

INTRODUCTION

CHAPTER I

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INTRODUCTION

Time and again new technological advances and their diffusion in recent decades have exhibited vast power to alter human existence and social set-up as well as the environment on a large scale previously unknown. Beneficial and detrimental impacts have been felt on diverse sectors of population (Freeman, 1974). But technology, if it has to maximize the human output has to be gender neutral (Gregori, 1989). Just as development is not possible if we neglect 50 per cent of the human resource and do not involve women in the process of development as equal partners with men, similarly technology, if it discriminates half of the productive power will not be able to accelerate the resource development process of a developing country, as expected. Rather it might raise certain issues, which might impede the pace of development (Whitehead, 1980; Date-Bah, 1983; Ahmed, 1985 and United Nations Report, 1989). This is what has happened in the Indian sub-continent and other developing countries where fruits of technology have not been equally distributed among men and women, especially with respect to the rural women who have always remained more than equal partners to men in terms of productive work on farms (Chakravarty, 1975; Ashraf, 1977; Dixon, 1982; Anker, 1983 and Saradamoni, 1986).

From many empirical studies conducted in rural areas of Africa and Asia, it has been established beyond doubt that rural women contribute significantly to farm and household work alongwith child care, which again constitutes the potential human power of a society (Devdas, 1961; Boserup, 1970; Mulay et al, 1974; Bhatt, 1975 and Chatterjee, 1975). But due to a combination of religious taboes and cultural prejudices prevalent in traditional societies and pronounced gender bias prevalent in the statistical data gathering agencies of the developing countries, women are primarily reckoned as housewives with low or no status of their own and their tremendous contribution to household and society in terms of real income is not realized at large or remains unreported (Clermont, 1981 and Beneria, 1982).

1.1.1 STATUS OF RURAL WOMEN

The functioning of societies depends upon the presence of patterns of reciprocal behaviour between individuals or group of individuals. The polar positions in such patterns of reciprocal behaviour are technically known as "Statuses". As a person occupies more than one status, the total number of statuses that a person occupies makes up his/her status (Davis, 1949) or position (Linton, 1936; Bertrand, 1951 and Bates, 1975). A women like any other person, occupies a number of statuses and positions at a given time and plays a number of roles. Her position in society is usually not

determined by any one particular status position held by her, but her composite status which results from merging of various statuses such as her social status, economic status, productive/work status, cognitive status, health status etc., and also perception of her own status.

Generally, in all developing countries status of women, especially the rural women, remain at a disadvantageous position as compared to their male counterparts. To take an example of Indian society, this inequality of status becomes pronounced when measured in terms of several status indicators like mortality rate, literacy level and labour force participation rate (Towards Equality, 1974; ICSSR Newsletter, 1975; Chaudhary and Raihan, 1980 and Jain, 1983). Various social scientists like Desai (1957), Dube (1958) and Hate (1969) indicated that though many changes have occurred in traditional conception of role and status of women through new opportunities for education and employment, emergence of new socio-economic patterns and privileges of equal legal and political rights, the pressure of traditional customs and norms continue to affect the society's attitude towards women. The Committee on Status of Women (1974) found that almost all liberal provisions made so far have affected the life styles and status of only a minority of female population of the country. It also found that while the changes have been considerable in urban areas, the problems continued to remain virtually unchanged in most of the rural areas, where low level of literacy, lack of mobility and

skills, lack of access to various services and the forces of customs and traditions still characterize the status of women and make her a tool for doing work with no rights of her own. In addition to this, various forces like technological advancement, urbanization and industrialization etc., are affecting the status of women. Mazumdar (1978) indicated an increasing gap between men and women in literacy, education and training, an accelerated decline in women's employment since 1951, a glaring disparity between men and women in their access to health care and medical services and consequently high female mortality rates (115/1000) (Seventh five year plan, 1985) and persistent decline in the proportion of women in the population (929/10000) (Census of India, 1991).

This gender bias becomes more pronounced when issue of technology vis-a-vis rural women is examined. The access of women to technology in different spheres and the impact of these technology on women is found to be different mainly because they occupy different positions in the social system as compared to men. The earlier observations on different indicators of their status in the society clearly reflects the fact that this had serious repercussions on women as benefits of technology have not reached women and also through them, have not percolated down to their families. The labour statistics as well as several empirical researches have shown that introduction of technology has displaced the rural women from their traditional employment as the female

labour participation rate in agriculture has dropped down to 18.30 and 7 percent in leading "Green Revolution" States of Haryana and Punjab respectively (NSS 38th Round, 1986). The infant mortality rate and maternal mortality rate statistics raise serious doubts on efficacy of health technology on women's status and on technology itself.

1.1.2 TECHNOLOGICAL CHANGE AND RURAL WOMEN

In the rural context, technology implies the changes that have taken place as a result of development. Mainly these changes are related to agriculture. The "Green Revolution", a phenomenon of 1960s proved a turning point in the modernization of agriculture in the developing countries. The agricultural technology leading to significant changes were of three major types, biological innovations in agriculture such as improved seed varieties tended to increase production; chemical innovations such as fertilizers, insecticides and pesticides promoting production and reducing production loss and the mechanical innovations, which helped in faster seed-bed preparation for multiple cropping, timely irrigation and quick threshing.

The rapidity of technological changes brought widespread changes in society and economy. Wherever technological advancement occurred in agriculture, concomitant changes took place in the socio-economic life of the people, production gain, income increase, reduction in farm employment, changes in agrarian relations, alterations

in investment patterns, changes in occupation, improvement in education, health, lifestyle and the like (Kahlon 1972; Agarwal, 1983; Bhan, 1987 and Sharma and Dak, 1989). This development, mainly through technological breakthrough, could have benefitted the State at macro level. It could have also benefitted the household sub-system too. But when it comes to individual members of the household sub-system and particularly the rural home maker, the issue needs a closer examination.

1.1.2.1 Rural Women and Farm Technology : A number of empirical studies have shown that benefits of farm mechanization have not trickled down to rural women. They have been either further marginalized or pauperized as a result of mechanization of farming and were thrown out of employment thus reducing their work status (Srinivas, 1966; Boserup, 1970; Sisodia, 1971; Singh, 1972; Palmer, 1978; Ahuja, 1979; Apte, 1979; Agarwal, 1985 andd Bhalla, 1987). Women have been relegated more and more to arduous, monotonous and time and energy consuming agricultural operations. Improper working postures (prolonged bending etc), long work schedules and strenuous working conditions leaves little or no time for leisure or rest and have proved detrimental to the welfare of the rural women (Laxmidevi, 1982; Blyn, 1983; Patel, 1984 and National Perspective Plan for women, 1988).

1.1.2.2 Rural Women and Household Technology : Apart from the paid work, rural women are responsible for multiple chores both inside and outside the house. Studies conducted on time use pattern of rural women have reported that women spend 10-15 hours per day in various household chores, water and fuel collection, animal care, pre-harvest, harvest and post-harvest work (Sandhu, 1972; Charkravarty, 1975; Quizon and Evenson, 1978; Saxena and Bhatnagar, 1985; Srivastava, 1985 and Singal, 1989). These energy inputs in performing more tasks than physically feasible and for a below subsistence level of living draws our attention to the plight and drudgery of rural women (Srinivasan, 1981). But how far adoption of simple technology like smokeless chulahs, handpumps for drawing water, electric milk churners and other time and labour conserving devices has taken place in rural areas remains an under researched area. To what extent technology, if it is adopted, has relieved rural women from drudgery of work by reducing their time and energy expenditure in performing various household, farm and economically extended activities ? Do the benefits arising through technology outweigh the cost components of these in terms of maintenance and care ? Not much analytical work has been done concerning these issues except a few ergonomic studies which have been done under laboratory conditions (Mittal, 1981; Oberoi, 1981; Dhillon, 1982 and Sindhu, 1985). Hence there is a need to critically analyse the aforesaid issues with special reference to rural women.

1.1.2.3 Rural Women and Health Technology : Besides the work related technology, it is advancement in the area of health technology which will impinge on the quality of life as women's health status affects their productivity and thereby their roles in society and development. This is especially so in the case of rural women because on account of many socio-cultural factors prevalent in the society, particularly the "two son syndrome", they are subjected to constant pregnancies. Data on crude birth rate pertaining to Haryana and State (38/1000 persons) was found to be higher than the national average (35/1000) (Census of India, 1981) pointing towards the fertility drudgery to which women are being subjected to. Government of India, in order to check the alarming rate of growing population, is vigorously campaigning for "Family Planning Programme" since as early as 1952. As a result of technological development over the years, various methods of birth control like IUDS, oral pills, condoms, sterilization etc. are being continuously popularized. But the staggering population figures of the nation i.e. 843 millions (Census of India, 1991) raises the query why after all these years, family planning has failed to gain momentum and acceptance? Is it due to the socio-cultural norms that women are being continuously subjected to fertility drudgery ? Studies on health care usage invariably show that far fewer women than men utilize existing health care services despite women's high morbidity (Chatterjee, 1983; Khan et al., 1983 and Pasrija, 1985). Could these

gender based asymmetries be a contributory factor to India's persistent high birth rates ?

A few studies have also highlighted that the technology evolved for improving the health of the women and to release them from frequent child births, ironically have had opposite effects on them as they have shifted the whole burden and responsibility of planned parenthood on women (Kaur and Punia, 1989). Hence, the need arises to re-examine the whole issue of technology and women's health and how it should be evolved and propagated so that it is acceptable to people.

1.1.2.4 Rural Women and Communication Technology : Women's low status, high fertility and illiteracy have been substantiated by various empirical studies (Kapadia, 1958; Kapoor, 1974 and Towards Equality, 1974) as correlated variables. Here communication technology has major role to play in breaking the mental isolation of rural women. Advancement in communication technology has been immense and has also made inroads into the rural households of progressive States of Haryana and Punjab. Television sets have become a common sight in rural areas. According to a study of rural markets (Dasgupta and Menon, 1990) over 20 percent of coloured television sets are sold in rural markets. Numerous educative programmes on family planning, immunization etc., are being shown on Doordarshan, whose one of the main objective is improvement of women's conditions, status and image. This massmedia technology alongwith extension personnel form a formidable channel of

communication. But do they reach the target group ? If yes, do they have any impact ? Are they confined to only well to do farming households ? There is much that needs to be studied even in this area from women's perspective.

1.2 Rationale Of The Study

The aforesaid discussion revolves around benefits as well as costs of different technology such as farm, household, health and communication, the gender specific impact of these technology, inaccessibility of certain technology to women (though it is meant for them) etc. Research gap is still there that could give a composite picture on the issue of technology vis-a-vis rural women and the impact of development on Status of Rural Women and Family Resource Development. Presently there is concern to integrate women's power in the developmental process as equal partners alongwith their male counterparts so as to maximize production as well as to realize the social goals of population control, poverty eradication, health for all etc.

The above rationale motivated the investigator to take the area for research where there is dearth of adequate information and which needs to be analytically studied on a cost/benefit approach. Specific research queries warranting the need for conducting the present study are :

- 1 What are the items of household technology that are available in rural areas of Haryana, how far have they become popular in the rural households? What is the

extent of their availability/access to and use by rural households ?

- ii To what extent has use of household technology benefitted the rural women in terms of conservation of time and energy in doing household tasks or has the time and energy inputs for maintenance and care of household technological items outweighed benefits of conservation of time and energy ?
- iii Has introduction of farm technology uprooted economic independence of women ?
- iv Has the loss of economic independence resulted in loss of status of such women within the households in terms of loss of decision making on important family issues ?
- v Are the power structure and status of women in the technological backward area better-off than that in the advanced area? Has development in communication and health technology contributed to increase in awareness and better knowledge and utilization of health facilities and better health seeking behaviour of rural population leading to family resource development ? How significantly did households of advanced area differ from their counterparts in the backward area in this respect ?

vi How far and in what respect has technology use affected the quality of life that could be reflected in the consumption expenditure pattern of the sampled households ? How significantly the quality of consumption expenditure pattern varied between the groups ?

vii In short, what is the net benefit/costs of technology vis-a-vis different aspects/dimensions of rural women's status i.e. economic, health, cognitive etc. and better quality of life as explained through the time use and consumption expenditure pattern ? The investigator found the studies done earlier in the field of rural women and technology, lacking in cost-benefit analysis of the dimension, which is required to get a thorough, holistic and composite picture on the issue of women and technology. Many of the earlier mentioned research queries still remain to be answered satisfactorily. The nature of impact of technological advancement on the Status of Women has get to emerge in totality. Thinking along these lines gave the impetus to the investigator to undertake the present research with following major objective in mind.

As mentioned earlier, the investigator found the studies already done in the field of rural women and technology lacking in cost-benefit analysis of the dimension, which is required to get a thorough, holistic and composite picture on the issue of women and technology. Many of the

earlier mentioned research queries still remain to be answered satisfactorily. The nature of impact of technological advancement on the Status of Women has yet to emerge in totality. Thinking along these lines gave the impetus to the investigator to undertake the present research with following major objectives in mind :

To determine the impact of selected technologies on the Status of Rural Women and Family Resource Development.

1.3 Specific Objectives

- i) To study the demographic and socio-economic profile of the sample households.
- ii) To take an inventory of household, farm, health and communication items acquired by or made available by the community to the sample households.
- iii) To determine the access to and extent of use of technological items acquired by the sample households / provided by the community and identify the explanatory variables accounting for differentials in adoption level of technology.
- iv) To determine the cost and benefit and benefit of different types of technology as perceived by rural women on different dimensions of Status of Rural Women and Family Resource Development and identify the determinants.

- v) To study homemaker's attitude towards impact of technology vis-a-vis women's status and family resource development.
- vi) To find out the correlation between perception of homemakers, towards impact of technology and their attitude towards the same.

1.4 Hypotheses

It is predicted that there is a significant relationship between adoption level of different technology viz; household, farm, health and communication and selected personal, household and situational variables.

There exists a significant difference in human cost of work (in terms of time and energy expenditure) according to adoption level of technology and selected personal and household variables.

There is a significant relationship between homemaker's attitude towards technology and selected personal, household and situational variables.

There is significant relationship between perception of homemakers regarding cost and benefit of technology and their attitude towards the same.

There is a significant difference in homemaker's level of participation in decision making according to

adoption level of technology and selected personal and household variables.

Quality of consumption of the households is positively related with adoption level of different technology and selected personal, household and other situational variables.

Status of Rural Women and Family Resource Development is a function of adoption level of different technology and selected personal, household and other situational variables.

It is observed here that above mentioned hypotheses have been so formulated that each one of them has a either direct, or indirect linkage with the two major dependent variables of the study i.e. SORW and FRD.

1.5 Delimitations Of The Study

The study was limited to two villages of Haryana State, one agriculturally advanced and other agriculturally backward. The study was limited to 300 households. The scope of health and communication technology was also limited. Under health technology the scope was limited to family planning only and for communication technology it was limited to channels of mass media and extension personnel.

1.6 Contribution Of The Study

The major contribution of the study will be to indicate where technological advancement has benefitted the rural women and where it has proved to be highly detrimental to their status and resource development. The identification of costs and benefits of different technology will help the researchers, extension workers, promoters of women's cause, planners and policy makers to develop and propagate appropriate technology for rural women which will be labour using instead of labour displacing and which will completely blend with socio-economic and cultural characteristics of the region. Moreover, identification of facilitators and constraints in the area of farm, home, health and communication technology will give wealth of information bearing policy implications. For family resource management specialists and for promoters of technology, information pertaining to household technology will be of great concern as it will give them information about which types of technologies are acceptable to rural homemakers. On the basis of this data they can promote technological items which are easy to use, care and maintain and are also cost-effective. For academicians, researchers, government functionaries, development planners, the finding will have policy implications for propagation of 'labour intensive' and 'gender neutral' farm technology which no longer displaces rural women. Useful information will be yielded by the data pertaining to health, as population control is one of the

major national issues. This study will reveal how far family planning techniques are acceptable to rural population. If they are not acceptable then what modifications are required in order to make them more beneficial for them. It will also throw light on the working of health functionaries in the field i.e. how far they have been successful in reaching the target group. Findings pertaining to communication technology will be of special concern to extension specialists, planners and policy makers as it will show how far channels of communication, are accessible to rural population and to what segment of population they are catering to. Overall, the findings of the present study will be of great interest to technology promoters, so that its benefits are maximised while keeping the social costs to a minimum.

1.7 Limitations Of The Study

The present investigation has limitations of time, money and other research facilities usually faced by a single student researcher. Limitation of time has set up a barrier for probing into more dimensions of the research. However, considerable care and thought have been exercised in selecting variables so that all objectives are fulfilled.