TABLE OF CONTENTS

REPORT ON THE PARTICIPATION OF WOMEN IN THE FIELDS OF METEOROLOGY, OPERATIONAL HYDROLOGY AND RELATED GEOPHYSICAL SCIENCES

I INTRODUCTION

The Beijing Declaration and Platform for Action of the 1995 United Nations Fourth World Conference on Women broke new ground in recognizing the crucial role of women in sustainable development and in the protection of human rights and the environment. It recommended actions to be taken by governments, non-governmental and international organizations as well as by civil society on critical areas of concern, to encourage the advancement of women in all walks of life.

In a statement to the Beijing Conference, the World Meteorological Organization (WMO) noted that although there were increasing numbers of women working in meteorology and hydrology in many parts of the world, these professions were still overwhelmingly male-dominated. Among other actions, WMO stressed the need to strengthen the capacities of women to manage and apply science-based knowledge and techniques, and to take a more active role in the activities of the Organization at decision- and policy-making levels.

At its forty-eighth session in 1996, the WMO Executive Council, upon reviewing the results of the Beijing Conference, requested WMO to undertake a survey, by means of a questionnaire, on the *Participation of Women and Men in the Activities of WMO and in the Fields of Meteorology, Operational Hydrology and Related Geophysical Sciences*.

The Executive Council requested the Secretary-General to work with interested Members to assess the status of women in the fields of meteorology, operational hydrology and related geophysical sciences, and to report the results to its next session in 1998. Some Members felt that there was a need to gather baseline data, that could be updated periodically, to track the progress in the meteorological and hydrological professions in achieving full opportunity for women working in these fields.

The Secretary-General responded by forming a small expert group, which worked by correspondence, and drafted a questionnaire on the participation of women in the fields of the meteorology, operational hydrology and related geophysical sciences.

The analysis of the questionnaire responses is presented in this report, which describes the process and the findings of that survey. No attempt has been made to corroborate any of the data provided by the NMHSs. The results of the survey have been discussed at great length and have provided the inspiration for many of the recommendations made by the *International Expert Meeting on the Participation of Women in Meteorology and Hydrology*, organized by WMO in Bangkok, Thailand in December 1997.

As we look to the next millennium, it is hoped that WMO and its Members will continue to work together in implementing these recommendations, including the development of a gender mainstreaming policy for WMO, that are consistent with the goal of maintaining the highest standards of efficiency and competence for our Organization.

WMO wishes to acknowledge with thanks and appreciation the contributions made by members of the Ad hoc Working Group on Women's Issues for their assistance in preparing this report, in particular, Dr Dian Gaffen of the US National Oceanographic and Atmospheric Administration and Ms Donna Franklin of the US National Weather Service.

II. QUESTIONNAIRE

The Questionnaire on the Participation of Women and Men in the Activities of the World Meteorological Organization and in the Fields of Meteorology, Operational Hydrology and Related Geophysical Sciences (hereafter referred to as the Questionnaire) was distributed to Members (the Permanent Representatives of each Member country of the WMO) by the Secretariat on 2 November 1996 with a request for each Member to designate a focal point for Women's Issues and to return the completed Questionnaires by 30 January 1997. A copy of the Questionnaire is included as Annex A.

The Questionnaire requested information in six basic areas:

- previous studies related to the topic of women's participation in meteorology, hydrology and related geophysical sciences;
- the participation of women and men in the activities of WMO and its constituent bodies during 1991–1995;
- the existence of gender-sensitive policies in the national Meteorological and Hydrological Services (NMHSs);
- the participation of women and men in educational and training programs in meteorology and hydrology;
- the employment of women and men in these fields; and
- male and female membership in professional societies serving meteorology, hydrology and related geophysical sciences.

In an effort to ensure a representative global sampling, a second letter was mailed to Members who did not respond. A third effort to solicit more responses was made by a Member in each Region during July and August 1997.

By October 1997, 94 responses were received, including two from countries that sent letters rather than completing the questionnaire (Annex B, Table 1). The data from the responses of the countries that completed the Questionnaire form the basis of this analysis and are presented in Annex B, Tables 2–5.

III. CONTEMPORARY AND HISTORICAL PERSPECTIVES ON WOMEN IN WMO

Since its beginning, some women have always been active in the work of WMO. However, their participation has generally been in limited numbers and with limited decision-making responsibility.

In terms of the representation of countries within the WMO, we find that very few women have served as Permanent Representatives. The lists of participants at WMO Congresses since the first Congress in 1951 show only a handful of female Principal Delegates (Figure III-1). (Principal Delegates are generally the Permanent Representatives with WMO.) For the first four Congresses, only one woman, H. Gudmundsson of Iceland, participated as Principal Delegate. During the next three Congresses, no female Principal Delegates were identified. During the last Congress in 1995, only five of the 161 Principal Delegates were women.

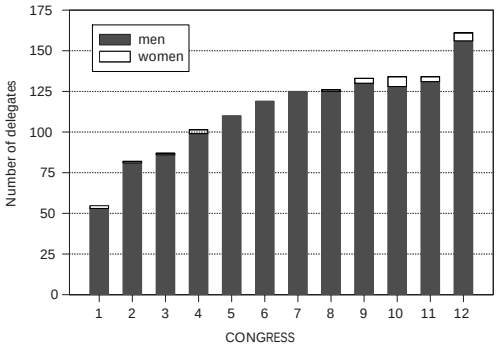

Figure III-1 — Principal delegates to WMO Congresses (1951–1995)

As Members of Delegations to Congress (Figure III-2), female participation has increased over the past 45 years. However, the increase in the number of women has not nearly kept pace with the increase in the number of men. When viewed in terms of the average number of women and men per delegation (Figure III-3), it is clear that men are far more likely than women (about 10 times) to serve as members of delegations. Additionally, the number of men per delegation

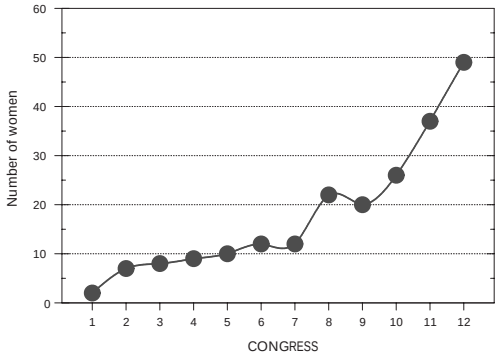

Figure III-2 — Female Members of delegations to WMO Congresses (1951–1995)

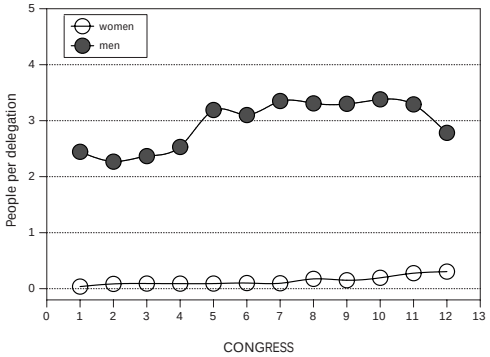

Figure III-3 — Average number of men and women on WMO Congress delegations (1951–1995)

has increased by about one person per delegation over the lifetime of WMO, while the number of women has increased by less than 0.4 person per delegation. Thus, as the opportunities for participation have increased, men have received most of them.

IV. ANALYSIS OF QUESTIONNAIRE RESPONSES BY REGION

Structure of WMO Regional Associations

For the purposes of WMO, the WMO Congress has divided the globe into six Regional Associations:

RA I Africa
RA II Asia
RA III South America
RA IV North and Central America
RA V South-West Pacific
RA VI Europe

The geographical limits of the corresponding Regions are shown in Figure IV-1. Each Regional Association is responsible for carrying out the functions specified in the WMO Convention, including: promoting the execution of the Resolutions of WMO Congress and the Executive Council (which is the Executive Body of the Organization) in their respective Regions; coordinating meteorological and related activities in their respective Regions; making recommendations to Congress and the Executive Council on matters within the interest of their respective Regions; and considering matters brought to their attention by the Executive Council. The Regional Associations normally meet once every four years.

This analysis of the Questionnaire data is organized by WMO Regional Association. The presentation by Regional Association should help each Region assess the role of women in meteorology, operational hydrology and related geophysical science within the region. However, it may be useful to group countries in a different manner — for example, according to degree of development, overall educational levels of women, etc. The presentation of the complete response data in Annex B, Tables 2–5 should facilitate such analyses.

Methodology

The data for each country have been summarized using six summary statistics, each representing the female participation rate in a different area of activity, expressed as a percentage.

WMO Activities. The first statistic is the female participation rate in WMO activities. It is the ratio of the sum of women to the sum of men plus women participating in various activities. The activities include participating in Technical Commission meetings and in regional meetings, and serving as members of Commissions, Working Groups, Subgroups, and as Rapporteurs.

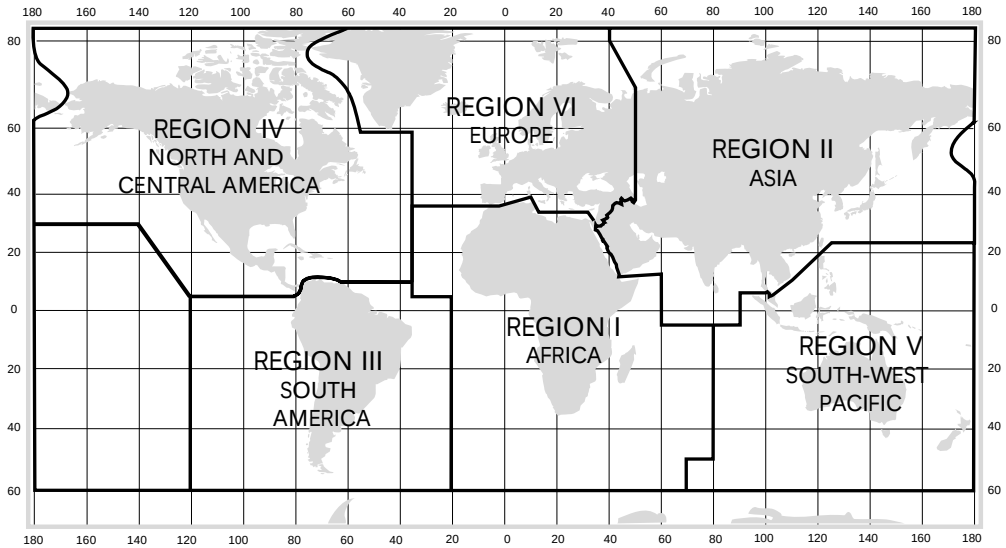

Figure IV-1 — Regions of the World Meteorological Organization

This summary statistic aggregates information for several different categories of activities and expresses the number of women involved as a percentage of the total. It should be noted that in some cases the total may not represent the actual number of people participating in a given area. For example, if a given person served as a WMO Commission Member and participated in a WMO regional meeting, he or she would be doubly counted. However, this problem is somewhat mitigated by the consideration that the representation of that country in WMO activities by men and women has been accurately estimated.

Education. The second and third statistics are female participation rates in educational activities, calculated separately for enrollment and for graduation. In each case, the female participation rate is the ratio of the total number of women enrolled in non-university programmes, university undergraduate programmes, and university graduate programmes, to the total number of men plus women enrolled in these programmes. Similarly, a female participation rate for graduation was calculated for the same programmes.

Employment. The fourth and fifth statistics are the percentage of women employed in professional and support capacities in the workforce. The statistics are the ratio of the total number of professional (or support) women in all sectors — civilian government, private sector, academic institutions and other — to the total number of professional (or support) men plus women in all sectors, expressed as percentages.

Professional Societies. A sixth summary statistic is the percentage of female members of professional societies, computed as the ratio of the total number of women in all professional societies reported to the total number of members.

Regional Summary. Average values of the summary statistics for each Regional Association are also presented. These averages represent a simple mean of the values of the statistics from all the countries which responded within the region. The averaging does not take into account the relative sizes of the meteorological and hydrological communities of the different countries; equal weight is given to each country. The main results, however, are not sensitive to this choice of averaging procedure. In most regions, and for most statistics, there is little difference between a weighted average and a non-weighted average for the region.

For each Regional Association, the six statistics for each country in the region and the regional summary are shown graphically in the next sections. If a particular statistic was not applicable to a given country (for example, if there are no relevant professional societies in that country) an asterisk is shown. If the data for a country were not available from the Questionnaire response, two asterisks are shown. In some cases, the female participation rates are actually zero, in which case there are no asterisks. The situation for the world is summarized in Section V, Global Summary Findings, using the data from the six Regional Associations.

Problematic Response Data

The vast majority of the data furnished in the Questionnaire responses is analyzed and presented here. However, some information has not been included for the reasons outlined below.

The information on participation in Executive Council delegations is not included in this analysis because only about one-sixth of WMO Members participate in the Executive Council.

The information on service as in-country staff to the Permanent Representative is not included because it appeared that the question was poorly worded and perhaps misinterpreted by some respondents. The very large numbers reported as in-country staff by some countries probably represent not the staff responsible for WMO-related matters but the entire staff of the nation's meteorological or hydrological service.

Data on salary comparison between men and women are not included in this report since only about 42 per cent of the countries provided specific salary information. Countries which did respond reported information in different currencies and for different time frames. Also, many of the responses regarding salaries may reflect a misinterpretation of the intent of the Questionnaire. In numerous instances, the responses indicate that the median salaries for men and for women are identical. It seems unlikely that the actual median salaries are equal. Perhaps the intent was to report that men and women in equivalent positions are equally compensated.

Analysis

Regional Association I — Africa

1. Response Rate

Of the 52 Member countries of WMO Region I, only 15 responded, as shown in Figure IV-2. The low response rate is perhaps due to the poor communication network in the Region.

2. Quality of Responses

The quality of the responses was generally good; however, some countries did not respond to certain sections of the Questionnaire because they either could not get the data or did not have national programmes pertaining to a particular section.

3. Bibliographic References

None of the countries indicated previous analyses of participation of women and men in WMO activities or programmes in the fields of meteorology, operational hydrology and related geophysical sciences.

4. Participation in the Activities of WMO

Figure IV-3 illustrates the participation of women in WMO activities. Chad, Mali, Morocco, Niger, Senegal, Seychelles, Tunisia and Uganda reported that there was no participation by women in WMO activities. Zimbabwe reported the highest rate of participation of women in WMO activities (19 per cent). The average for the Region is 5 per cent overall. The average rate of participation of women in various WMO activities is summarized below:

Commission Meetings:	4%
Regional Meetings:	8%
Commission Members:	3%
Working Groups/Subcommittees:	7%
Rapporteurs:	5%

5. Gender-Sensitive Policies

The following countries reported having gender-sensitive polices in the following areas:

Staffing: Chad, Morocco, Namibia, Niger, Senegal, South Africa, Tunisia and Uganda
Operational activities: Chad, Gambia, Morocco, Niger, Senegal, Tunisia and Uganda
Decision-making: Morocco, Niger, Senegal, Tunisia and Uganda
Medium term plan: Gambia, Kenya, Senegal and South Africa
Budget allocated to integrate gender into policies: Gambia (20 per cent), Namibia, Tunisia (18 per cent) and Uganda (.06 per cent)

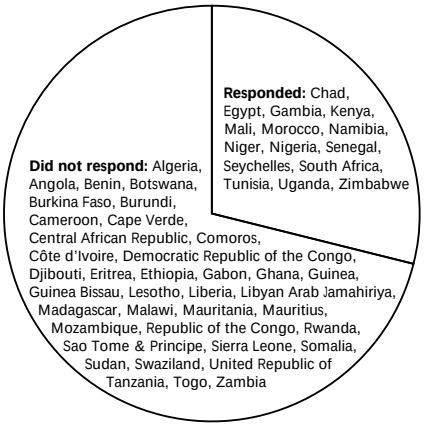

Figure IV-2 — RA I (Africa) 29% response rate

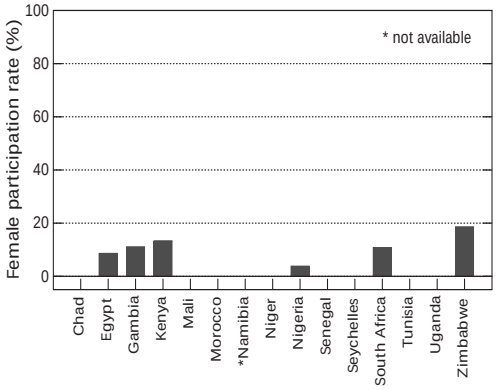

Figure IV-3 — Participation of women in WMO activities in RA I

6. Participation in Educational Programmes

Of the 15 countries that responded to the Questionnaire, 10 have either university or non-university education programmes in meteorology and hydrology. Namibia and Zimbabwe reported no meteorology or hydrology programmes in their countries. Egypt and Gambia have programmes but reported that there were no women enrolled in them. Figure IV-4 shows that the percentage of women enrolled in programmes ranges between zero (Egypt and Gambia) and 55 per cent (Seychelles), with a regional average of 14 per cent. The number of female graduates ranges from 8 per cent (Egypt) and 55 per cent (Seychelles), resulting in a regional average of 18 per cent.

7. Employment

In response to Part V of the Questionnaire, some of the countries gave the required information on the employment of women in the professional and support positions in their respective countries, as illustrated by Figure IV-5. Women comprise between zero (Chad, Gambia and Niger) and 62 per cent (Namibia) of the professional workforce, with a regional average of 13 per cent. Women support personnel range from 0.5 per cent (Senegal) and 44 per cent (Seychelles) of the workforce, with a regional average of 16 per cent.

8. Professional Society Membership

Figure IV-6 shows the data on professional society membership. Gambia and Niger did not provide data for this category. The responses from Mali, Morocco, Namibia and Zimbabwe indicate that they do not have professional societies. Chad, Egypt, Senegal, Seychelles, Tunisia and Uganda reported that they each have one professional society, while Nigeria indicated it had two societies, but it only provided data for one. Membership of women in professional societies ranged from 3 per cent (Senegal) to 18 per cent (South Africa), with a regional average of 13 per cent.

9. Summary

Figure IV-7 shows that the rate of participation of women in various areas related to meteorology and hydrology ranges from 5 per cent in WMO activities to 18 per cent for graduates in the fields of

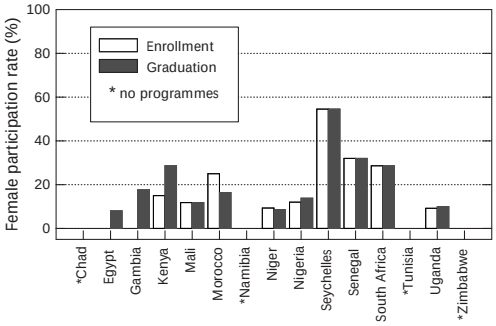

Figure IV-4 — Participation of women in Educational Programmes in RA I

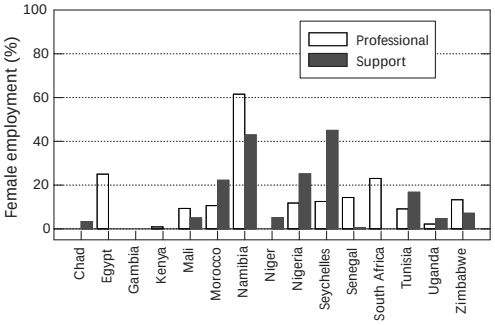

Figure IV-5 — Employment of women (all sectors) in RA I

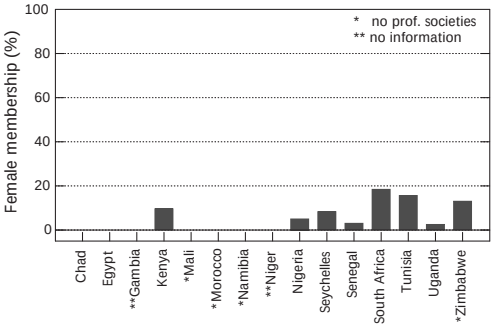

Figure IV-6 — Membership of women in Professional Societies in RA I

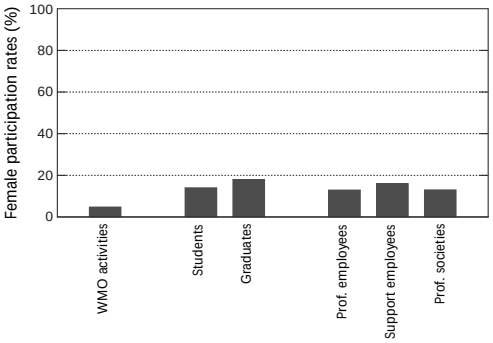

Figure IV-7 — RA I average female participation rates

meteorology and hydrology. The data suggest that women are underrepresented in WMO activities, the workforce, and in professional society membership in comparison to the number of female graduates in meteorology and hydrology.

Regional Association II — Asia

1. Response Rate

Region II comprises 33 Members in Asia. Nineteen Members responded to the WMO Questionnaire, resulting in a response rate of 58 per cent, as shown in Figure IV-8.

2. Quality of Responses

The quality of the responses received was very good, although many of the Members did not have relevant data to report in some categories.

3. Bibliographic References

None of the countries indicated previous analyses of participation of women and men in WMO activities or programmes in the fields of meteorology, operational hydrology and related geophysical sciences.

4. Participation in WMO Activities

All of the responses from Members of Region II provided data on participation of women in WMO activities, as shown in Figure IV-9. All countries, except the Kyrgyz Republic, responded that they take part in WMO activities. The average percentage of women participating in various WMO activities is summarized below:

Commission meetings:	21%
Regional meetings:	6%
Members of Commissions:	14%
Members of Working Groups and Subgroups:	7%
Rapporteurs:	22%

In Region II the female participation rate in WMO activities varied from zero (Kuwait, Macao, Maldives, Oman, Qatar and Sri Lanka) to 54 per cent in Kazakstan, where six of a total of 11 participants were women. The average female participation rate is 12 per cent.

5. Gender-Sensitive Policies

Sixteen countries responded to this section. Several countries stated that they have gender-sensitive policies in specific areas, including:

Staffing: Japan, Kazakstan, the Kyrgyz Republic, Myanmar, Nepal and the Socialist Republic of Viet Nam

Operational activities: Japan, Kazakstan, Kyrgyz Republic, Myanmar, Nepal, Republic of Korea and the Socialist Republic of Viet Nam

Decision-making: Kazakstan, Kyrgyz Republic and Nepal

Medium term plan: Kyrgyz Republic, Macao, Nepal and the Socialist Republic of Viet Nam

Budget allocated to integrate gender into policies: Nepal and the Socialist Republic of Viet Nam

Figure IV-8 — RA II (Asia) 58% response rate

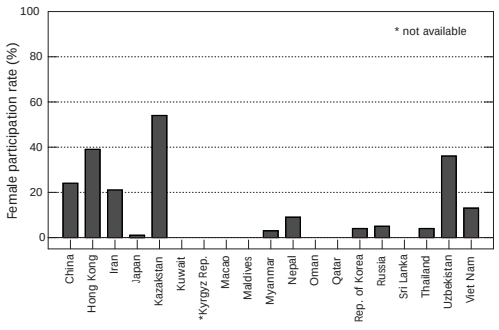

Figure IV-9 — Participation of women in WMO activities in RA II

6. Participation in Educational Programmes

Twelve countries reported having either non-university or university programs in the fields of meteorology and/or hydrology. As shown in Figure IV-10, women students constitute between zero (Japan) and 65 per cent (Kyrgyz Republic) of total students, with a regional average of 34 per cent. The percentage of female graduates ranges from 5 per cent (Nepal) and 64 per cent (Krygyz Republic), with a regional average of 33 per cent.

7. Employment

Figure IV-11 illustrates that women comprise between zero (Kuwait, Qatar) and 60 per cent (Kazakstan) of the professional workforce, with a regional average of 18 per cent. Support personnel constitute from zero (Kuwait, Qatar) to 81 per cent (Kazakstan) of the workforce, with a regional average of 26 per cent.

8. Professional Society Membership

Five countries provided data for this section: China, Hong Kong (China), Kuwait, the Kyrgyz Republic and the Republic of Korea. Figure IV-12 shows that the percentage of female members of professional societies ranges from zero (Kuwait) to 41 per cent (China), with a regional average of 14 per cent. The age and gender distribution of professional society membership shows a smaller female percentage of members over 55 years than in the younger age brackets.

9. Summary

Figure IV-13 indicates that the participation rate of women ranges from 12 per cent (WMO activities) to 33 per cent (graduates of educational programmes) in the areas meteorology and hydrology. Although women comprise about one-third of the graduates in the fields of meteorology and hydrology, they comprise only about 18 per cent of the professional workforce in those same fields. It also appears that women are underrepresented in professional societies, where only 14 per cent of the members are women.

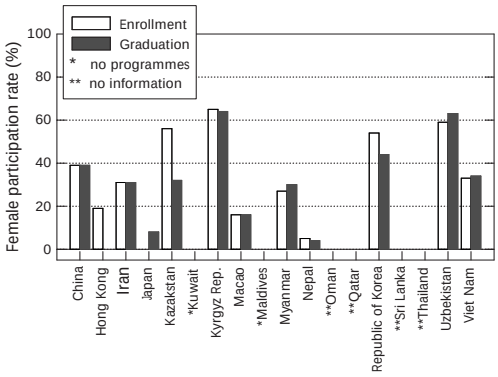

Figure IV-10 — Participation of women in educational programmes in RA II

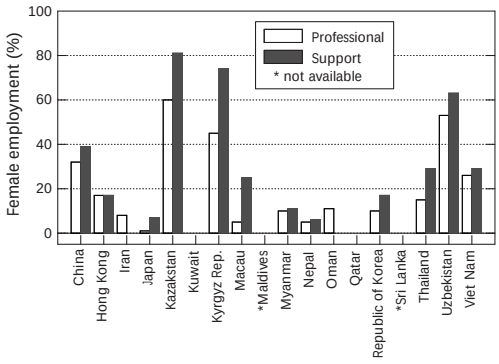

Figure IV-11 — Employment of women (all sectors) in RA II

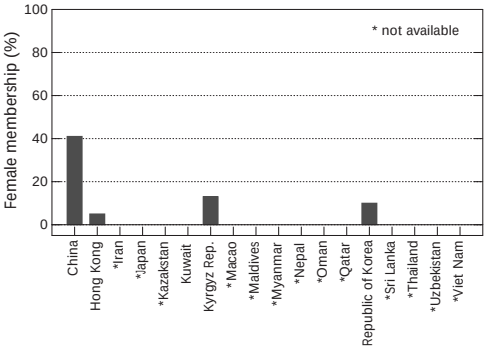

Figure IV-12 — Participation of women in Professional Societies in RA II

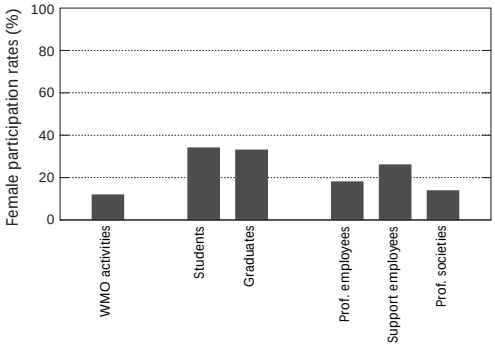

Figure IV-13 — RA II average female participation rates

Region III — South America

1. Response Rate

Region III comprises 12 Members in South America. Eleven countries answered the Questionnaire, resulting in a response rate of 92 per cent, as illustrated by Figure IV-14.

2. Quality of Responses

The quality of the responses received was good. However, some parts of the Questionnaire were not completely answered by some countries, and only a few countries from the Region reported having educational programmes in hydrology and/or meteorology.

3. Bibliographic References

None of the countries indicated previous analyses of participation of women and men in WMO activities or programmes in the fields of meteorology, operational hydrology and related geophysical sciences.

4. Participation in the Activities of WMO

The female participation rate in WMO activities in Region III is 15 per cent and varies from zero (Bolivia and Brazil) to 40 per cent in Guyana, where two out of five participants were women (Figure IV-15).

The results from this part of the Questionnaire indicate that female participation is most significant as Commission Members and in Working Groups and Subgroups. The average rate of participation of women in WMO activities is summarized below:

Commission Meetings:	3%
Regional Meetings:	9%
Commission Members:	23%
Working Groups and Subgroups:	28%
Rapporteurs:	0%

5. Gender-Sensitive Policies

Only four countries reported having gender-sensitive policies in their meteorological and/or hydrological services:

Staffing: Colombia and Venezuela
Operational activities: Colombia and Venezuela
Decision-making: Colombia, Uruguay and Venezuela
Medium term plan: Colombia, Ecuador and Venezuela
Budget allocated to integrate gender into policies: Bolivia

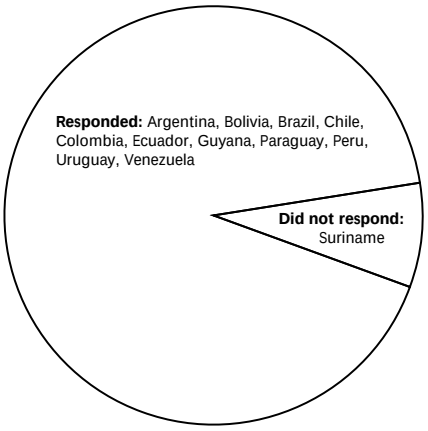

Figure IV-14 — RA III (South America) 95% response rate

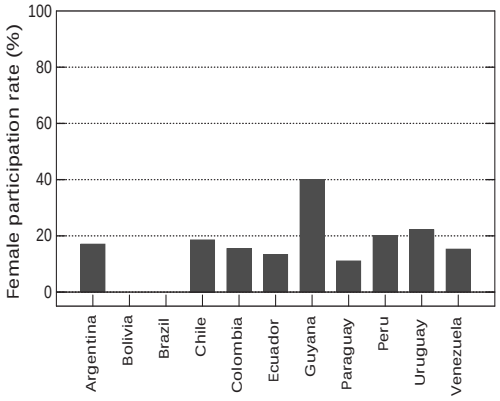

Figure IV-15 — Participation of women in WMO activities in RA III

6. Participation in Educational Programmes

Very few countries from Region III have educational programmes for meteorology and hydrology. Chile and Venezuela are the only countries that have non-university, undergraduate and postgraduate programmes. Brazil and Colombia have graduate and postgraduate programmes. Uruguay and Paraguay have non-university and undergraduate programs. Argentina has a program at the post-graduate level. Guyana and Ecuador reported that they did not have any educational programmes in hydrology or meteorology.

Figure IV-16 illustrates that women constitute from 16 per cent (Colombia) to 74 per cent (Uruguay) of the students enrolled during 1994–1995. The average for the eight countries that provided data is 44 per cent. The average fraction of female graduates for Region III varies from 20 per cent (Bolivia) to 62 per cent (Uruguay), with a regional average of 40 per cent. Argentina is not taken into account because, although four educational programmes were reported, no data were provided.

7. Employment

Each country reported employment data. Figure IV-17 shows that Uruguay and Bolivia were the only countries where no women were employed in the professional category. The average for Region III is 21 per cent, ranging from zero (Uruguay and Bolivia) to 47 per cent (Brazil).

The average percentage of women as support personnel in the fields of meteorology and hydrology is 18 per cent for the Region, ranging from 3 per cent (Ecuador) to 53 per cent (Guyana).

Brazil, Guyana and Chile reported that Women Coordinations have been created within the institutions of hydrology and meteorology. In Colombia, a committee has been founded within the IDEAM, Institute of Hydrology, Meteorology and Environmental Studies, to analyze the role of women in the institution and to discuss policies to reach a fair and better balance in opportunities for men and women.

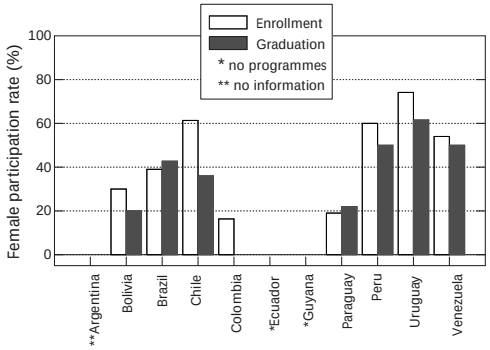

Figure IV-16 — Participation of women in Educational Programmes in RA III

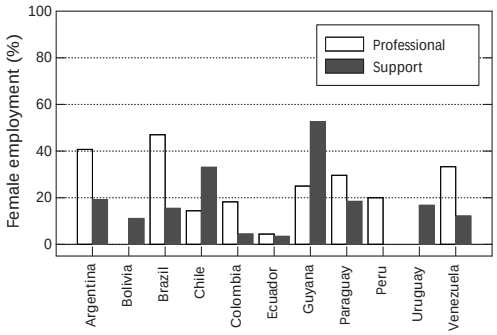

Figure IV-17 — Employment of women (all sectors) in RA III

8. Professional Society Membership

Four Members (Guyana, Paraguay, Peru and Uruguay) did not report data for this section. The highest percentages of women as members of professional societies are in Brazil (61 per cent) and Argentina (49 per cent); Ecuador reported the lowest membership for women (11 per cent). The average percentage for the Region is 19 per cent. Brazil, Chile, and Colombia each reported two professional societies in their countries. Argentina, Bolivia, Ecuador, and Venezuela each reported one. (See Figure IV-18.)

9. Summary

The responses to the Questionnaire show that average rate of participation for women in meteorology, hydrology and related geophysical sciences ranges from 15 per cent (participation in WMO activities) to 44 per cent (percentage of women enrolled in educational programmes). The percentage of women students in meteorology and hydrology is twice the percentage of females employed in professional capacities in the same fields. Women participate in professional societies at about the same rate that they are employed in the fields of meteorology and hydrology. (See Figure IV-19.)

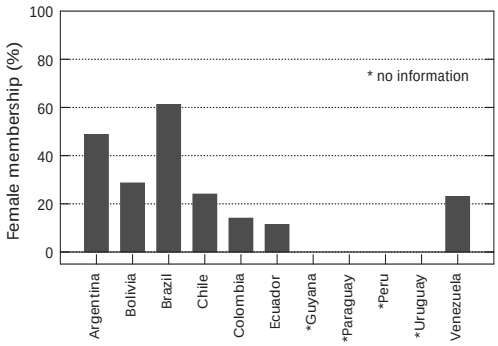

Figure IV-18 — Membership of women in Professional Societies in RA III

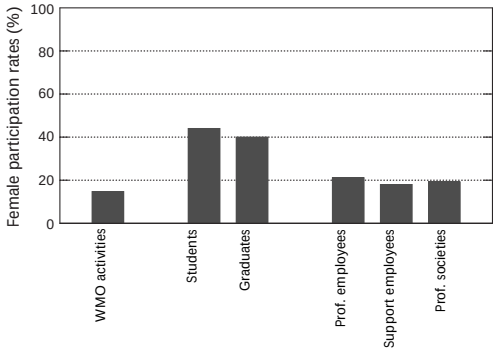

Figure IV-19 — RA III average female participation rates

Region IV — North and Central America

1. Response Rate

Region IV comprises 22 members in North and Central America. Twelve countries responded to the Questionnaire, resulting in a response rate of 55 per cent, as shown in Figure IV-20. The three largest and most populous nations in the Region (Canada, Mexico and the United States) are included in the responses.

2. Quality of Responses

The quality of the responses received was very high. Most of the Questionnaires were practically fully complete, although many of the Members did not have relevant data to report in some categories (e.g., educational programmes and professional societies) in which there are no national programmes.

3. Bibliographic References

Canada and the United States included publications and citations of previous studies on the participation of women and men in meteorology or in the physical sciences. The references are included in Annex C. Those references preceded by an asterisk were forwarded to WMO. In addition, the United States response noted that “interesting information for and about women in meteorology can be found on the World Wide Web at http://www.nssl.uoknor.edu/~nws/women/women2.html”.

4. Participation in the Activities of WMO

Eleven of the 12 responses from Region IV Members provided data on participation in WMO activities, as indicated by Figure IV-21. (Haiti did not provide data in this area). In Region IV, the female participation rate in WMO activities varies from

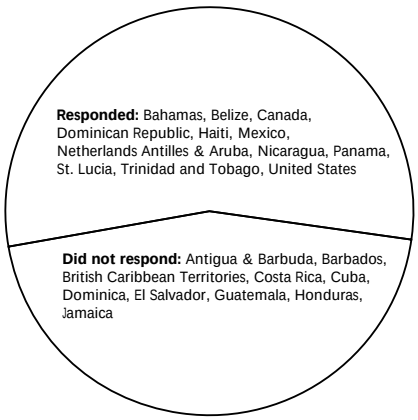

Figure IV-20 — Membership of women in Professional Societies in RA III

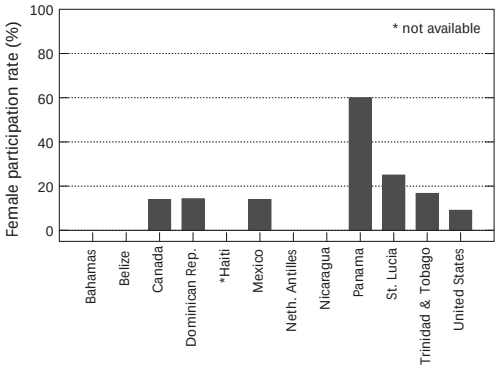

Figure IV-21 — Participation of women in WMO activities in RA IV

zero (Bahamas, Belize, Netherlands Antilles/Aruba and Nicaragua) to 60 per cent (Panama), where three of the five participants are women. The average female participation rate for the Region is 13 per cent. The average percentage of women participating in WMO activities is summarized below:

Commission Meetings:	6%
Regional Meetings:	12%
Commission Members:	11%
Working Groups and Subgroups:	14%
Rapporteurs:	33%

5. Gender-Sensitive Policies

Of the 12 responses from Region IV Members, the countries that report having gender-sensitive policies in each of the following areas include:

Staffing: Canada, Haiti, St. Lucia, Trinidad and Tobago and United States
Operational Activities: Canada, Haiti, St. Lucia, Trinidad and Tobago and United States
Decision-making: Canada, Haiti, St. Lucia, Trinidad and Tobago and United States
Medium term plan: Canada, the Dominican Republic and United States
Budget allocated to integrate gender into policies: Haiti and St. Lucia

6. Participation in Educational Programmes

Six of the 12 responding nations in Region IV reported having educational programmes in meteorology and hydrology (Belize, Canada, Mexico, Nicaragua, Panama and the United States). The data from Canada are actually for mathematics and physical sciences, the main areas of training for meteorologists and hydrologists there.

Figure IV-22 shows that women comprise from 8 per cent (Mexico) to 36 per cent (Panama) of the enrolled students, with a regional average of 23 per cent. Four countries reported graduation data; the percentage of female graduates varies from 23 per cent (United States) to 50 per cent (Nicaragua), with a regional average of 35 per cent.

7. Employment

Figure IV-23 indicates that each country in Region IV reported employment data. Women constitute between from zero to 41 per cent of the professional workforce, the latter statistic coming from Panama, where there are 13 female professionals. In the Bahamas, none of the four professionals are women, and in Belize none of the seven professionals are female. The average percentage of professionals who are women is 17 per cent for the Region.

Female support personnel range from 6 per cent (Haiti) to 47 per cent (Nicaragua) of the total, with the average being 22 per cent. No figures were given for support personnel in the Dominican Republic, Mexico or the Netherlands Antilles/Aruba. The Bahamas reported no female support personnel.

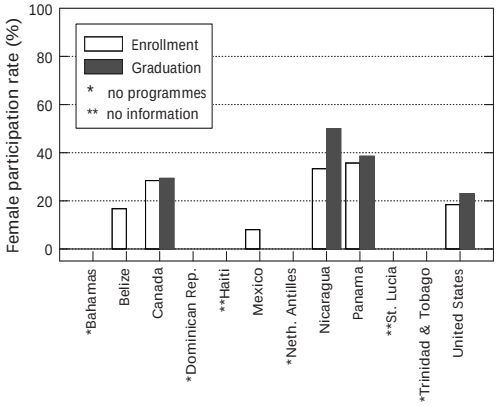

Figure IV-22 — Participation of women in Educational Programmes in RA IV

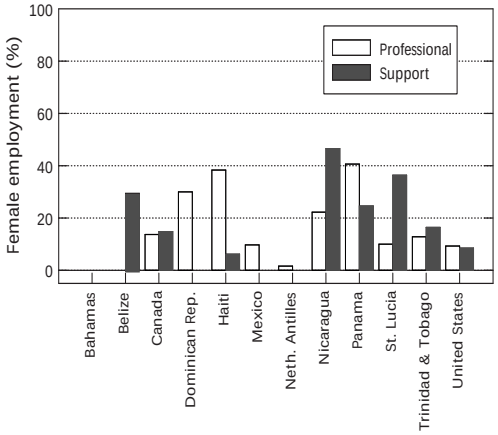

Figure IV-23 — Employment of women (all sectors) in RA IV

8. Professional Society Membership

In Region IV, four Members (Bahamas, Belize, Netherlands Antilles & Aruba, and Trinidad and Tobago) reported that there are no relevant professional societies, and three Members (Nicaragua, Panama and St. Lucia) did not report data. Of the remaining five nations, the fraction of professional society members that are women varied from 2 per cent (Dominican Republic) to 10 per cent, (Canada and the United States), although the data from Canada are a rough estimate. The regional average of female members of professional societies is 7 per cent. (See Figure IV-24.)

In terms of gross numbers, the United States reports the greatest number of professional society members, both female and male, in Region IV. In the United States, the professional society membership has approximately the same female percentage as the employment figures. However, in the other countries with professional societies, women are underrepresented in that they constitute a larger percentage of the employed workforce than of professional society members.

Although the data are few, the age and gender distribution of professional society membership show a much smaller female fraction of members over 55 years old compared to the number of younger women. This might suggest that the professions have become more inclusive of women over the past few decades. A complementary feature is the greater fraction of women in educational programmes than in the workforce, which might lead to higher proportions of women in the professions in the coming years. However, an alternate interpretation of these observations is that women might be more likely to leave the professions than are men.

9. Summary

Among those countries in North and Central America that responded to the Questionnaire, women tend to be underrepresented in the professions of meteorology, hydrology and related geophysical sciences; in educational programmes and professional societies serving those fields; and in the activities of the WMO. Only in Haiti and Panama, both relatively small countries, do the number of women professionals approach 40 per cent of the total. Elsewhere, it is below 30 per cent, and in the largest countries in the region, it is below 15 per cent. The percentage of female students tends to exceed the percentage of women employed in the professions. Women participate in WMO activities at about the same rate that they participate in the professions, but they tend to participate in professional societies at a lower rate in many of the smaller countries in the Region. (See Figure IV-25.)

Region V — South-West Pacific

1. Response Rate

Out of a total of 18 Member countries in Region V, only five Members responded to the WMO Questionnaire, resulting in a 28 per cent response rate, as shown in Figure IV-26.

2. Quality of Responses

The quality of responses received was considered good. Most of the Questionnaires submitted were complete. However, no Members provided information on professional societies.

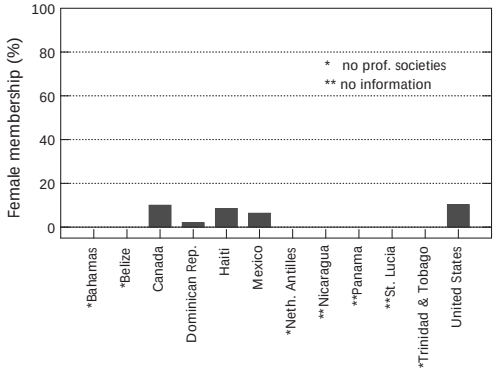

Figure IV-24 — Membership of women in Professional Societies in RA IV

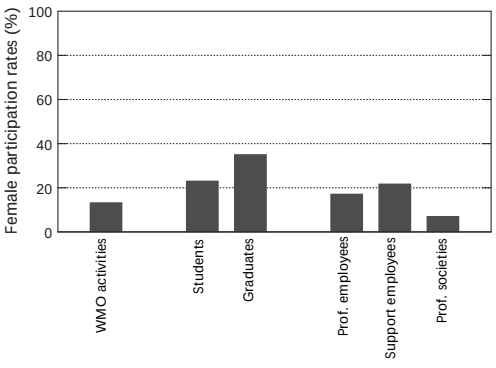

Figure IV-25 — RA IV average female participation rates

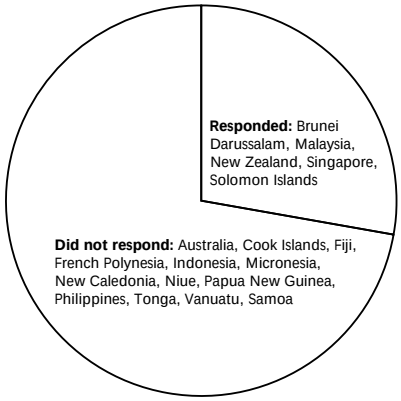

Figure IV-26 — RA V (South-West Pacific) 28% response rate

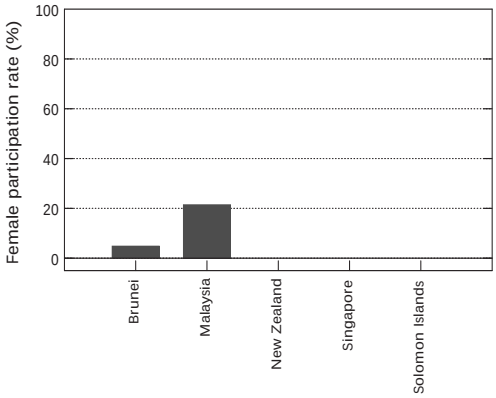

Figure IV-27 — Participation of women in WMO activities in RA V

3. Bibliographic References

None of the Members provided publications and citations of previous studies on the participation of women and men in WMO activities or programmes, or in the fields of meteorology, operational hydrology and related geophysical sciences.

4. Participation in the Activities of the WMO

Of the five Members that responded, New Zealand, Singapore and Solomon Islands reported that no women participated in any of the activities of the WMO during 1991–1995. In Malaysia, although the female participation was high at 21 per cent, only one individual was involved and, in this case, the individual attended the meetings just one time. Brunei reported a female participation rate of 4 per cent. Figure IV-27 shows that the female participation rate ranges from zero to 21 per cent, with a regional average of 5 per cent. The average percentage of women participating in various WMO activities is summarized below:

Commission Meetings:	2%
Regional Meetings:	22%
Commission Members:	0%
Working Groups and Subgroups:	10%
Rapporteurs:	0%

5. Gender-Sensitive Policies

Of the five responses received, only Malaysia reported having gender-sensitive policies, and these are in staffing and operational activities. Other countries reported an absence of gender-sensitive policies in their NMHSs.

6. Participation in Educational Programmes

Four countries in Region V (Brunei, Malaysia, New Zealand and Singapore) reported that training of meteorologists, operational hydrologists and geophysical scientists is not carried out at the local institutions. Solomon Islands has one non-university programme for professional training in meteorology and operational hydrology; however, only five men enrolled and graduated.

7. Employment

As shown in Figure IV-28, female participation in the professional field ranges from zero (Solomon Islands) to 26 per cent (Singapore), for a regional average of 12 per cent. For support personnel, female participation ranges from 4 per cent (Solomon Islands) to 63 per cent (Brunei), for an average of 32 per cent in Region V.

The results indicate that the overall employment of professional females in these fields is low. Moreover, the fraction of women in the support group is almost three times the percentage in the professional group, indicating that women tend to be employed as technicians and observers rather than as researchers and managers.

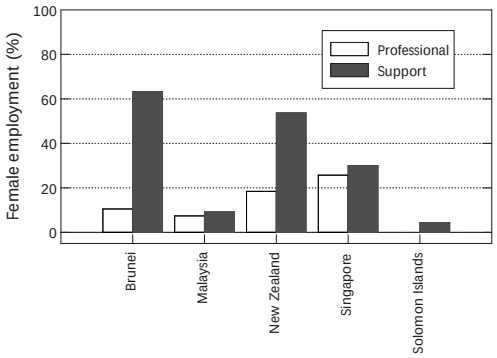

Figure IV-28 — Employment of women (all sectors) in RA V

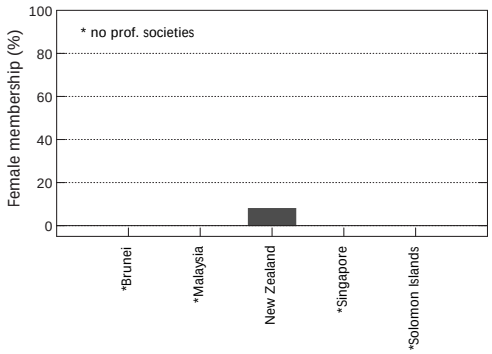

Figure IV-29 — Membership of women in Professional Societies in RA V

8. Professional Society Membership

In four of the five Member countries, there are no professional societies in which meteorologists, operational hydrologists and other related geophysical scientists can participate (Figure IV-29). The reason could be that the numbers of professional meteorologists and hydrologists in the country are too small. New Zealand reported that there are two professional societies which have both male and female members. The total female participation is 8 per cent. No figures were available on the ages of the members.

9. Summary

Some variations between countries is expected since the region consists of developed countries, developing countries and several island nations. Because only five responses were received, it is difficult to deduce trends or identify specific features from the available data. Generally, women are very much underrepresented in the profession as well as in the activities of WMO. Only Brunei and Malaysia had women participating in the activities of WMO, resulting in a regional average of 5 per cent. The percentage of women in Region V employed in the professions of meteorology, hydrology and related geophysical sciences is low, with the highest rate in Singapore (26 per cent). Women participation is also significantly higher in support personnel compared with professional personnel, particularly in Brunei and New Zealand. Very few countries have educational and training programmes in meteorology and hydrology. Although the Solomon Islands have an existing programme, so far there has been no female participation. Aside from New Zealand, where approximately half the women in the profession participate in professional societies, none of the other four countries have professional societies catering to the meteorological and hydrological professions. (See Figure IV-30.)

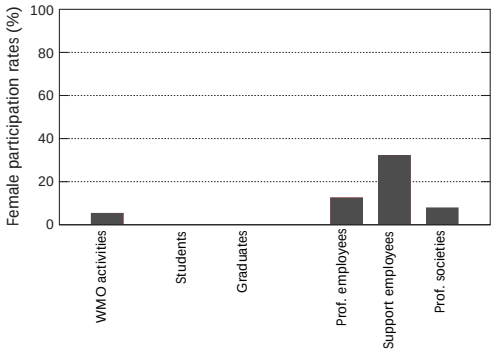

Figure IV-30 — RA V average female participation rates

Region VI — Europe

1. Response Rate

Region VI comprises 47 Member countries of which 32 replied to the Questionnaire, resulting in a response rate of 68 per cent (Figure IV-31). Cyprus and Spain did not complete the Questionnaire; however, the employment information that Spain provided is included in the data.

2. Quality of Responses

Overall, the quality of the responses for Region VI was good. It was evident in some cases that where questions had not been answered this was because it would prove difficult to collect the information, especially where it was necessary to contact other organizations.

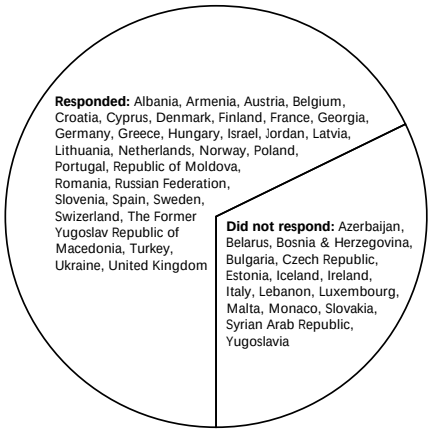

Figure IV-31 — RA VI (Europe) 68% response rate

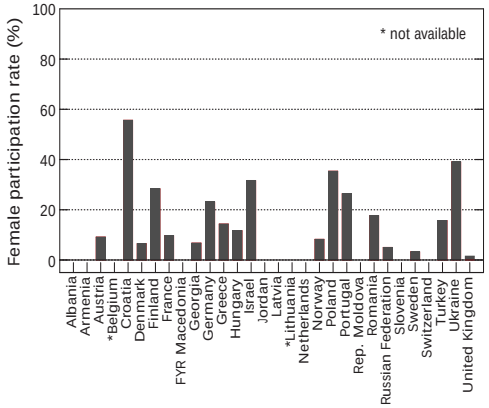

Figure IV-32 — Participation of women in WMO activities in RA VI

3. Bibliographic References

Of all the countries which replied, none gave bibliographic references to previous studies carried out in their countries on the participation of women and men in the fields of meteorology, operational hydrology and related geophysical sciences

4. Participation in the Activities of the WMO

Figure IV-32 shows the female participation rate for Region VI ranges from zero (Albania, Armenia, Jordan, Latvia, Former Yugoslav Republic of Macedonia, Netherlands, Slovenia and Switzerland) to 55 per cent (Croatia), with a regional average of 13 per cent. The average percentage of women participating in specific WMO activities is summarized below:

Commission Meetings:	13%
Regional Meetings:	12%
Commission Members:	15%
Working Groups and Subgroups:	12%
Rapporteurs:	17%

5. Gender-Sensitive Policies

Of the responses from Region VI Members, the following have gender-sensitive policies in the following areas:

Staffing: Albania, Armenia, Austria, Belgium, Denmark, Finland, France, Germany, Lithuania, Netherlands, Norway, Poland, Russian Federation, Sweden, Switzerland and the United Kingdom

Operational activities: Albania, Belgium, Denmark, Finland, France, Lithuania, Netherlands, Norway, Poland, Russian Federation, Sweden, Switzerland and the United Kingdom

Decision-making: Albania, Belgium, Denmark, Finland, France, Lithuania, Netherlands, Norway, Poland, Russia, Switzerland and the United Kingdom

Medium-term plans: Albania, Belgium, Denmark, Finland, Former Yugoslav Republic of Macedonia, Netherlands, Norway, Russian Federation, Sweden, Switzerland and the United Kingdom

Budget allocation to integrate gender into policies: Albania, Belgium, Finland, Russian Federation and the United Kingdom

6. Participation in Educational Programmes

The female participation in educational programmes is summarized in Figure IV-33. The average rate of participation for women enrolled in educational programmes is 42 per cent, ranging from 9 per cent (Greece) to 78 per cent (Georgia). Female graduation rates range from 9 per cent (Greece and Finland) to 80 per cent (Georgia), with a regional average of 43 per cent.

7. Employment

Figure IV-34 illustrates the percentage of women working in the fields of meteorology, hydrology and geophysical sciences, both in a professional and a support capacity. The percentage of female professional personnel in Region VI ranges from 4 per cent (Jordan) to 90 per cent (Latvia), with a regional average of 38 per cent. Countries where women exceed 50 per cent of the total number of professional personnel include Armenia, Georgia, Latvia, Lithuania, Republic of Moldova, Russian Federation and Ukraine.

The percentage of female support personnel in Region VI ranges from 4 per cent (Turkey) to 100 per cent (Switzerland), with a regional average of 42 per cent. Countries where women exceed 50 per cent of the total number of support personnel include Armenia, Georgia, Latvia, Lithuania, Republic of Moldova, Russian Federation, Switzerland and Ukraine.

8. Professional Society Membership

As shown in Figure IV-35, 20 countries provided data on their professional societies. Of the remaining 11 countries, six do not have a professional society, and Portugal is in the process of forming one. Countries where women comprise less that 10 per cent of the membership of the professional societies include Germany, Jordan, and the United Kingdom. Countries where women comprise more than 50 per cent of the membership are Croatia, Georgia, Latvia, Lithuania and Poland. The average percentage of female membership for the Region VI is 34 per cent.

9. Summary

Of the countries in Region VI which completed the Questionnaire, a large element of diversity existed in the degree of participation of women. Figure IV-36 summarizes the overall participation of women in Region VI in WMO activities, education, employment, and professional societies. This shows

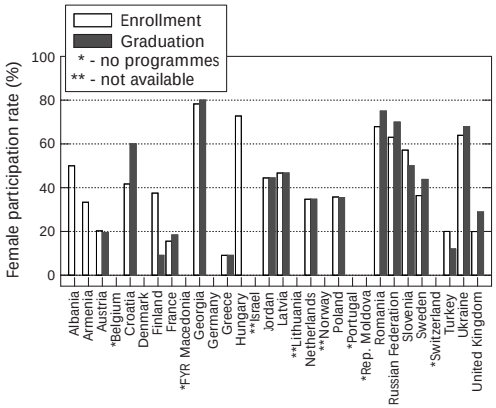

Figure IV-33 — Participation of women in Educational Programmes in RA VI

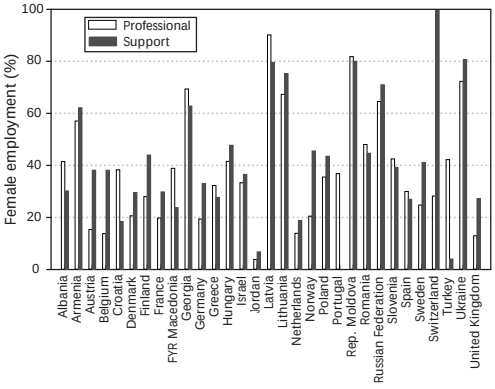

Figure IV-34 — Employment of women (all sectors) in RA VI

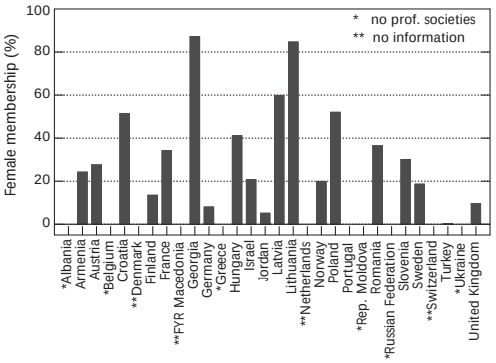

Figure IV-35 — Membership of women in Professional Societies in RA VI

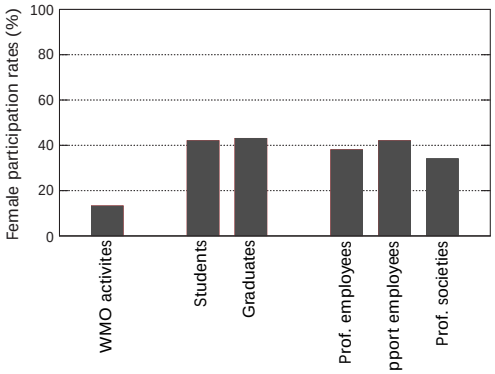

Figure IV-36 — RA VI average female participation rates

that women are well represented in education, accounting for 43 per cent of graduates. Women comprise 38 per cent of professional personnel and 42 per cent of support personnel overall; however, it is noticeable that some countries are much better represented than others since professional employment figures range from 4 per cent to 90 per cent. The participation of women in WMO activities at 13 per cent is significantly lower than in the professions. Professional society membership is not consistent with the women employed in the fields of meteorology, hydrology and the geophysical sciences. There is evidence, however, to suggest that the numbers are increasing as more women in the younger age category are joining the societies.

WMO Secretariat

At the end of 1996, the WMO Secretariat staff included 139 women and 120 men, which suggests gender equity within the Organization. However, women comprise only 20 per cent of the professional staff and 80 per cent of the general services staff (Figure IV-37). The current professional staff employed in professions of meteorology and other related fields includes two meteorologists, one atmospheric environmental scientist, and one oceanographer. Thus, within the Organization women are much more likely to serve in a support capacity than in one of programmatic or policy responsibility. This situation remained basically unchanged during 1991–1996 (Figure IV-38).

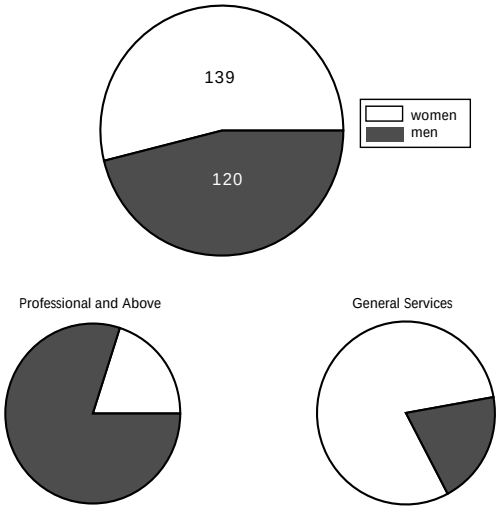

Figure IV-37 — WMO Secretariat staff 1996

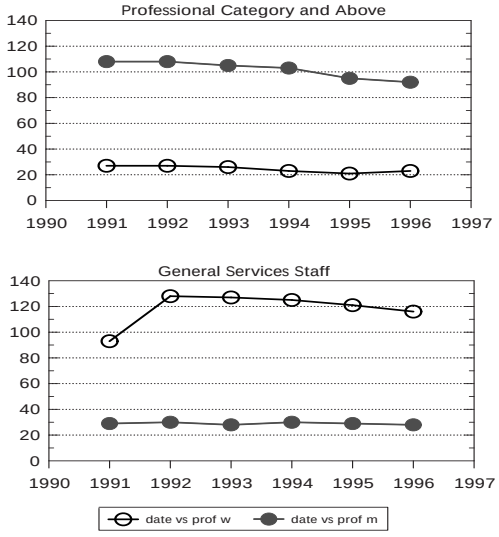

Figure IV-38 — WMO Secretariat staff 1991–1996

V. GLOBAL SUMMARY OF FINDINGS

The national and regional results have been aggregated to summarize the global participation of women in WMO activities. Of 187 WMO Members, a total of 94 completed Questionnaires were received (Figure V-1). These responses probably reflect a substantial majority of the international activities in WMO-related areas because the respondents included most of the countries that have the largest proportion of the global meteorological and hydrological communities.

On a global scale, and based on averaging participation rates from all countries, women comprise about one-fourth of the students enrolled in meteorology, hydrology and related geophysical sciences educational programmes. Accordingly, they account for one-third of the graduates in these programmes. However, there is considerable country-to-country and region-to-region variability in these global statistics. (See Figure V-2.)

On average, women account for about one-fifth of the professionals in the fields of meteorology, hydrology and related geophysical sciences and about one-third of the support personnel in these fields. (See Figures V-2 and V-3.)

In general, women participate in WMO activities, and in professional societies, at a lower rate than they do in the professions. A summary of the female participation in various WMO activities shows that

women constitute about 10–15 per cent of the participants in each area of activity. This indicates a potentially underutilized human resource. (See Figures V-4 and V-5.)

Aggregating the data for all of the professional societies (Figure V-6), the current age distribution of the members shows a larger female percentage (women/total members) in the younger age groups. The explanations for this trend are not obvious, but it may suggest an increase in the rate of participation of women in professional societies and/or a tendency for women to discontinue their involvement in professional societies (and perhaps in the professions) as they age.

It will be interesting to compare these findings with those from a follow-up Questionnaire and analysis for the upcoming 13th financial period (2000–2003).

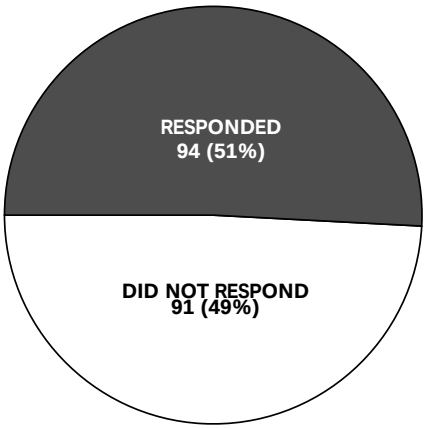

Figure V-1 — Global questionnaire response rate

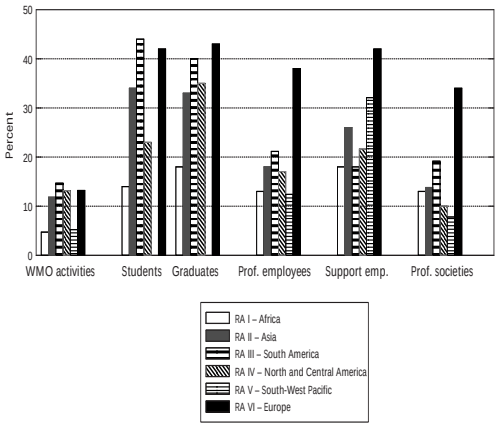

Figure V-2 — Regional average female participation rates

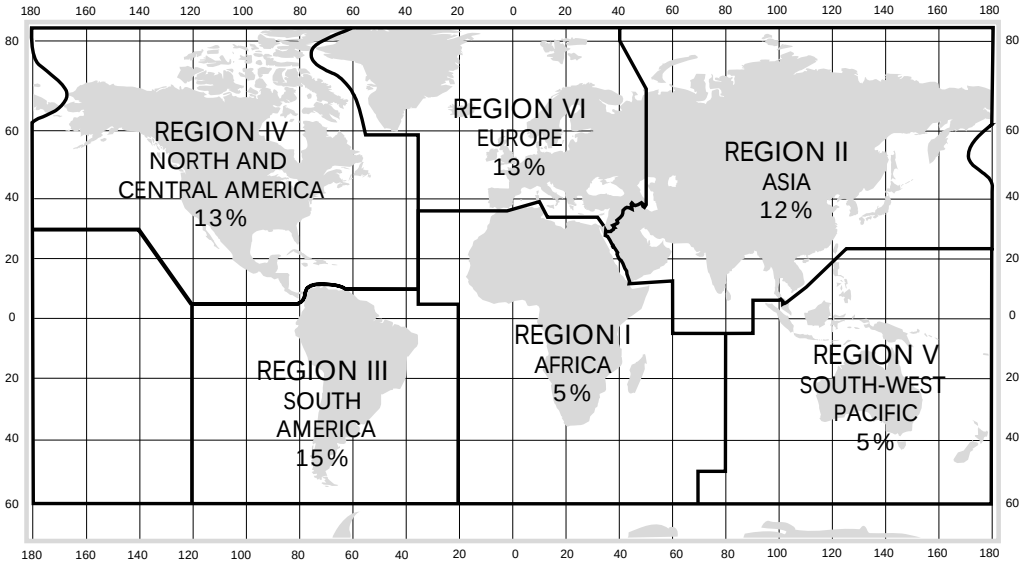

Figure V-3 — Participation of women in Professional employment — regional averages

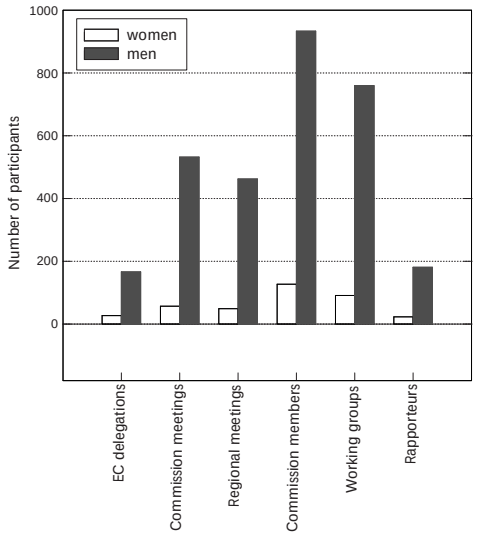

Figure V-4 — Global participation in WMO activities (1991–1995)

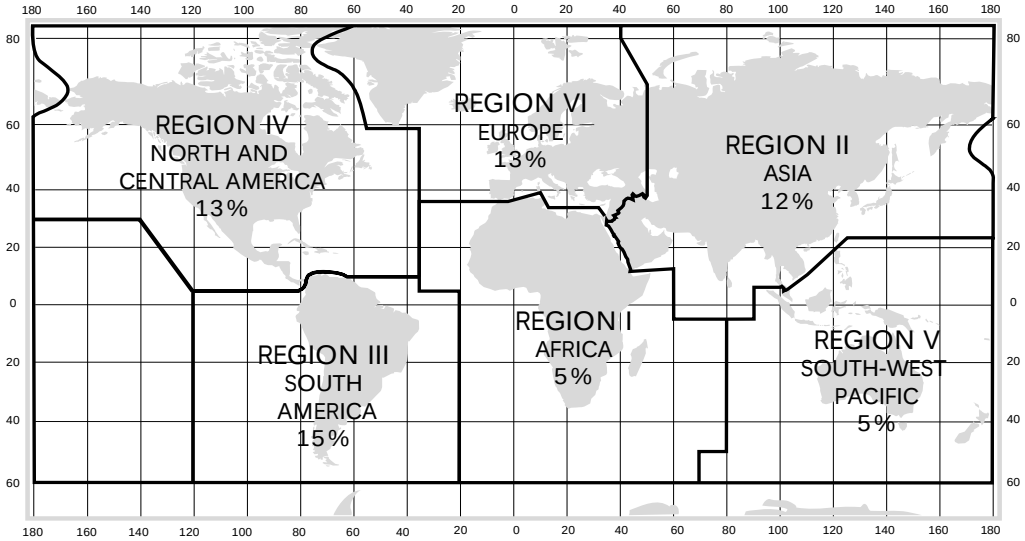

Figure V-5 — Participation of women in WMO activities — regional averages

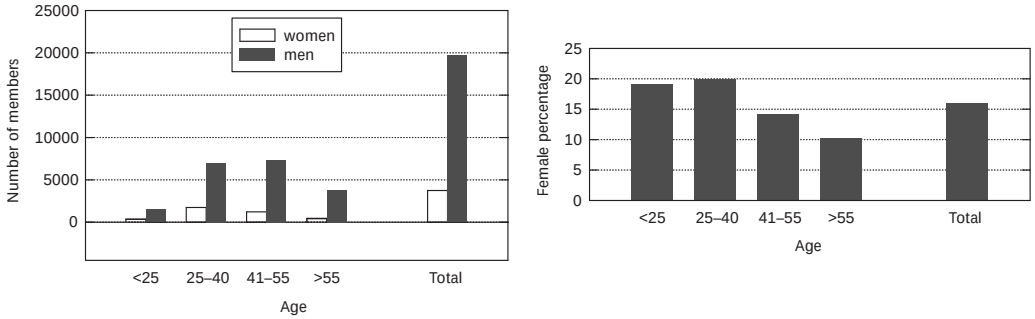

Figure V-6 — Global participation in Professional Societies

ANNEX A — COPY OF QUESTIONNAIRE

WORLD METEOROLOGICAL ORGANIZATION

S/INF/Women, ANNEX

QUESTIONNAIRE ON THE PARTICIPATION OF WOMEN AND MEN IN THE ACTIVITIES OF THE WORLD METEOROLOGICAL ORGANIZATION AND IN THE FIELDS OF METEOROLOGY, OPERATIONAL HYDROLOGY AND RELATED GEOPHYSICAL SCIENCES

Part I. General Information

Country _____

Name of Respondent _____

Title _____

Address _____

_____

_____

_____

Telephone Number _____

Fax Number _____

E-mail address _____

Date _____

Part II. Previous Studies

If previous analyses of the participation of women and men in WMO activities or programmes or in the fields of meteorology, operational hydrology and related geophysical sciences in your country exist, please list them below and send a copy of the analyses or studies.

Part III. Participation in WMO Activities

For 1991–1995, please give the numbers of women and men involved in the following activities:

	Women	Men
Participating in Executive Council delegations	_____	_____
Participating in Commission meetings	_____	_____
Participating in Regional meetings	_____	_____
Serving as members of Commissions	_____	_____
Serving as members of Working Groups and Subgroups	_____	_____

	Women	Men
Serving as Rapporteurs	_____	_____
Serving in-country as staff to Permanent Representative	_____	_____

Does your Service have gender-sensitive policies:

In staffing?	Yes_____	No_____
In operational activities?	Yes_____	No_____
In decision-making?	Yes_____	No_____

Does your medium-term plan, strategy or mission statement incorporate a gender perspective?

Yes_____ No_____

Does your Service/country allocate parts of the budget to integrate gender into its policies and programmes?

Yes_____ No_____

What is the percentage? _____%

Part IV. Education in meteorology, operational hydrology and related geophysical sciences

Please survey the schools that train meteorologists, operational hydrologists and geophysical scientists in your country.

Non-university programmes for professional training (e.g., technical or vocational schools with programmes in meteorology or operational hydrology).

Total number of programmes	_____
Number of programmes surveyed	_____
Number of men enrolled (1994–95)	_____
Number of women enrolled (1994–95)	_____
Number of male graduates (1995)	_____
Number of female graduates (1995)	_____
If data are not for 1994–95, please give the relevant years	_____

University undergraduate programmes (i.e., post-secondary schools with academic programmes for professional training in meteorology or hydrology).

Total number of programmes	_____
Number of programmes surveyed	_____
Number of men enrolled (1994–95)	_____
Number of women enrolled (1994–95)	_____
Number of male graduates (1995)	_____
Number of female graduates (1995)	_____
If data are not for 1994–95, please give the relevant years	_____

University graduate programmes (i.e., programmes granting advanced degrees in meteorology or hydrology and preparing students for possible research careers).

Total number of programmes	_____
Number of programmes surveyed	_____
Number of men enrolled (1994–95)	_____
Number of women enrolled (1994–95)	_____
Number of male graduates (1995)	_____
Number of female graduates (1995)	_____
If data are not for 1994–95, please give the relevant years	_____

Part V. Employment in meteorology and operational hydrology

Please gather information on the number of men and women employed as meteorologists, hydrologists and geophysical scientists in the following sectors. A possible source for some of this information is the professional societies serving these fields. If the data are difficult to gather, please at least try to obtain information for your national Meteorological or Hydrological Service.

	Women	Men
Civilian government		
Professional (e.g., operations, research, management)	_____	_____
Support (e.g., technicians, observers)	_____	_____
If data are not for 1995, please give relevant year	_____	
Private sector	Women	Men
Professional (e.g. operations, research, management)	_____	_____
Support (e.g., technicians, observers)	_____	_____
If data are not for 1995, please give relevant year	_____	
Academic institutions	Women	Men
Professional (e.g., operations, research, management)	_____	_____
Support (e.g., technicians, observers)	_____	_____
If data are not for 1995, please give relevant year	_____	
Other	Women	Men
Professional (e.g., operations, research, management)	_____	_____
Support (e.g., technicians, observers)	_____	_____
If data are not for 1995, please give relevant year	_____	

Salary Information. Please give information for 1995 for the three largest employers of meteorologists and hydrologists in your country. (If detailed information on salaries is not available, please indicate any difference in the salaries between women and men and if so, indicate the percentage).

1. Organization/Company _____

Median professional salary of men _____
Median professional salary of women _____
Relevant date (if not 1995) _____

2. Organization/Company _____

Median professional salary of men _____
Median professional salary of women _____
Relevant date (if not 1995) _____

3. Organization/Company _____

Median professional salary of men _____
Median professional salary of women _____
Relevant date (if not 1995) _____

Part VI. Professional Societies

In order to obtain the following data, please contact the three major professional societies, where applicable, in which meteorologists, operational hydrologists and other related geophysical scientists participate.

1. Name of Professional Society _____

	Women	Men
Number of members	_____	_____
Number of associate members	_____	_____
Number of student members	_____	_____
Number of fellows and honorary members	_____	_____

Age distribution of membership	Women	Men
0–25 years	_____	_____
26–40 years	_____	_____
41–55 years	_____	_____
over 55 years	_____	_____

2. Name of Professional Society _____

	Women	Men
Number of members	_____	_____
Number of associate members	_____	_____
Number of student members	_____	_____
Number of fellows and honorary members	_____	_____

Age distribution of membership	Women	Men
0–25 years	_____	_____
26–40 years	_____	_____
41–55 years	_____	_____
over 55 years	_____	_____

3. Name of Professional Society _____

	Women	Men
Number of members	_____	_____
Number of associate members	_____	_____
Number of student members	_____	_____
Number of fellows and honorary members	_____	_____

Age distribution of membership	Women	Men
0–25 years	_____	_____
26–40 years	_____	_____
41–55 years	_____	_____
over 55 years	_____	_____

ANNEX B — TABLES 1–5

Table 1 — Participation in WMO Activities (1991–1995)

Country	Comm. Mtgs		Regional Mtgs.		Comm. Members		Working Group		Rapporteurs	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
REGION I										
Chad	0	0	0	1	0	0	0	0	0	1
Egypt	0	3	2	2	0	4	1	21	0	2
Gambia	0	0	0	0	1	7	0	1	0	0
Kenya	3	15	2	20	0	16	3	12	1	6
Mali	0	3	0	2	0	2	0	2	0	1
Morocco	0	3	0	2	0	8	0	3	0	0
Namibia	0	0	0	0	0	0	0	0	0	0
Niger	0	4	0	8	0	8	0	1	0	1
Nigeria	0	10	0	3	2	31	0	4	0	2
Senegal	0	3	0	2	0	16	0	3	0	2
Seychelles	0	0	0	2	0	0	0	0	0	0
South Africa	0	6	4	14	0	9	0	2	0	1
Tunisia	0	8	0	11	0	19	0	11	0	2
Uganda	0	0	0	5	0	22	0	0	0	1
Zimbabwe	1	4	3	14	2	14	1	1	1	2
Subtotal	**4**	**59**	**11**	**86**	**5**	**156**	**5**	**61**	**2**	**21**
REGION II										
China	3	12	4	7	0	0	3	8	1	5
Hong Kong, China	3	3	3	6	0	0	0	2	0	0
India	1	82	1	14	1	42	1	27	0	10
Iran	0	16	0	12	16	32	0	0	2	3
Japan	1	13	0	2	0	140	2	100	0	25
Kazakstan	1	1	0	0	4	4	0	0	1	0
Kuwait	0	0	0	2	0	0	0	0	0	0
Kyrgyz Rep.	0	0	0	0	0	0	0	0	0	0
Macao	0	0	0	1	0	0	0	0	0	0
Maldives	0	0	0	1	0	1	0	1	0	1
Myanmar	0	11	1	60	0	11	0	10	2	10
Nepal	1	9	2	20	1	10	10	130	5	20
Oman	0	3	0	0	0	0	0	0	0	0
Qatar	0	1	0	3	0	0	0	1	0	0
Republic of Korea	0	8	0	2	2	37	0	4	0	0
Sri Lanka	0	0	0	0	0	9	0	0	0	0
Thailand	0	7	2	48	1	5	0	1	0	0
Uzbekistan	1	1	0	1	9	18	15	22	0	2
Viet Nam, SR	1	0	0	4	1	7	0	2	0	0
Subtotal	**12**	**167**	**13**	**183**	**35**	**316**	**31**	**308**	**11**	**76**
REGION III										
Argentina	1	2	1	4	5	19	3	12	0	2
Bolivia	0	3	0	6	0	4	0	2	0	3
Brazil	0	5	0	4	0	0	0	0	0	0

Table 1 (*Continued*)

Country	Comm. Mtgs		Regional Mtgs.		Comm. Members		Working Group		Rapporteurs	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
REGION III *(Continued)*										
Chile	0	0	0	0	4	10	1	8	0	4
Colombia	1	3	1	11	1	1	0	1	0	4
Ecuador	0	0	0	0	1	5	1	8	0	0
Guyana	0	0	0	0	1	1	1	1	0	1
Paraguay	0	0	0	0	0	7	1	0	0	1
Peru	0	0	0	1	6	23	1	2	0	0
Uruguay	0	5	4	11	4	14	7	17	0	2
Venezuela	1	5	0	0	5	21	0	0	0	0
Subtotal	**3**	**23**	**6**	**37**	**27**	**105**	**15**	**51**	**0**	**17**
REGION IV										
Bahamas	0	0	0	1	0	7	0	4	0	1
Belize	0	0	0	1	0	5	0	2	0	0
Canada	5	23	1	2	4	25	0	15	1	3
Dominican Rep.	0	1	0	1	1	4	0	0	0	
Haiti										
Mexico	3	17	0	0	2	12	0	0	0	2
N. Antilles/Aruba	0	0	0	6	0	3	0	5	0	0
Nicaragua	0	5	0	3	0	0	0	0	0	0
Panama	0	0	1	1	0	0	1	1	1	0
St. Lucia	0	0	1	3	0	0	0	0	0	0
Trinidad/Tobago	0	1	0	1	1	5	1	3	0	0
USA	2	40	0	4	5	28	5	46	1	13
Subtotal	**5**	**63**	**2**	**18**	**8**	**48**	**7**	**55**	**2**	**15**
REGION V										
Brunei	0	3	1	8	0	3	0	5	0	1
Malaysia	1	8	1	0	0	1	1	1	0	1
New Zealand	0	11	0	3	0	14	0	9	0	7
Singapore	0	1	0	6	0	6	0	3	0	4
Solomon Islands	0	1	0	9	0	0	0	1	0	1
Subtotal	**1**	**24**	**2**	**26**	**0**	**24**	**1**	**19**	**0**	**14**
REGION VI										
Albania	0	0	0	0	0	4	0	0	0	0
Armenia	0	0	0	2	0	0	0	0	0	1
Austria	0	8	1	2	2	13	0	5	0	2
Belgium										
Croatia	3	4	1	0	3	3	1	1	2	0
Denmark	1	10	0	3	1	11	0	5	0	0
Finland	5	10	2	3	3	9	5	14	0	2
FYR Macedonia	0	2	0	3	0	0	0	0	0	0
France	1	17	1	15	1	17	7	46	1	8
Georgia	0	1	0	1	1	11	0	1	0	0
Germany	1	4	1	2	1	4	0	0	0	0
Greece	0	4	1	2	5	21	1	15	0	0
Hungary	3	8	1	32	2	5	2	13	0	3
Israel	2	6	0	1	2	6	1	0	1	0
Jordan	0	5	0	1	0	1	0	1	0	

Table 1 (*Continued*)

Country	Comm. Mtgs		Regional Mtgs.		Comm. Members		Working Group		Rapporteurs	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
REGION VI *(Continued)*										
Latvia	0	1	0	1	0	1	0	1	0	1
Lithuania										
Netherlands	0	14	0	2	0	23	0	18	0	2
Norway	0	9	1	5	1	18	2	12	0	1
Poland	5	6	2	2	5	16	4	6	2	3
Portugal	1	7	2	8	5	6	2	7	0	0
Rep. of Moldova	0	0	0	0	0	0	0	0	0	0
Romania	1	5	1	1	1	5	0	2	0	1
Russian Federation	0	16	0	8	0	2	2	40	2	11
Slovenia	0	7	0	1	0	7	0	0	0	0
Spain										
Sweden	0	10	1	4	0	11	0	4	0	1
Switzerland	0	6	0	3	0	15	0	4	0	0
Turkey	1	1	0	5	4	21	0	0	0	0
UK	0	13	0	5	1	12	0	35	0	2
Ukraine	2	0	0	1	8	12	6	12	0	0
Subtotal	**26**	**174**	**15**	**113**	**46**	**254**	**33**	**242**	**8**	**38**
Grand Total	**51**	**510**	**49**	**463**	**121**	**903**	**92**	**736**	**23**	**181**

Table 2 — Gender-Sensitive Policies in national Meteorological and Hydrological Services

Country	Staffing	Operations	Decisions	Medium-term Plans	Budget	Per cent
REGION I						
Chad	Y	Y	N	N	N	
Egypt	N	N	N	N	N	
Gambia	N	Y	N	Y	Y	20
Kenya	N	N	N	Y	N	
Mali	N	N	N	N	N	
Morocco	Y	Y	Y	N	N	
Namibia	Y	N	N	N	N	
Niger	Y	Y	Y	N		
Nigeria	N	N	N	N	N	
Senegal	Y	Y	Y	Y	Y	
Seychelles	N	N	N	N	N	
South Africa	Y	N	N	Y	N	
Tunisia	Y	Y	Y	N	Y	18.2
Uganda	Y	Y	Y	Y	Y	0.06
Zimbabwe	N	N	N	N	N	
REGION II						
China	N	N	N	N	N	
Hong Kong, China	N	N	N	N	N	
India	N	N	N	N	N	
Iran	N	N	N	N	N	
Japan	Y	Y	N	N	N	
Kazakstan	Y	Y	Y	N	N	
Kuwait	N	N	N	N	N	
Kyrgyz Rep.	Y	Y	Y	Y	N	
Macao	N	N	N	Y	N	
Maldives	N	N	N	N	N	
Myanmar	Y	Y	N	N	N	
Nepal	Y	Y	Y	Y	Y	2.5
Oman	?					
Qatar						
Republic of Korea	N	Y	N	N	N	
Sri Lanka	N	N	N	N		
Thailand	N	N	N	N	N	
Uzbekistan	N	N	N	N	N	
Viet Nam, SR	Y	Y	Y	Y	Y	
REGION III						
Argentina	N	N	N	N	N	
Bolivia	N	N	N	N	Y	80
Brazil	N	N	N	N	N	
Chile	N	N	N	N	N	
Colombia	Y	Y	Y	Y	N	
Ecuador	N	N	N	Y	N	
Guyana	N	N	N	N	N	
Paraguay	N	N	N	N	N	
Peru	N	N	N	N	N	
Uruguay	N	N	Y	N	N	
Venezuela	Y	Y	Y	Y	N	

Table 2 (*Continued*)

Country	Staffing	Operations	Decisions	Medium-term Plans	Budget	Per cent
REGION IV						
Bahamas	N	N	N	N	N	
Belize	N	N	N	N	N	
Canada	Y	Y	Y	Y	N	
Dominican Rep.	N	N	N	Y	N	
Haiti	Y	Y	Y		Y	
Mexico	N	N	N	N	N	
N. Antilles/Aruba	N	N	N	N	N	
Panama	N	N	N	N	N	
St. Lucia	Y	Y	Y	N	Y	
Trinidad/Tobago	Y	Y	Y	N	N	
USA	Y	Y	Y	Y	N	
REGION V						
Brunei	N	N	N	N	N	
Malaysia	Y	Y	N	N	N	
New Zealand	N	N	N	N	N	
Singapore	N	N	N	N	N	
Solomon Islands	N	N	N	N	N	
REGION V						
Albania	Y	Y	Y	Y	Y	
Armenia	Y	N	N	N	N	
Austria	Y	N	N	N	N	
Belgium	Y	Y	Y	Y	Y	
Croatia	N	N	N	N	N	
Denmark	Y	Y	Y	Y	N	
Finland	Y	Y	Y	Y	Y	0.5
France	Y	Y	Y	N	N	
Georgia	N	N	N	N	N	
Germany	Y	N	N	N	N	
Greece	N	N	N	N	N	
Hungary	N	N	N		N	
Israel	N	N	N	N	N	
Jordan	N	N	N	N	N	
Latvia	N	N	N	N	N	
Lithuania	Y	Y	Y	N	N	
FYR Macedonia	N	N	N	Y	N	
Moldova	N	N	N	N	N	
Netherlands	Y	Y	Y	Y	N	
Norway	Y	Y	Y	Y	N	
Poland	Y	Y	Y		N	
Portugal	N	N	N	N	N	
Romania	N	N	N	N	N	
Russia	Y	Y	Y	Y	Y	
Slovenia	N	N	N	N	N	
Spain						
Sweden	Y	Y	N	Y	N	
Switzerland	Y	Y	Y	Y	N/A	
Turkey	N	N	N	N	N	
UK	Y	Y	Y	Y	N/A	
Ukraine	N	N	N	N	N	

Table 3 — Participation in Meteorological and Hydrological Educational Programmes (1994–1995)

Country	Non-University Programmes					Univ. Undergraduate Programmes					Univ. Graduate Programmes				
	# Prgs	Enroll W	Enroll M	Grad W	Grad M	# Prgs	Enroll W	Enroll M	Grad W	Grad M	# Prgs	Enroll W	Enroll M	Grad W	Grad M
REGION I															
Chad	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Egypt	8	0	86	2	0	0	0	0	0	0	5	0	14	0	23
Gambia	0	0	0	3	14	0	0	0	0	0	0	0	1	0	0
Kenya	29	104	555	42	79	3	2	24	0	0	1	2	31	2	31
Mali												2	15	2	15
Morocco	1			5	31							2	6	2	5
Namibia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Niger						1	2	11	2	11	1	2	28	1	21
Nigeria	3	13	45	6	14	30	19	190	0	24	12	2	14	2	12
Senegal		6	4	6	4		2	13	2	13					
Seychelles	2	6	5	6	5	0					0				
South Africa	1	1	7	0	2	4	4	9	1	2	5	3	4	1	1
Tunisia															
Uganda	10	9	88	9	82						2	1	11	1	8
Zimbabwe															
Subtotal	**55**	**139**	**790**	**79**	**231**	**38**	**29**	**247**	**5**	**50**	**26**	**14**	**124**	**11**	**116**
REGION II															
China							1027	1387	209	283		1529	2568	506	872
Hong Kong,China	2	3	13												
India															
Iran	0					0					8	31	68	31	68
Japan	0						0	17	1	12	0				
Kazakstan	1	17	1			3	28	28			3	28	28	6	13
Kuwait	0					0					0				
Kyrgyz Rep.	11	19	6	19	6	18	15	10	13	9	55	15	10	5	6
Macao	14	14	74	14	74										
Maldives	0					0					0				
Myanmar	2	9	45	9	39	4	13	12	13	12	1	0	1	0	0
Nepal	0					2	5	115	4	96	1	2	18	1	15
Oman	0	0				0					0				
Qatar	0					0					0				
Rep. of Korea	1					8	210	160	143	185	8	26	42	10	12
Sri Lanka	0					0					0				
Thailand	0					0					0				
Uzbekistan	1	82	50	53	24						2	14	17	6	10
Viet Nam, SR		86	175	56	107		17	30	13	21		5	17	1	8
Subtotal	**32**	**230**	**364**	**151**	**250**	**35**	**1 315**	**1 759**	**396**	**618**	**78**	**1 650**	**2 769**	**566**	**1 004**

Table 3 (*Continued*)

Country	Non-University Programmes					Univ. Undergraduate Programmes					Univ. Graduate Programmes				
	# Prgs	Enroll W	Enroll M	Grad W	Grad M	# Prgs	Enroll W	Enroll M	Grad W	Grad M	# Prgs	Enroll W	Enroll M	Grad W	Grad M
REGION III															
Argentina											4				
Bolivia	1					1	1	3	0	2	1	2	4	1	2
Brazil						9	148	216	42	39	3	72	128	8	28
Chile	1	0	0	6	14	1	38	21	3	1	2	0	3	0	1
Columbia						1	8	37			1		4		
Ecuador															
Guyana															
Paraguay		10	43	10	43				3	4					
Peru						1	18	12	3	3					
Uruguay	34	20	7	8	5										
Venezuela	1	14	3	10	7	3	8	12	6	8	1	5	8	1	2
Subtotal	**37**	**44**	**53**	**34**	**69**	**16**	**221**	**301**	**57**	**57**	**12**	**79**	**147**	**10**	**33**
REGION IV															
Bahamas	0					0					0				
Belize	0					1	1	5			0				
Canada	N/A						9 800	24 700	1959	4 470				99	491
Dominican Rep.	0					0					0				
Mexico	N/A	6	72												
N. Antilles/ Aruba	0					0					0				
Nicaragua	1	1	2	10	10										
Panama	0					2	10	18	5	8	0				
St. Lucia	N/A					N/A					N/A				
Trinidad and Tobago	0					0					0				
USA	2	191	1 810	19	217	56	590	2 285	259	806	44	410	1 178	309	945
Subtotal	**3**	**198**	**1 884**	**29**	**227**	**59**	**10 401**	**27 008**	**2 223**	**5 284**	**44**	**410**	**1 178**	**408**	**1 436**
REGION V															
Brunei	0					0					0				
Malaysia	0					2					0				
New Zealand	0					0					0				
Singapore															
Solomon Is.	1	0	5	0	5	0					0				
Subtotal	**1**	**0**	**5**	**0**	**5**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Table 3 (*Continued*)

Country	Non-University Programmes					Univ. Undergraduate Programmes					Univ. Graduate Programmes				
	# Prgs	Enroll W	Enroll M	Grad W	Grad M	# Prgs	Enroll W	Enroll M	Grad W	Grad M	# Prgs	Enroll W	Enroll M	Grad W	Grad M
REGION VI															
Albania	2					2	1	2			4	3	2		
Armenia											2	4	8		
Austria	1	1	7	0	4	5	60	230	7	24	7	6	27	1	5
Belgium															
Croatia							10	14	13	7				2	3
Denmark	0					1					1				
Finland	0					5	8	10	1	6	5	4	10	0	4
FYR Macedonia	0					0					0				
France	3	16	87	9	40	0					0				
Georgia	1	18	5	12	3	0					0				
Germany	0					0					0				
Greece		2	20	2	20	0					0				
Hungary	0					0					3	21	30	4	8
Israel															
Jordan	2	8	10	8	10										
Latvia											2	49	51	49	51
Lithuania	0					1					1				
Netherlands	12	10	24	5	13	2	7	8	7	8				13	26
Norway	N/A					N/A					N/A				
Poland	4	21	35	20	35	6	15	22	12	21	3	19	42	18	35
Portugal	0					0					0				
Rep. of Moldova	0					0					0				
Romania											2	19	9	6	2
Russian Fed.	7	773	454	356	153										
Slovenia	0					0					1	4	3	1	1
Spain															
Sweden	N/A					10	13	14	4	6	6	7	21	3	3
Switzerland	0					0					0				
Turkey	1	5	45	0	71	0					1	12	22	13	25
UK		65	286			4	27	55	7	17	3	7	16	6	15
Ukraine		138	62	131	42	0						126	87	81	58
Subtotal	**33**	**1 057**	**1 035**	**543**	**391**	**36**	**141**	**355**	**51**	**89**	**41**	**281**	**328**	**197**	**236**
Grand Total	**161**	**1 668**	**4 131**	**836**	**1 173**	**186**	**12 107**	**29 670**	**2 732**	**6 098**	**201**	**2 434**	**4 546**	**1 192**	**2 825**

Table 4 — Employment in Meteorology, Hydrology and Related Geophysical Sciences (1995)

Country	Government				Private Sector				Academic				Other			
	Prof/W	Prof/M	Sup/W	Sup/M	Prof/W	Prof/M	Sup/W	Sup/M	Prof/W	Prof/M	Sup/W	Sup/M	Prof/W	Prof/M	Sup/W	Sup/M
REGION I																
Chad	0	18	2	58					0	0	0	0				
Egypt	0	0	0	0	0	0	0	0	5	15	0	0	0	0	0	0
Gambia	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Kenya	10	1 200	0	0	0	20			2	100						
Mali	4	40	9	203	0	5	2	4	1	4						
Morocco	15	127	164	575												
Namibia	8	5	6	8					0	0	0	0				
Niger	0	8	5	94												
Nigeria	31	282	200	591	3	7	1	3	10	40	8	24				
Senegal	5	30	1	200												
Seychelles	2	14	9	11												
South Africa	10	34							1	2						
Tunisia	6	60	62	309												
Uganda	1	45	10	204												
Zimbabwe	4	26	23	300					0	2	0	0				
Subtotal	**96**	**1 889**	**491**	**2 553**	**3**	**32**	**3**	**7**	**19**	**163**	**8**	**24**	**0**	**1**	**0**	**0**
REGION II																
China									15 095	31 777	6 522	10 096				
Hong Kong, Ch	10	48	9	43												
India	90	900	500	4 500												
Iran	35	482	35	482				3	36							
Japan	46	3 650	124	1695												
Kazakstan	129	120	178	97	679	443	1960	403	69	27	17	10				
Kuwait	0	16	0	30												
Kyrgyz Rep.	70	57	254	85					1	7	2	4	2	26		
Macao	1	18	15	44												
Maldives	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myanmar	4	46	82	664					4	13	0	8	4	46	82	664
Nepal	2	60	10	189	1	10	3	30	1	9	2	15				
Oman	8	66	0	0												
Qatar	0	16	0	545										1		

NOTE: Countries in italics provided employment data for years other than 1995, generally 1996–1997.

Table 4 (*Continued*)

Country	Government				Private Sector				Academic				Other			
	Prof/W	Prof/M	Sup/W	Sup/M	Prof/W	Prof/M	Sup/W	Sup/M	Prof/W	Prof/M	Sup/W	Sup/M	Prof/W	Prof/M	Sup/W	Sup/M
REGION III (*Continued*)																
Rep. of Korea	17	151	136	644					5	40						
Sri Lanka																
Thailand	80	436	118	289												
Uzbekistan	215	208	457	265					115	80	23	12				
Viet Nam, SR	213	667	878	2 252					52	105	53	31				
Subtotal	**920**	**6 941**	**2 796**	**11824**	**680**	**453**	**1963**	**433**	**15 345**	**32 094**	**6 619**	**10176**	**6**	**72**	**82**	**664**
REGION III																
Argentina	69	124	169	733					29	19	4	2				
Bolivia	0	10	5	45	0	0	0	0	0	0	0	0	0	0	0	0
Brazil	47	100	70	413	5	8	3	0	136	104	8	32				
Chile	17	85	302	527	2	5		76	2	35	3	17				
Colombia	10	35	8	224	1	13	3	15	1	6						
Ecuador	1	22	9	256												
Guyana	1	3	10	9	0	0	0	0	0	0	0	0	0	0	0	0
Paraguay	8	19	14	62												
Peru	12	55			5	21			3	4						
Uruguay	0	7	2	10												
Venezuela	15	30	25	250	10	20	8	15	5	10	5	10	0	0	0	0
Subtotal	**180**	**490**	**614**	**2 529**	**23**	**67**	**14**	**106**	**176**	**178**	**20**	**61**	**0**	**0**	**0**	**0**
REGION IV																
Bahamas	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Belize		7	5	12												
Canada	75	472	149	856					1	4	0	1	3	8	0	6
Rep. Dominica	12	14					15		3	6						
Haiti	10	15	7	160	3	7	3	10					10	15	3	28
Mexico	58	521									3	18				
N Antilles/Aruba	1	62														
Nicaragua	2	7	60	69												

NOTE: Countries in italics provided employment data for years other than 1995, generally 1996–1997.

Table 4 (*Continued*)

Country	Government				Private Sector				Academic				Other			
	Prof/W	Prof/M	Sup/W	Sup/M	Prof/W	Prof/M	Sup/W	Sup/M	Prof/W	Prof/M	Sup/W	Sup/M	Prof/W	Prof/M	Sup/W	Sup/M
REGION IV (*Continued*)																
Panama	9	7	17	45					1	4	0	1	3	8	0	6
St. Lucia	0	9	8	14	1	0	0	0								
Trinidad/Tobogo	5	34	20	102	0	0	0	0	0	0	0	0	0	0	0	0
USA	673	7602	24	186	739	7458	6	78	619	5198	0	30	258	2097	0	30
Subtotal	**845**	**8754**	**290**	**1 258**	**743**	**7 480**	**9**	**88**	**627**	**5 230**	**0**	**32**	**274**	**2 128**	**3**	**70**
REGION V																
Brunei	2	17	24	14												
Malaysia	7	79	70	682	0	8	0	8	0	0	0	0	0	0	0	0
New Zealand	98	436	80	69												
Singapore	9	26	21	49												
Solomon Is.	0	2	2	43												
Subtotal	**116**	**560**	**197**	**857**	**0**	**8**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
REGION VI																
Albania	17	24	16	37												
Armenia	113	85	281	171												
Austria	78	469	1 140	1 844					15	44	1	5				
Belgium	8	50	45	73												
Croatia	43	73	37	185					8	9	6	5				
Denmark	40	154	18	43	0	0	0	0								
Finland	50	120	550	700	3	5			2	20	1	3				
FYR Macedonia													14	22	19	61
France	207	840	666	1 567												
Georgia	286	127	577	322					133	58	31	38				
Germany	122	508	395	802												
Greece	99	208	93	243	0	0	0	0								
Hungary	66	93	115	164	1	2	1	1	2	6	2	0	8	28	22	12
Israel	32	52	33	56	4	20	5	1								
Jordan	2	50	4	55												
Latvia	55	6	215	55												

NOTE: Countries in italics provided employment data for years other than 1995, generally 1996–1997.

Table 4 (*Continued*)

Country	Government				Private Sector				Academic				Other			
	Prof/W	Prof/M	Sup/W	Sup/M	Prof/W	Prof/M	Sup/W	Sup/M	Prof/W	Prof/M	Sup/W	Sup/M	Prof/W	Prof/M	Sup/W	Sup/M
REGION VI (*Continued*)																
Lithuania	107	52	259	85												
Netherlands	46	331	52	129	5	24	4	12	20	95			6	27	6	126
Norway	33	128	128	153												
Poland	286	521	321	418					15	25	10	12				
Portugal	117	204			2											
Rep. of Moldova	135	30	232	58												
Romania	98	106	188	233												
Russia	87	67	25	19					2 493	2 480	1662	1654	5 837	2 072	19 545	6 945
Slovenia	51	69	42	65												
Spain	403	931	58	157												
Sweden	50	147	151	217					6	23	2	2				
Switzerland	35	89	2	0												
Turkey	307	420	56	1341												
UK	166	1115	287	765												
Ukraine	31	14							190	60			1800	700	2000	480
Subtotal	**3 170**	**7 083**	**5 986**	**9 957**	**15**	**51**	**10**	**23**	**2 884**	**2 820**	**1715**	**1719**	**7 665**	**2 849**	**21592**	**7 624**
Grand Total	**5 327**	**25 717**	**10 374**	**28 978**	**1464**	**8 091**	**1999**	**665**	**19 051**	**40 485**	**8 362**	**12 012**	**7 945**	**5 050**	**21677**	**8 358**

NOTE: Countries in italics provided employment data for years other than 1995, generally 1996–1997.

Table 5 — Membership in Professional Societies

Country	Professional Society	Total Memb.		Associates		Students		Fellow/Hon.		Age 0–25		Age 26–40		Age 41–55		Age 55 + up	
		W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M
REGION I																	
Kenya	Kenya Met. Society	5	47									5	43		4		
Nigeria	Nigeria Met. Society	8	113	2	8	1	78	0	10	1	77	9	67	4	58	0	4
Senegal	ASECNA	3	96			3											
Seychelles	Nat. Climate Change Cm.	2	22									2	21	0	1		
South Africa	S.A. Soc. for Atmos. Sci.	35	155							1	11	31	96	3	45		3
Tunisia	Inst. National de la Met.	68	369							3	5	42	127	22	213	1	24
Uganda	African Met. Society	1	7	0	0	0	0	0	0	0	0	0	0	1	7		
Subtotal		**122**	**809**	**2**	**8**	**4**	**78**		**10**	**5**	**93**	**89**	**354**	**30**	**328**	**1**	**31**
REGION II																	
China	Beijing Met. Society	579	940							7	12	210	312	265	407	97	209
" "	National Met. Centre	316	347							39	42	111	111	157	158	9	36
Hong Kong, Ch.	Hong Kong Met. Society		14	2	38		22	8	98								
Kuwait	Meteorology Deptartment		60							0	10	0	40	0	10	0	0
Kyrgyz Rep.	Geographic Society	5	33	5	33					0	0	0	4	3	16	2	13
Rep. of Korea	Korean Met. Society	51	443														
Sri Lanka	SR Assoc. for Adv. of Sci.	275	2 475	10	75	2	8	3	27								
Subtotal		**1 226**	**4 312**	**17**	**146**	**2**	**30**	**11**	**125**	**46**	**64**	**321**	**467**	**425**	**591**	**108**	**258**
REGION III																	
Argentina	Centro Argentino de Met.	72	70	72	70	4	9	0	1	4	6	34	19	30	28	4	17
Bolivia	Assc. de Meteorologos	8	20	8	20	0	0	0	3	5	12	3	8	0	0	0	0
Brazil	SBMET	0	0	466	280	417	274	0	6	0	0	0	0	0	0	0	0
Chile	Assoc. de Ingenieros DGA	60	190	1	35								6	1	22		10
" "	Conama Assc. Professional	1	1														
Colombia	SOCOLMET	10	71	10	68	0	1	0	2	0	1	2	9	8	56		3
" "	Assc. Col. Ciencias Hidricas	20	110	8	80	12	30	0	4	10	15	8	40	2	47		8
Ecuador	Assc. Nat. de Meterologos	9	71	9	71							4	51	5	20		
Venezuela	Assc. de Hidromet.	30	100							3	5	10	80	7	15		
Subtotal		**210**	**633**	**574**	**624**	**433**	**314**	**0**	**16**	**22**	**39**	**61**	**213**	**53**	**188**	**4**	**38**

Table 5 (*Continued*)

Country	Professional Society	Total Memb. W	Total Memb. M	Associates W	Associates M	Students W	Students M	Fellow/Hon. W	Fellow/Hon. M	Age 0–25 W	Age 0–25 M	Age 26–40 W	Age 26–40 M	Age 41–55 W	Age 41–55 M	Age 55 + up W	Age 55 + up M
REGION IV																	
Canada	CMOS	85	765														
Dominican Rep	Domincan College of Eng.	3	147	1	46	0	0	0	3	0	0	1	20	10	16	5	95
Haiti	SNRE	6	61	0	0	2	5	0	0			4	48	1	10	1	3
" "	SNEP	0	1	0	0	0	0	0	0						1		
" "	CAMEP	0	3	0	0	0	0	0	0	0	0	0	2	0	1	0	0
Mexico	Mexican Hydrological Assc			100	1500	4	26	0	20	2	48	20	480	78	902	0	70
USA	American Met. Society	751	8 005	151	952	234	814	17	498	103	449	738	4 061	152	3 741	69	2 114
" "	Amer. Geophysical Union	555	3407					18	558								
" "	Nat. Council. of Indst. Met.	1	59							0	0	0	0	1	25	0	34
Subtotal		**1 401**	**12 448**	**252**	**2 498**	**240**	**845**	**35**	**1079**	**105**	**497**	**763**	**4 611**	**242**	**4 696**	**75**	**2 316**
REGION V																	
New Zealand	Met. Society of New Z.	17	236					0	1								
	New Zealand Hydro Soc.	18	228	0	1	6	15	0	1								
Subtotal		**35**	**464**	**0**	**1**	**6**	**15**	**0**	**2**								
REGION VI																	
Armenia	Association of Armenian Hydrologists	79	248	11	25		4	2	11	23	55	12	82	31	96	13	15
Austria	Austrialia Society for Met.	20	210				5										
" "	Sunnblickverein	100	100							10	10	20	20	30	30	40	40
Croatia	Croation Met. Society	43	45			10	5										
Finland	Geophysial Soc. of Finland	36	225						7								
FYR Macedonia	Nat. Technics of Macedonia		1												1		
France	Hungarian Hydro. Society	306	590	79	423	227	167										
Hungary	Hungarian Met. Society	152	228			40	38		9	38	38	57	57	38	57	44	119
" "	Hungarian Hydro. Society	19	100						4			7	20	6	22	6	62
Israel	Israel Meteorological Society	30	120	20	40						8	22	52	23	60	5	40
" "	Israeli Assc. for Water Res.	28	138							6	5	7	46	7	36	8	51

Table 5 (*Continued*)

Country	Professional Society	Total Memb. W	Total Memb. M	Associates W	Associates M	Students W	Students M	Fellow/Hon. W	Fellow/Hon. M	Age 0–25 W	Age 0–25 M	Age 26–40 W	Age 26–40 M	Age 41–55 W	Age 41–55 M	Age 55 + up W	Age 55 + up M
REGION VI (*Continued*)																	
Jordan	Meteorological Department	4	60				15										
Latvia	Society of Geographers	128	84			4	2	2	4			31	36	55	18	42	30
Lithuania	Geographic Society	11	2							1		2		7		1	2
Poland	Polish Geophysical Society	185	170					5	10	3		65	72	87	80	30	18
Portugal	APMG																
Romania	Romanian Met. Society	39	61	1	1			4	3			15	21	18	27	6	13
" "	Romanian Assc of Hydro Sc.	65	110		13				2			30	29	35	52		29
Slovenia	Slovenian Met. Society	26	50														
" "	Sovenian Water Society	105	255														
Sweden	Swedish Met. Assoc.	46	234						8								
" "	Nordic Assc. for Hydrology	29	86														
Turkey	Chamber of Met. Engineers	84	326					1	3	6	6	67	214	10	90	2	19
UK	Royal Met. Society	176	2 273	62	546	83	191	1	19	72	169	122	788	74	979	49	783
Subtotal		**1 895**	**5 853**	**173**	**1 048**	**371**	**431**	**120**	**91**	**171**	**292**	**519**	**1 446**	**476**	**1 557**	**276**	**1 230**
Grand Total		**4 889**	**24 519**	**1 018**	**4 325**	**1 056**	**1 713**	**166**	**1 323**	**349**	**985**	**1753**	**7 091**	**1 226**	**7 360**	**464**	**3 873**

ANNEX C — REFERENCES

General

United Nations: The Beijing Declaration and the Platform for Action.

Report of the Fourth World Conference on Women, Beijing, 4–15 September 1995 (A/CONF.177/20).

United Nations. Economic and Social Council, Coordination of Policies and Activities of the Specialized Agencies and Other Bodies of the United Nations System Related to the Following Theme: Mainstreaming the Gender Perspective into all Policies and Programmes in the United Nations System. Geneva, July 1997 (E/1997/L.30).

Report of the UN Commission on the Status of Women, Economic and Social Council, 41st Session, 10–21 March 1997 (E/1997/27), Agreed Conclusions on Women and the Environment.

Canada

Lagowski, J. B. and McKenna, J., 1996: *Women Physics Faculty in Canada*. Summary of results of a survey sponsored by the Canadian Association of Physicists, Physics in Canada, Vol. 52, No. 2, March/April 1996.

McMillan, A. and Svenson, A. L.: *Women Students in Physics in Canada: A Decade of Progress*, Physics in Canada, Vol. 52, No. 2, March/April 1996.

Women in Canada, 1995: A statistical report, 3rd edition, Statistics Canada.

Education Quarterly Review, 1995: Statistics Canada, No. 81–003, Vol. 2, No. 1.

Education in Canada 1992–93, Statistics Canada, No. 81–229, Vol. 2, No. 1.

United States

American Meteorological Society, 1996: *Curricula in the atmospheric, oceanic, hydrologic, and related sciences*, AMS, 45 Beacon Street, Boston, MA 02108-3693, 524 pp.

Claudy, N. and M.E. Kauffman, 1988: *North American Survey of Geoscientists*, 131 pp. (Available from American Geological Institute, 4220 King Street, Alexandria, VA 22302).

Duffel, E. R. M., 1994: Looking at gender distribution among AGU fellows, *Eos, Transactions, American Geophysical Union*, Vol. 75, No. 37, pp. 429.

Gaffen, D. J., E. W. Friday, Jr., K. E. Weston, and D. B. Franklin, 1997: The participation of women in meteorology and hydrology in the United States: The U.S. response to a World Meteorological Organization Questionnaire. *Bulletin of the American Meteorological Society*, Vol. 78, No. 10, *in press*.

Lewis, J. M., 1995: WAVES (Women Accepted for Volunteer Emergency Service) forecasters in World War II (with a brief survey of other women meteorologists in World War II), *Bulletin of the American Meteorological Society*, Vol. 76, No. 11, pp. 2187–2202.

National Science Foundation, 1994: *Women, Minorities, and Persons with Disabilities in Science and Engineering*, NSF 94-333, 404 pp. (Available from NSF, Arlington, VA 22230).

National Weather Service, 1994: NWS Diversity Workshop: *Developing Tomorrow's managers and Leaders: Focus on Women — Final Report*, 89 pp. plus appendices.

O'Brien, K., and G. K. Grice, eds., 1991: *Women in the Weather Bureau during World War II*, National Weather Service, 58 pp.

Simpson, J. and M. LeMone, 1974: Women in meteorology, *Bulletin of the American Meteorological Society*, Vol. 55, No. 2, pp. 122–131.

Stephens, P. L. and C. Kazarosian, 1992: Results of the AMS membership survey, *Bulletin of the American Meteorological Society*, Vol. 73, No. 4, pp. 486–495.

WORLD METEOROLOGICAL ORGANIZATION

REPORT ON THE PARTICIPATION OF WOMEN IN THE FIELDS OF METEOROLOGY, OPERATIONAL HYDROLOGY AND RELATED GEOPHYSICAL SCIENCES

CORRIGENDUM

Please replace the diagrams and captions on pages 5, 7, 11, 14 and 19 by the following new diagrams below.

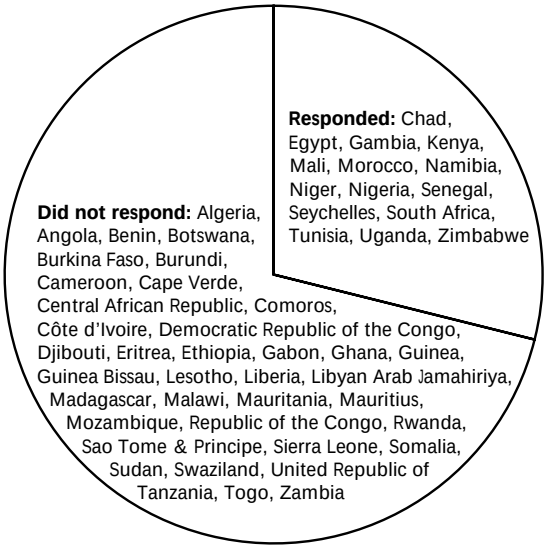

Figure IV-2 — RA I (Africa) 29% response rate

Figure IV-8 — RA II (Asia) 58% response rate

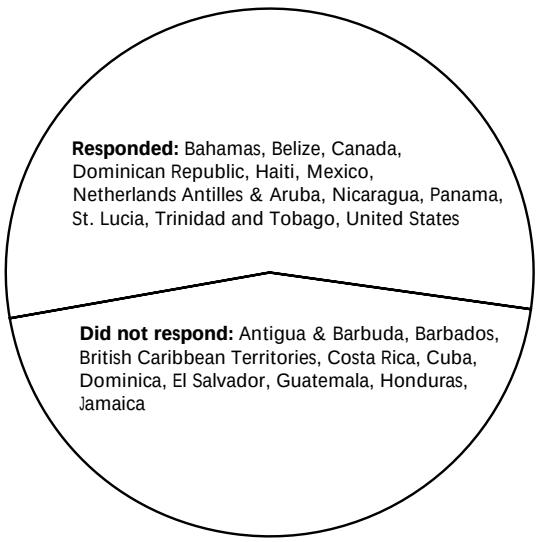

Figure IV-20 — RA IV (North and Central America) 55% response rate

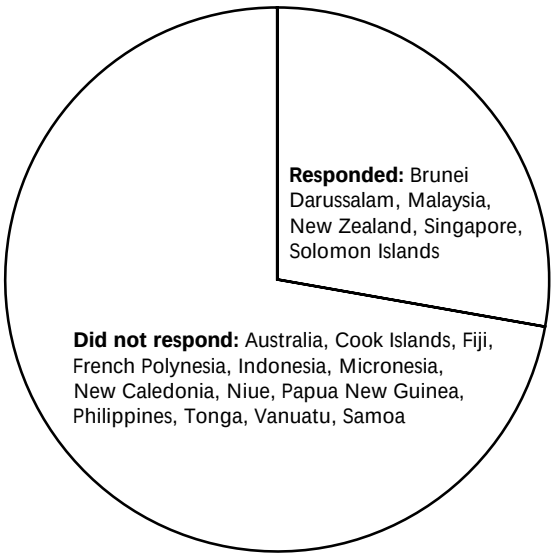

Figure IV-26 — RA V (South-West Pacific) 28% response rate

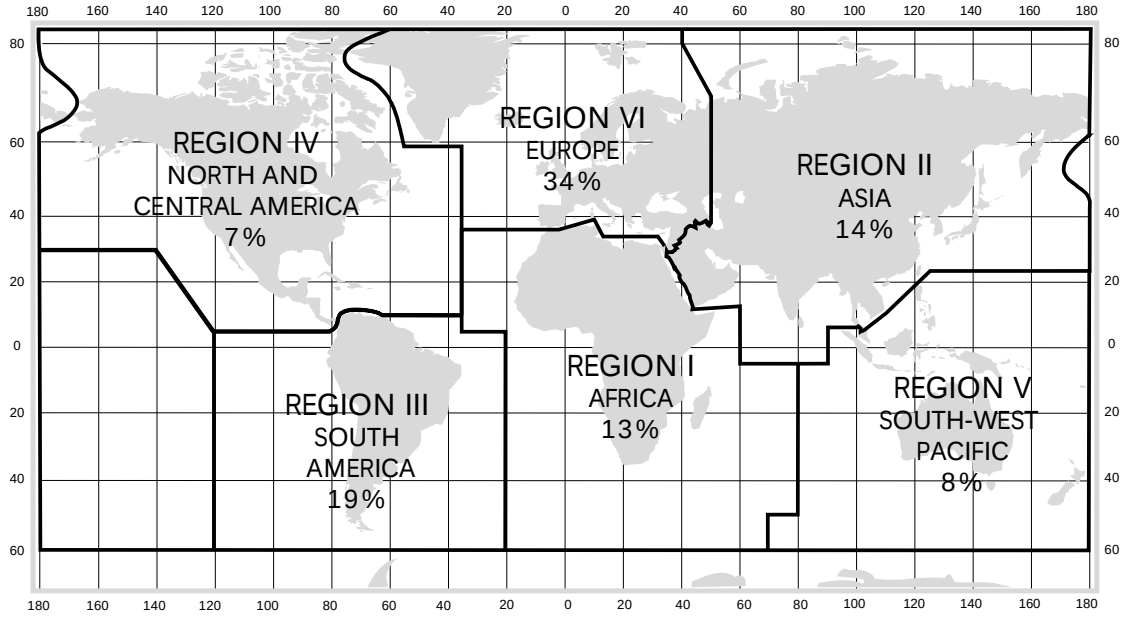

Figure V-3 — Participation of women in Professional Societies — regional averages