PROBLEMS OF WOMEN ENGINEERS IN INDIA

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1. INTRODUCTION :

India with a population of 900 million people is one of the largest producer of engineers and scientists having 4 16 engineering colleges producing 1 ,0 1,45 1 engineers per year and 1029 polytechnics producing 1,66,458 diploma holders. Women represent only 15% in engineering colleges and about 20% in polytechnics. Indian society is characteristic in its own way. Caste and class factors greatly influence the women's entry into education in general and technical education in particular. The socio economic and cultural aspects of the society also have great role in this regard. Women from urban areas are comparatively doing well but women from rural areas and socially and economically backward castes' representation is very poor. The selection for professional courses in India is by an entrance test. There is a severe competition for professional education in India (about 200,000 students compete for about 6000 seats in the state of Andhra Pradesh only). This requires special effort and coaching and students have to prepare specially for the entrance examination. A recent study by the author revealed that girls work for 2 hours in domestic help in addition to their studies where as boys do not help at all.

2. PROBLEM OF ENTRY INTO ENGINEERING COLLEGE :

(i) The problem starts with the coaching classes for engineering entrance examinations. The coaching classes either start too early in the day or run too late into the night, which is considered to be unsafe for girls in our society.

(ii) For the parents it is a big loss to give professional education to a daughter, since anyway they have to spend an equally or even larger sum for her marriage and the earnings of the professional pursuits will ultimately benefit her in laws. Thus the social traditions, as they are, big disincentives for the parents to think of professional education for their daughters.

(iii) The engineer - bride has lesser chances in the matrimonial field compared to a medico, who is more easily accepted for her ability to render professional service to the family, while her engineering counterpart will have a dominating profession, which is less acceptable to the male ego of the day.

(iv) Colleges of engineering, with the majority under private management, often have remote locations with poor accessibility, poor facilities for girls with no provisions for waiting rooms or even toilets, and poor protection against sex greedy male onslaughts of different gradations. These factors are strong deterrents in seeking engineering education for the daughters of middle class families.

3. PROBLEMS OF ENTRY INTO SERVICE :

The few women who mange to acquire engineering qualification have a greater hurdle in securing a deserving job, since feminine sympathy and professional dividends are mutually exclusive for the employer. The reasons are as follows.

(i) Lady's career is linked up with her marriage and cannot execute a service contract or bond before her marriage is settled.

(ii) The female employee needs protection against possible offences against her feminine sensitivities, which is a cumbersome and costly liability for her employer. These include provision if transport and safety for night shifts of duty, provision of toilets etc.

(iii) Commitment to child birth and child rearing, ordained by nature and worsened by male selfishness is an additional liability to the employer or women-power. Her biochemical cycles can some times distract her from her professional efficiency.

(iv) Physical inferiority and fragility of feminine sensitivity put constraints on the suitability of women in jobs involving touring and other physical strains. Irrespective of the moral justifications, the fact is that several employers have no courage to recruit lady engineers, except in some limited areas of professional activity.

4. CONSEQUENT LOSSES :

(i) By dissuading the participation of women in due proportion in the engineering profession the nation is a loser by (i) not exploiting the intellectual potential of one half (better half ?) of the population.

(ii) Remaining uncivilized enough to discriminate against sex in providing social opportunity in spite of the commitments in the constitution and social philosophy.

(iii) Wasting on the training of ladies who choose to remain unemployed or under employed after qualifying

5. REMEDIALS :

The ultimate remedy lies in the emancipation of the male from traditional prejudices that victimise the helpless female. As this aspect of human evolution is too slow, some incentives are to be provided to offer solutions to the problems. The following suggestions may be considered in this context.

(i) Reservation of seats in engineering colleges for girls, with no constraints on the choice of branch or college except perhaps a maximum limit if necessary.

(ii) Increasing the reservations for women in certain categories of employment, where the clash with femininity is lesser.

(iii) Liberal transfers on request for lady employees.

(iv) More part time and seasonal jobs to mobilise the productive potential of women.

(v) Incentives to employers who offer to increase the female proportion of their employees.

(vi) Organization of professional women to voice their problems and needs.

(vii) Providing a career brake for women to fulfill their socio biological role.

(viii) Providing more child care centres and working women hostels in all major cities.

(ix) Providing part time and lexi time employment.

(x) Formation of an equal opportunity cell for women in all institutions as existing in U.S.A.