

A Comparative Study of the Research Conditions of Women Scientists and the Present  
States of Women's/Gender Studies in Asian Countries Toward the Sustainable  
Development

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The Status of Women Scientists in Japan  
--Gender Mainstreaming in the Science Council of Japan--

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## I. Introduction

The purpose of this workshop is to exchange information on the research conditions of women scientists and the present states of women's/gender studies in Asian countries and to find out the means to promote the status of women scientists by improving their research conditions. In this presentation I would like to concentrate on women scientists rather than women's/gender studies because of time limitation. Concerning the state of women's/gender studies in Japan, there is a paper presented by Prof. Hiroko Hara at Regional Consultation on Women's/Gender Studies Programmes in the Asia-Pacific Region in Bangkok, December 1-3, 2003 organized by UNESCO (See attached paper, "Experience in Japan" by Hiroko Hara).

Though there are several grassroots movements to improve the research conditions of women scientists in colleges, universities and research institutions all over Japan, mostly I would like to concentrate on the activities of the Science Council of Japan (SCJ) because of strong influence on the government policies.

## II. Present state of women scientists in Japan

According to Article 14 of Japan's Constitution, everybody is equal under the law and nobody is segregated in political, economic and social relations regardless of his/her race, creed, sex, social status and family background. However, the status of women in society is still very low. Gender Empowerment Index of UNDP was 38<sup>th</sup> in the world in 2004, mainly because of the low ratio of women in the decision-making positions in politics and business. In science and technology, women are more invisible than in politics and business. The ratio of women researchers was only 11.6% in 2004, which is

less than a half of other developed countries.

The higher the level of education, the less women are among the teaching staff. In 2004, the ratio of female teachers in kindergarten is 93.9%, in elementary school, 62.7%, in junior high school 41.0%, in high school 27.5%, in junior college 46.3%, and in university 16.0%. In university, the female ratio of the presidents is 8.0%, professors 9.7%, assistant professors 16.1%, lecturers 22.9% and assistants 23.3%, though women in the Ph.D. course is nearly 30% now. There are more female professors in Home Economics, Public Health and Humanities than Physics and Engineering.

There are many surveys on working women, but there is a few on women scientists. The followings are surveys on female members of academic organizations registered to SCJ.

#### 1) Survey on the Environment of the Scientists

Mail survey was conducted to 5000 members of the academic organizations registered to SCJ in 1997, in which Dr. Hara was a leader. 1353 women and 589 men responded, which means that women were more interested in such topics as working conditions and work-family balance.

The results are summarized as follows.

41.9% of women and 78.7% of men were married with child or children. 37.5% of women and 10.4% of men were unmarried. Married with children increases men's output, while it decreases women's output measured by the number of articles and of oral presentations. The more men had children, the more they were productive, but the more women had children, the less they were productive. Nearly 80% of women mentioned household tasks were obstacle to their research, but 60% of men mentioned household tasks had no effect on their research.

The more women in part-time positions, though there was no gender gap concerning their outputs.

More women were working in junior colleges than universities, and in private universities than national universities with less research funds and more teaching load.

More women were in such lower positions as assistant or lecturer and stayed there for long. Promotion was delayed. To become assistant professor and professor, women were 5 years behind men.

Women had less opportunities to go abroad for study or to attend international conference, which was related to less output.

Women were often isolated from the communication network of the scientists, which was related to less opportunities to be encouraged, receiving advice and forming new ideas.

Among junior college staff, 21.4% of women experienced sexual harassment, among university staff 34.3% and among graduate students 26.7%.

Those who were encouraged by their boss could achieve more outcome in their research.

## 2) The Activities of Women Members in SCJ Registered Organizations

The Special Committee for Examining Various Aspects of Gender Issues of the 18<sup>th</sup> term(2000-2003) of SCJ conducted a mail survey on status of women to the registered academic organizations, in which Prof. Keiko Kashiwagi was a leader. The results are as follows.

More women were in Division 1(literature, philosophy, history, education, psychology, sociology), and the number had been increasing. Division 7(medicine, dentistry, pharmacy, nursing) had also been increasing recently because of increase in nursing.

The ratio of women in decision-making positions were less than their share of membership. In 2002, the ratio of women members in Division 1 was 34.7%, while the ratio of women in the executive board was only 13.2%. In Division 7, the former was 22.0%, while the latter was only 6.0%.

The ratio of women in the editorial staff was a little bit higher. In 2001, the ratio of women member in Division 1 was 32.4%, while the ratio of female editors was 16.9%. In Division 7, the former was 21.0%, while the latter was 6.7%.

Prof. Kashiwagi also analyzed the female ratio of the psychological associations, in which there are more female members than other academic organizations. In 2004, among members of the Japanese Psychological Association, 34.8% were women, while 14.3% in the executive board, 4.5% in the editorial staff. In Japan Association of Educational Psychology, 47.2% were women, 8.1% in the executive board and 26.4% in the editorial staff. In Japan Society of Developmental Psychology, 65.1% were women, 42.3% in the executive board, and 32.8% in the editorial staff.

Over all, women scientists stay as rank-and-file members and those in the executive board and in the editorial staff are less than their share. In spite of hard efforts of women scientists, they are still suffering from dual responsibility of managing work and family life, which is quite common among many working women not only in Japan but also in most of both developed and developing countries.

### .III. Brief history of promoting the status of women scientists in Japan

#### 1. 1970s: Recognition of gender issues and introduction of women's studies

Though there were several groups of women scientists before 1970 in various

places in Japan, they were scattered or limited to a certain discipline. In 1956, the Japan Association of Women Scientists was organized, but members were mostly natural scientists. And also there were groups of women scientists at Kyoto University, Kanazawa University and Nagoya University. In 1974, the Committee of Women Scientists' Problem was first established in Japan Scientists' Association, NGO founded in 1965, to examine the states of women scientists and their problems. In 1975, women scientists organized groups in Aichi and Kanagawa prefectures.

The Association of Aichi Women Scientists examined such issues as employment, research and teaching conditions, higher education of women and difficulty in maintaining work-life balance. Thirty years have passed since then, but the problems of women scientists have not been solved yet. For instance, many women are working as part-time, conducting peripheral tasks, many girls go to junior college and only a few choose engineering, and housekeeping, childcare and eldercare are still in the hands of women. The Association of Aichi Women Scientists has been quite active not only in improving working conditions of women scientists but also in abolishing gender segregation at national and local levels.

On December 20, 1976, the Committee of the Status of Scientists, Science Council of Japan (SCJ), held the first symposium on the status of women scientists, and the second one was held next year. "Need to Improve the Status of Women Scientists" was adopted at the general meeting of SCJ and presented to Prime Minister on May 23, 1977. The National Women's Education Center (NWEC) was founded in July 1977 to foster leaders of women's education and promote programs for women's education. Why there were such trends in 1970s? We can point out the impact of Women's Liberation Movement in late 1960s in the United States and of UN Year of Women in 1975 and the UN Decade for Women from 1976-1985. At the grassroots level, the former encouraged women to improve their conditions and at the government level the latter influenced on both the national and local governments to recognize the importance of gender issues.

## 2. 1980s: Starting point for gender equality

1980s was characterized as the age of women in Japan. At the Mid-year World Conference of UN Decade for Women in 1980 in Copenhagen, the head of the Japanese delegate, Ambassador Nobuko Takahashi, signed to the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW) and the Japanese government ratified it in 1985. Equal Employment opportunity Law (Law concerning the promotion of equal opportunity and treatment between men and women in employment and other welfare measures for women workers) was enacted in 1985. Both the national

and local governments made an effort to improve the status of women and to abolish gender segregation both at work and at home in order to attain the gender equal society. Mass media publicized such trends, though some were critical or cynical. Women's/gender study courses were introduced to colleges and universities. Local governments established women's center for life-long education in the community.

In 1981, Dr.Katsuko Saruhahi was elected as the first female member of SCJ, and since then female members have been increasing gradually. The following is the list of the number of female members of SCJ.

12<sup>th</sup> term (1981-85): 1 women in 210 SCJ members

13<sup>th</sup> term (1985-88): 1women in 210 SCJ members

14<sup>th</sup> term (1988-91): 3 women in 210 SCJ members

15<sup>th</sup> term (1991-94): 4 women in 210 SCJ members

16<sup>th</sup> term (1994-97): 1 women in 210 SCJ members

17<sup>th</sup> term (1997-2000): 2 women in 210 SCJ members

18<sup>th</sup> term (2000-2003): 7 women in 210 SCJ members

19<sup>th</sup> term (2003-): 13 members in 210 SCJ members.

Among 7 divisions of SCJ, there have been no women member in the 5th division (engineering) and the 7th division (medicine, dentistry, pharmaceutical science, nursing), though nearly one third of medical doctors, more than half of pharmacists and almost hundred percent of nurses are women.

In 1985, SCJ general meeting adopted "Recommendation to establish an integrated research institute for improving the status of women scientists." NWECC has been collecting data on courses of women's/Gender studies at colleges and universities since fiscal 1983. Its database has been accessible through the Internet since 1992(URL:<http://www.nwec.jp>). Now approximately half of Japan's universities and colleges offer courses related to women's/gender studies.

1980s was characterized as the starting point of equal participation of men and women in every sphere of the society.

### 3. 1990s-: More comprehensive policies for gender equality

At the 1994 general meeting, SCJ adopted "Urgent appeal for the improvement of the research environment for female scientists." In 1995, female members of 15<sup>th</sup> and the 16<sup>th</sup> terms, and female members of Liaison Committees of SCJ founded Japanese Association for the Improvement of Conditions of Women Scientists (JAICOWS), and conducted the survey on working conditions of women scientists in 1997, which was

shown previously.

At the 17<sup>th</sup> term (1997-2000), Special Committee for Improvement of the Research Environment for Female Scientists started. At the general meeting in 2000, SCJ adopted “Promotion of Equal Opportunities for and Treatment of Men and Women Participating in the Science Council of Japan” and “Towards a Comprehensive Solution to Improve the Research Environment for Female Scientists” In the former, the goal of increase in female member of SCJ up to 10% until 2010 was set. In the latter, the following items were included;

To indicate the gender differences in the government statistic. The government statistics often does not show the gender differences when they show the survey result.

Creating new items in the government research funds for promoting equal participation of men and women in science and technology.

Assistance to childcare of scientists. Childcare is the biggest barrier for women to continue their career.

Improvement of the recruit system. Women scientists are often segregated in employment because their family responsibility may reduce the time for research.

Establishment of systems to prevent sexual harassment Women scientists in such low status as graduate students and research assistants often face sexual harassment from their boss because of the patriarchal structure of the academic society.

Improvement of conditions for applying scientific research fund by the Ministry of Education, Culture, Sports, Science and Technology. Only full-time employees can apply for it, which excludes many women in part-time positions.

Increase in female members of decision- making positions in academic societies.

Recognition of couples to use different family names. In Japan, more than 90% of couples use the husband’s family name, which make it inconvenient or disadvantageous for female scientists who have started their career before marriage. Recently many institutions allow to use maiden names for female staff, but officially they have to use their registered name.

In the 18<sup>th</sup> term (2000-2003), Special Committee for Examining Various Aspects of Gender Issues started. The committee hold several symposiums on promoting gender equality in research and education, and in May 2003, the committee published the report of “Gender Problems and Reconstruction of Science,” in which the following recommendations were included; the long-term policy for solving such problems as sexual harassment and childcare based on recognition of human dignity. reconstruction of science based on gender perspectives, long term goals to be attained for formation of gender equal society such as changing social systems, customs

and values.

In the 19<sup>th</sup> term (2003- ), Research Liaison Committees of Gender Studies, and of 21<sup>st</sup> Century and Gender Studies started. The former, though a half of the members are from division 1(humanities, sociology, etc.), it includes other divisions. The latter consists of only division 2 (law and political science). These two committees jointly organized symposiums on gender equality in science.

In 1999, Basic Law for Gender Equality was enacted. The 2<sup>nd</sup> term Basic Plan of Science and Technology in 2001 included “improvement of research conditions for female scientists.” Just recently Bureau of Gender Equality, the Cabinet Office, has decided to add such an item as “increase in the number of women in science and technology” to their 2<sup>nd</sup> Term Basic Plan for Forming Gender Equal Society.

In 2003, Japan Association of Gender Law was founded and in 2004 Japan Association of Gender History was founded. Until 1990s, gender issues were treated as something curious in the academic society, but now gender mainstreaming is obvious and inevitable.

#### IV. Some Recommendations to Asian countries

##### 1) The database of women scientists

I have tried to find the data on women scientists in other Asian countries, but failed. The problems women scientists are facing are quite common in most of Asian countries. It is important to have the accurate statistics in order to discuss and to solve the problems

##### 2) Network of male and female scientists who are sensitive to gender issues

In order to improve the status and working conditions of women scientists, it is necessary to establish the network of both male and female scientists who are sensitive to gender issues so that we could achieve more gender equal society by abolishing the patriarchal structure of both at work and at home.

##### 3) Comparative study

Though there are some comparative studies on women's/gender studies, there is no cross-national study on women scientists. In order to clarify the situation of women scientists in Asian countries, it is necessary to conduct a cross-national study on such items as the status, promotion, research environment, and work-life balance of women scientists.