5-1 -Role of Science and Technology in the Upliftment of Women

Dr. Sumita Sahgal
Assistant Professor, Chemistry Department, S.S.Khanna Girls' Degree College, Allahabad, Uttar Pradesh, India

ABSTRACT

In the new era of globalization the gap between education and technology opportunities for men and women have widened. Women are a great human resource and their role in the society is vital for its progress. The involvement and engagement of women in the present day Information Society on an equal footing with men would directly contribute to improving the livelihood of people, making it more sustainable and thereby promoting the social and economic advancement of societies. Science and Technology brings economic growth and well-being to people. In India, women face enormous challenges with respect to health, education, and economic empowerment. For example, maternal mortality and malnutrition remain major problems, about third of women are unable to read and write, and economic opportunities are limited by pervasive discrimination and lack of access to market information.

Keywords: Science and Technology, Market Information, Decision-Making Process, STI, INSA

1. INTRODUCTION

The Science, Technology and Innovation Policy (STI), 2013 document states that the ‘benefits of Science, Technology and Innovation (STI) should focus on faster, sustainable and inclusive development of the people’

Inclusive growth has to ensure opportunities for all sections of the population with a special emphasis on the poor, particularly women who are most likely to be marginalized.

In the future, science and technology will likely play an even larger role in the creation of wealth as biotechnology and communications industries, among others, continue to grow. Because of this, more attention must be paid to the role science and technology can and does play in shaping the lives of women. We must strive to ensure that women in the twenty-first century take their rightful place in shaping their societies and share in the benefits of progress.

S&T for women’s empowerment

Women’s poverty is directly related to absence of economic opportunities and autonomy, lack of access to economic resources, and lack of access to education and support services resulting in poor participation in the decision-making process. Rural women constitute 66% of the total labour in farm production and livestock-related activities have low participation in decision-making processes such as marketing or selection of the livestock/crop. S&T can help in creating opportunities to enable them to acquire the skills necessary for entering these newly emerging occupations. S&T can be a powerful tool in bridging the gender divide and achieving inclusive development, if effectively and universally adopted. S&T offers solutions to many challenges faced by rural women: it can contribute to food security by boosting crop yields, increasing women’s performance by introducing labour-saving technologies and increase their participation in the rural labour market.
through better communications. Women can greatly benefit from a combination of ICT and space technology.

Initiatives were taken up both in the farm and non-farm sector. With focus on technology development and demonstration aspects, emphasis on these initiatives has been to improve upon existing skills, provide managerial capabilities and to understand the science behind the processes/products. This has made them more open to improved/emerging technologies for improving production efficiency and reducing drudgery in their day-to-day work.

II. METHODS AND MATERIAL

Technological empowerment for drudgery reduction:
Since women have different ergonomical characteristics compared to men, it is necessary to develop technologies to suit them and reduce the burden and drudgery, especially for small holders and marginal women farmers. Women-friendly implements/tools can reduce drudgery, save time and enhance output.

Promoting rural enterprises for women:
Encouraging entrepreneurship for women in rural areas in the era of increasing feminization of rural India, Promotion of women entrepreneurship in rural areas through capacity building in the key areas such as finance, literacy skills, marketing, production and managerial skills would play a crucial role.

Value addition and market linkages for livelihoods promotion of women:
S&T can play an important role in livelihood promotion of women through value chain development and marketing linkages. These measures would result in better access to inputs and services, technologies, credit and support services

Using modern gadgets for upliftment of women:
Mobile: Not only for communication, women also using the mobile for different ways: to be safety in times of difficulty, as a media connector with current updates in day to day and as an e-learning device to become literate, the mobile is an enabling device and this is only the beginning.

Computer: Apart from literacy women need vocational training to improve their stamina. They need to become strong and give support for their families. Depending upon the literacy level Computer training can be provided and they have to be motivated to have internet browsing centres, Desk Top Publishing centres. Providing training on Internet and email services will be very useful for expanding their business to local, national as well as international level. They can even run BPO centres if they have more people in their locality. Depending upon the trend information system with multilingual facility has to be developed which will provide guidance and other related information for setting up their own enterprise.

III. RESULTS AND DISCUSSION

Education and Employment:
Only normal education is not important but the computer education is also important because now a days and also in future technology plays a crucial role in our lives. The current and future generations are found of employment in data entry and other areas with adequate computer knowledge. The rural area public also moving towards technology and gaining required skills and knowledge about computer

Nutrition including value addition and supplements:
✓ More and more women should be made aware in the field of science to cope with such problems as malnutrition and the related ailments.
Inter-sectoral interventions are required to combat malnutrition.

The problem in implementation of the available technologies and information on malnutrition should be given due consideration.

Women can be motivated for home-gardening to combat malnutrition.

Diversification of food baskets is essentials to tackle the malnutrition problem.

The nutritional quality of food can be enhanced using bio-fortification.

Since, good nutrition contributes positively to family, community health and development; therefore, with bio-fortification of food and crops the nutrition divide of the country can be bridged to a great extent.

Health issues dealt with the use of science and technology:

Two of the most common cancers affecting women are breast and cervical cancers. Detecting both these cancers early using modern techniques is key to keeping women alive and healthy. Sexual and reproductive health problems are responsible for one third of health issues for women between the ages of 15 and 44 years. Unsafe sex is a major risk factor – particularly among women and girls in developing countries. This could be resolved by using modern communication method to make them not only aware but also proper remedies could also be suggested. the importance of protecting against HIV and human papillomavirus (HPV) infection (the world’s most common STI). But it is also vital to do a better job of preventing and treating diseases like gonorrhoea, chlamydia and syphilis. About 13 million adolescent girls (under 20) give birth every year. Complications from those pregnancies and childbirth are a leading cause of death for those young mothers. Many suffer the consequences of unsafe abortion. These problems can only be resolved by using science and technology involved in medical sciences.

Science and Technology have been an integral part of Indian civilization and culture. Over the years Indian women have overcome the traditional mindsets and have excelled in professions like teaching, medicine and pure sciences. Women have made important contributions in all walks of life and made inroads into new fields like engineering, information technology, biotechnology, nuclear science, space science and many such specialized fields in the domain of science and technology. While these developments have been highly satisfying, constraints in the form of socio-cultural factors, such as discrimination, lack of self-confidence and gender disparity continue to affect Indian women and their choices of career. In an Indian National Science Academy (INSA) study on “Gendered Science: Trends and Analysis of Contributions of Indian Women Scientists”, taken up with a view to focusing on achievements and recognition of Indian Women scientists, it has been pointed out that women reaching to higher positions in the cadre in their science careers are few and far between. Many women have done exceedingly well in their scientific and academic pursuits, however not many are seen being awarded and rewarded. Some of the contributing factors mentioned in the INSA study were: family, motherhood, inadequate support systems, societal/cultural issues that could be due to fixed mind set, restriction on movement, nepotism and sexism.

IV. CONCLUSION

S&T is the key to the growth of any nation, as it improves the well-being of the population. Equal opportunities are essential for the economic growth of a country. Using S&T to improve the lives of women will help unravel the vast amount of untapped potential as it equips them with a scientific outlook and logical thinking ability which would greatly influence the mindset of the society. Empowering rural women would ultimately lead to empowering the nation.
V. REFERENCES


