

**Title of the Project :** Professional Women in Agriculture  
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**Year of Completion :** 1998

**Objectives : The project aims to study**

- ▶ The objective is to provide a firm basis for formulation of corrective strategies. The study accordingly centres around assessment of the following aspects of the subject .
- ▶ Career opportunities for agricultural women graduates.
- ▶ Professional performance of women graduates.
- ▶ Job opportunities for women engineers.
- ▶ Issues pertaining to women professionals and the influencing factors.

**To achieve the above objectives the project was designed to answer the following sub-objectives :**

- ▶ Growth of discipline-wise trained graduate personnel in agriculture.
- ▶ Influence of background of male and female students in opting career in agriculture
- ▶ Performance in school and choice of graduation in agricultural courses
- ▶ Variables which influence women and men to join agricultural courses.
- ▶ Preferences of disciplines convenient/suitable for women in post-graduation.
- ▶ Reasons for pursuing higher studies in agriculture.
- ▶ Participation of women in conferences/workshops/seminars/symposia, and also in national and international professional societies
- ▶ Analysis of opinions of male and female graduates to questions on perceptions about professional and career issues.

**Executive Summary :**

The DST project on "Professional Women in Agriculture" was taken up to study the status and growth of agricultural women graduates, career opportunities, preference, and perceptions regarding professional and career issues. The target population included the UG, PG and Ph.D. degree holders in agriculture and allied sciences, i.e. all disciplines offered by agricultural universities. The number of female students with professional degree in agriculture has increased many fold, i.e. from 387 (3.9% of total) in 1980 to about 3,773 (21.6% of total) in 1996.

The employees of professional agricultural women such as ICAR, agricultural universities, banks, state and central departments, private sector, the unemployed women graduates, and students were contacted for the survey purpose. Four different questionnaires were used - three for maintaining databases on agricultural graduate students, employees and organizations employing them, and one for survey covering personal, academic, career information, career expectations and values as well as career problems.

The estimated number of agricultural women graduates in the country in 1995 was 14,460. Purposive sampling was done for the survey using the snow ball technique. The survey could identify 7,821 graduate women, out of which 1,443 expressed their willingness to participate in the survey. The final sample consisted a total of 1,298 respondents, out of which 454 were male and 844 were female. Male respondents were included to identify gender-neutral issues and also for comparison of perceptual differences.

The project report shows the changes needed in procedures, rewards and policies

of both government and private agencies. The work is culmination of serious survey, case-studies and brain storming workshop.

### **Organisation of the report**

The report consists of thirteen chapters. First three chapters give general introduction to the system, and methodology used and response. Chapters IV and V give personal and academic details of the respondents. Physical facilities, career opportunities and job related issues are explored in chapter-VI to chapter-IX. Out come of a brainstorming workshop on issues of professional women is given in chapter-X, and chapter-XI gives summary of the findings and looks to the future. International experiences on issues of professional women, Indian case studies, and some project information are given in chapter-XII as annexes. References are given in chapter-XIII.

### **Major findings**

Based on the findings it can be concluded that there is no major perceptual difference between women and men professionals as both regard work as gender-neutral and give more importance to competence. The results are discussed in terms of per cent respondents agreeing or disagreeing to a particular issue or event. Broad subject wise findings are given the following.

### **Agricultural education**

A study of the school background of the female respondents indicate that 14.9% were from rural and 85.1% were from urban schools. The professional education in agriculture was opted as the second best (next to medicine) by female respondents (18.5%) at the time of entry into college. Agriculture was preferred as it was regarded as a challenging profession working with nature, tapping the potential resources for the welfare of the country. It is worth noting at this juncture that parents had been most influential in motivating to take up education in agriculture, more so the mother in case of female respondents. In agricultural education field work is mandatory, and the study revealed that majority of the respondents had not faced difficulties in field work. However, 12 per cent of the respondents had not faced difficulties in field work due to one of the following reasons: lack of practical training and guidance, physical strain, non-agricultural background, negative attitude of colleagues and distance from field. Students respondents opined that, home science (40.9%), horticulture (18.9%) and extension (15.7%) specialisations were convenient specialisations for graduate women.

### **Employment issues**

Data on job-status of female graduates indicate that 72.6 per cent are employed, 6.6 per cent were unemployed and 20.8 per cent were students. The situation of unemployment in agriculture was low compared to other professions. Female respondents, who were unemployed, cited the reasons that employment in agriculture involved frequent travel and intensive fieldwork. As far as the employing organisations are concerned, it is seen that the largest number (39.7%) of female graduates were employed in educational institutions. This is followed by government development departments (19.2%), research institutions (7.9%), private sector (4.2%), and financial institutions (1.1%)

Most women engineers have no preference regarding whether their colleagues should be male or female. Professional competence and cooperative attitudes are considered as important qualities expected from colleagues. The sex of the person is considered irrelevant in this context. In spite of the difficulties faced by them, most respondents have no reservations in advising younger women to take up engineering as a career. The respondents believe that with increase in numbers, acceptance will follow and the present difficulties will get resolved.

The study pointed the fact that sexual harassment faced by the female respondents was low at the place of work and about 22.3 per cent indicated facing

the problem. Thus, a congenial atmosphere/work condition existed for women at the place of work, in most organisations.

### **Career perceptions**

Majority of women (57.2%) opined that they have to do better than men to get equal professional recognition. About 52.8 per cent women revealed that family is of primary concern when compared to career. Both, male (82.8%) and female (85.6%) respondents considered family support a key factor to a successful career. As infrastructure facilities are poor in field stations, women (35.5%) felt that it will be convenient to work in such stations during the initial entry of their career when the family obligations would be minimum.

In the choice of colleagues at work, majority of the respondents opined that work is gender neutral. In the choice of their supervisor, 61.5% of the female respondents indicated gender-neutrality, 22.9% preferred male supervisor, and 15.6% preferred female supervisor. Data on preferences for choice of subordinate revealed that 66.3% of the female respondents implied gender-neutrality, 16.5% preferred male subordinates, and 17.2% preferred female subordinates.

### **Management issues**

The non-availability of physical facilities like creche, school, wash room, accommodation, transport and health facilities were reported by majority of the respondents. It is to be noted as vital issue that both female and male respondents expressed concern on absence of flexible working hours. Gender prejudice was cited as an important reason by female respondents for not getting job especially in private sector. The awareness and participation in employee associations and training programmes was relatively low in case of female respondents. Some of them (27%) had not undergone any training programme in their professional career. Low salary, distance of work place from residence and lack of accommodation were cited as reasons for refusal of job by women.

On the question of reservations to women in education and employment, nearly one third female respondents were against any reservations. However, two third female respondents felt the need for reservations. However, two third female respondents felt the need for reservations in all activities supported by government.

The number of female respondents with top level management positions was negligible. To alleviate some of the managerial problems, the female respondents felt the need to associate women in all decision making bodies, like selection committees.

### **Recommendations for action**

Based on the analysis of nation-wise survey findings, and supported by case studies, and brainstorming workshop, the following recommendations are made for alleviating the problems faced by women graduates and also to encourage more and more women graduates to come to main stream economy. The detailed recommendations along with concerned agencies for policy and action are given in chapter-XI.

### **Educational issues**

As urban graduates are reluctant to serve in rural areas, more number of rural students be admitted in the agricultural courses so as to increase the number of professional graduates with rural back ground, who may take up extension related jobs/activities.

Women reservations are to be extended to all activities supported by state such as scholarships, admissions nominations to awards, curricular and co-curricular activities.

### **Technology transfer issues**

The organisational climate in the line departments needs to be made gender friendly to encourage women to take up extension jobs. The women employees

are to be provided necessary facilities and services like transport, accommodation and spouse employment.

### **General issues of working women**

- ▶ It must be made mandatory to associate at least one woman member in all committees such as selection panels for recruitment/promotion, grievances etc. This may minimise discrimination met by certain women purely on gender basis
- ▶ For the better satisfaction of employees, work structure can be modified incorporating features like flexible timings, easy leave option and contract jobs.
- ▶ Personnel policies to be evolved aiming at spouse employment and preferential placement for working women.
- ▶ For out-station tours, availability of facilities like transport and accommodation may be made a prerequisite.
- ▶ Essential minimum infrastructure facilities like boarding, lodging, transport, toilets, etc. exclusive for women, be provided at training institutes and work places.
- ▶ HRD programmes for professional women in agriculture need proper planning in timing and duration keeping in view the dual responsibility of women employees.
- ▶ More women professionals should be encouraged to become members in professional societies and proportionate opportunities be given to participate in conferences and training programmes.

There is need for a coordination body (women cell) and also a need to network agricultural professional women at organisational and national level. NCW may provide broad guidelines and insist for creation of a women cell in each organisation for implementation of women related policies. It may establish an organisation-independent mechanism to review the progress from time to time.

### **Definition of the sample of the study**

For the purpose of the present study graduate women include all undergraduates, post-graduates and doctorate holders in various disciplines of agricultural and allied sciences, i.e., the graduates in agriculture, horticulture, forestry, cooperation and marketing, veterinary and animal sciences, dairy, fishery, agriculture engineering, home science and all such disciplines offered by state agricultural universities (SAUs). The total sample of 1,298 respondents of this study represent all associated sub-systems and, hence, reflect the problems faced by agricultural women graduates in different systems in the country.

### **Organisation of the report**

The report consists of thirteen chapters. Chapters I-III of the report give general introduction to the system, methodology used and response. Chapters IV-V give personal and academic details of the respondents. Chapters VI-IX explore the physical facilities, career opportunities and job related issues. Brief outcome of the workshop on issues of professional women in agriculture is given in chapter-X. Chapter-XI presents the summary of the findings and looks to the future. Survey questionnaires, estimation of working women, some information pertaining to the project and international experiences on issues of professional women in agriculture are given as annexures in chapter-XII. References are listed in chapter-XIII.