as well as its current human resource capacity.

   It should be noted that between 1991 and 1997 ILRAD and ILCA were combined to form the new ILRI and INIBAP was absorbed into IPGRI. Also, CIFOR and ICLARM, new centers to the CGIAR, were not included in the 1991 survey. They were included, however, in the 1994 survey.

2. **Overall Trends.** The analysis of the current international staffing profile in comparison with that in 1991 shows a decline of 8% in total numbers over the past six years. More striking is the change in the relative distribution of staff across staff categories and centers. The number, and relative percentage, of senior and principal scientists has declined while the employment of younger scientists, postdoctoral fellows, locally-recruited scientists, and consultants has increased. The data also reveal a clear increase in the relative share of internationally-recruited staff working in the newer centers which were incorporated into the CGIAR system to strengthen its capacity to carry out natural resource management research.

   With respect the gender, the quantitative data show good progress in increasing the participation of internationally-recruited women scientists and professionals within the CG System. Applications from women have increased, appointment rates have been positive, and women have been moving slowly, but increasingly, into scientific leadership and management roles where their perspectives and experiences can begin to have an impact on the research and the culture of the work environments in the centers. On the other hand, the data also indicate a higher rate of attrition for women. This needs to be monitored as it may signal constraints for women in the work environment of the centers, particularly as they move up the hierarchy.

Experience in other organizational systems has shown that organizational change related to gender takes time and involves much more than simply increasing numbers of women. Yet, the deeper changes in work practices and organizational culture required to create gender equitable work environments can only happen once there is a critical mass of women in the organization dispersed across different levels of hierarchy and occupational niches. Research suggests that once the relative percentage of women reaches levels of 30 to 35%, women no longer have to assimilate into the dominant work culture, but can become active participants in shaping the work culture and practices. Only two centers have begun to reach these levels of representation, but if the rate of progress of the last 6 years continues this number should increase significantly in the next five years.

II. PROFILE OF INTERNATIONALLY-RECRUITED STAFF

1. **Size** (Table 1; Annex 2 - Tables 1 and 3). The total number of internationally-recruited staff (including visiting scientists, postdoctoral fellows, and associate experts) in mid-1997 was 1190. This represents an 8% decrease from the 1295 recorded 1991.[3] It also includes two additional centers, ICLARM and CIFOR, which had 73 internationally-recruited staff in 1997. If the comparison is limited to the centers that were included in the 1991 survey, the number of internationally-recruited staff has declined by 14%.

2. **Staff categories** (Table 1; Annex 1 - Charts 1, 2, 3; Annex 2 - Tables 1 and 3). Table 1 below and Charts 1 and 2 in the Annex show the distribution of staff across major staff categories. As would be expected the largest number of staff (n = 426) are senior and principal scientists. The relative percentage of internationally-recruited staff who are principal and senior scientists, however, has dropped from 44% in 1991 to 36% in 1997. This represents a loss of 142 senior scientists, or 25%.[4] Most of this decline occurred before 1994 (Table 1). At the same time the number of less experienced scientists and postdoctoral fellows has increased 16%. This shift is also reflected in the experience levels of the scientists. In 1991, only 7% of the staff had 5 years or less experience post-MSc. while in 1997 it reached 12% (Chart 3). In total, there has been a 12% reduction in the number of internationally-recruited scientists across all levels, dropping from 956 in 1991 to 841 in 1997

   While the management cadre has increased from 18% of internationally-recruited staff to 23%, most of this growth has occurred at the middle management level. There has been a 25% increase in the number of middle managers between 1991 and 1997. This likely reflects the shift to a project-based system in many centers with the concomitant increase in project leaders and coordinators. Usually the management roles for these staff are part-time and they remain active as scientists.

   The number of internationally-recruited administrative and program support staff (e.g. specialists in training, information, or computers) decreased by 25% since 1991. In 1997 these staff represented only 7% of all internationally-recruited staff.

   It should be noted that in addition to the 1190 internationally-recruited staff, the centers also

employ more than 450 nationally-recruited scientists and almost 200 nationally-recruited administrators. Data on these staff were not available in 1991, but these numbers represent a modest increase from 1994, particularly among administrators (Annex 2 - Tables 1 and 2). Centers have also increased their use of consultants to supplement their core staff. The centers hired 539 consultants in 1996 representing an increase of 44% over the 374 hired in 1994 (Annex 2 - Tables 1 and 2).

Table 1. Number of Internationally-Recruited Staff by Category - 1997, 1994, 1991

Staff category	1997	1994	1991
Senior management/administration[1]	90	89	88
Middle management (department heads, program leaders, project leaders)	180	163	143
Senior and/or principal scientists	426	432	568
Scientists or associate scientists	137	153	111
Visiting scientists/research fellows	86	88	144
Postdoctoral scientists/fellows	116	133	107
Associate experts/Research associates	75	65	26
Administrative & program support staff[2]	80	101	108
Total internationally-recruited staff	1190	1224	1295

1/ Director level and above; 2/ Program support staff include specialists in training, information, and computers.

3. **Disciplinary composition** (Annex 1 - Charts 4 and 5). Crop scientists comprise the largest group of internationally-recruited staff (36%), followed by socio-economists (16%), and biological scientists (13%). Surprisingly, given the increased emphasis on natural resource management research and biotechnology in the CG centers in recent years, there has been little change in the disciplinary composition of the internationally-recruited staff. The 137 scientists with advanced degrees in the disciplines related to natural resource management research (environmental, soil, natural resource management, forestry and agroforestry sciences) comprised 11% of staff in 1991 compared to 9% in 1991. Those in trained in cell biology and microbiology, relevant for biotechnology research, remained at 6%. The centers report that 81, or 7%, of their internationally-recruited staff are engaged actively in biotechnology research. This compares to 8% in 1991 and represents a decline of 11 scientists.

4. **Degree levels** (Annex 2 - Tables 1 and 3). In 1997, 75% of the internationally-recruited staff had Ph.D. degrees, 17% held masters degrees, and 8% held other types of degrees. This pattern is essentially the same as that recorded in 1991.

5. **Region of origin** (Annex 1 - Chart 6). With respect to regional representation, there has been a modest decrease in the percentage of staff from developing country regions from 43% to 41%. This trend runs counter to the increased representation of member countries from the

South in the CGIAR. This decline largely reflects lower representation of internationally-recruited staff from Asia and Latin America. As in 1991, the largest group of internationally-recruited staff in 1997 came from Europe (34%), followed by North America (20%).

6. **Location of posting** (Annex 2 - Tables 1 and 3). In 1997, as in 1991, 70% of the internationally-recruited staff were based at the centers' headquarters. The two centers with the most decentralization were ICRAF and IPGRI which have 50% of their staff based outside of headquarters.

7. **Source of funding** (Annex 2 - Tables 1 and 3). In 1997, 77% of the internationally-recruited staff were in positions with fixed term, renewable appointments; 14% were in fixed term non-renewable positions funded by special projects, and 9% were in non-renewable positions funded by specific donors. This pattern is similar to that reported in 1991 where 79% of the staff were in what were then called "TAC approved core staff positions".

8. **Retention and tenure** (Annex 1 - Chart 7). The data show stability in staffing. The percent of staff with 7 years or more tenure at the centers increased from 31% to 35% between 1991 and 1997. The average annual rate of attrition between 1995 and 1997 was relatively modest at 12%.[5] This rate has remained relatively constant with 13% reported for 1992-94 and 10% reported for the period of 1988 to 1991. An area of concern, however, is that the average attrition rate among scientists and associate scientists in 1995-97 was 23%, a rate significantly higher than in any other staff category. Of all the staff departures reported by the centers for 1995 through mid-1997, 41% were classified as staff initiated, 25% as center-initiated, and 34% as due to the end of a fixed-term contract.

9. **Recruitment** (Annex 1 - Charts 8 and 9). The average number of applicants for advertised internationally-recruited posts across all centers dropped from 43 in 1991/92 to 38 in 1996/97.[6] This raises some concern since the centers cannot afford to recruit from a narrow pool of global talent. Chart 8 shows the variability of the average size of applicant pool by center for 1991 and 1997. Five centers – CIMMYT, ICRAF, IPGRI, ISNAR and IRRI – attracted more that 50 applicants on average per post advertised in 1996/97. There is also significant variability in applicant numbers by the type of post (Chart 9). Management posts, on average, receive the highest number of applicants (n = 72), while scientist average considerably less (n = 39).

10. **Variability across centers** (Annex 2 - Charts 10 and 11). Changes in international staffing levels have varied widely across the centers. Centers that have registered a decrease of 15% or more since 1991 include: CIAT, CIMMYT, CIP, ILRI, ICRISAT, and IRRI. Centers with significant growth of 15% or more include: ICARDA, ICRAF, IFPRI, IPGRI and WARDA. Staff at CIFOR and ICLARM were not included in the 1991 survey, but both have grown in staff numbers since 1994, particularly CIFOR which has increased by 50%. The distribution of staff across centers (Chart 11) indicates an increase from 7% to 15% in the share of staff working in the newer, "expansion," centers (CIFOR, ICLARM, ICRAF, IIMI) which were incorporated into the CGIAR system to strengthen its capacity in natural resource management research.

11. **Trainees** (Annex 2 - Tables 1 and 2). The CG System has been an important locus of training for scientists working in tropical agriculture and natural resource management. Data from 1996/97 indicate that the centers had 320 Ph.D. students and 173 Msc. students in training. This compares with 287 Ph.D. Students and 255 Msc. students in 1994.[7]

III. GENDER PROFILE OF INTERNATIONALLY-RECRUITED STAFF

1. **Proportion of international staff** (Annex 1 - Chart 8; Annex 2 - Tables 1 and 3). There has been a significant increase in the number and relative percentage of female internationally-recruited staff since 1991. Women now comprise 16% of international staff as compared to 12% in 1991. The number of internationally-recruited staff women has increased 23% from 153 to 188. This is a positive change given that the total international staff cadre in the centers has declined by 8% since 1991.

2. **Staff categories** (Annex 1 - Charts 12 and 13). The percentage of women has increased in all staff categories. Women now comprise 10% of the management cadre in the centers, up from only 5% in 1991. The number of women in senior management positions (Director-level and above) has increased from 2 to 6 and there is one female Director General. The percentage of scientists and senior scientists who are women has increased modestly from 10% in 1991 to 14% in 1997. These data indicate that women are gradually gaining stronger representation in positions of decision-making and influence in the centers. The relative distribution of men and women across staff categories shows, however, that men still predominate disproportionately in the senior staff positions (Chart 13).

   As would be expected from the expanding supply of women scientists worldwide in the disciplines relevant to agriculture and natural resource management research, the percentage of postdoctoral scientists who are women has increased from 18% to 23%, a level which is in line with supply. Women are most heavily represented in administrative and program support positions where they comprise 25% of the internationally-recruited staff. This higher level of participation is not surprising since the pool of female trainers, administrators, and information specialists is larger than that of senior scientists in agriculture.

3. **Variability across centers** (Annex 1 - Charts 14 and 15). The representation of women varies markedly across the centers. At one end of the spectrum are three centers where less than 10% of their internationally-recruited staff are women (ICRISAT, ISNAR, and WARDA). On the other hand, two centers (IFPRI and CIFOR) now have women comprising 25% of their internationally-recruited staff. Thirty to thirty-five percent is a reasonable target for the centers given the representation of women in the pools from which the centers recruit. It is also at this level of participation that gender becomes less visible as a distinguishing marker of women as a minority group. Women come to be seen more as individuals, rather than as members of a group, and stereotyping tends to decrease. Ten of the 14 centers for which there is comparative data have increased the percentage of women among their international staff since 1991. CIFOR and ICLARM, for which data is not available from 1991, have also increased the percentage of women amongst international staff since 1994.

4. **Disciplines** (Annex 1 - Chart 16). The disciplinary composition of male and female internationally-recruited staff differ in several ways, largely reflecting the gender composition of the pool of scientists in different disciplinary areas. For example, in 1997, 38% of the male staff were crop scientists as compared to 27 % of the female staff. A larger share of the women, however, are social and economic scientists and biological scientists. Women also comprise almost 30% of the staff with advanced degrees in the computer and information fields. With respect to staff trained in forestry and agroforestry and the environmental and resource management sciences, the percentage of women has increased from 4% to 13%. As would be expected from the gender composition of the supply, men represent the vast majority of scientists from the fields of animal sciences, chemistry and physics.

   In 1991, with the growth in biotechnology in the centers, it was expected that more biological and cellular scientists would be recruited. This would have created more opportunities for women since they comprise 30% to 50% of the scientists in these fields worldwide. This has not occurred, however. The number of scientists in the centers with training in cellular and other biological sciences has actually decreased. Nevertheless, women now make up 20% of this pool as compared to 14% in 1991. On the other hand, there has been a decline in the percentage of women among staff whom the centers report to be actively engaged in biotechnology research from 26% in 1991 to 21%.

5. **Region of origin** (Annex 2 - Tables 1 and 3). The large majority of internationally-recruited women (71%) come from Europe and North America. This compares with 50% of the men. This has not changed significantly since 1991. These data suggest that the centers need to strengthen their ability to tap into the expanding pool of women scientists and professionals from developing countries.

6. **Degree and experience levels** (Annex 2 - Tables 1 and 3). The women in the centers are, as a whole, younger with fewer years of professional experience than the men. This reflects their more recent entrance into the centers as well as into the dominant fields from which the centers recruit.[8] Whereas 60% of the women are 40 years or younger, only 31% of the men are in this age cohort. With respect to years of experience post MSc., 52% of the women have less than 10 years compared to 25% of the men. In terms of degree levels, 77% of the men have Ph.Ds compared to 58% of the women. This reflects the higher representation of internationally-recruited women in program support and administrative positions and associate expert positions where doctoral degrees are not a requisite.

7. **Retention/tenure** (Annex 1 - Charts 17 and 18). Retention is a good proximate indicator for the degree to which the work environments of the centers are equally supportive of men and women and offer similar opportunities for career development. The 1995-97 data indicate that there has been somewhat less stability in female as compared to male staffing. The average annual attrition rate for internationally-recruited women in the period of 1995-97 was 15% compared to 12% for the men. Four centers in particular show significantly higher annual attrition rates for women compared to men over the 1995-97 period – CIAT, ICRAF, IIMI and ISNAR. Comparing the average annual attrition rate of men and women by type of post shows a higher attrition rate for women in management positions (14%) compared to men (9%). The factors affecting the differential attrition rates for men and women need to be

examined more closely as they may reflect constraints for women in the work environment of the centers, particularly at the senior levels.

With respect to tenure, only 19% of the women have tenures of 7 years or longer compared to 38% of the men. This reflects, in part, the more recent entry of women amongst the international staff of the centers. The percentage of women with tenures of 7 years and longer has, however, increased from only 10% in 1991.

8. **Recruitment** (Annex 1 - Charts 19 and 20). Many centers have made active efforts since 1991 to tap into the expanding pool of women scientists and professionals and mobilize applications from women. These efforts are reflected positively in the increase in the application rate from women for international posts. The average percent of applicants for international posts who are female has increased from 4% in 1990 to 14% in 1997.[9] While the percentage is well below the share of the pool made up by women in many of the disciplines from which the centers draw, the figures indicate clear progress. The average rate of applications from women is highly variable across the centers. For 1996/97, IFPRI had the highest percentage of applications from women (47%), in part because it was recruiting for a large number of postdoctoral positions, while ICARDA only had 4%.

   The percent of applications from women clearly varies by the type of post and the discipline. In terms of types of posts, postdoctoral positions attract the highest percentage of female applicants followed by program support and administrative positions. The largest increase in rate of applications from women has been among scientists where women now comprise 12% of applicants on average compared to 7% in 1991/2.

   The appointment rate of women remains positive. Women comprised 25% of the staff appointed to the 170 open positions reported in the 1997 survey. This rate is higher than the 20% recorded in 1991/92. The appointment rate of women also varies markedly across the centers. It ranged from 0% at IIMI and ISNAR to almost 40% at CIMMYT and IFPRI, two centers that have given priority to attracting women and creating positive working environments for both men and women.

9. **Marital status** (Annex 2 - Tables 1 and 3). The most striking difference between men and women in the CG System is their family situations. In 1997, only 44% of the women were married with their spouse residing with them, compared to 82% of the men. Moreover, the percentage of women who were married with their spouses in residence actually dropped from 48% in 1991. Similarly, only 39% of the women had children compared to 79% of the men. This undoubtedly reflects the growth in dual career families and the differential impact of spouse employment constraints on hiring women with male spouses. It may also reflect the younger age of women in the centers compared to men

IV. Other Human Resource Categories: Level of Female Participation

1. **Boards** (Annex 1 - Chart 12).[10] There has been a marked increase in the percentage of women on the Boards from 10% in 1991 to 22% in 1997. Women are also well represented in leadership positions: 30% of the female trustees now serve as Board Chairpersons, vice-

chairpersons, or sub-committee chairpersons compared to 16% in 1991. In 1991 there were no female Board Chairs compared to three in 1997. This is a positive development which should facilitate the recruitment of women into the CG System in the future.

2. **Trainees** (Annex 1 - Chart 10). In 1996/97, the centers had 121 female Ph.D. students and 45 MSc. students in training. The percentage of Ph.D. trainees who are women has increased dramatically from 22% to 36%. This percentage actually exceeds the estimated proportion of women doctoral students in many of the disciplines relevant to the research of the centers. The percentage of women among Msc trainees has remained constant at 25%. The percentage of women participating in short courses at the centers has also increased modestly from 13% in to 16%.

3. **Nationally-recruited scientists** (Annex 1 - Chart 12). It is interesting to note that with the growth in the numbers of locally-recruited scientists hired at the centers, there has also been a marked increase in the percentage of female national scientists. While in 1991 women only comprised 18% of nationally-recruited scientists, they now make up almost 45%. This brings into question the conventional wisdom that the supply of female scientists in many developing countries is severely constrained. Women also comprise 41% of locally-recruited senior managers and administrators.

4. **Consultants.** As noted earlier, the centers are increasing their use of consultants to supplement their core staff. In 1996/7 women comprised 19% of the international consultants and 26% of the regional and/or national consultants hired.

END NOTES

1 The data from the 1991 survey were reported in D. Merrill-Sands and P. Sachdeva, *Status of Internationally-Recruited Women in the International Agricultural Research Centers of the CGIAR: A Quantitative Perspective.* CGIAR Gender Program Working Paper No. 1. CG Secretariat, The World Bank, Washington, D.C., 1992.

2 The data for the 1994 survey is reported in D. Merrill-Sands, *CGIAR Human Resources Survey: 1991, 1994: Key Observations on International Staffing with a Focus on Gender.* CGIAR Gender Program Working Paper No 9. CG Secretariat, The World Bank, Washington, D.C., 1995

3 The 1991 base number for total international staff reported in previous publications did not include 89 visiting and postdoctoral scientists at CIMMYT (n = 56) and ICRISAT (n = 33) . These centers reported these staff under the section on staff categories but did not include them in the total numbers of international staff nor under other human resource indicators. Since the 1997 survey does count these types of scientists, the base number for 1991 has been corrected to give a more accurate comparison with the 1997 figures.

4 It should be noted that some of the more senior scientists have been classified as middle managers by the centers and, hence, are not reflected in these figures.

5 The average annual attrition rate was calculated using the average of the number of staff in the centers in 1994 and 1997 as the base. The departures were calculated using the average number over a three year period to reduce the impact of anomalous years.

6 The data for 1991/92 covers 120 posts and does not include data from CIFOR, ICLARM, nor WARDA. The 1997 data covers 132 posts and is missing data from CIP and ICLARM.

7 Data on the number of trainees was only collected for females in 1991.

8 Data from the National Science Foundation in the United States show that percentage of women earning Ph.D. degrees in the agricultural sciences began to increase in the 1970s. In the early 1970s, for example, only 4% of the doctoral degrees awarded by US universities in agricultural sciences went to women. In the early 1990s, however, 19% of these degrees were awarded to women. In the forestry sciences, this increase in the participation of women did not begin until the 1980's. Women have been more strongly represented in the biological sciences. In the early 1970s women earned 20% of the doctoral degrees in the fields relevant to the centers and 40% in the early 1990s. In the socio-economic disciplines, women received 15% of the doctoral degrees awarded in the early 1970s and 35% of those awarded in the early 1990s. Similar trends have been documented for other countries in North America and Europe as well as in some developing countries.

9 The 1991/92 data on recruitment comes from the analysis of a survey carried out in 1992. It is reported in S. Ladbury, *Strengthening the Recruitment of Women Scientists and Professionals at the International Agricultural Research Centers: A Guidelines Paper.* CGIAR Gender Program Working Paper No. 4. CG Secretariat, The World Bank, Washington, D.C., 1993.

10 Data is drawn from the *CGIAR: The Boards of Trustees of the International Agricultural Research Centers, Trustee Directory,* CGIAR Secretariat, The World Bank, Washington D.C., 1991, 1994, 1996, and 1997.

ANNEX 1 - CHARTS

Chart 1: Percent of Internationally-Recruited Staff by Category - 1991, 1997

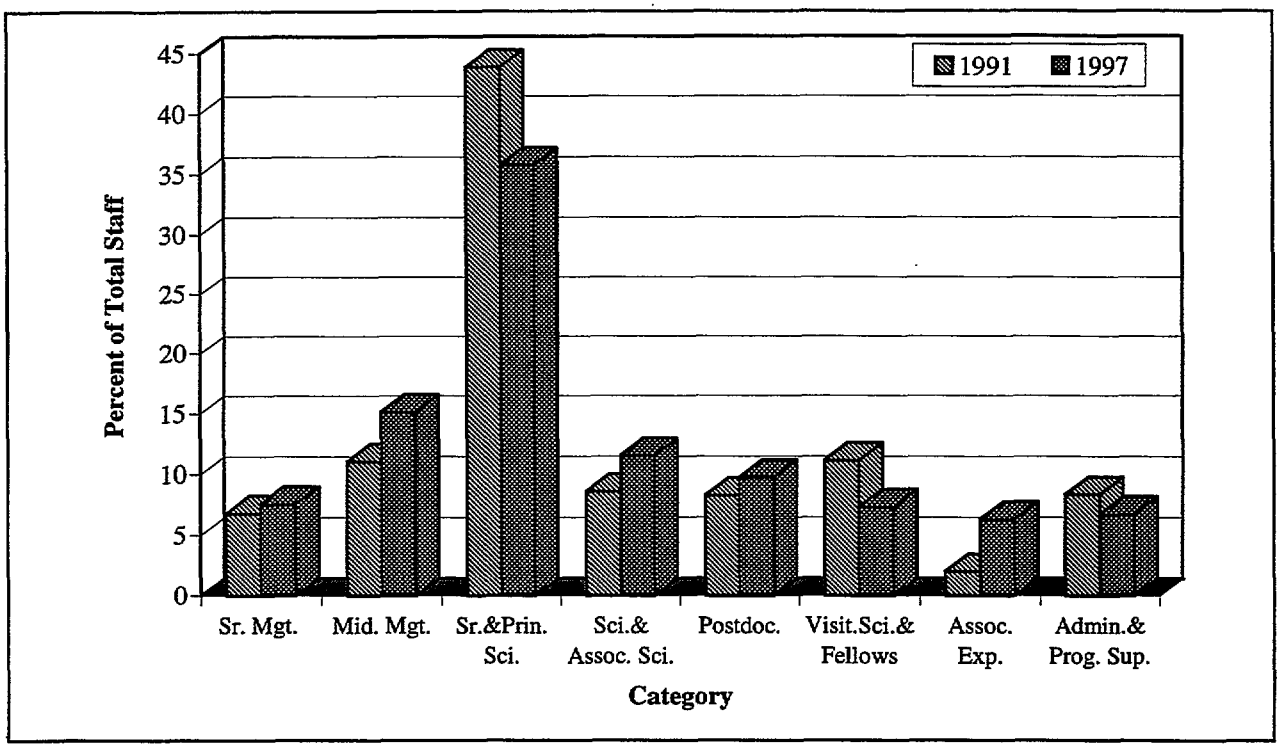


Chart 2: Number of Internationally-Recruited Staff by Category - 1991, 1997

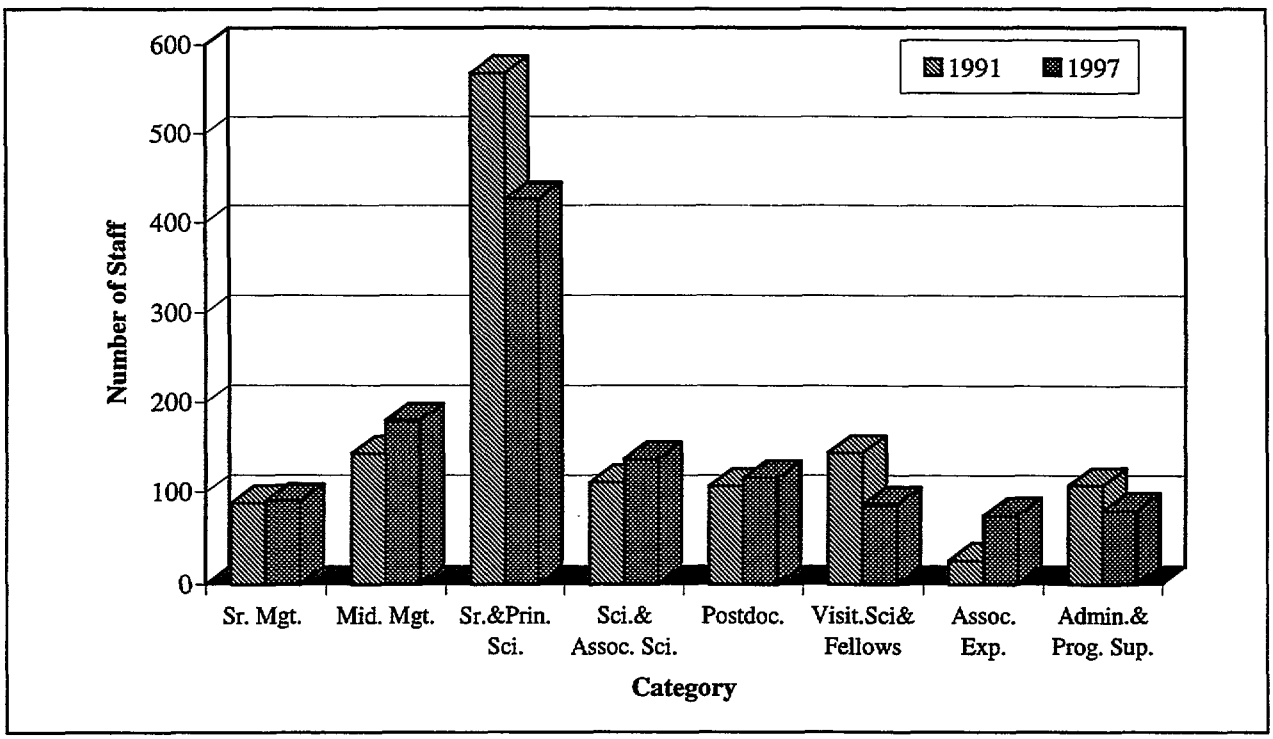


Chart 3: Distribution of International Staff by Years of Professional Experience - 1991, 1997

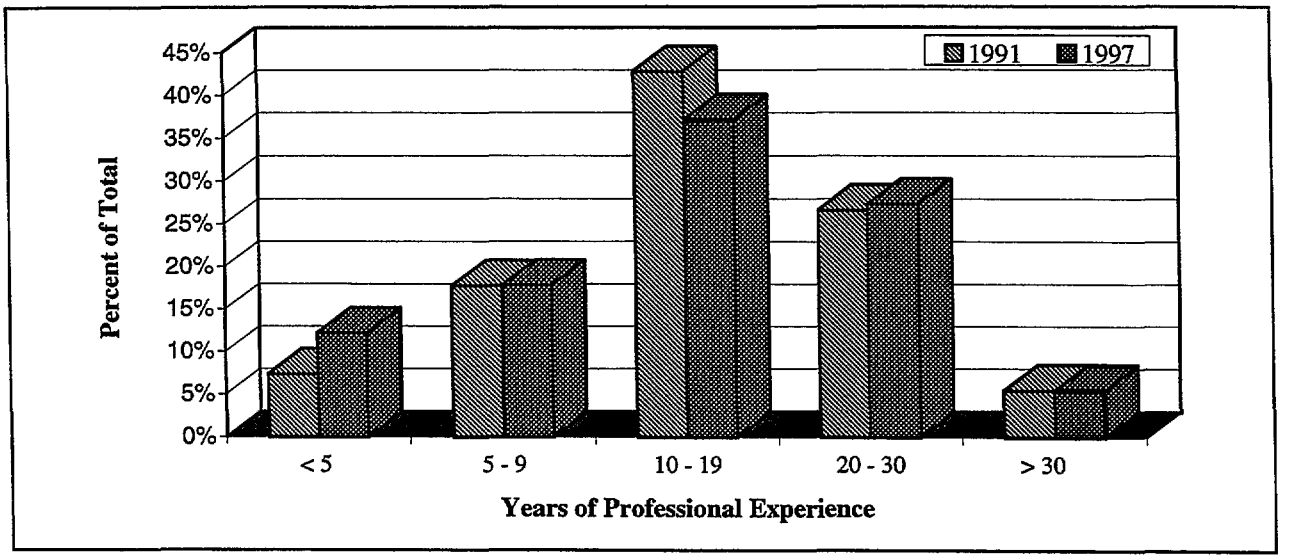


Chart 4: Number of Internationally-Recruited Staff by Discipline Area - 1991, 1997

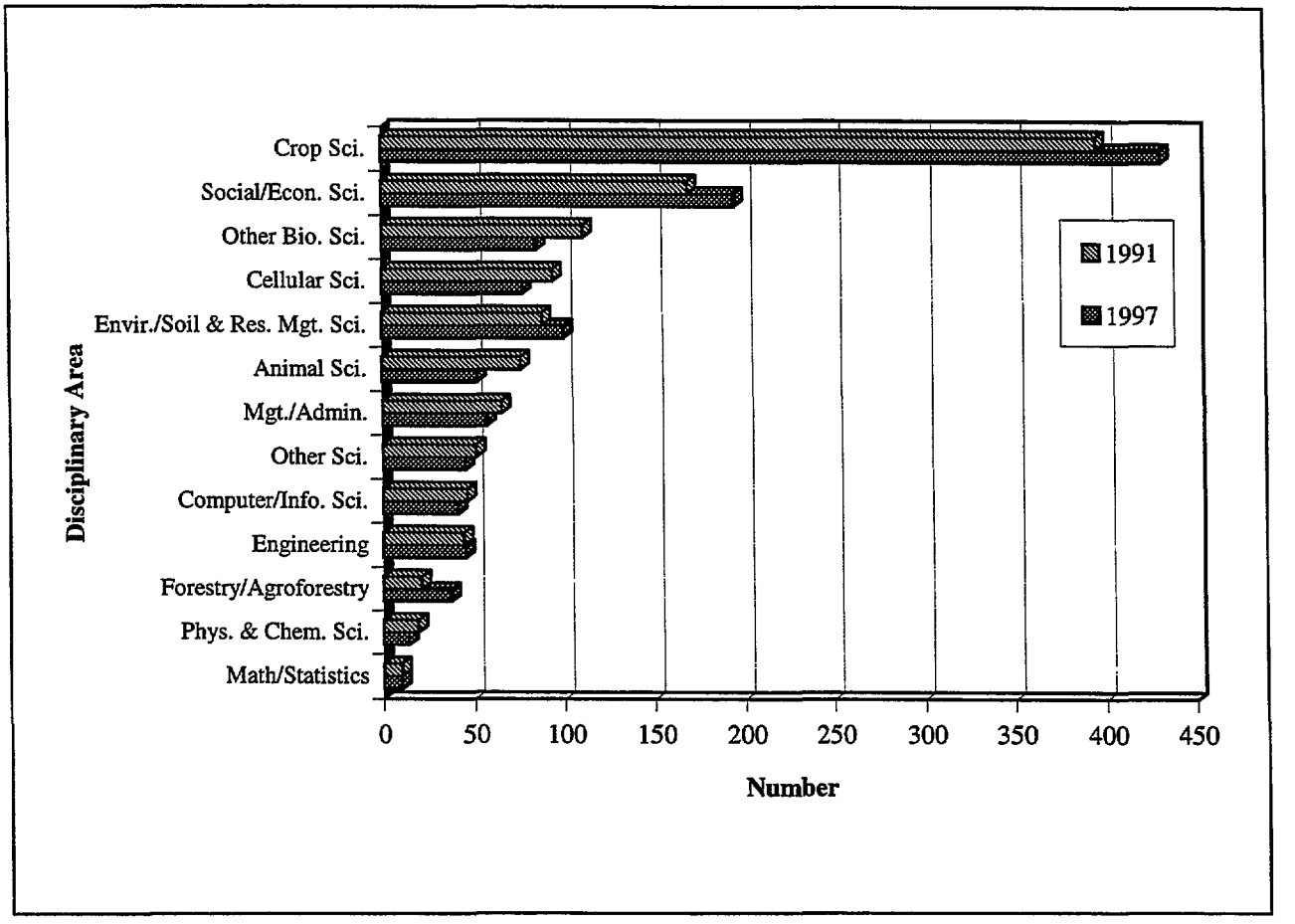


Chart 5: Percent Distribution of Internationally-Recruited Staff by Discipline Area - 1991, 1997

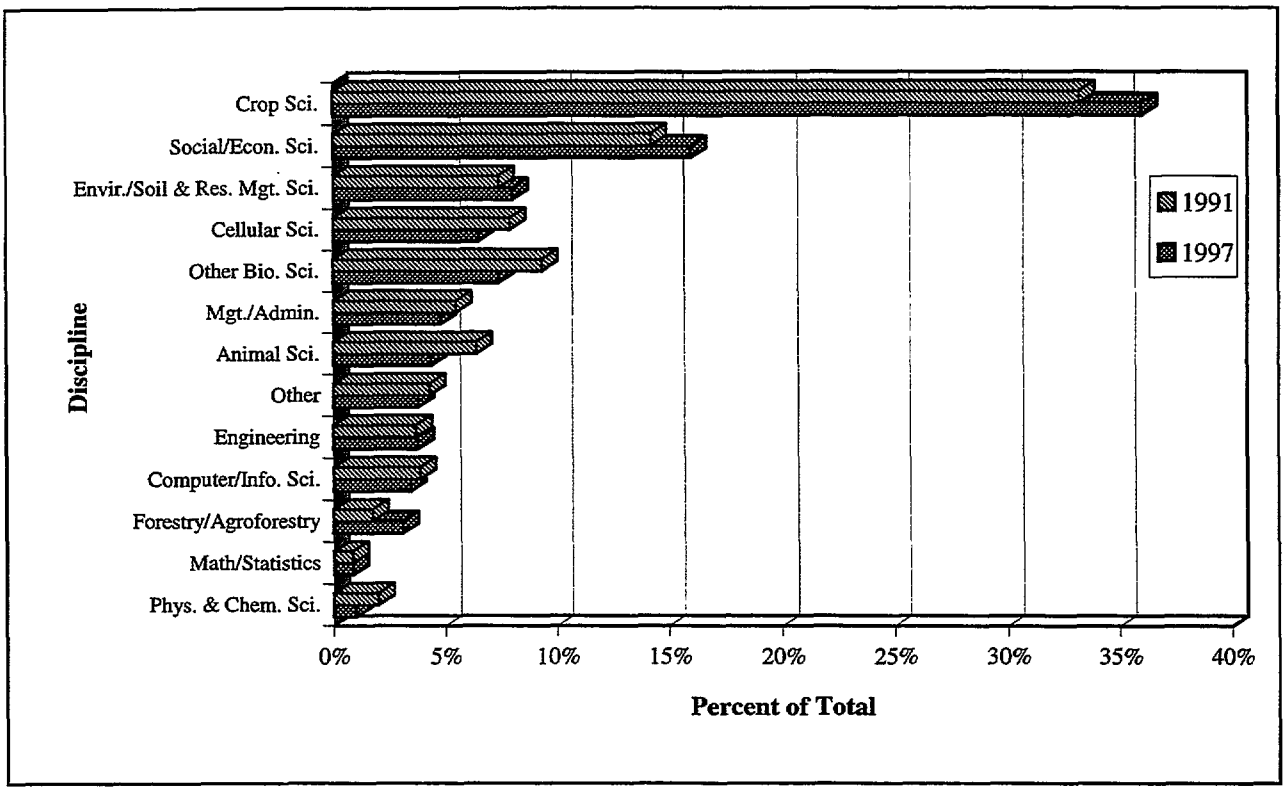


Chart 6: Distribution of Internationally-Recruited Staff by Region of Origin - 1991, 1997

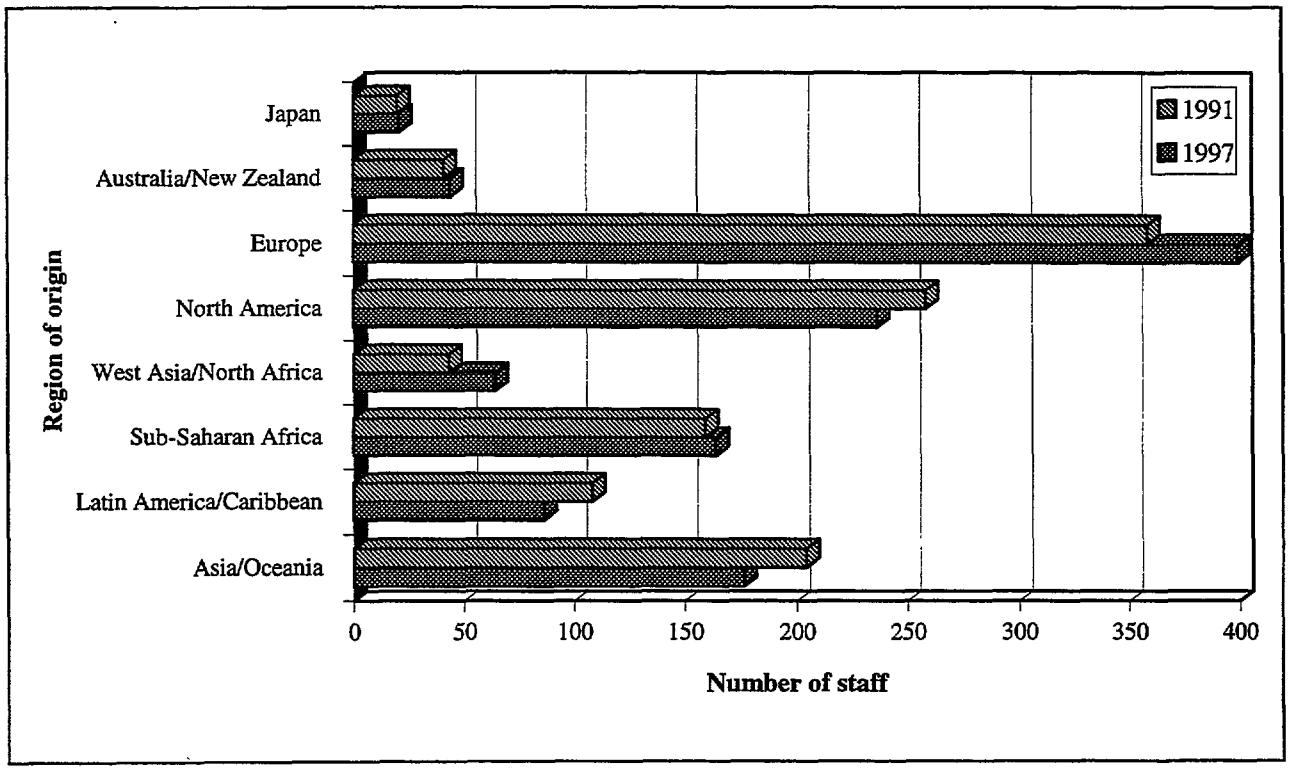


Chart 7: Distribution of Staff by Length of Tenure (percent of total) - 1991, 1997

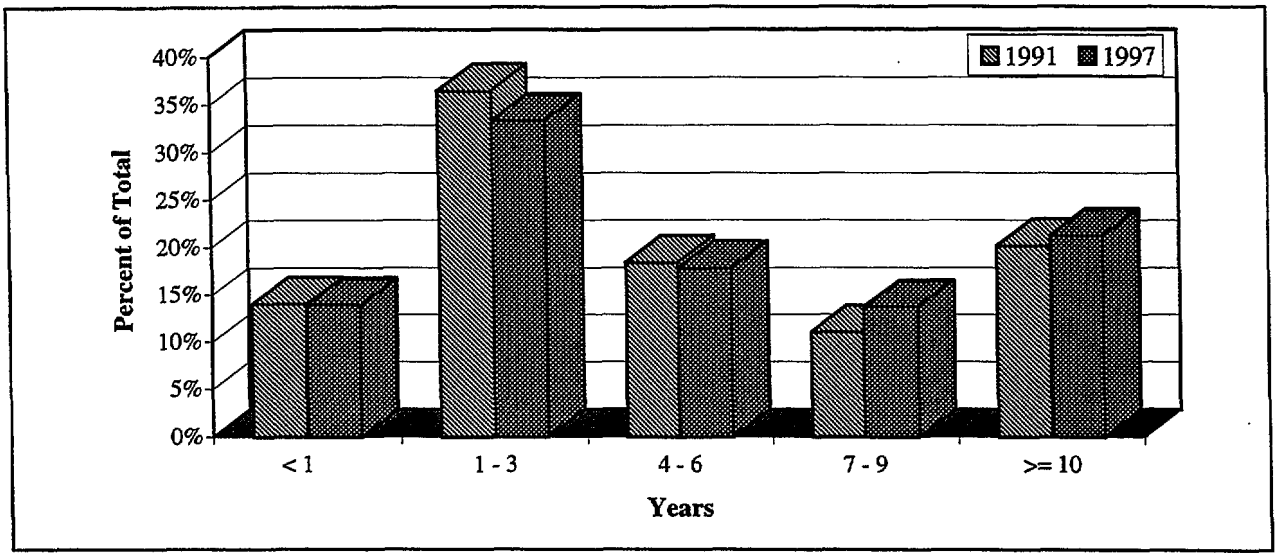
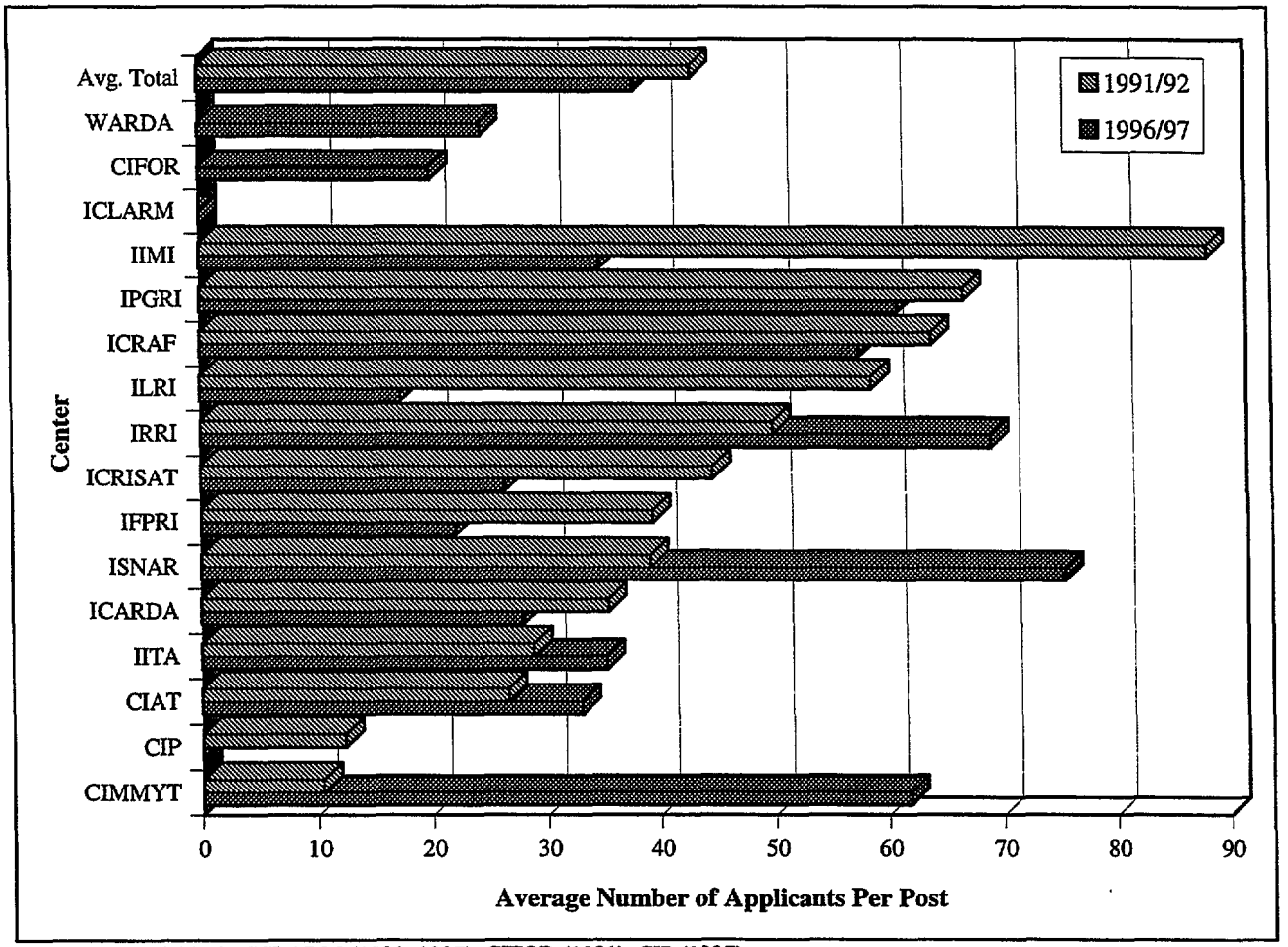


Chart 8: Average Number of Applicants per Advertised International Posts - 1991/92, 1996/97*



* Data not available for ICLARM (1991, 1997), CIFOR (1991), CIP (1997)

Chart 9: Average Number of Applicants by Type of Post (1997)

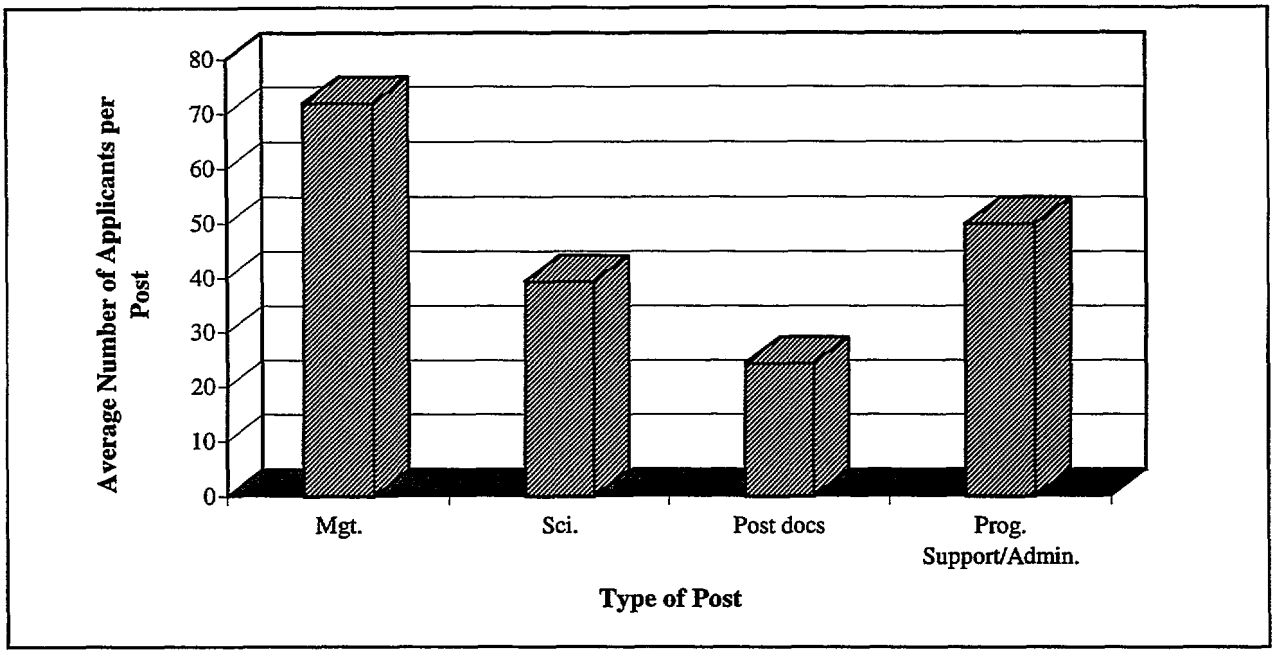
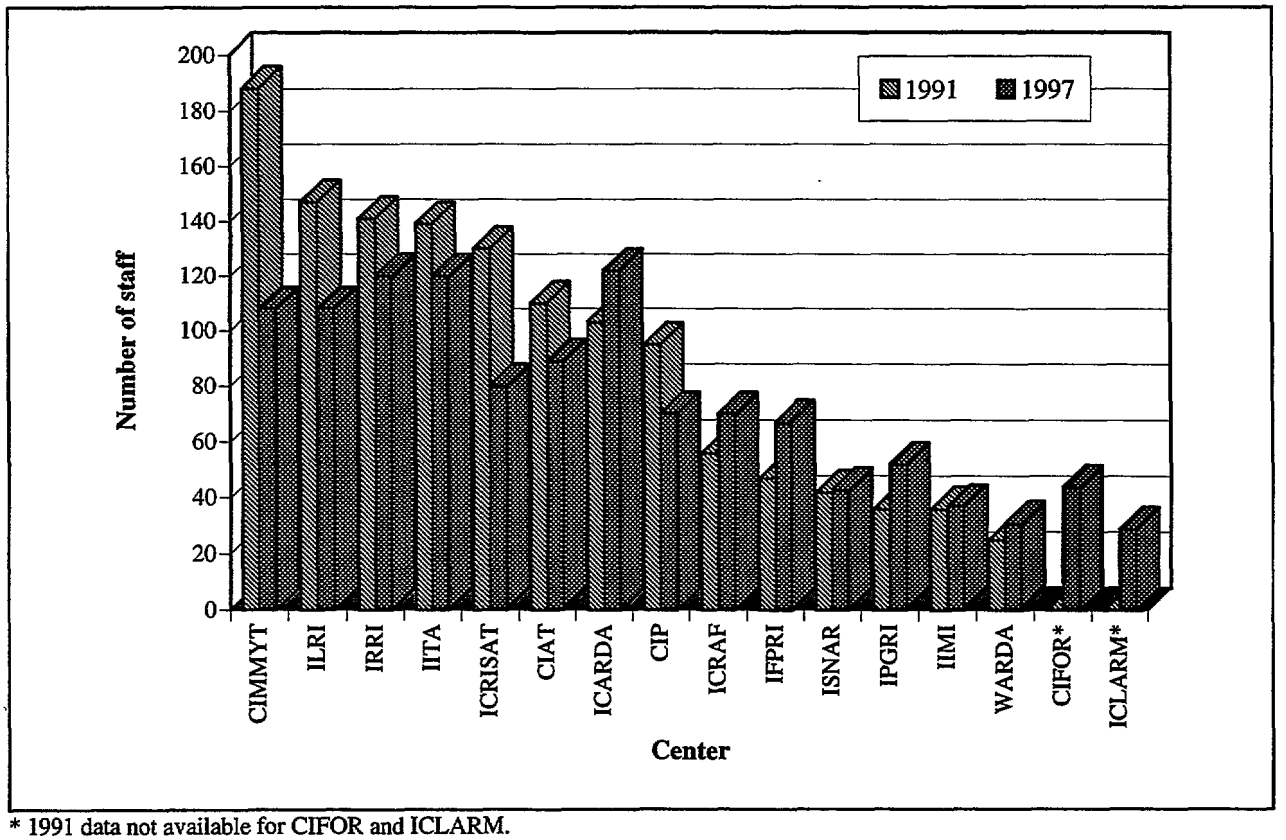
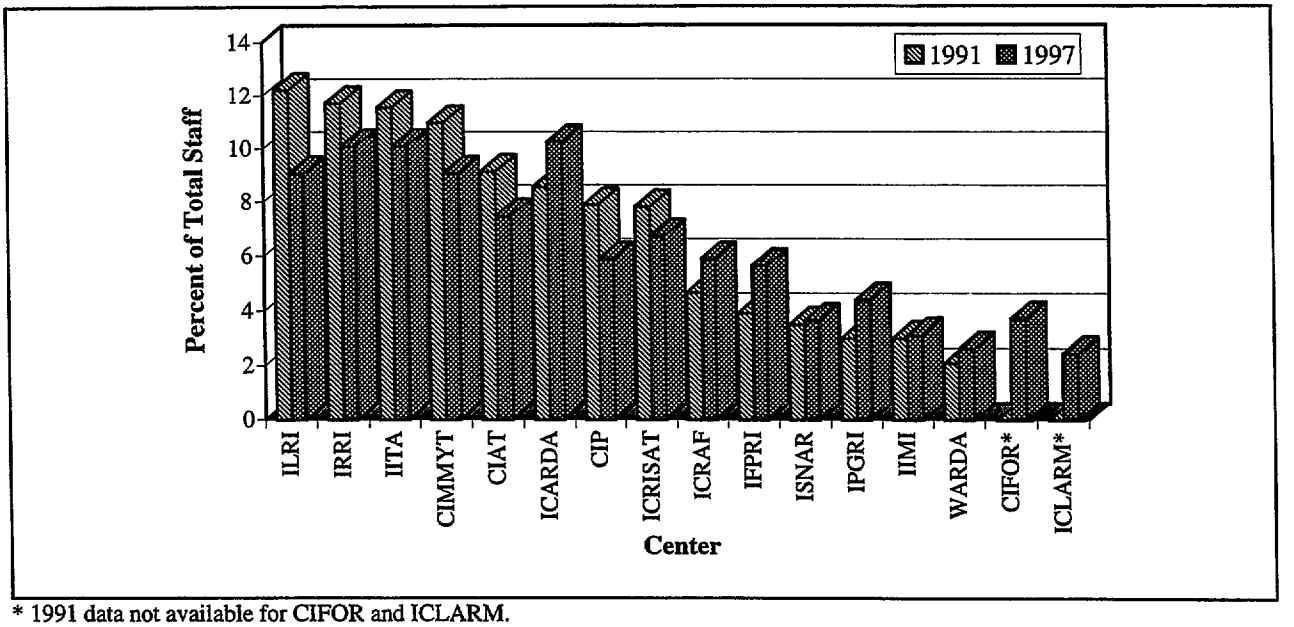


Chart 10: Number of Internationally-Recruited Staff by Center - 1991, 1997



* 1991 data not available for CIFOR and ICLARM.

Chart 11: Distribution of Internationally-Recruited Staff Across Centers - 1991, 1997



* 1991 data not available for CIFOR and ICLARM.

Chart 12: Percent of Women by Category of Staff, Boards, Consultants, and Trainees

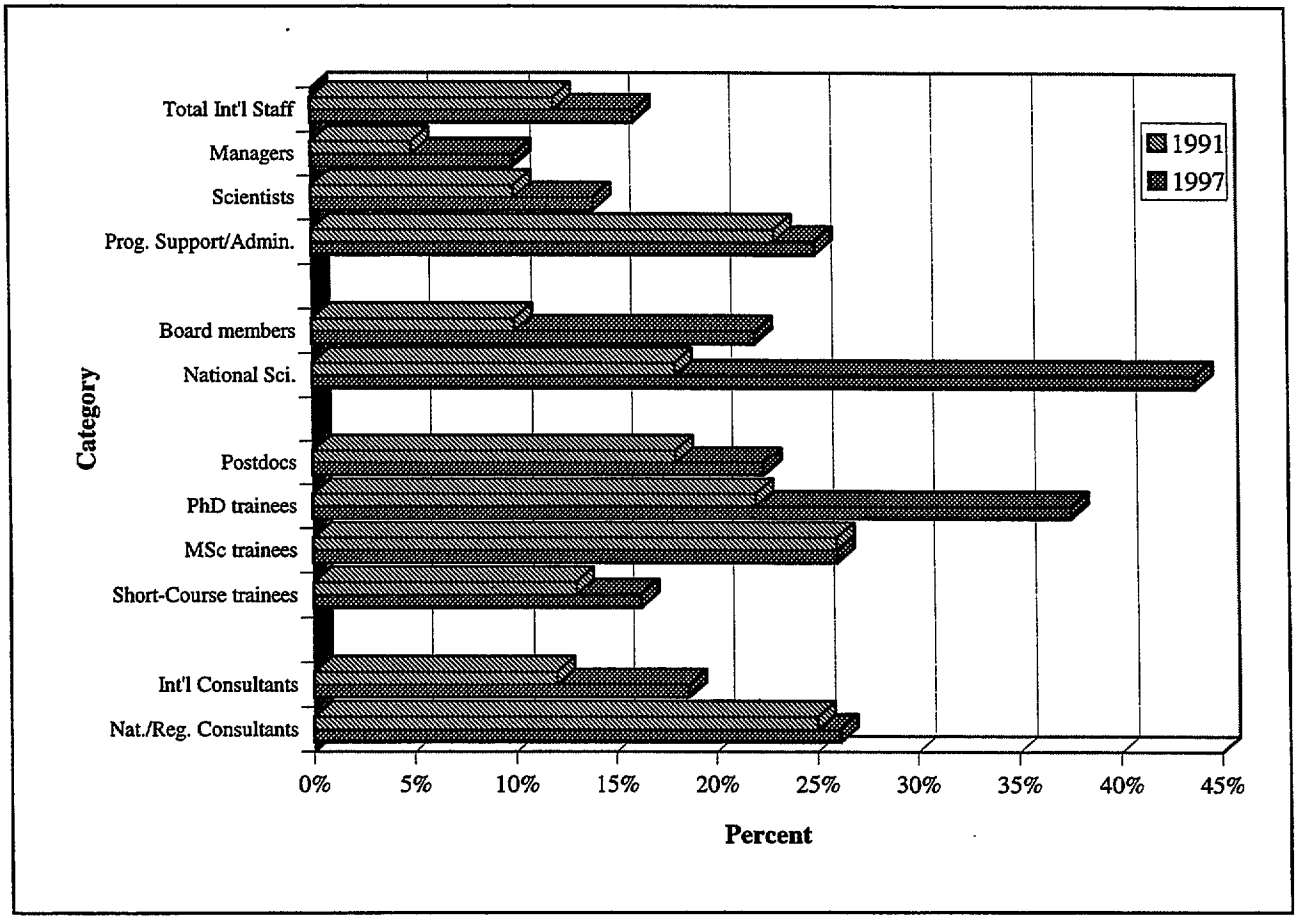


Chart 13: Comparison of Distribution of Men and Women Across Staff Categories (1997)

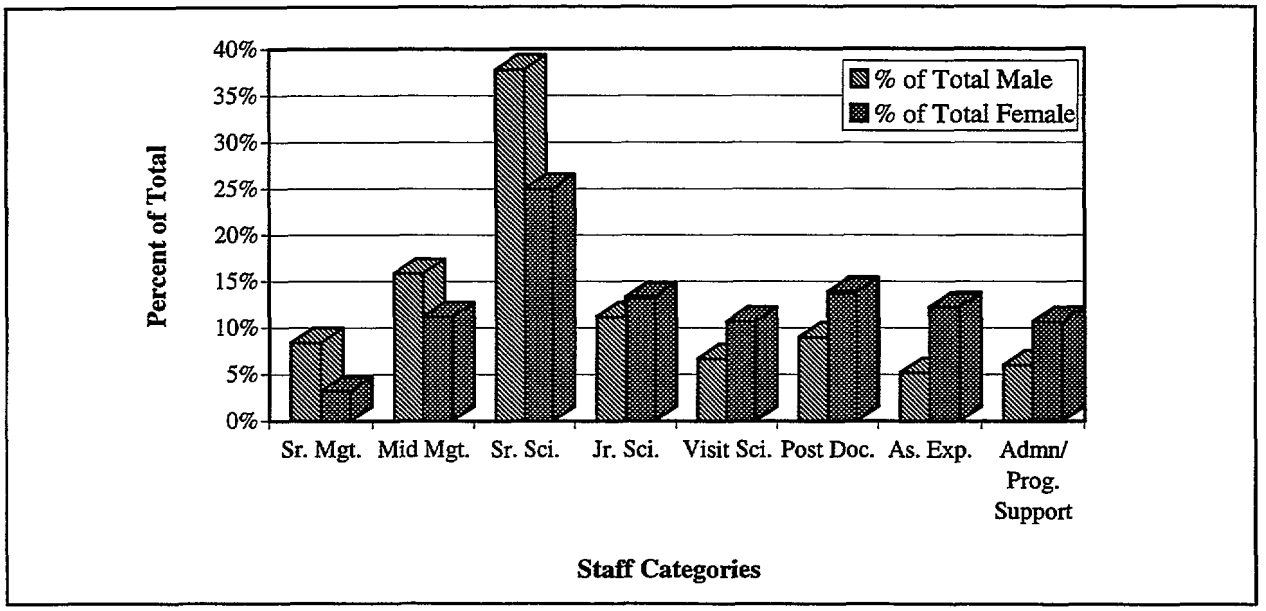
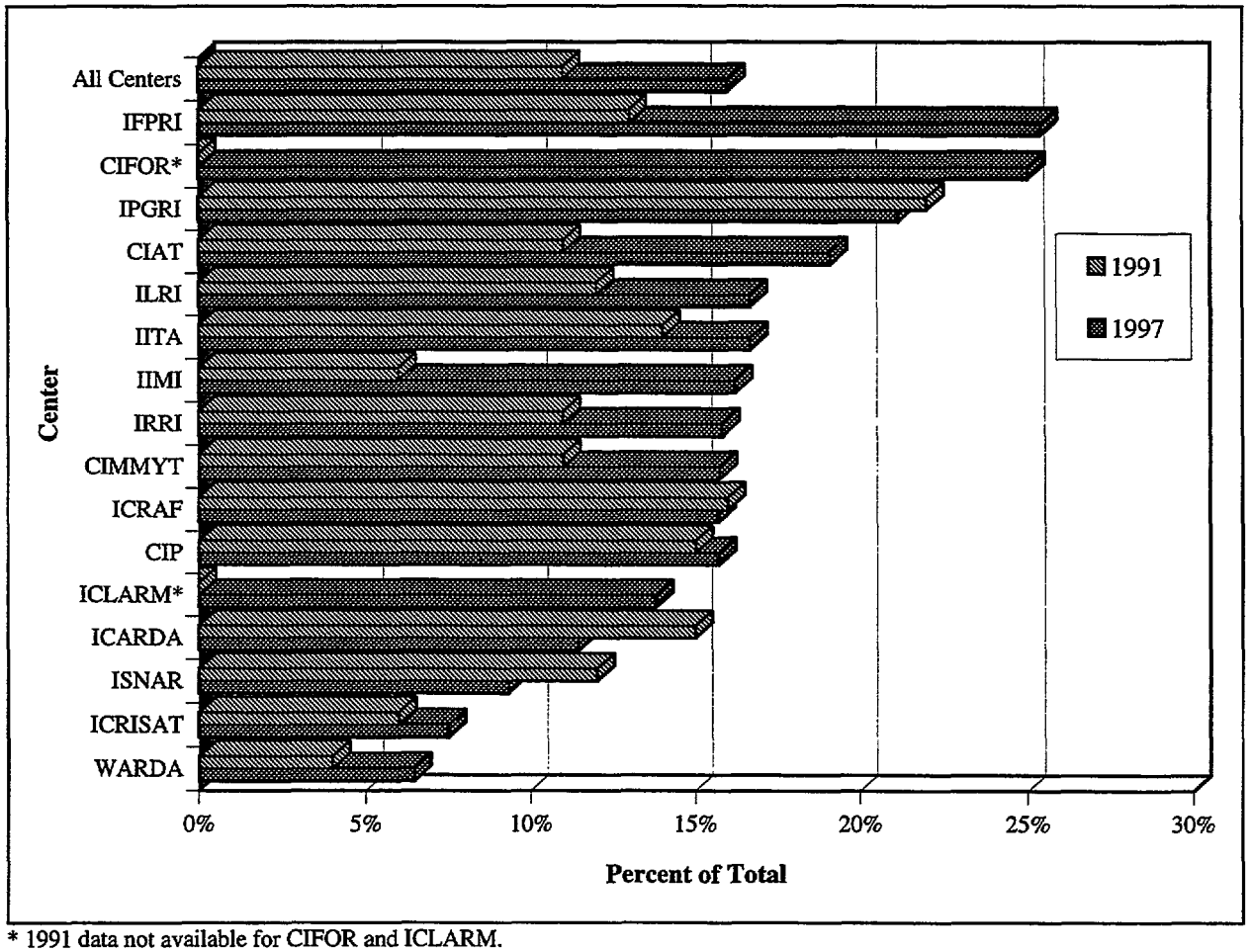
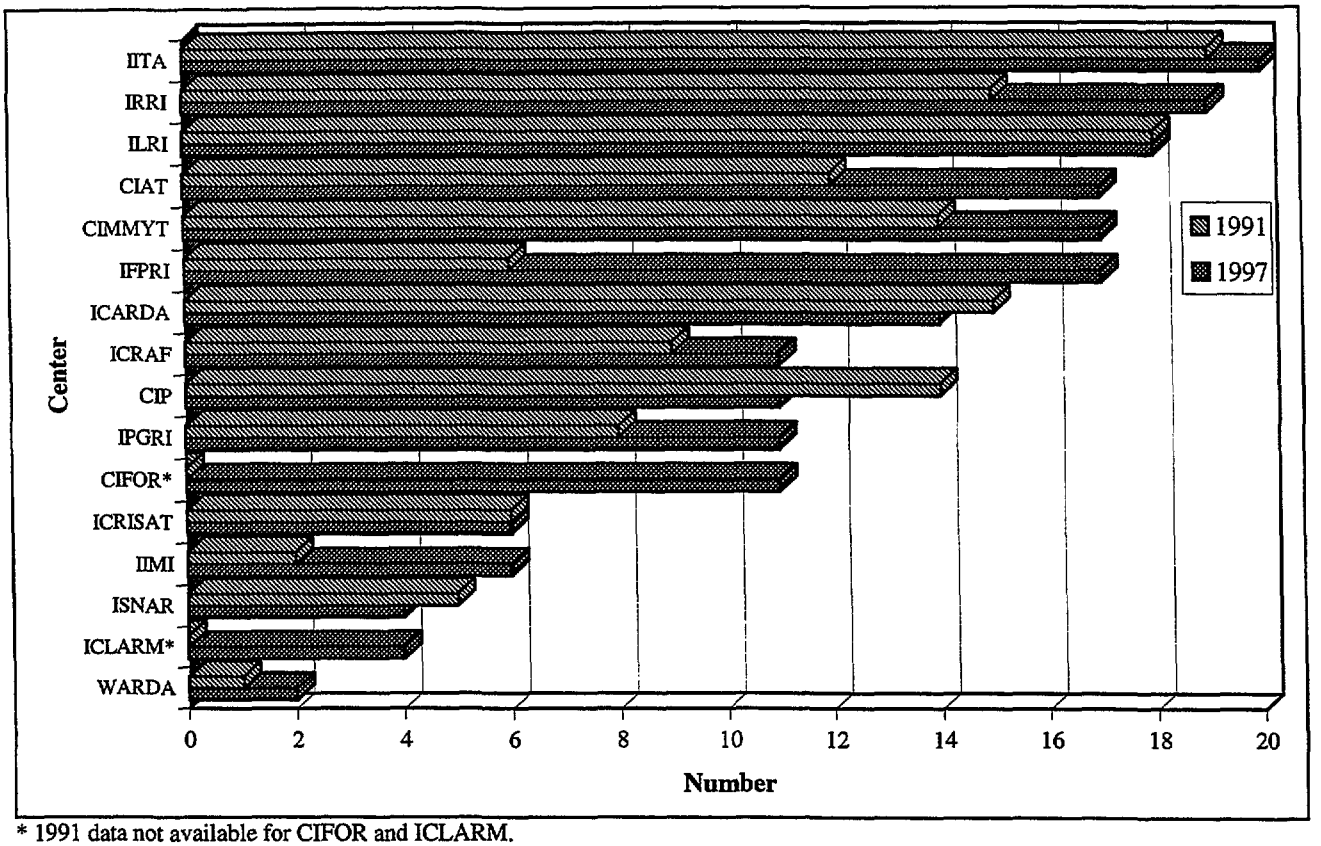


Chart 14: Females as Percent of Internationally-Recruited Staff by Center - 1991, 1997



* 1991 data not available for CIFOR and ICLARM.

Chart 15: Number of Female Internationally-Recruited Staff by Center - 1991, 1997



* 1991 data not available for CIFOR and ICLARM.

Chart 16: Distribution of Men and Women by Disciplinary Area (percent) - 1997

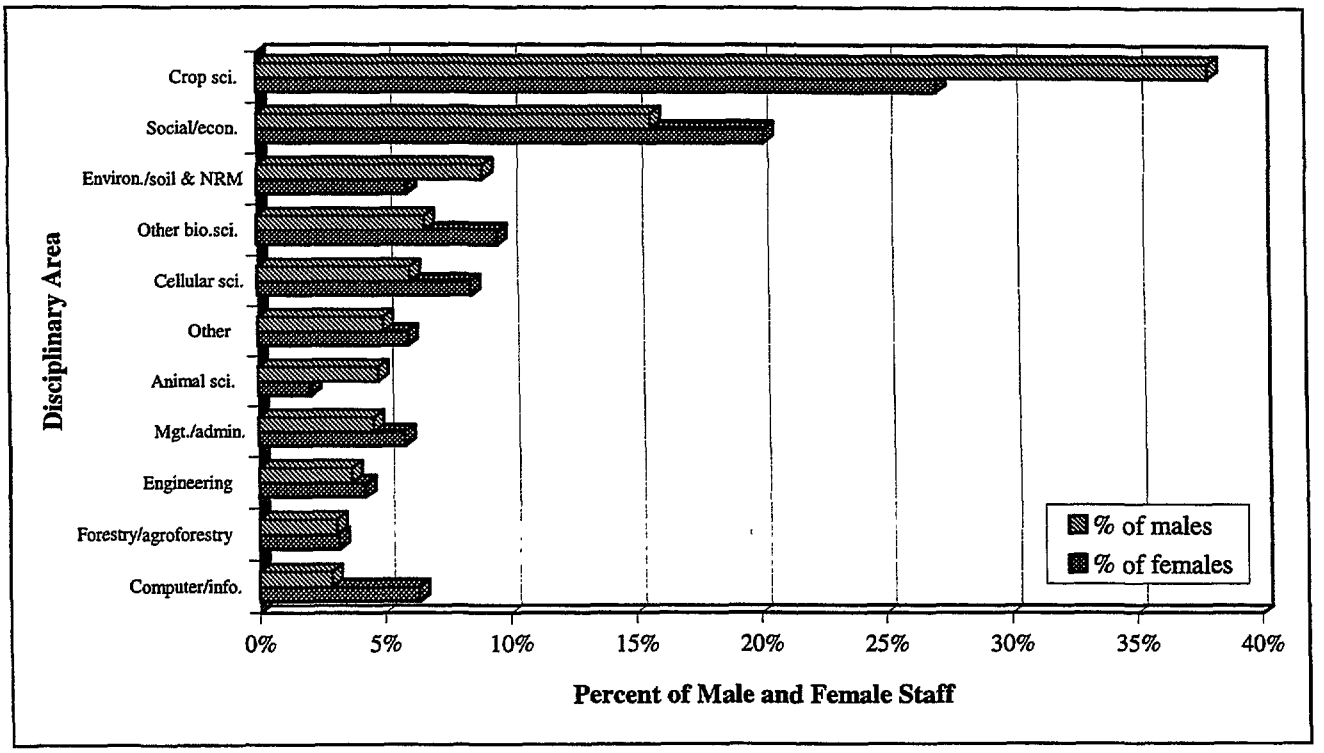


Chart 17: Attrition Rates of Male and Female Internationally-Recruited Staff by Category (average for 1995-97)

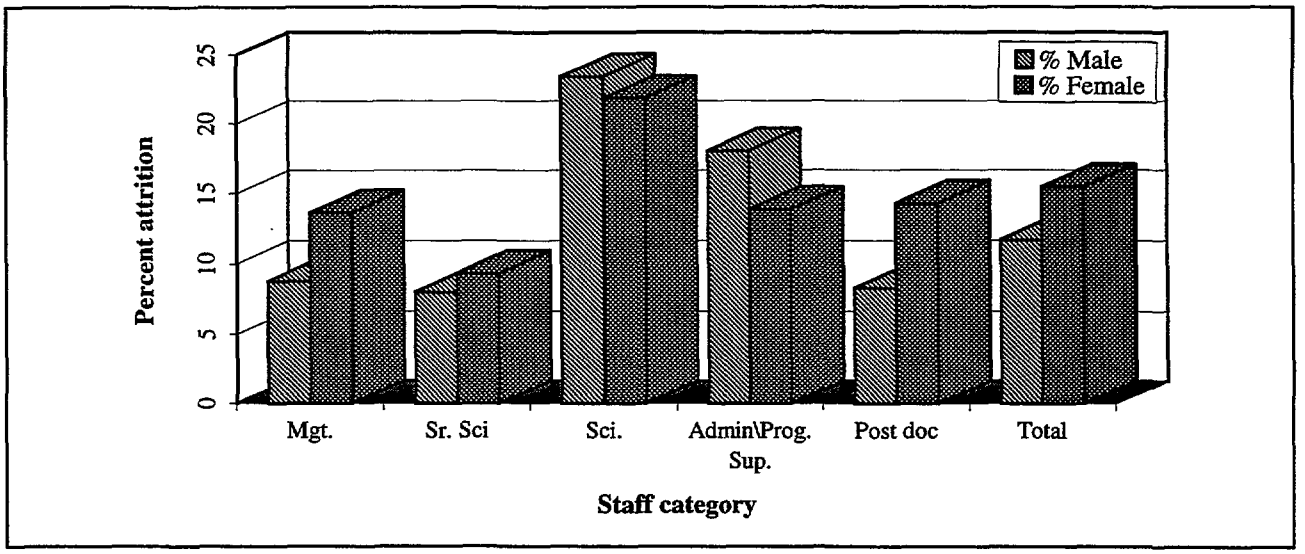


Chart 18: Attrition Rates of Male and Female Internationally-Recruited Staff by Center (average for 1995-97)

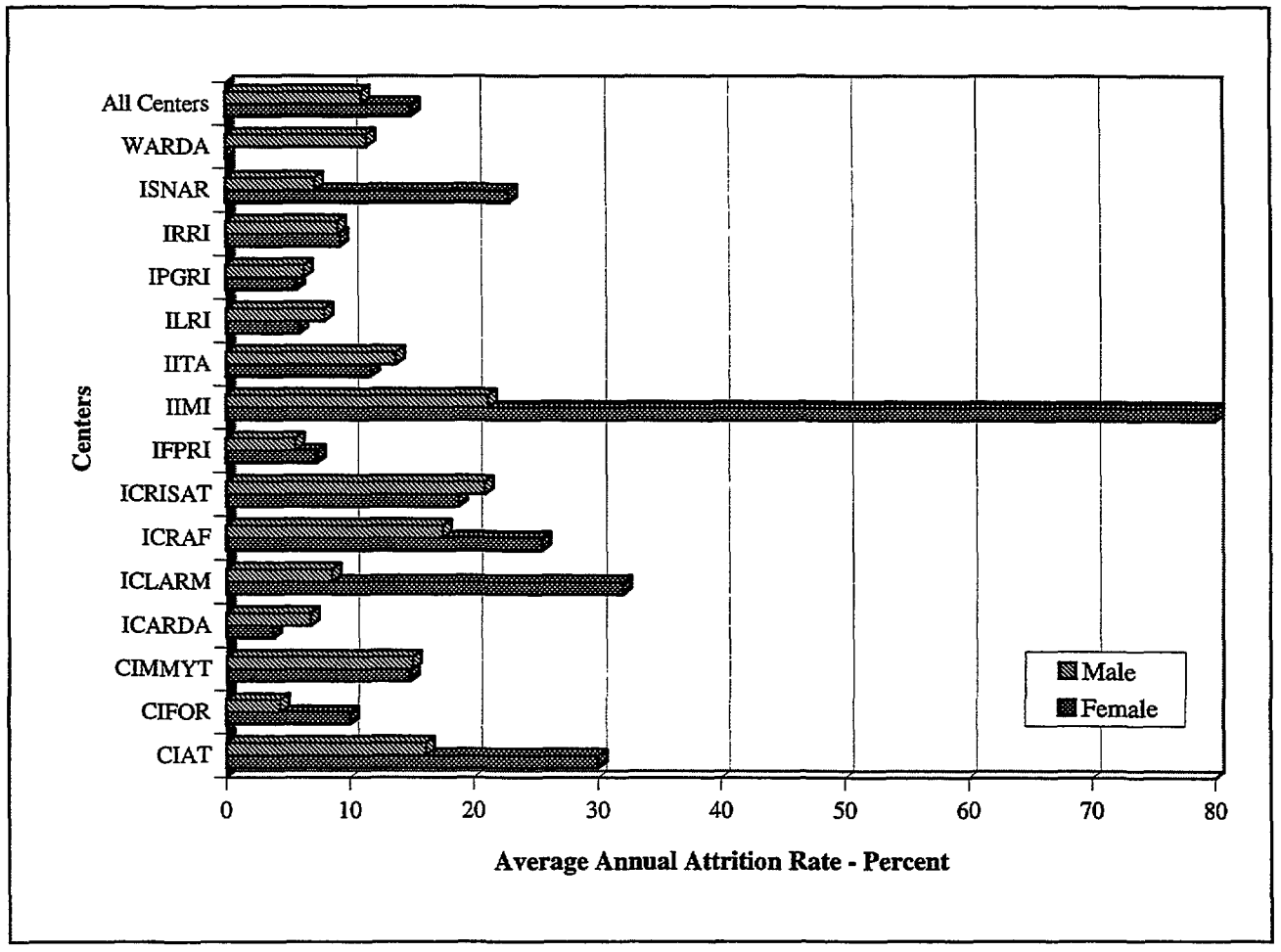
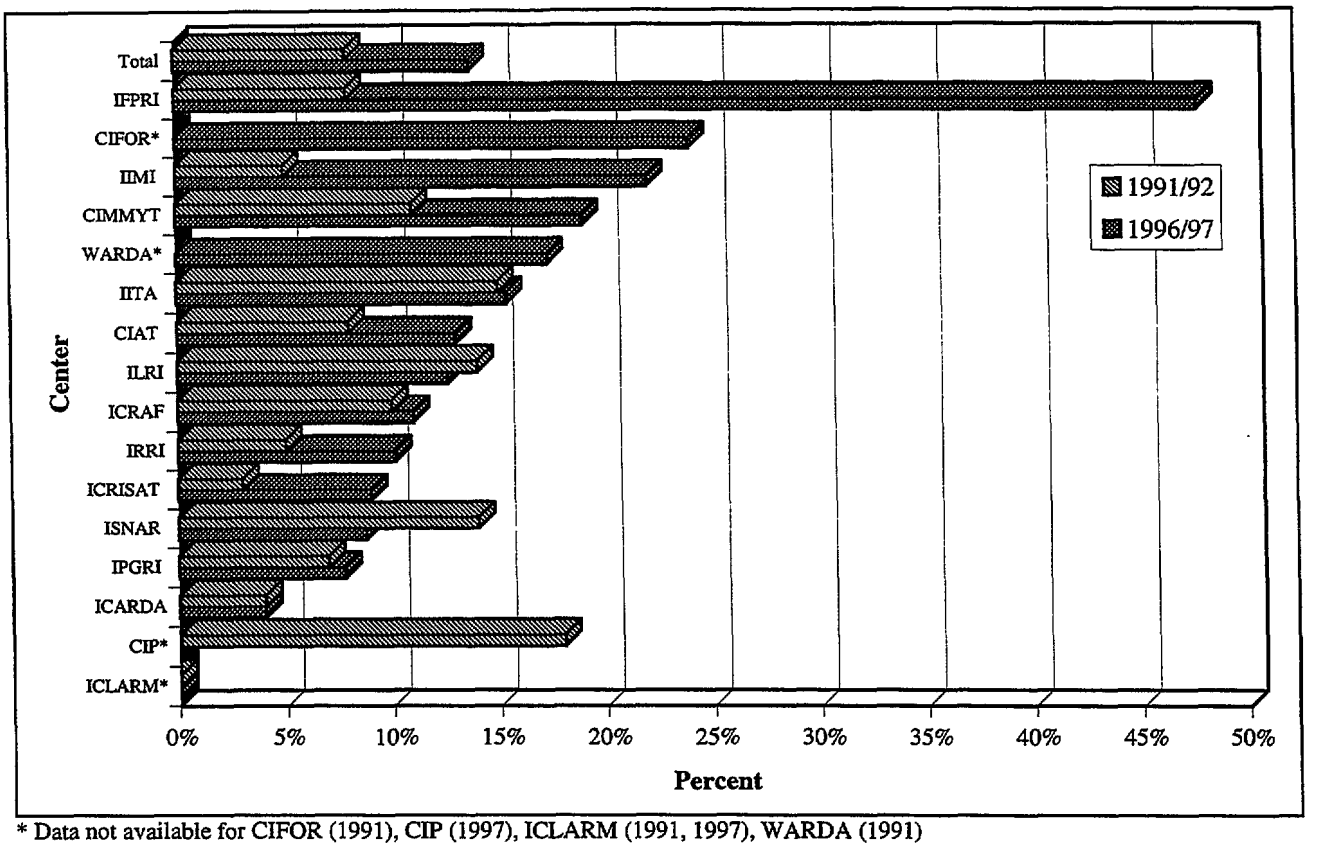
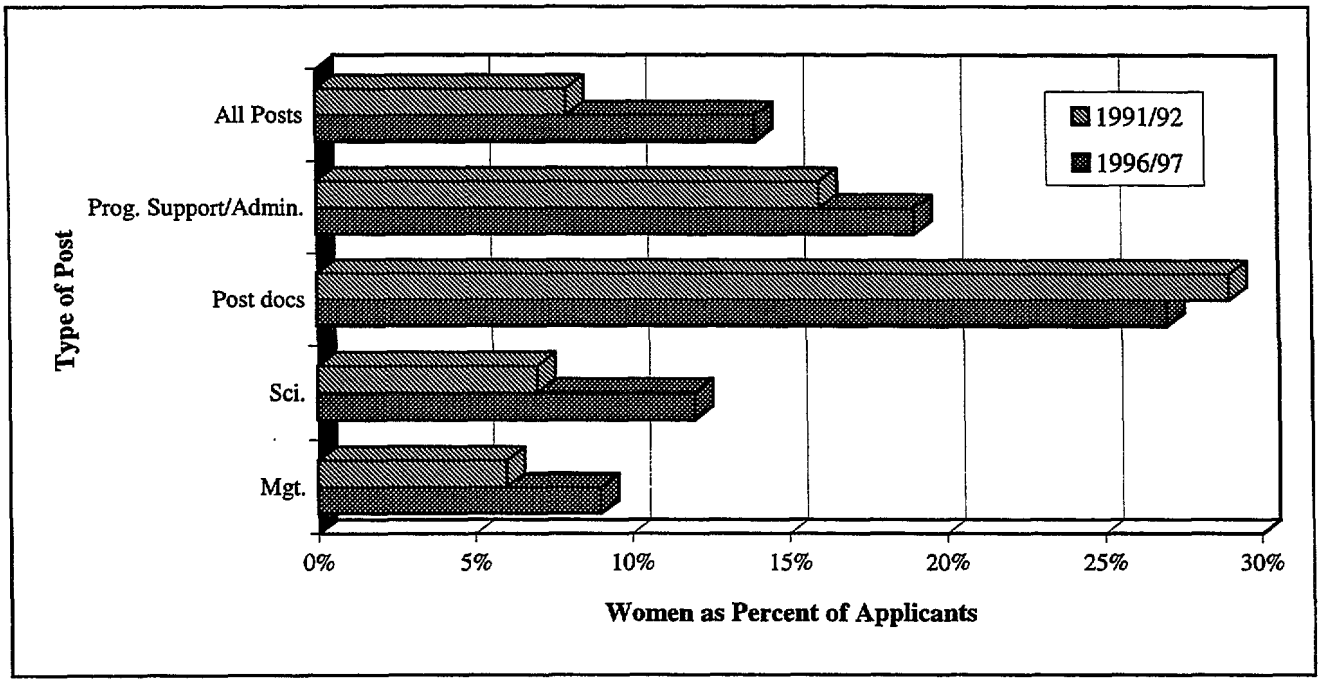


Chart 19: Females as Percent of Applicants for Internationally-Recruited Posts - 1991/92, 1996/97



* Data not available for CIFOR (1991), CIP (1997), ICLARM (1991, 1997), WARDA (1991)

Chart 20: Women as Percent of Applicants by Type of Post - 1991/92, 1996/97



ANNEX 2 - TABLES

1. Summary Table, 1997 CGIAR Human Resources Survey
2. Summary Table, 1994 CGIAR Human Resources Survey
3. Summary Table, 1991 CGIAR Human Resources Survey

TABLE 1: 1997 HUMAN RESOURCES SURVEY - SUMMARY								
QUESTION #	MALE	FEMALE	TOTAL	% of TOTAL	M as % M TOTAL	F as % F TOTAL	M % row TOTAL	F % row TOTAL
Question 1. Total number of international staff	1002	188	1190	100%	100%	100%	84%	16%
Question 2. Staffing by level - by recruited								
senior management/administration	84	6	90	8%	8%	3%	93%	7%
department heads/research thrust leaders	159	21	180	15%	16%	11%	88%	12%
senior and/or principal scientists	379	47	426	36%	38%	25%	89%	11%
junior or associate scientists	112	25	137	12%	11%	13%	82%	18%
visiting scientists/research fellows	67	20	87	7%	7%	11%	77%	23%
postdoctoral scientists/fellows	90	26	116	10%	9%	14%	78%	22%
associate experts	52	23	75	6%	5%	12%	69%	31%
other internationally recruited	60	20	80	7%	6%	11%	75%	25%
administrative staff/or professional support staff								
TOTAL	1003	188	1191	100%	100%	100%	84%	16%
Question 3. Age (years)								
20-30	38	23	61	5%	4%	12%	62%	38%
31-40	267	89	356	31%	27%	48%	75%	25%
41-50	410	57	467	40%	42%	31%	88%	12%
51-60	228	17	245	21%	23%	9%	93%	7%
61 and above	30	0	30	3%	3%	0%	100%	0%
TOTAL	973	186	1159	100%	100%	100%	84%	16%
Question 4. Nationality								
Asia/Oceania	151	25	176	15%	15%	13%	86%	14%
Latin America/Caribbean	78	8	86	7%	8%	4%	91%	9%
Sub-Saharan Africa	153	11	164	14%	15%	6%	93%	7%
West Asia/North Africa	57	7	64	5%	6%	4%	89%	11%
North America	184	52	236	20%	18%	28%	78%	22%
Europe	319	80	399	34%	32%	43%	80%	20%
Australia/New Zealand	39	5	44	4%	4%	3%	89%	11%
Japan	21	0	21	2%	2%	0%	100%	0%
TOTAL	1002	188	1190	100%	100%	100%	84%	16%

Annex 2, Table 1
1997 Human Resources Survey

QUESTION #	MALE	FEMALE	TOTAL	% of TOTAL	M as % M TOTAL	F as % F TOTAL	M % row TOTAL	F % row TOTAL
Question 5. Tenure at Center (number of years employed at Center)								
Less than 1	125	41	166	14%	12%	22%	75%	25%
1-3	321	76	397	33%	32%	40%	81%	19%
4-6	176	36	212	18%	18%	19%	83%	17%
7-9	145	18	163	14%	14%	10%	89%	11%
More than 10	236	17	253	21%	24%	9%	93%	7%
TOTAL	1003	188	1191	100%	100%	100%	84%	16%
Question 6. Location/ Posting								
Headquarters	689	141	830	70%	69%	75%	83%	17%
Outposted (regional or field position)	313	47	360	30%	31%	25%	87%	13%
TOTAL	1002	188	1190	100%	100%	100%	84%	16%
Question 7. Funding source								
Fixed term, renewable appointment	777	134	911	77%	78%	72%	85%	15%
Special project - non-renewable	142	24	166	14%	14%	13%	86%	14%
Donor funded positons	80	29	109	9%	8%	16%	73%	27%
TOTAL	999	187	1186	100%	100%	100%	84%	16%
Question 8. Staff on part-time contracts (<75%)	8	1	9	1%	1%	1%	89%	11%
Question 9. Degree levels (highest degree received)								
Ph.D. or equivalent	791	99	890	75%	77%	58%	89%	11%
Msc/MA/ or equivalent	146	51	197	17%	14%	30%	74%	26%
Other	85	20	105	9%	8%	12%	81%	19%
TOTAL	1022	170	1192	100%	100%	100%	86%	14%
Question 10. Discipline (in which highest degree received)								
Crop sciences	380	51	431	36%	38%	27%	88%	12%
Animal sciences	48	4	52	4%	5%	2%	92%	8%
Cellular sciences (microbiology)	61	16	77	6%	6%	9%	79%	21%

QUESTION #	MALE	FEMALE	TOTAL	% of TOTAL	M as % M TOTAL	F as % F TOTAL	M % row TOTAL	F % row TOTAL
Forestry/agroforestry	31	6	37	3%	3%	3%	84%	16%
Other biological sciences	67	18	85	7%	7%	10%	79%	21%
Chemistry	4	0	4	0%	0%	0%	100%	0%
Physical sciences	10	0	10	1%	1%	0%	100%	0%
Environmental/soil and resource mngt. sciences	88	12	100	8%	9%	6%	88%	12%
Engineering	37	8	45	4%	4%	4%	82%	18%
Social/economic sciences	157	38	195	16%	16%	20%	81%	19%
Computer/information sciences	29	12	41	3%	3%	6%	71%	29%
Mathematics/statistics	8	2	10	1%	1%	1%	80%	20%
Management/administration	46	11	57	5%	5%	6%	81%	19%
Other (specify)	35	10	45	4%	3%	5%	78%	22%
TOTAL	1001	188	1189	100%	100%	100%	84%	16%
Question 11. Staff actively engaged in biotechnology research	64	17	81	0%	6%	9%	79%	21%
Question 12. Years of relevant professional experience (post Msc or equiv.)								
< 5 years	91	36	127	12%	10%	22%	72%	28%
5 - 9 years	136	50	186	18%	15%	30%	73%	27%
10-19 years	333	54	387	37%	38%	33%	86%	14%
20-30 years	266	19	285	27%	30%	12%	93%	7%
> 30 years	52	5	57	5%	6%	3%	91%	9%
TOTAL	878	164	1042	100%	100%	100%	84%	16%
Question 13. Marital status (number of staff)								
married w/spouse in residence	824	82	906	76%	82%	44%	91%	9%
married w/out spouse in residence	63	14	77	6%	6%	7%	82%	18%
single/divorced/widowed	115	92	207	17%	11%	49%	56%	44%
TOTAL	1002	188	1190	100%	100%	100%	84%	16%
Question 14. Children (number of staff)								
With children	787	73	860	72%	79%	39%	92%	8%
No children	215	115	330	28%	21%	61%	65%	35%
TOTAL	1002	188	1190	100%	100%	100%	84%	16%

Annex 2, Table 1
1997 Human Resources Survey

QUESTION #	MALE	FEMALE	TOTAL	% of TOTAL	M as % M TOTAL	F as % F TOTAL	M % row TOTAL	F % row TOTAL
Part III. Additional Information for Analysis of Gender Staffing								
18. Number of locally-recruited scientists (1997)	258	201	459	n/a	n/a	n/a	56%	44%
19. Number of locally-recruited senior managers/ admin. (1997)	115	81	196	n/a	n/a	n/a	59%	41%
20. International consultants hired in 1996	258	59	317	n/a	n/a	n/a	81%	19%
21. Regional and/or national consultants hired in 1996	164	58	222	n/a	n/a	n/a	74%	26%
22. Spouses of internationally-recruited staff hired as consultants (1996)	3	17	20	n/a	n/a	n/a	15%	85%
23. Short-course group trainees (in headquarters and regions) in 1996	876	170	1046	n/a	n/a	n/a	84%	16%
24. Ph.D. trainees in 1996	201	121	322	n/a	n/a	n/a	62%	38%
25. Msc trainees in 1996	128	45	173	n/a	n/a	n/a	74%	26%

TABLE 2: 1994 HUMAN RESOURCES SURVEY - SUMMARY								
QUESTION #	MALE	FEMALE	TOTAL	% of TOTAL	M as % M TOTAL	F as % F TOTAL	M % row TOTAL	F % row TOTAL
Question 1. Total number of international staff	1051	173	1224	100%	100%	100%	86%	14%
Question 2. Staffing by level - by recruited								
senior management/administration	84	5	89	7%	8%	3%	94%	6%
department heads/research thrust leaders	148	15	163	13%	14%	9%	91%	9%
senior and/or principal scientists	393	39	432	35%	37%	23%	91%	9%
junior or associate scientists	134	19	153	13%	13%	11%	88%	12%
visiting scientists/research fellows	71	17	88	7%	7%	10%	81%	19%
postdoctoral scientists/fellows	103	30	133	11%	10%	17%	77%	23%
associate experts	49	16	65	5%	5%	9%	75%	25%
other internationally recruited	69	32	101	8%	7%	18%	68%	32%
administrative staff/or professional support staff								
TOTAL	1051	173	1224	100%	100%	100%	86%	14%
Question 3. Age (years)								
20-30	40	26	66	5%	4%	15%	61%	39%
31-40	325	82	407	33%	31%	47%	80%	20%
41-50	431	55	486	40%	41%	32%	89%	11%
51-60	231	9	240	20%	22%	5%	96%	4%
61 and above	24	1	25	2%	2%	1%	96%	4%
TOTAL	1051	173	1224	100%	100%	100%	86%	14%
Question 4. Nationality								
Asia/Oceania	190	17	207	17%	18%	10%	92%	8%
Latin America/Caribbean	98	4	102	8%	9%	2%	96%	4%
Sub-Saharan Africa	168	15	183	15%	16%	9%	92%	8%
West Asia/North Africa	54	7	61	5%	5%	4%	89%	11%
North America	178	55	233	19%	17%	32%	76%	24%
Europe	309	71	380	31%	29%	41%	81%	19%
Australia/New Zealand	34	3	37	3%	3%	2%	92%	8%
Japan	21	1	22	2%	2%	1%	95%	5%

QUESTION #	MALE	FEMALE	TOTAL	% of TOTAL	M as % M TOTAL	F as % F TOTAL	M % row TOTAL	F % row TOTAL
TOTAL	1052	173	1225	100%	100%	100%	86%	14%
Question 5. Tenure at Center (number of years employed at Center)								
Less than 1	142	39	181	15%	14%	23%	78%	22%
1-3	336	70	406	33%	32%	40%	83%	17%
4-6	202	27	229	19%	19%	16%	88%	12%
7-9	134	23	157	13%	13%	13%	85%	15%
More than 10	237	14	251	21%	23%	8%	94%	6%
TOTAL	1051	173	1224	100%	100%	100%	86%	14%
Question 6. Location/ Posting								
Headquarters	734	142	876	72%	70%	82%	84%	16%
Outposted (regional or field position)	317	31	348	28%	30%	18%	91%	9%
TOTAL	1051	173	1224	100%	100%	100%	86%	14%
Question 7. Funding source								
In TAC approved core staff positions	667	92	759	64%	65%	55%	88%	12%
Other staff positions	355	74	429	36%	35%	45%	83%	17%
TOTAL	1022	166	1188	100%	100%	100%	86%	14%
Question 8. Staff on part-time contracts (<75%)	12	5	17	0%	0%	0%	0%	0%
Question 9. Degree levels (highest degree received)								
Ph.D. or equivalent	792	95	887	72%	75%	55%	89%	11%
Msc/MA/ or equivalent	161	52	213	17%	15%	30%	76%	24%
Other	98	26	124	10%	9%	15%	79%	21%
TOTAL	1051	173	1224	100%	100%	100%	86%	14%
Question 10. Discipline (in which highest degree received)								
Crop sciences	388	43	431	35%	37%	25%	90%	10%
Animal sciences	60	9	69	6%	6%	5%	87%	13%
Cellular sciences (microbiology)	75	19	94	8%	7%	11%	80%	20%

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QUESTION #	MALE	FEMALE	TOTAL	% of TOTAL	M as % M TOTAL	F as % F TOTAL	M % row TOTAL	F % row TOTAL
Forestry/agroforestry	37	3	40	3%	4%	2%	93%	8%
Other biological sciences	94	12	106	9%	9%	7%	89%	11%
Chemistry	6	1	7	1%	1%	1%	86%	14%
Physical sciences	7	0	7	1%	1%	0%	100%	0%
Environmental/soil and resource mngt. sciences	83	10	93	8%	8%	6%	89%	11%
Engineering	46	2	48	4%	4%	1%	96%	4%
Social/economic sciences	145	43	188	15%	14%	25%	77%	23%
Computer/information sciences	29	7	36	3%	3%	4%	81%	19%
Mathematics/statistics	12	1	13	1%	1%	1%	92%	8%
Management/administration	45	16	61	5%	4%	9%	74%	26%
Other (specify)	24	7	31	3%	2%	4%	77%	23%
TOTAL	1051	173	1224	100%	100%	100%	86%	14%
Question 11. Staff actively engaged in biotechnology research	73	21	94	0%	0%	0%	78%	22%
Question 12. Years of relevant professional experience (post Msc or equiv.)								
< 5 years	166	50	216	18%	16%	29%	77%	23%
5 - 9 years	185	36	221	18%	18%	21%	84%	16%
10-19 years	362	58	420	34%	34%	34%	86%	14%
20-30 years	284	27	311	25%	27%	16%	91%	9%
> 30 years	54	1	55	4%	5%	1%	98%	2%
TOTAL	1051	172	1223	100%	100%	100%	86%	14%
Question 13. Marital status (number of staff)								
married w/spouse in residence	857	76	933	77%	82%	44%	92%	8%
married w/out spouse in residence	67	9	76	6%	6%	5%	88%	12%
single/divorced/widowed	121	87	208	17%	12%	51%	58%	42%
TOTAL	1045	172	1217	100%	100%	100%	86%	14%
Question 14. Children (number of staff)								
With children	851	73	924	76%	81%	42%	92%	8%
No children	194	99	293	24%	19%	58%	66%	34%
TOTAL	1045	172	1217	100%	100%	100%	86%	14%

QUESTION #	MALE	FEMALE	TOTAL	% of TOTAL	M as % M TOTAL	F as % F TOTAL	M % row TOTAL	F % row TOTAL
Part III. Additional Information for Analysis of								
Gender Staffing								
18. Number of locally-recruited scientists (1994)	311	139	450	n/a	n/a	n/a	69%	31%
19. Number of locally-recruited senior managers/	119	28	147	n/a	n/a	n/a	81%	19%
admin. (1994)								
20. International consultants hired in 1994	199	38	237	n/a	n/a	n/a	84%	16%
21. Regional and/or national consultants hired in 1994	105	32	137	n/a	n/a	n/a	77%	23%
22. Spouses of internationally-recruited staff	2	15	17	n/a	n/a	n/a	12%	88%
hired as consultants								
23. Short-course group trainees (in headquarters	1894	417	2311	n/a	n/a	n/a	82%	18%
and regions) in 1994								
24. Ph.D. trainees in 1994	212	75	287	n/a	n/a	n/a	74%	26%
25. Msc trainees in 1994	158	47	205	n/a	n/a	n/a	77%	23%

TABLE 3: 1991 HUMAN RESOURCES SURVEY - SUMMARY								
QUESTION #	MALE	FEMALE	TOTAL	% of TOTAL	M as % M TOTAL	F as % F TOTAL	M % row TOTAL	F % row TOTAL
Question 1. Total number of international staff	1142	153	1295	100%	100%	100%	88%	12%
Question 2. Staffing by level - by recruited								
senior management/administration	86	2	88	7%	8%	1%	98%	2%
department heads/research thrust leaders	134	9	143	11%	12%	6%	94%	6%
senior and/or principal scientists	519	49	568	44%	45%	32%	91%	9%
junior or associate scientists	85	26	111	9%	7%	17%	77%	23%
visiting scientists/research fellows	130	14	144	11%	11%	9%	90%	10%
postdoctoral scientists/fellows	88	19	107	8%	8%	12%	82%	18%
associate experts	18	8	26	2%	2%	5%	69%	31%
other internationally recruited	82	26	108	8%	7%	17%	76%	24%
administrative staff/or professional support staff								
TOTAL	1142	153	1295	100%	100%	100%	88%	12%
Question 3. Age (years)								
20-30	49	17	66	6%	5%	12%	74%	26%
31-40	336	63	399	33%	32%	44%	84%	16%
41-50	430	48	478	40%	41%	34%	90%	10%
51-60	197	13	210	18%	19%	9%	94%	6%
61 and above	42	2	44	4%	4%	1%	95%	5%
TOTAL	1054	143	1197	100%	100%	100%	88%	12%
Question 4. Nationality								
Asia/Oceania	187	17	204	17%	18%	12%	92%	8%
Latin America/Caribbean	100	8	108	9%	10%	6%	93%	7%
Sub-Saharan Africa	150	9	159	13%	14%	6%	94%	6%
West Asia/North Africa	40	3	43	4%	4%	2%	93%	7%
North America	203	55	258	22%	19%	38%	79%	21%
Europe	310	48	358	30%	30%	33%	87%	13%
Australia/New Zealand	37	4	41	3%	4%	3%	90%	10%
Japan	20	0	20	2%	2%	0%	100%	0%

Annex 2, Table 3
1991 Human Resources Survey

QUESTION #	MALE	FEMALE	TOTAL	% of TOTAL	M as % M TOTAL	F as % F TOTAL	M % row TOTAL	F % row TOTAL
TOTAL	1047	144	1191	100%	100%	100%	88%	12%
Question 5. Tenure at Center (number of years employed at Center)								
Less than 1	133	34	167	14%	13%	24%	80%	20%
1-3	377	57	434	36%	36%	40%	87%	13%
4-6	186	33	219	18%	18%	23%	85%	15%
7-9	126	5	131	11%	12%	3%	96%	4%
More than 10	225	15	240	20%	21%	10%	94%	6%
TOTAL	1047	144	1191	100%	100%	100%	88%	12%
Question 6. Location/ Posting								
Headquarters	730	113	843	71%	69%	78%	87%	13%
Outposted (regional or field position)	321	31	352	29%	31%	22%	91%	9%
TOTAL	1051	144	1195	100%	100%	100%	88%	12%
Question 7. Funding source								
In TAC approved core staff positions	771	100	871	79%	80%	76%	89%	11%
Other staff positions	195	31	226	21%	20%	24%	86%	14%
TOTAL	966	131	1097	100%	100%	100%	88%	12%
Question 8. Staff on part-time contracts (<75%)	11	2	13	100%	100%	100%	85%	15%
Question 9. Degree levels (highest degree received)								
Ph.D. or equivalent	799	77	876	73%	76%	53%	91%	9%
Msc/MA/ or equivalent	158	46	204	17%	15%	32%	77%	23%
Other	95	21	116	10%	9%	15%	82%	18%
TOTAL	1052	144	1196	100%	100%	100%	88%	12%
Question 10. Discipline (in which highest degree received)								
Crop sciences	366	29	395	33%	35%	20%	93%	7%
Animal sciences	71	5	76	6%	7%	3%	93%	7%
Cellular sciences (microbiology)	75	19	94	8%	7%	13%	80%	20%

QUESTION #	MALE	FEMALE	TOTAL	% of TOTAL	M as % M TOTAL	F as % F TOTAL	M % row TOTAL	F % row TOTAL
Forestry/agroforestry	20	1	21	2%	2%	1%	95%	5%
Other biological sciences	102	9	111	9%	10%	6%	92%	8%
Chemistry	9	0	9	1%	1%	0%	100%	0%
Physical sciences	10	0	10	1%	1%	0%	100%	0%
Environmental/soil and resource mngt. sciences	85	3	88	7%	8%	2%	97%	3%
Engineering	44	0	44	4%	4%	0%	100%	0%
Social/economic sciences	131	38	169	14%	13%	27%	78%	22%
Computer/information sciences	29	17	46	4%	3%	12%	63%	37%
Mathematics/statistics	8	2	10	1%	1%	1%	80%	20%
Management/administration	59	6	65	5%	6%	4%	91%	9%
Other (specify)	37	14	51	4%	4%	10%	73%	27%
TOTAL	1046	143	1189	100%	100%	100%	88%	12%
Question 11. Staff actively engaged in biotechnology research	68	24	92	0%	0%	0%	74%	26%
Question 12. Years of relevant professional experience (post Msc or equiv.)								
< 5 years	72	10	82	7%	7%	9%	88%	12%
5 - 9 years	169	29	198	18%	17%	26%	85%	15%
10-19 years	430	47	477	43%	43%	42%	90%	10%
20-30 years	276	21	297	27%	28%	19%	93%	7%
> 30 years	56	5	61	5%	6%	4%	92%	8%
TOTAL	1003	112	1115	100%	100%	100%	90%	10%
Question 13. Marital status (number of staff)								
married w/spouse in residence	881	69	950	79%	83%	48%	93%	7%
married w/out spouse in residence	55	8	63	5%	5%	6%	87%	13%
single/divorced/widowed	127	68	195	16%	12%	47%	65%	35%
TOTAL	1063	145	1208	100%	100%	100%	88%	12%
Question 14. Children (number of staff)								
With children	859	69	928	78%	82%	50%	93%	7%
No children	185	70	255	22%	18%	50%	73%	27%
TOTAL	1044	139	1183	100%	100%	100%	88%	12%

Annex 2, Table 3
1991 Human Resources Survey

QUESTION #	MALE	FEMALE	TOTAL	% of TOTAL	M as % M TOTAL	F as % F TOTAL	M % row TOTAL	F % row TOTAL
Part III. Additional Information for Analysis of Gender Staffing								
18. Number of locally-recruited scientists (1991)*		109	109	n/a	n/a	n/a	0%	100%
19. Number of locally-recruited senior managers/ admin. (1991)*		26	26	n/a	n/a	n/a	0%	100%
20. International consultants hired in 1991		41	41	n/a	n/a	n/a	0%	100%
21. Regional and/or national consultants hired in 1991		34	34	n/a	n/a	n/a	0%	100%
22. Spouses of internationally-recruited staff hired as consultants		17	17	n/a	n/a	n/a	0%	100%
23. Short-course group trainees (in headquarters and regions) in 1991		19	19	n/a	n/a	n/a	0%	100%
24. Ph.D. trainees in 1991		45	45	n/a	n/a	n/a	0%	100%
25. MSc trainees in 1991		48	48	n/a	n/a	n/a	0%	100%

* Data for total number of locally-recruited scientists and managers estimated from center publications in order to draw comparisons to 1994 and 1997.

ANNEX 3. LIST OF ACRONYMS

CGIAR	Consultative Group for International Agricultural Research
TAC	Technical Advisory Committee

CGIAR Centers

CIAT	Centro Internacional de Agricultura Tropical (Columbia)
CIFOR	Center for International Forestry Research (Indonesia)
CIMMYT	Centro Internacional de Mejoramiento de Maiz y Trigo (Mexico)
CIP	Centro Internacional de la Papa (Peru)
ICARDA	International Center for Agricultural Research in the Dry Areas (Syria)
ICLARM	International Center for Living Aquatic Resources Management (Philippines)
ICRAF	International Center for Research in Agroforestry (Kenya)
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics (India)
IFPRI	International Food Policy Research Institute (USA)
IIMI	International Irrigation Management Institute (Sri Lanka)
IITA	International Institute of Tropical Agriculture (Nigeria)
ILRI	International Livestock Research Institute (Kenya)
IPGRI	International Plant Genetics Resources Institute (Italy)
IRRI	International Rice Research Institute (Philippines)
ISNAR	International Service for National Agricultural Research (The Netherlands)
WARDA	West Africa Rice Development Association (Cote d'Ivoire)