

# Strategic Role of Women in Science and Technology

Bismanjeet Singh\*

## ABSTRACT

*In the current era, women scientists are playing a strategic and important role in the research and development in the field of science, information, technology, space technology, digitalization, biotechnology and much more. Women empowerment can be achieved through education- which is a major milestone. Educating women is the best way to improve their current and traditional lifestyle. Instead, a lack of education for women can be a hindrance for the economic development of a country. There is a lack of gender diversity, especially in the field of science and technology all around the world. Science plays a very important role in the existing crisis like climate change, disruption of technology, the emergence of new diseases recently and much more. Science and technology can help in solving the crisis with the important participation of women that want to pursue their career in science. Henceforth, there is a need to boost female participation in all the sectors, especially science and technology and information technology. We need to give women the biggest platforms for showing the talents and hence for improving the economy of any country. Women deserve every right in every field, keeping aside the challenges they face in every field.*

## DEFINITION OF WOMEN'S EMPOWERMENT

According to the World bank: "Empowerment is the process of increasing the capacity of individuals and groups to make their choices and also to transform these choices into the desired action and outcomes" Therefore, it is the process of increasing the authority role and responsibility of we as individuals and also as groups, first, to make choices and second, to transform the choices into known desired actions and outcomes to achieve the goals.

## STATUS OF WOMEN IN INDIAN SOCIETY

According to Pt. Jawaharlal Nehru, "To awaken the people, it is the women who must be awakened." In order to awaken citizen, it is the people who have to be awakened, once she moves, the country moves and thus we build the India of tomorrow. To achieve and get a high growth rate, basic and good access to education should be open for the entire population without any discrimination on the basis of caste, religion, colour, gender and status. It refers to increasing the spiritual, political, social, educational, gender, or economic strength of individual and communities of women. The total population of present India 1210.3 million (2011) which is almost equal to the combined population of the USA, Indonesia, Brazil, Pakistan, Bangladesh and Japan, out of which the Women population is 586.6 million (48.5%) which means sex ratio- 943/1000men.

\*Assistant Professor, GGNIMT, Huawei Certified ICT Associate and Trainer (HCAI, HCIA)

## STATUS IN ANCIENT INDIA

During the ancient era, women had good social and religious status. During the Vedic period, women were allowed to get Vedic education and also used to take part in religious rites. Women of that age were also thought to be capable of learning and understanding philosophical education. Moreover, women remain unmarried for higher studies. Women education has been highly appreciated in Atharva Veda of Hinduism.

Women's empowerment has five components:

- 1) Women's sense of self-worth.
- 2) Their right to have basic amenities and education and to determine their choice.
- 3) Their right to have access to all the opportunities and resources which male members of the society have.
- 4) Their right to have the powers to control their lives, both within as well as outside the home.
- 5) Their ability to influence the direction of good social change in order to create more social and economic order.

## NEED OF WOMEN EMPOWERMENT

The main problems that were faced by women in past days are Gender discrimination, Female foeticide, Woman education, Dowry System, Child Marriage in the same caste, Various Atrocities on woman: Raped, kicked, killed, subdued, humiliated and face domestic violence almost daily.

Women are deprived of the Decision Making Power inside and outside the homes, freedom of Movement, Access to Education, Access to Employment, Exposure to Media.

## WAYS TO EMPOWER WOMEN

There can be many ways to empower the women of our society, giving them equal rights and status. Therefore, women can be empowered by:

- 1) Changing women's mobility and social interaction, changing women's labor patterns.
- 2) Changing women's access to and control over resources as all have equal rights on it.
- 3) Changing women control over decision making both inside and outside the homes.
- 4) Providing education.
- 5) Self-employment and self-help groups can also help in this.
- 6) Providing minimum needs like nutrition, health, sanitation, housing.
- 7) Other than this, the society should change the mentality towards the word women, thereby encouraging women to develop in their fields they are good at and make a good career.

## ROLE OF NGO'S

Non-governmental organizations are playing an important role in the empowerment of women. The government had set up the Central Social Welfare Board, which is an apex body of the voluntary sector that aids approximately around ten thousand NGOs across the country, thereby helping women stand on their own and make their career.

## ROLE OF GOVERNMENT

The Department of Women and Child Development has implemented various special programmes for the overall development and empowerment of women of our country with a major focus to improve their socio-economic status as well as empowering the education system of women of the country. The year 2001 was declared as the "Women's Empowerment Year" to bring a bright focus on the programmes for women. A programme of Support to Training-cum-Employment for Women was also launched in 1987 to strengthen and to improve the skills for employment opportunities, in various sectors of agriculture, small animal husbandry

etc where the women of our country are employed on a large scale. Swayamsidha was also launched in March 2001 and the Swa-Shakti Project was launched in October 1998.

## **VARIOUS WOMEN EMPOWERMENT PROGRAMMES IN INDIA**

The government as well as along with self-help groups along with NGOs have launched various programmes in India for the overall development of women in society. For example, these are Swayamsidha, Swa-Shakti Project, also to support to Training and Employment programme for the women, Swalamban, Creches/Daycare centers for the children of working and as well as the Ailing Mothers, Swadhar, Rashtriya Mahilakosh and more are also being launched by the Government of India.

### **SWAYASMIDHA**

It is also an integrated project for the development and empowerment of women through Self-Help Groups, with special emphasis on covering the service, also thereby developing access to micro-enterprises. About 15 lakh women have taken membership in the programme.

### **SWAM SHAKTI PROJECT**

Earlier known as the Rural Women's Development and Empowerment Project, it was sanctioned in October 1998 as it is a centrally sponsored scheme to be implemented in the various states of Bihar, Chattisgarh, Gujrat, Haryana, Jharkhand, Karnataka, Madhya Pradesh, Uttaranchal and UP.

### **SUPPORT TO TRAINING AND EMPLOYMENT PROGRAMME FOR WOMEN:**

The program seeks to provide updated skills and also enhance new knowledge to poor, asset-less women in the eight sectors of employment, viz., agriculture, animal husbandry, khadi and village industry, sericulture, dairying, fisheries, handlooms and handicrafts sectors.

### **SWADHAR:**

This scheme was too launched in 2001-2002 as a central sector scheme for providing overall holistic and integrated services to women in difficult circumstances.

### **NATIONAL POLICY FOR THE EMPOWERMENT OF WOMEN (2001)**

The goal of this policy is to bring about the advancement, development and empowerment of women.

## **CONCLUSION**

Women represent half the world's population, and also gender inequality exists in every nation on the planet. Unless and Until women are given the same opportunities that the men are, entire societies will be destined to perform below their true potentials. The greatest need of the hour is a change of social attitude towards women giving them equal rights in all the fields. Henceforth, Science plays a very important role in the existing crisis like climate change, disruption of technology, the emergence of new diseases recently and much more. Science and technology can help in solving the crisis with the important participation of women who want to pursue their career in science. Henceforth, there is a need to boost female participation in all the sectors, especially science and technology and in information technology.

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