

CHAPTER 0

INTRODUCTION

India is a fast developing country where recently the women have been given importance and recognition for their contribution towards the development of family and thereby to society and nation. Since 1970, a concern for the emancipation of women in general, and rural and farm women in particular, has been expressed in many ways, aiming at improving the working environment of women and raising their standard of living. However, very limited efforts have been made by the Government, voluntary organizations, educational and scientific institutions for providing them an appropriate recent technology necessary at home and on farms and training regarding the same.

The rural and farm women need to be given greater thought and opportunities for development as expressed by the past Prime Minister of India late Mr. Rajiv Gandhi in the International Conference on Appropriate Technologies for Farm Women (1988) :

Contribution of rural women are unlimited both at home and on the farms. They have been a definite strength in the nation building process. The value and attitude of men towards women must change one from helplessness to helpfulness. The constitution of India provides equal opportunities and rights to every citizen. Women must form an integral and vital part of the development streams.

This clearly indicated the need to involve farm women in the progress and development of communities by enabling

them to solve many of their family as well as community problems.

Inadequate nutrition, improper housing, poor health status, poor environmental sanitation, illiteracy, low income and ignorance are the prominent problems in the rural community. These problems can only be solved when community mainly the women and the future homemakers, as well as adolescent girls who are the backbone of the families, are made aware, trained and helped to improve their life styles by equipping them with all the required skills in homemaking.

To improve the quality of life is one of the prime objectives of Home Science Education. It helps to promote the healthier and happier homes where every family member gets an opportunity to develop wholesome personality and thus improve the standard of living.

The content of Home Science is family and community centred. It is basically the combination of all Arts and Sciences for developing skills which will help to solve day to day problems. This objective can be achieved by providing proper training in Home Science to its clientele.

A training approach needs to be directed towards desirable changes in the farm women who require understanding of various aspects of home living through proper learning experiences.

This task of training farm women has been more difficult than envisaged earlier because farming community in India lives with a set of socio-economic problems typical to them. A larger percentage of farm women belong to weaker sections and are living the life of socio-economic deprivation. It has been realised that special training efforts need to be made for this section of rural society so that it will enhance the total development of nation.

However, the training needs of farm women also differ from region to region and from State to State because of its geographical area and the other developments of the State particularly in terms of providing the programme exposure to farm women and facilities for them to benefit from such programmes.

In this particular study the training needs of the farm women from Gujarat State have been studied.

0.1 Gujarat State

The State of Gujarat is located along the North-Western coast of India. It is divided into 19 districts for the purpose of administration. Gujarat State is established in 1960, with the bifurcation of Maharashtra and Gujarat from old Bombay State.

0.1.1 POPULATION

According to 1981 census the State of Gujarat has an area of 1,95,984 Kms. and a population of 3,41,00,000.

There are 18,574 village existing in the Gujarat State which accommodates 69 per cent of the total population. The tribals account for 14 per cent and schedule castes account for 7 per cent of the population.

0.1.2 LAND HOLDING PATTERN IN GUJARAT

The total operational land holding in Gujarat State are 29.30 lakhs according to 1981 census. It covers the area of 101.04 lakhs hectares. The marginal and small farmers constitute about 46 per cent of landholders. The medium and large farmers constitute approximately 25 per cent and 28 per cent respectively.

0.1.3 AGRICULTURE AND ALLIED FIELDS IN GUJARAT

Gujarat is predominantly an agrarian State though it is being industrialised very rapidly. Out of the total 196 lakhs hectares about 95-96 lakhs hectares, land is under cultivation. Agriculture contributes about 35 per cent of the State's income. It employs about 65 per cent of the total labour force.

In Gujarat State 2.4 million farm families are engaged in agriculture, mainly raising of cash crops. The major crops of Gujarat are cotton, groundnut and tobacco. It produces about one quarter of India's cotton and groundnut and one third of its tobacco. However, cereals and pulses account for less than half the cropped area.

Low rainfall and limited irrigation has been responsible for low yields. But Gujarat has been one of the leading States in adoption of improved practices in Agriculture and Allied Fields. As a result of this in the productivity per agricultural worker, Gujarat is fourth highest in the country.

There are three cropping seasons in Gujarat, namely, Kharif season between June and October, the Rabi season between November and February and the hot weather season which stretches between the months of March and May.

Most of the crops are grown during the Kharif season as it is the monsoon season. The Rabi crops are grown in irrigated areas. In hot season, except in limited areas which has perennial irrigation, in other areas there is no cultivation.

In spite of three cropping pattern, the crop production in Gujarat is seriously deficient in food grains. In a normal year of production it is about 4.5 million tons against an estimated requirement of 6.5 million tons.

0.1.4 ANIMAL HUSBANDRY IN GUJARAT

According to 1981 census the total cattle population in the State of Gujarat was one hundred and one lakh (101 lakh). The districts of Panchmahals, Banaskantha, Rajkot and Bhavnagar have higher concentration of those cattles.

Buffaloes account for 44 lakhs of the total cattle population and are found largely in the districts of Kaira, Mehsana, Panchmahals and Banaskantha.

There were about 24 lakhs of sheep found mainly in Kutch, Bhavnagar and Rajkot districts and 33 lakhs of goats in Kutch, Panchmahal, Banaskantha and Bhavnagar districts.

In Southern and central Gujarat, however, there is more of poultry development. The poultry population was estimated to be about 35-72 lakh mainly in the districts of Valsad, Panchmahals, Kaira and Vadodara.

0.1.5 CO-OPERATIVE MOVEMENTS IN GUJARAT

In Gujarat the co-operative movement began in the field of dairy in 1950 which has become a model for Dairy Development not only in India but also abroad. The main objective of this programme was to organise milk producers' co-operative in order to assure them fair returns for the milk supplied by them.

It was observed that in Dairy Development, care and maintenance of cattle is done exclusively by women in Gujarat State. The women are responsible for animal husbandry and supply of milk to milk collection centres. According to Gupta (1979) about 2,00,000 women are engaged in dairying and in managing the milch animals.

0.1.6 PARTICIPATION OF WOMEN IN AGRICULTURE

Women in rural agricultural society have been considered as equal partners in farming and allied agricultural activities. They are found to have been engaged in agricultural activities. The studies on agricultural activities estimated that women performed 60 to 72 per cent of the agricultural operations, whereas men performed only 30 to 40 per cent of the labour.

A pilot project conducted by Paralikar and Patil (1984) to identify the agricultural activities performed by farm housewives revealed that they tend to carry out the following eight main activities -

1. Soil management, taking out soil samples and packing for laboratory tests, preparing soil for sowing were carried out by women.
2. In crop production women were involved in operations which call for selection of high yielding and high breeding varieties of seeds, in giving the required treatment to seeds before sowing operation. They also participated in crop rotation as well as different crops to be grown side by side.

Women were involved more frequently in farm operations such as weeding, budding, grafting, transplanting, depending upon the crop grown. In case of important Horticultural crops, women were involved in activities concerning rejuvenations, budding as well as

grafting.

3. Plant protection included the activities related to control of pests and insects. The women themselves were physically involved in driving out the pests, insects and birds which spoil the ready crops in the fields.
4. Farm women actively participated in production of green farm yard manure as well as in its selection, use and storage. They were busy in building compost pit, supervising its digging, filling as well as preparing scientific covering. In many cases even mixing it with the soil was the activity of farm women.

The women were more responsible for the storage of Commercial Fertilizers and its mixing with soil for administering it in the fields. Storage of Chemical and Commercial Fertilizers was a concern of farm women. They were chiefly responsible for safety measures involved in its storage and economic measures involved in its utilization.

5. In the harvesting activities the farm women looked after the culturing of ready thrashing the seed grain, cleaning, adding of preservatives and storing it for shorter or longer time at home.
6. From older times women from farm families were involved in use of low cost technology. In recent years, they also looked after the upkeep, cleaning and maintenance of farm machinery for its efficient use.

7. Management of farm animals have been an age old responsibility of farm housewives. In Gujarat farm women are chiefly involved in management of cattle and sale of milk.

Patil and Gupta (1985) in their study regarding Dairy Management Practices carried out by rural homemakers found out the major activities in which women were involved. These were :

- a. Preparing and serving cattle feeding.
- b. Cleaning and upkeep of cattle and cattle shed.
- c. Care of cattle and calf.
- d. Storage of fodder.
- e. Milking activity and selling of milk.

In these activities preparing domestic as well as scientific cattle feed was mainly the job of farm women.

8. In farm forestry activities, women were involved in selection, acquisition, planting, nurturing protecting and also replacing plants which were used for household consumption.

A survey conducted by Paralikar, Gaekwad and Pandya (1985) regarding the activities of women in agriculture revealed that farm women from higher socio-economic group tend to conduct "home based" agricultural activities. The women from low socio-income group families actually work in "farm based" agricultural activities.

Though the farm women remained engaged on the farm yet they can not neglect the household duties like preparing food, feeding members of the family, child care, managing home, storing grains, health care of family member and the other household activities. Though, they grow vegetables yet they are unaware of the importance of vegetables. Nutritional surveys reveal that the Indian diets are deficient of vegetables and fruits to a greater extent. There is a lot of gap between recommended pattern and actual consumption. So to reduce this gap the women should be trained to use of vegetables and easily available fruits in their diets.

Energy requirements in rural area is much more important where non-conventional and alternate energy need to be promoted. Many technologies and scientific methods related to Energy Management are involved and standardized by Engineers and Scientists from IITs and National Universities in their laboratories. Their acceptance and adoption by consumers who are mainly women needs to be studied. There are two aspects of this programme. One being generating awareness among users and giving feedback to Scientists and Technologists on their design of product, its utility and modifications. The first part needs to be undertaken through training programmes for farm women. Training programmes have to help farm women in improving their role and performance. The major emphasis should be given on the women's roles in farming and household.

Therefore, training programmes for farm women are undertaken in agriculture as well as in Home Science are through various training centres under the Department of Agriculture as well as the agricultural universities.

0.1.7 **TRAINING FOR FARMERS AND FARM WOMEN
IN GUJARAT STATE**

Over the years, the Government of India has particularly attempted and concentrated its efforts in training the farm women to promote and rationalise developmental work.

During the Fourth Five Year Plan, five Farmers' Training Centres were established in Gujarat State at Jamnagar, Navsari, Thasra, Pilwai and Junagadh, separately under the State Department of Agriculture to train farmers and farm women mainly in Agriculture and Allied Fields. On receiving the good responses from farmers it was proposed to start Farmers' Training Centre in other districts of Gujarat State.

A pilot study was conducted by the investigator regarding Farmers' Training Centres in Gujarat State with special reference to training programmes for farm women. The information about the types of training programmes, the topics covered, methods used in conducting programmes, the other activities undertaken, duration of programmes, number of participants covered in each programme and the place at which the training programmes were held was collected during

this study. Information so collected was needed to select the aspects under Home science which were thought of as essential for farm women's training by trainers as well as experts.

0.1.7.1 Farmers' Training Centre. Today there are seventeen Farmer's Training Centres in Gujarat under Tribal Sub Plan as well as in Non-tribal Areas. They are divided into three administrative regions namely Navsari, Ahmedabad and Rajkot.

Table 1. Distribution of Farmers' Training Centres Under
Non-Tribal as well as Tribal Sub Plan

Name of the Region	Farmer Training Centre	Name of the District	Year of Establishment
I. Navsari	Navsari	Valsad	1968-69
	* Dahod	Panchmahal	1975-76
	* Rajpipla	Bharuch	1976-77
	* Chhotaudepur	Vadodara	1976-77
	* Vyara	Surat	1977-78
II. Ahmedabad	Thasra	Kaira	1970-71
	Pilwai	Mehsana	1971-72
	Ahmedabad	Ahmedabad	1980-81
	Deesa	Banaskantha	1980-81
	* Khedbrahma	Sabarkantha	1976-77
III. Rajkot	Jamnagar	Jamnagar	1967-68
	Junagadh	Junagadh	1971-72
	Bhuj	Kutch	1976-77
	Rajkot	Rajkot	1978-79
	Amreli	Amreli	1978-79
	Bhavnagar	Bhavnagar	1980-81
	Surendranagar	Surendranagar	1980-81

* Farmers Training Centres under Tribal Sub Plan

The above table revealed that the Farmers' Training Centres in Gujarat were established between 1967 to 1981. There were five centres established during 1967 to 1975, eight centres established between 1976 to 1980 and four centres established during 1980-81. Out of these seventeen centres there were five centres under Tribal Sub Plan, majority (4) of which were in Navsari region whereas only one was in Ahmedabad.

0.1.7.2 Objectives. The following were the objectives of the Farmers' Training Centres.

1. To provide to the farmers an advanced technical education in agriculture for increasing food production.
2. To make farmers aware of new innovations in agriculture.
3. To acquaint farmers with new production systems.
4. To train illiterate farmers and farm women through audio visual aids, and,
5. To train literate and illiterate traditional as well as developing farmers in Agriculture and Allied Fields through solving of their doubts and questions.

0.1.7.3 Female staff pattern. Under these Farmers' Training Centres provision for training farm women in Agriculture and Allied subjects and Home science was made. For which in each of these centres there was provision for Training Associates in Home Science in the grade of Rs.1200 to 1900 per month, Training Assistance, extension educators and specialists in Home Science in the grade of Rs.700 to

1600 per month as well as in the grade of Rs.425 to 700 per month, Field Assistant in Home Science and Home Science worker in the grade of Rs.350 to 560 per month as well as Craft Teachers, Balwadi Teachers, Sewing Teachers and demonstrators and Hostel Warden for which Home Science graduates were preferred. It was observed that out of 11 posts of female trainers in these centres only one post has been filled in all the Centres under Navsari and Ahmedabad divisions, except Deesa training centre. Many of the posts are vacant ever since they were created. It was noted that training programmes for women were not conducted due to vacancies of the posts of female trainers in the Centres. The vacancies of the post of female demonstrator was due to the fact that these posts were reserved for candidates from Scheduled Castes. Since no scheduled caste candidates have applied for the post they remain unfilled.

0.1.7.4 Content and Methods. The major topics which were covered under these programmes were -

- Foods and Nutrition
- Fertilizers and Manures
- Management of Farm Animals
- High Yielding Varieties, Seed Treatment, Soil Testing
- Farm Forestry and Poultry.

The above topics were generally covered through talks by specialists and discussions with farm housewives. Practical experiences were provided by means of demonstration of different Nutritive Recipes from high

yielding varieties, Preservation and Food Processing by way of preparing jam, jellies, pickles and chutneys.

Besides these demonstration on seed treatment, taking of soil sample as well as compost making were also arranged. Field trips to places of interests like Home Science colleges, Dairy, Poultry units and Village Industries were conducted for generating awareness, interest and understanding regarding them.

0.1.7.5 Programmes. There were three different kinds of programmes offered through these Training Centres for farm women.

- a. A five day institutional programme for farmers and farm women which was residential in nature.
- b. A one day production cum demonstration cum training camp organised at village level, and,
- c. A follow up programme at village level by experts and trainers during which the necessary queries were attended to.

Besides these, Akashwani and now Television Charcha Mandals were also organised to impart necessary education through the programmes broadcasted and telecasted through them.

0.1.7.6 Participants. In each of the training programmes about 25 participants were covered. During an year about ten such programmes were organised. Hence every year it was expected that about 250 farm women will be

covered through the programmes run by Farmers' Training Centres.

0.2 Statement of the Problem

A study of Identification of Training Needs in Selected Aspects of Home Science Education of Farm Women of Gujarat State.

0.3 Justification of the Study

Under some of the schemes like Integrated Child Development, Nutrition Education or under Community Development Programmes women are provided education in certain aspects of Child Welfare, Nutrition, Health and in certain Crafts, but there is no programme large enough to cover the million of the women in rural areas in various other aspects. Besides this, literacy among these rural women is too low to sustain any developmental efforts. In Gujarat itself it was found that only 32.30 per cent of women were literate as per census data of 1981.

It was, therefore, felt that widening of educational and training strategy for women on certain subjects based on their needs which would help them immediately in their day to day life to improve their standard of living, needs to be given priority.

According to advancement of Scientific Technology appeared as an endowment for Indian peasants, in increasing

their standard of living. In agricultural sector the scientific technology proved its worthiness by increasing agricultural production and, thereby, the standard of living. Farm women play vital role in such development as they participated in both farm and homestead activities. Researches conclusively indicated a high degree of potentialities of scientific farming as well as of home living. It also revealed that the adoption of scientific of know-how among the farm women was restricted for a few. The reason was the level of adoption was primarily depended on knowledge input that farm women receive through various training institutions. Therefore, to expedite the process of disseminating knowledge among the farm women become a major issue. Training institutions of various forms and ideology were initiated and established. Farmers' Training Centres and subsequently Krishi Vigyan Kendra are some of the important training institutions for imparting training to farm women.

Farm women, except ploughing fields and driving carts and tractors, participate equally with men in all other operations of agricultural production. On an average women are engaged in agricultural pursuits for about 120 days. The post harvest operations like winnowing, storage of grains and the like which are within the home activities are generally performed by women in all localities and castes. Therefore, rest of the time can be utilised for knowing learning and developing certain skills which ultimately help

them to overcome some of their problems like illiteracy, ignorance, malnutrition, poor health, poverty, over population and so on.

The economic and social developments of these women are definitely two aspects of development but can not be demarcated clearly into two separate phases: The training on both aspects have to go together. Social development can not wait to start after the economic development has taken place. In fact education and training of both these aspects should be given in assimilated form. Satisfactory gains at both the socio-economic fronts would result in total development of women and thus in total rural communities.

Also Education and Training are the key elements in Community Development Programmes. The proponent of Community Development movement late Pt. Jawaharlal Nehru underlined the significance of training in the development by saying that if this movement fails it will not be so for the paucity of funds but for the lack of trained personnel.

This very opinion of Nehru has proved to be true within a few years after launching of the programmes. Thus, the content of training and trained manpower are perhaps the most serious obstacles to large scale rural development efforts. No grand design to meet the challenges of rural development is possible unless the institution strengthens its training programme and information resources in various ends.

Due to various constraints, mainly non-availability of trainers and subject matter specialists in Home Science, very few training programmes are undertaken at Farmers' Training Centres in Gujarat State.

Though the Farmers' Training Centres aim at imparting short training programmes, yet they are mostly peripathetic in character. These courses are more as the information support to the farmers and farm women than providing needed skill development for enduring change in their living and farming behaviour.

Moreover, the training programmes for farm women under these training centres are not planned on the basis of studied identification of training needs but are offered as and when it was convenient to them in terms of availability of Resource Persons or when called for by Authorities from time to time.

As the top priority is to be given to attain and sustain the living conditions of these rural people it is important to study the ways in which the needed knowledge to every family particularly the women improves. This will inevitably require adequate and need based education and training of the women regarding Home Science in which they are the major concerns.

It was, therefore, felt by the investigator that a study for identification of training needs in Home Science of farm women of Gujarat State be undertaken to systematise

the programmes of training farm women through Farmers' Training Centres of Gujarat State. The present study was undertaken with following objectives.

0.4 Objectives of the Study

1. To identify training needs in Home Science Education of farm women of Gujarat State.
2. To identify training needs in Home Science Education of farm women from three administrative divisions of Gujarat State.
3. To identify training needs in Home Science Education of farm women from different areas within the administrative divisions of Gujarat State.
4. To identify training needs in Home Science Education of farm women from tribal and non-tribal areas of Gujarat State.
5. To find out extent of differences in the training needs in Home Science Education of farm women from three administrative divisions of Gujarat State.
6. To find out extent of differences in the training needs in Home Science Education of farm women from the areas near to different centres within the three divisions of Gujarat State.
7. To find out extent of differences in the training needs in Home Science Education of farm women from Tribal and Non-Tribal areas of Gujarat State.
8. To find out the association between training needs in Home Science Education of farm women in Gujarat State

with the following selected variables, namely -

- (i) Age of the women.
- (ii) Socio-economic status of the women.
- (iii) Prior training of women by FTC under study.
- (iv) Proximity to training centre.
- (v) Exposure to programmes other than those of Farmers' Training Centres.

0.5 Basic Assumptions of the Study

1. Farm women in Gujarat State have training needs in Home Science Education.
2. The needs in Home Science can be identified on the basis of the collected related materials and on the opinion of the authorities of Training Institution and Subject Matter specialists.
3. Selected farm women will respond to the questionnaire.

0.6 Null Hypothesis of the Study

1. There will be no significant difference in the extent of needs for training in seven selected aspects of Home Science Education for farm women belonging to three administrative divisions of Gujarat State.
2. There will be no significant differences in the extent of needs for training in the following seven selected aspects of Home Science Education for farm women from the areas near to different centres within the

Ahmedabad division of Gujarat State.

1. Health and Sanitation
2. Household Storage
3. Family Planning
4. Foods and Nutrition
5. Grain Storage
6. Child Care
7. Energy Management

3. There will be no significant differences in the extent of needs for training in the following seven selected aspects of Home Science Education for farm women from the areas near to different centres within the Navsari division of Gujarat State.

1. Health and Sanitation
2. Household Storage
3. Family Planning
4. Foods and Nutrition
5. Grain Storage
6. Child Care
7. Energy Management

4. There will be no significant differences in the extent of needs for training in the following seven selected aspects of Home Science Education for farm women from the areas near to different centres within the Rajkot division of Gujarat State.

1. Health and Sanitation
 2. Household Storage
 3. Family Planning
 4. Foods and Nutrition
 5. Grain Storage
 6. Child Care
 7. Energy Management
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5. There will be no significant differences in the extent of needs for training in seven selected aspects of Home Science Education from Tribal and Non-tribal areas of Gujarat State.
 6. There will be no association between the training needs of the farm women in Home Science Education and their age.
 7. There will be no association between the training needs of the farm women in Home Science Education and their socio-economic status.
 8. There will be no association between the training needs of the farm women in Home Science Education and previous training received from Farmers' Training Centres.
 9. There will be no association between the training needs of the farm women in Home Science Education and proximity to training centres.
 10. There will be no association between the training needs of the farm women in Home Science Education and and their exposure to programmes offered by the

institution other than Farmers' Training Centres.

0.7 Delimiting the Scope of the Study

1. The study is limited to the selected aspects of Home Science Education, namely, Foods and Nutrition, Household Storage, Grain Storage, Child Care, Health, and Sanitation, Family Planning, and Energy Management.
2. The findings of the study will be applicable to the farm women from the areas under the study only.
3. The study is limited to the sample selected on the basis of accessibility and guidance provided by the authorities of FTCs.

0.8 Definitions of Terms

1. Farm Women : Those women who are engaged in agricultural activities either in their own fields or in the fields of others as the farm labourers.
2. Trained farm women : Those farm women who received training from Farmers' Training Centres in agriculture and Home Science Education.
3. Untrained farm women : Those farm women who have not received training from Farmers' Training Centres.
4. Proximities to the Centre : In terms of distance between the Farmers' Training Centres and the residence of farm women i.e. nearness and farness.
5. Training : Training here refers to knowledge of facts and practices possessed by farm women in the aspects of Home Science Education.