

**ENVIRONMENTAL CHANGES AND ITS IMPACT
ON RURAL WOMEN: A SOCIOLOGICAL
STUDY OF HARYANA**

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CHAPTER-6

SUMMARY AND CONCLUSION

Environment has emerged as an alarming issue in recent years; it is an allembacing concept. It means different things to different people. The variations in individuals notion of environment ranges from one's immediate physical surroundings to socio economic conditions. In fact environment is everything that affects not only humans but other organisms also. In this way environment is a multidimensional system.

Women in the rural society deal with many of the daily aspects of environmental change, including the consequences of degraded resources. The present study lies in understanding the nature of environmental changes taking place in rural Haryana and its impact on rural women. As we all know that with increase in population, open spaces are getting squeezed including space for living. Due to lack of clean drinking water which was earlier supplied through village wells is no more available. Depletion of ground water and contamination has resulted in lack of availability of drinking water within the village. With the result women cover long distances to fetch water from hand pumps located at the periphery of the village.

Deforestation is another problem because of which women have to cover long distance to get fuel and fodder. In Haryana, the after effects of Green revolution can be clearly seen in agriculture such as salinity of the soil, water logging and reduced soil fertility. Mechanization of agriculture has resulted in many direct and indirect problems. Keeping in view the overall scenario, the present study has been carried out to understand the impact of environmental changes on the rural women of Haryana across caste and class lines in terms of time spent in gathering fuel, fodder and water and the role of state initiatives in protecting environment.

For this exploratory research design has been used to understand dimensions concerning environmental changes and their impact on rural women. The exploratory research design has helped to have in-depth understanding of the issues concerning environmental changes and impact on rural women. The study was carried out in two districts of Haryana namely Jhajjar and Kurukshetra. For this, multi-stage random sampling was employed. There are four administrative divisions in Haryana namely Ambala, Hissar, Rohtak and Gurgaon comprising of 21 districts. At the first stage, all the districts were divided into two regions i.e. region A and B. Region A comprises of Ambala and Hissar division and Region B is comprised of Rohtak and Gurgaon. Both regions are distinctive from each other in terms of socio-economic and political background. Apart from these distinctions, these regions also vary in their geographical conditions such type of soil, water availability for irrigation purposes and cropping pattern and most importantly on the basis of environmental changes taking place. In the second stage one district from each region was selected through lottery method. In this way, district Jhajjar from region A and district Kurukshetra from region B were selected. At the third stage one village from each district namely Dhandhlan from Jhajjar district and village Barwa from Kurukshetra were chosen through lottery method. After the selection of the villages, household list of the villages was prepared with the help of anganwadi workers and health workers. In village Dhandhlan, district Jhajjar, the total number of household were 640 out of which 40 percent of the sample was drawn i.e. 258 households across caste lines. Similarly in village Barwa, district Kurukshetra, the household list was prepared with the help of anganwadi workers and

health workers. There were a total number of 616 households out of which 40 percent of the sample was drawn i.e. 246 households across caste lines. Since the present study relates to rural women, therefore, unit of investigation were married women ageing between 30 to 55 years old.

For the present study, we have used interview schedule and focused group discussion with different group of people. Both primary and secondary data were collected to get insight of research problem. Interview schedule was prepared having both structured and unstructured set of questions. Interview schedule used in present study has mainly two parts: A and B. Section A deals with the socio economic conditions of the respondents including family background, occupation and income of the respondents, details of their living arrangements and possession of assets including source of energy for cooking and lighting. Section B deals with issues such as use of community land, change in living space, kitchen, availability of drinking water, time spent on collecting water, toilet, fuel and fodder, daily routine of women, working conditions of women. The secondary data was also collected from various sources such as census report 2011, land records, human development index, Haryana statistical abstract etc. Besides these sources, information was collected from anganwadi workers, health workers, village school teachers, patwari, sarpanch and other members of panchayat. After the data collection, the data was categorized, tabulated and analyzed to draw inferences.

As regards the socio-economic status of the respondents, significant observations were made. Socio-economic status shows different situations in both selected villages. The social and economic background of the respondents provides vital information about the quality of life of the people in rural Haryana. In order to have an in depth understanding of the status of respondents, an attempt was made to thoroughly investigate dimensions such as caste composition, type of family, family size, marital status, present age of the respondents, educational levels, land ownership pattern, occupation, family income, livestock, assets, number of rooms in the house, toilet facility and type of fuel used etc.

The main occupation of respondents of both the villages is farming and the land is owned by people belonging to upper caste. Schedule caste and Backward caste women work on their land as labourers as most of them are land less. In Village Dhandhlan, majority of the respondents belong to upper caste whereas in Barwa village majority of them are from backward caste. In both the villages, majority of the household heads are men. Dhandhlan village has more female headed households in comparison to village Barwa. In the selected villages, both nuclear and joint family systems exist; the trend of nuclear family is rapidly increasing in both villages as reported in discussion held with villagers. Family size is important aspect in rural social structure as large families are self-sustainable in terms of various labour works in farm as well as household activities; comparatively village Dhandhlan has more number of large families than Barwa village. The institution of marriage plays vital role in one's life. Majority of the respondents were married and living with spouse but in village Dhandhlan around 25 percent respondents were widows which is a matter of concern as they have to live life alone and face hardship. Age of respondents is a determining indicator in terms of contribution to family and society. In both the villages, majority of the respondents were in the age group of 41 to 50 years. Educational levels are crucial for multidimensional growth of individual as well as society. The educational levels of the respondents show that the

percentage of respondents who were illiterate is quite high in both villages contributing around 30 percent of the total.

The significant feature in land holding pattern depicts that as the land holding is increasing in the size, the numbers of households are decreasing simultaneously. Barwa village has more number of landless households in comparison to Dhandhlan village. In villages Dhandhlan and Barwa, women have been engaged in several activities. Besides domestic chores, they are working outside home also. In both the villages, the numbers of women are less in self-employment or other employment; women engaged in agriculture and dairy sectors are very few. Income of the family denotes the economic status of the family and its standing in social hierarchy. It also determines the standard of living, access to resources and the assets that one possesses. The average annual income is around Rs 2 lacs in both selected villages. While comparing both the villages, households of Dhandhlan village are more prosperous than village Barwa in terms of their annual income. Animal husbandry plays a vital role in the rural economy of Haryana. It provides a valuable addition to the sustainable income of the rural household in Haryana. Milching animals and drought animals are considered most important among all. For cultivation and transportation of goods drought animals are used whereas milching animals increase household income by trading milk. While comparing both the villages, Dhandhlan has more number of non milching animals in comparison to Barwa village. When assets were accounted for the purpose of study, both the villages show almost similar situations in terms of basic amenities such as Mattress, Cooker, Chairs, Bed, Table, Clock, Mobile Phones, Refrigerator, Tractor and Car etc. Village Dhandhlan has more number of agricultural implements in comparison to village Barwa but women of Barwa village are having privilege of having more number of washing machines in comparison to women in village Dhandhlan. While examining living arrangements, the number of rooms particularly in rural area has important bearing on the space available for family members for living. In rural area one can easily find common space in the household, being shared by the family as well as cattle; space is squeezing as family size increases. We find that in both the villages around 20 percent people are having only one room for living which results in poor sanitation and unhealthy living practice.

Having a toilet facility doesn't indicate about the sanitation practices in a particular area. Around 90 percent households have toilet facility in both the selected villages but still people prefer to go for open defecation.

With regard to the impact of environmental changes on women significant observations have been made. Though both the villages have community land but unfortunately most of the land is leased out and only two to three percent of land is used for community purpose. In both the selected villages community land is available and all respondents of village Dhandhlan and village Barwa told that village has community land but the land is leased out on contract by respective Village Gram Panchayats mainly for agricultural purposes and revenue generation. This has adversely affected cattle rearing space as well as fodder availability as community green pastures are now leased out to private contractors.

An attempt has also been made to understand about the living space in the household in context to the space used for living, space for sanitary and hygiene practices, separate kitchen facility, space for tending cattle. Rise in cost of land and decrease in economic status has resulted in squeezed space for living and thus inadequate space for living has resulted in

unhygienic living conditions. For example, people are living with cattle and smoke while cooking affecting not only the health of women but health of other family members also. Haryana is an agrarian society and almost all the people in the village have cattle. Earlier, they had separate space for cattle called Gher (Open Yard). In both the villages, it was revealed that there were open yards (*Gher*) in the past which is sold or divided among sons to build separate house for living purposes. The respondents of Dhandhlan village have less open yards in comparison to Barwa. This is mainly because of increased land price, division of paternal land, increase in population. In both the villages, majority of the respondents were having separate kitchen facilities whereas 22 percent respondents were not having separate kitchen in both the villages. When the respondents were asked about problems faced due to non-availability of kitchen; they pointed out about difficulty in cooking, increase in health related problems, poor sanitation & hygiene conditions.

The analysis with regard to availability of drinking water has different dimensions in the selected villages as village Barwa has water supply from public water tap whereas village Dhandhlan has no water supply from public tap. In village Dhandhlan drinking water is available through hand pumps located at the periphery of the village or water being supplied privately through campers on daily basis. With the result, women are basically responsible for fetching water in village Dhandhlan. When asked about the problems faced by women in bringing water, half of the total respondents told that it is time consuming and causing health problems such as neck pain, knee pain and cervical pain because of bringing water on head. Significantly, quite a few of the respondents revealed the issue of personal safety because of molestation, stalking etc.

Regarding the collection of fuel in village Dhandhlan, women have to cover long distance i.e. 1.1 to 3 km. Similarly in village Barwa three forth of the women cover more than 2 km to bring fuel. Time spending for fuel collection is drudgery on women as they have to cover long distances and they don't have time for their own social life. If this precious time is saved they can spare time for other activities leading to economic prosperity of their own household. An attempt was also made to find out the source for cooking in both the villages. The finding revealed that in village Dhandhlan, majority of respondents use combination of sources for cooking i.e. cow dung and wood along with L.P.G. In village Barwa half of the respondents use L.P.G. and another half of use sources such as cow dung and wood.

When respondents were asked about who brings the fuel then majority of the respondents of village Dhandhlan replied that they themselves bring fuel. In village Barwa, the situation is different where majority of the respondents told that their husband/son bring fuel. Needless to mention that women have to cover distance to bring fuel and they have to face lot of problems such as abusive language by the field owners, many times they were refused to enter in to the fields.

Arranging fodder for the cattle is enormous task performed by women in rural Haryana. Majority of the respondents have livestock in both the villages. It is also important to know about who brings the fodder for these cattle because in Haryana bringing fodder is also considered as household chore of women. The majority of the respondents of village Dhandhlan told that they themselves bring fodder whereas in village Barwa majority of the respondents told that their husband/son bring fodder. Regarding time spent, in village Dhandhlan majority of the respondents have to spend more than 2 hours to bring fodder. It was tough situation for one third respondents who spend more than 3 hours a day. In Barwa

village, majority of the respondents spend 1 to 2 hours to bring fodder and around one third respondents spend more than 3 hours a day. Women have to cover long distances for fodder collection as natural grass cover on common lands and forest areas have been squeezed. It has not only affected the security of women but also affects the health as they have to bring fodder on their head resulting into cervical pain and other joint pain problems.

Regarding impact of new agriculture technology and changes observed in agriculture land and its fertility, important revelations were made. Earlier land was fertile which has become saline now and the reason is no other than excessive use of chemical fertilizers, pesticides, insecticides and mono cropping pattern. In both Barwa and Dhandhlan village respondents told that the excessive use of pesticides and insecticides has resulted into loss of land fertility and hence increased the cost of production.

As regards the impact of new technology on agricultural land, majority of respondents in both the villages revealed about loss of soil fertility, water logging, salinity and mono cropping pattern resulting in loss of wage employment.

Women in Haryana contribute equally to men in terms of workforce whether in their own fields or working in others fields as laborers. With regard to women participation in agriculture, it was observed that in village Dhandhlan majority of women work in others field in activities such as harvesting of wheat and rice, removing weed etc. In village Barwa, majority of women worked in their own field in activities such as harvesting of wheat and rice, removing weed etc.

An attempt was made to find out the availability of work in a calendar year. Majority of the respondents in the Dhandhlan village get work for less than 50 days in a year, only 26 percent women get work between 51-100 days, there were only two women who were lucky to get work for more than 100 days. The situation is similar in village Barwa where majority of women get work for less than 50 days in a year, only 23 percent women gets work between 51-100 days and only one woman is lucky to get work for more than 100 days.

Wage distribution is an important aspect of the income generation as well as economic status. Regarding gender differentiation in wages, there were wide gaps in the wages given to men and women. Majority of respondents asserted that earlier it was easy to get work in both the farming seasons i.e. Rabi and Kharif, which has become a hardship now because of farm mechanization. In earlier times in harvesting of wheat, they used to collect wheat for the whole year for family; now machines have replaced man working days. In Haryana for harvesting 1 acre land, instead of paying cash wages, farmers give 2.5 Qtl. of wheat share to labourer. The respondents further asserted that use of new technology such as combines and threshers have partially replaced labour force resulting into reduced men days. Gender disparities are also observed in availability of work in both the villages, it was observed that men are preferred over women.