TRAINING NEEDS OF FARM WOMEN OF THRISSUR TALUK IN DAIRY AND POULTRY FARMING

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Thesis submitted in partial fulfilment of the requirement for the degree of

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DECLARATION

I hereby declare that this thesis entitled **"TRAINING NEEDS OF FARM WOMEN OF THRISSUR TALUK IN DAIRY AND POULTRY FARMING"** is a bonafide record of research work done by me during the course of research and that this thesis has not previously formed the basis for the award to me of any degree, diploma, fellowship, associateship or other similar title, of any other University or Society.

Mannuthy
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CERTIFICATE

Certified that this thesis entitled **"TRAINING NEEDS OF FARM WOMEN OF THRISSUR TALUK IN DAIRY AND POULTRY FARMING"** is a record of research work done independently by **Dr. DURGGA RANI. V,** under my guidance and supervision and that it has not previously formed the basis for the award of any degree, diploma, fellowship or associateship to her.

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Rani

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ABBREVIATIONS

AHD	-	Animal Husbandry Department
DDD	-	Dairy Development Department
KAU	-	Kerala Agricultural University
KLDB	-	Kerala Livestock Development Board
TNI	-	Training Need Index
PS	-	Percentage Score
MS	-	Mean Score
SFDA	-	Small Farmers Development Agency
ETC	-	Extension Training Centre
SHG	-	Self Help Group
KVK	-	Krishi Vigyan Kendra

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Introduction

1. INTRODUCTION

Training has been recognized as an important input in improving the competence of farming community by aiding adoption of advanced technologies. The problem facing the developing world today is not the lack of technologies or scientific discoveries, but that of converting them into production accomplishment and then using them as an instrument of economic growth and social change. This would depend, to a greater extent, on the accuracy and speed with which the technology is being transferred from its source to the users. Under such circumstances, the role of communication of technology through training has become important. In fact, training has become a critical input in view of growing sophistication in technology on one hand and its cost effectiveness on the other.

Aslam (1979) observed training for skill development as an attempt to bridge the gap between the existing skill and the new technology on one side and develop skill among the unskilled on the other side. Lynton and Pareek (1967) defined training as the process by which the desired knowledge, attitude, skill and ideas are inculcated, fostered and reinforced in an organism. No training programme would bring changes in the knowledge, attitude and action unless it is need based. In fact, the success of training efforts ultimately depends upon the extent to which training needs are truthfully assessed. Schematically, training need has been defined by Mishra (1990) in mathematical equation as training needs = Job requirement – present performance + development needs.

The development of a community, society or nation in any field, be it social, economic, political or spiritual depends as much on women as on men. By ignoring the welfare and development of women, no nation can ever reach the stage of development in any sector. **"In order to awaken the people, it is the women who have to be awakened, once they are on the move, the house hold moves, the village moves, and the country moves, hence women are point for family, society and humanity development"** said Pandit Jawaharlal Nehru, the architect of modern India. Therefore, national development is considered less feasible without developing this important and substantial segment of our society.

Kerala has made significant progress in livestock development, especially in the area of dairying. Dairy and poultry farming form an integral part of the mixed farming pattern of Kerala. The role of women in dairy and poultry farming is significant because they are involved in most of the farm activities besides their exclusive commitment to domestic chores. It is a known fact that every base level farm activities related to dairy and poultry is done by farm women. Yet, women have only very limited access to resources and control over income, credit, land, education, decision making, training and information.

Since dairy and poultry farming involve many skillful operations, training assumes special significance. As none of the farm operations related to dairy and poultry is contributed without the hand touch of farm women, the need for empowering them with sufficient knowledge and skill in scientific management vis-à-vis timely breeding, feeding and health care of their livestock is felt. So it becomes increasingly important that necessary training should be provided to them. So farm women must be given training on the latest technological advances to update their knowledge about improved farm practices. Training will improve their technical skill which inturn can contribute to the production. Many training programmes for the improvement of skills of farm women in animal husbandry practices have been started for providing necessary training to them. The observations of Desai and Mohuiddin (1992) and Sharma and Gupta (1994) indicate that training of farm women to be effective should be based on their felt needs and not on the information requirements as perceived by the organizers of the training courses. Training will make available to the farm women timely information on improved farm practices in an easily understandable form, create in them an attitude receptive for adopting innovations and impart necessary skills for undertaking scientific know-how.

Women's role in farming is still inadequately acknowledged. The urgent need is to develop animal husbandry extension network at the village level and arrange training of women in technologies for optimization of out put and increased income from livestock and poultry enterprises. There is a greater need for

redesigning training and extension interventions to suit the women's requirements. While designing a training programme for women, their triple burden of child rearing, farm work and house hold responsibilities need to be given due consideration. All research attempts seem to concentrate on farmers' needs and preferences, however, farm women's training needs and preferences have remained still unexplored. Therefore, it is necessary that a detailed study should be taken up to identify the training needs of farm women in the areas of dairy and poultry farming and to determine their preference for duration, type, method, time, season, interval and venue of training programme. It is also imperative to ascertain the problems faced by them in dairy and poultry farming so that proper policy recommendations can be suggested for successful implementation of livestock development programmes.

Keeping this in view, the present study was designed with the following objectives.

1. To study the profile of farm women in dairy and poultry farming.
2. To assess the training needs of farm women in dairy and poultry farming.
3. To find out the problems of farm women engaged in dairy and poultry farming.

Review of literature

2. REVIEW OF LITERATURE

This chapter deals with the review of the past studies. The relevant and available literature reviewed have been presented under the following sub-headings

2.1 Profile of Farm Women Engaged in Dairy and Poultry Farming

2.1.1 Personal Profile

2.1.2 Socio-economic Profile

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2.2 Training Needs of Farm Women with Respect to Farm Operations in Dairy and Poultry Farming

2.3 Preference for Type, Method, Duration, Interval, Time, Season and Venue of Training

2.4 Problems Related to Farm Operations in Dairy and Poultry Farming

2.1 PROFILE OF FARM WOMEN ENGAGED IN DAIRY AND POULTRY FARMING

2.1.1 Personal Profile

Balaji (1990) in the investigation on role of farm women in groundnut farming and allied agro-enterprises studied the profile of farm women of North Arcot district in Tamil Nadu with a sample size of 100 respondents and revealed that majority of the respondents were middle aged, married, belonged to backward community and nuclear family with a family size of upto five members, educated upto primary level and engaged in agriculture and allied activities. The study also revealed that nearly half of the respondents possessed low and medium level of experience in dairy and poultry farming respectively.

While analyzing the training needs of farm women in Karaikal region of Pondicherry with a sample size of 104 farm women engaged in livestock keeping

and poultry farming Madivanane (1990) found that majority of the farm women were young, educated upto primary level and had low farming experience. The study also revealed that most of the respondents were married.

Shreeshailaja (1993) in her study on knowledge level, adoption pattern and training needs of dairy farm women of Devanahally Taluk of Karnataka state reported that nearly fifty per cent of the respondents were illiterate. The study also revealed that the educational level of others ranged from primary to high school and none of the farm women were graduates.

Vaidehi and Joshi (1995) in their study on participation of women in poultry farming in Bangalore district of Karnataka and Selam district of Tamil Nadu with a sample size of 70 respondents reported that average age of the respondents was 39 years in case of large farm owners and 36 years in case of small farm owners. Among the large farm owners, majority had secondary school education and persued poultry as subsidiary occupation and among the small farm owners, majority were found to be illiterate and persued poultry as primary occupation.

Chylek *et al.* (1996) conducted a study among women engaged in livestock farming together with their husbands in eastern and western provinces of Poland and revealed that one half of the respondents had full secondary education followed by 30.8 per cent and 6.7 per cent having elementary and higher education respectively.

While analyzing the skills of farm women in selected animal husbandry practices in Bareilly district of Uttar Pradesh Rath *et al.* (1998) found that majority of the farm women belonged to middle age group, back ward caste and nuclear family with medium family size, had four to seventeen years farming experience and two third of the respondents were illiterate.

Sheela and Sundaraswamy (1999) studied the knowledge level of dairy practicing women of Bidar district of Karnataka state with a sample size of 179 respondents and found that majority of the respondents were illiterate, were

members in only dairy co-operative societies, did not participate in extension activities and had low level of mass media participation.

In their study entitled dairy farming an attitudinal profile of rural women Tripathi and Kunzru (2000) studied the profile of rural women engaged in dairy farming in Hissar district of Haryana with a sample size of 50 respondents. The study revealed that majority of them belonged to middle age group, backward caste and nuclear family having small family size.

Lalitha and Seethalakshmi (2001) in their study of "Rural women in dairy enterprise - the role of institutional intervention", analysed the profile of women in dairy sector with a sample size of 63 respondents in Dindigul district of Tamil Nadu and reported that more than half of the respondents were in the age group of 25 to 45 years and were illiterate. Majority of the respondents belonged to backward community and the remaining were scheduled castes. It was also reported that dairying constituted subsidiary occupation for majority of the respondents and primary occupation for the remaining.

While analyzing the knowledge level of farm women in scientific poultry farming in Namakkal district of Tamil Nadu, Narmatha *et al.* (2001) found that majority of the poultry farm women were young, educated upto secondary level and had poultry as subsidiary occupation with medium level of experience.

In their study entitled feed back analysis on the tested dairy processing technologies in Haryana, Gosain *et al.* (2002) studied the profile of rural women engaged in dairy farming from three districts of Haryana state and found that majority of the respondents were middle aged, educated upto primary standard and had medium family size.

While analyzing the role performance of rural women in dairy management practices in Haryana with a sample size of 180 respondents, Singh (2003) found that majority of the respondents belonged to middle age group and had low (upto primary) level of education.

Subrahmanyeswari and Reddy (2004) studied the profile of rural women entrepreneurs involved in dairying in Chittoor district of Andhrapradesh with a sample size of 120 respondents and reported that most of the women involved in dairying were with less education and farming experience.

In their study entitled "Training: an effective tool for farm women empowerment", Mehta and Malaviya (2004) analysed the profile of farm women of three districts in Haryana state with a sample size of 300 respondents and found that 47.00 per cent of the respondents belonged to the age group of 19-30 years and 57.66 per cent were illiterate.

2.1.2 Socio-economic Profile

Balaji (1990) in the investigation on role of farm women in groundnut farming and allied agro-enterprises studied the socio-economic profile of farm women of north Arcot district in Tamil Nadu and revealed that majority of the farm women belonged to low level material and livestock possession category and low income group.

Madivanane (1990) studied the training needs of farm women in Kariakal region of Pondicherry with a sample size of 104 respondents and revealed that majority of the farm women belonged to low socio- economic status ,low income group, had low extension agency contact and nearly half of the respondents had high mass media exposure.

Vaidehi and Joshi (1995) studied the participation of women in poultry farming from villages of Bangalore district in Karnataka and Selam district in Tamil Nadu and found that in case of large farm owners majority belonged to high income group and in case of small farm owners majority belonged to low income group. Farm women had limited mass media exposure and extension participation.

Rath *et al.* (1998) studied the skills of farm women in selected animal husbandry practices in Bareilly district of Uttar Pradesh and reported that mass media exposure of the respondents was found to be very low and extension agency contact was found to be medium.

Sheela and Sundaraswamy (1999) in their study on the knowledge level of women practising dairying in Bidar district of Karnataka state found that majority of the respondents had no contact with any extension agency.

Singh *et al.* (2000) studied the strategy for training of farm women engaged in backyard poultry farming in Tehri district of Garhwal Himalayas and reported that the number of birds reared ranged from four to twenty five with majority of the families rearing 10-15 birds.

While analyzing the demography of poultry farm women of Namakkal district in Tamil Nadu Narmatha *et al.* (2001) found that majority of the respondents had medium level of material possession, land holding, flock size, income, media exposure and extension agency contact.

Lalitha and Seethalakshmi (2001) in their study entitled decision making behaviour of women in dairy sector - A micro study, analysed the socio-economic profile of farm women of Dindigal district and found that about 36.50 per cent of the farm women were land holders and rest of them belonged to land less category.

Singh (2003) studied the role performance of rural women in dairy management practices in Haryana with a sample size of 180 respondents and found that about half of the total respondents were either land less or marginal farmers, majority had low mass media exposure and extension contact and belonged to low income group.

In their study entitled "Training: an effective tool for farm women empowerment", Mehta and Malaviya (2004) analysed the socio-economic profile of farm women of three districts in Haryana state and found that majority of the respondents possessed upto five acre land, had low material possession, socio-economic status, exposure to communication sources and no social participation.

While analyzing the training needs of women farmers and effectiveness of training methods in Hissar district of Haryana state Dahiya *et al.* (2004) found that majority of the farm women were landless, had low farm and family material possession.

Subrahmanyeswari and Reddy (2004) studied the profile of rural women entrepreneurs involved in dairying in Chittoor district of Andhrapradesh and reported that majority of the respondents had medium social participation.

2.1.3 Socio-psychological Profile

While analyzing the training needs of farm women in Karaikal region of Pondicherry Madivanane (1990) found that nearly half of the respondents had low scientific and risk orientation and one third of the respondents had high innovativeness.

Shreeshailaja (1993) in her study on knowledge level, adoption pattern and training needs of dairy farm women of Devanahally taluk of Karnataka state reported that majority of the farm women had medium innovation proneness.

While analyzing the role performance of rural women in dairy management practices in Haryana, Singh (2003) found that majority of the respondents had medium economic motivation and low to medium level of innovation proneness and risk orientation.

Subrahmanyeswari and Reddy (2004) studied the profile of rural women entrepreneurs involved in dairying in Chittoor district of Andhra Pradesh and revealed that majority of the rural women had medium range of value and management orientation.

While analyzing the training needs of women farmers and effectiveness of training methods in Hissar district of Haryana state Dahiya *et al.* (2004) found that nearly half of the respondents had medium credit orientation and majority of them were change prone and had medium risk orientation.

2.2 TRAINING NEEDS OF FARM WOMEN WITH RESPECT TO FARM OPERATIONS IN DAIRY AND POULTRY FARMING

Balaji (1990) in the investigation on role of farm women in groundnut farming and allied agro-enterprises studied the training needs of farm women of North Arcot district of Tamil Nadu in dairy farming and poultry keeping and found

that in dairy farming, purchase of animals was the most preferred training area followed by caring the animals. It was also reported that in poultry farming, selection of eggs for hatching, feeding the birds, maintenance of cages and caring the sick birds were the areas in which the farm women needed training.

While analyzing the training needs of farm women in Karaikal region of Pondicherry Madivannane (1990) found that in livestock keeping, rearing of animals ranked first followed by maintenance of cattle shed and care of sick animals. It was also found that in poultry farming, rearing of birds ranked first followed by maintenance of poultry shed and care of sick birds.

Singh and Aggarwal (1993) conducted a study on information needs of Punjabi farm women engaged in dairy farming and found that cattle feed and their nutritive value, feed for dam at the time of calving and quantity and quality of feed to be given to pregnant cattle during different months were the first, second and third needed areas of training respectively.

Chandran and Perumal (1995) studied the training needs of farm women on indigenous resource management in Kanyakumari district of Tamil Nadu with a sample size of 150 respondents and revealed that in dairy farming, the perceived need for training in the area of caring the animals stood first followed by feeding. It was also revealed that in poultry farming, caring the sick birds was followed by feeding the birds and selection of eggs for hatching.

Fulzele and Meena (1995) conducted a study in dairy tribal women of Jaipur district of Rajsthan to identify their training needs. It was reported that majority of the respondents perceived selection of breed and knowledge of balanced feeding, castration of calf and bull, deworming of young stock, vaccination and fodder production and their variety as most needed areas of training.

A study on training needs of farm women engaged in poultry farming in Salem district of Tamil Nadu by Pushpa *et al.* (1995) revealed that training was needed the most in the area of disease management followed by feeding for

growing birds, selection of birds, feed preparation, maintenance of floor space and maintenance of records.

Narmatha *et al.* (1996) in their study on the knowledge level of farm women in scientific poultry farming in Salem district of Tamil Nadu with a sample size of 100 respondents reported that the need for educational opportunities to poultry farm women were in the areas of general management, disease control and marketing.

An ex-post-facto analysis of women in animal production was done by Raju *et al.* (1999) in Kolar district of Karnataka state with a sample size of 100 farm women. They reported that finance and credit, selection of animals and health care were the most needed areas of training followed by management of animals, feed preparation, preparation of milk products and balanced feeding.

Lalitha and Seethalakshmi (1999) opined that rural women in dairying should be imparted knowledge and skill based training in identification of animals in heat, insemination at proper time, knowledge about contagious diseases, vaccination, production of green fodder round the year, knowledge about feeding schedule, uses of disinfectants, knowledge about sources of micro organisms, dehorning and deworming.

Sujaths and Nanjaiyan (1999) while conducting a study related to the training needs of farm women in Coimbatore and Periyar districts of Tamil Nadu in animal husbandry and poultry farming revealed that in dairy farming, the need for training in remedial measure for disease management and rinderpest stood first followed by feed ratio for animals. It was also found that in poultry farming, the need for training in the area of feed ratio for broilers or layers and disease management ranked first followed by debeaking.

Umarani and Thangamani (2000) studied the technological needs of women of Ranga Reddy district of Andhra Pradesh in dairying and reported that the respondents considered balanced diet, health care and sanitation, care of pregnant animals and new born calf and correct procedure of milking as the most important areas of technologies they would like to learn.

Sumathi and Alagesan (2001) in their study of training need of farm women of Dharmapuri district of Tamil Nadu in integrated farming system in dairy and poultry farming found that in dairy farming, cent percent of the respondents needed training in purchase of animals, maintenance of cattle shed and processing of milk. In poultry farming, all the respondents preferred training in protection of birds and marketing of birds and eggs. The other areas in which the respondents needed training were selection of eggs for hatching, purchase of birds, maintenance of eggs and feeding of birds.

Das and Mishra (2002) studied the training needs of tribal women of Kalahandi district in Orissa with a sample size of 600 tribal women engaged in farm activities and found that in cattle rearing, the highest training need was expressed in the area of care against diseases followed by making of feed mixture and care of pregnant cows. It was also found that in poultry rearing, health care of birds and preparation of poultry feed ranked first and second respectively.

Gupta and Tripathi (2002) conducted a study in Bareilly district of Uttar Pradesh to assess the training needs of rural women in dairy enterprise. It was noted that out of the seven studied major areas of dairying, health care was ranked first followed by feeding, breeding, management, processing and preservation of milk and milk products in descending order as the priority areas of training.

In their study entitled "Training: an effective tool for farm women empowerment", Mehta and Malaviya (2004) analysed the training needs of farm women of three districts in Haryana state and found that dairy farming was found to be the most preferred area of training followed by animal nutrition and animal health/hygiene.

2.3 PREFERENCE FOR TYPE, METHOD, DURATION, INTERVAL, TIME, SEASON AND VENUE OF TRAINING

While analyzing the training needs of farm women of Karaikal region of Pondichery Madivanane (1990) found that majority of the respondents preferred Peripatetic type of training, their 'village itself' as the venue, March-April as the

season and a duration of three to six days for training. It was also found that most of them preferred training during after noon session and demonstration as the best method.

Shreeshailaja (1993) while studying the knowledge level, adoption pattern and training needs of dairy farm women of Devanahally taluk in Karnataka state found that majority of the farm women preferred peripatetic training, combination of lecture, group discussion and method demonstration as the most preferred combination of method for training, duration of three days and their own village as suitable place for training.

Puspha *et al.* (1995) studied the training needs of women in poultry farming in Salem district of Tamil Nadu and revealed that top most priority was given to on-farm training followed by institutional training and farm school on AIR.

In an ex-post-facto analysis of women in animal production, Raju *et al.* (1999) studied the training preferences of dairy farm women of Kolar district of Karnataka with a sample size of 100 respondents. They reported that majority of the farm women preferred training of two to three days duration, during April to June months using demonstration method, at their own village.

Ahmed *et al.* (2000) studied the preferences of farm women in agriculture and allied fields in port Blair of Andaman and Nicobar island towards training methodology. They reported that majority of the respondents preferred a combination of farmers field and KVK as the venue for training and four days and above as the best duration. Half of the respondents preferred May-June as the best months for attending training programmes.

Singh *et al.* (2000) conducted a study on strategy for training of farm women in Taria district of Uttar Pradesh and revealed that majority of the farm women preferred their own village as venue, one to three months duration, winter season and afternoon hours for attending training programmes.

Sumathi and Alagesan (2001) in their study of training need of farm women of Dharmapuri district in Tamil Nadu in integrated farming system found that

majority of the respondents preferred training in their own village during crop season.

Gupta and Tripathi (2002) conducted a study in Bareilly district of Uttar Pradesh to assess the training needs of rural women in dairy enterprise and found that short duration, knowledge-cum-skill oriented training organized in suitable season at their own village by the middle aged female communicator in a homogenous group was preferred the most. It was also found that field visits and lecture along with group discussion were the most preferred training methods.

In their study entitled Training: An effective tool for farm women empowerment, Mehta and Malaviya (2004) analysed the training needs of farm women of three districts in Haryana state and found that majority of the farm women preferred their own village as the venue, noon time and January month for attending training.

2.4 PROBLEMS RELATED TO FARM OPERATIONS IN DAIRY AND POULTRY FARMING

Balaji (1990) while studying the role of farm women in groundnut farming and allied agro-enterprises identified the problems faced by the farm women in North Arcot district of Tamil Nadu in dairy management and poultry keeping and revealed that in dairy management, lack of institutional credit support was the major problem followed by non-availability of improved milch animals, more distance to Veterinary hospital, low price of milk, scarcity of labour, non-availability of space and difficulty in growing green fodder. The study also revealed that in poultry keeping, inability to pay constant attention, lack of financial help, high cost of commercial feed and low price support were the top ranked problems under personal, economic, feed and situational constraints.

Thirunavukkarasu and Prabaharan (1992) conducted a study in North Arcot district of Tamil Nadu with a sample size of 90 respondents to identify the constraints in rearing cross bred cattle and reported that higher susceptibility to

diseases was the major constraint followed by higher mortality rate in cross bred calves.

In an investigation of training needs of women in poultry farming, Pushpa *et al.* (1995) studied the problems of women in poultry farming in Salem district of Tamil Nadu and revealed that the non availability of feed at subsidized rate was the major problem followed by lack of training on disease management.

Bairathi *et al.* (1997) studied the constraints in milk production in Jaipur district of Rajasthan with a sample size of 80 respondents and reported that untimely available veterinary services, non availability of green fodder round the year, irregular payments by the milk society, lack of technical guidance and low price for milk offered by society were expressed as very serious constraints by the respondents.

In a study on gender analysis of time utilization pattern, training needs and problems of farmers and farm women in farming systems, Sujaths and Nanjaiyan (1999) analysed the problems of farm women of Coimbatore and Periyar district of Tamil Nadu. They reported that in animal husbandry, scarcity of water was the major problem followed by rinderpest disease, and in poultry farming, scarcity of water ranked first followed by bacterial diseases and labour problems.

Amudha and Veerabhadraiah (2000) in their study on women in commercial poultry, opined that lack of knowledge of improved practices, disease control measures, poultry disease, higher feed cost and low egg prices, lack of storage and export facilities for eggs, low egg consumption and inadequate capital were some of the problems encountered by women in commercial poultry farming.

Singh *et al.* (2000) while identifying strategy for training of farm women of Tehri district of Garhwal Himalayas studied the constraints of women in backyard poultry farming. They reported that loss of chicks due to diseases and predators were the major problems followed by malnutrition.

Vyas and Patel (2000) conducted a study to know the constraints faced by milk producers of Panchamahal district of Gujarat with a sample size of 300

respondents and reported that non-availability of loan facilities for purchase of milch animals and fodder, non availability of artificial insemination and milk marketing facilities, lack of knowledge of scientific animal feeding and preservation practices and lack of pasture land were the main constraints.

Podikunju *et al.* (2001) conducted a study on constraints encountered by farm women in management of dairy animals in Udaipur district of southern Rajasthan with a sample size of 100 respondents and found that lack of improved sire and poor results of A.I were the most important constraints followed by high price of concentrates, lack of knowledge of cause and control of diseases and illiteracy being a hindrance in record keeping.

Chinnadurai *et al.* (2002) conducted a study among dairy farm women of Coimbatore district in Tamil Nadu engaged in commercial dairy farming and identified the constraints faced by farm women. It was revealed that low price of milk, non availability of green fodders in summer, lack of transport facilities, lack of financial resources and non availability of veterinary health care were the major constraints.

While analyzing the prospects and constraints of dairy farming in rural Bengal, Misra and Pal (2003) found that inadequate technical knowledge, poor organizational support and lack of financial resources were the major constraints.

Dabas *et al.* (2004) conducted a study among rural women in Tarai area of Uttaranchal with a sample size of 120 respondents to identify the constraints in adoption of dairy technology and revealed that repeat breeding, non-remunerative price of milk and its products, non-availability of loan and high cost of treatments were the major problems.

Materials and Methods

3. MATERIALS AND METHODS

This chapter deals with the methodology adopted for the investigation. The research methods followed are described under the following sub-heads.

3.1 Sampling Design

3.2 Selection of Variables

3.3 Operationalisation and Measurement of Variables

3.4 Method of Data Collection

3.5 Analytical Procedures

3.1 SAMPLING DESIGN

3.1.1 Selection of Study Area

Thrissur Taluk in Thrissur District was purposively selected for the study. The map of the study area with the selected development blocks is shown in fig.1.

3.1.2 Sampling Procedure

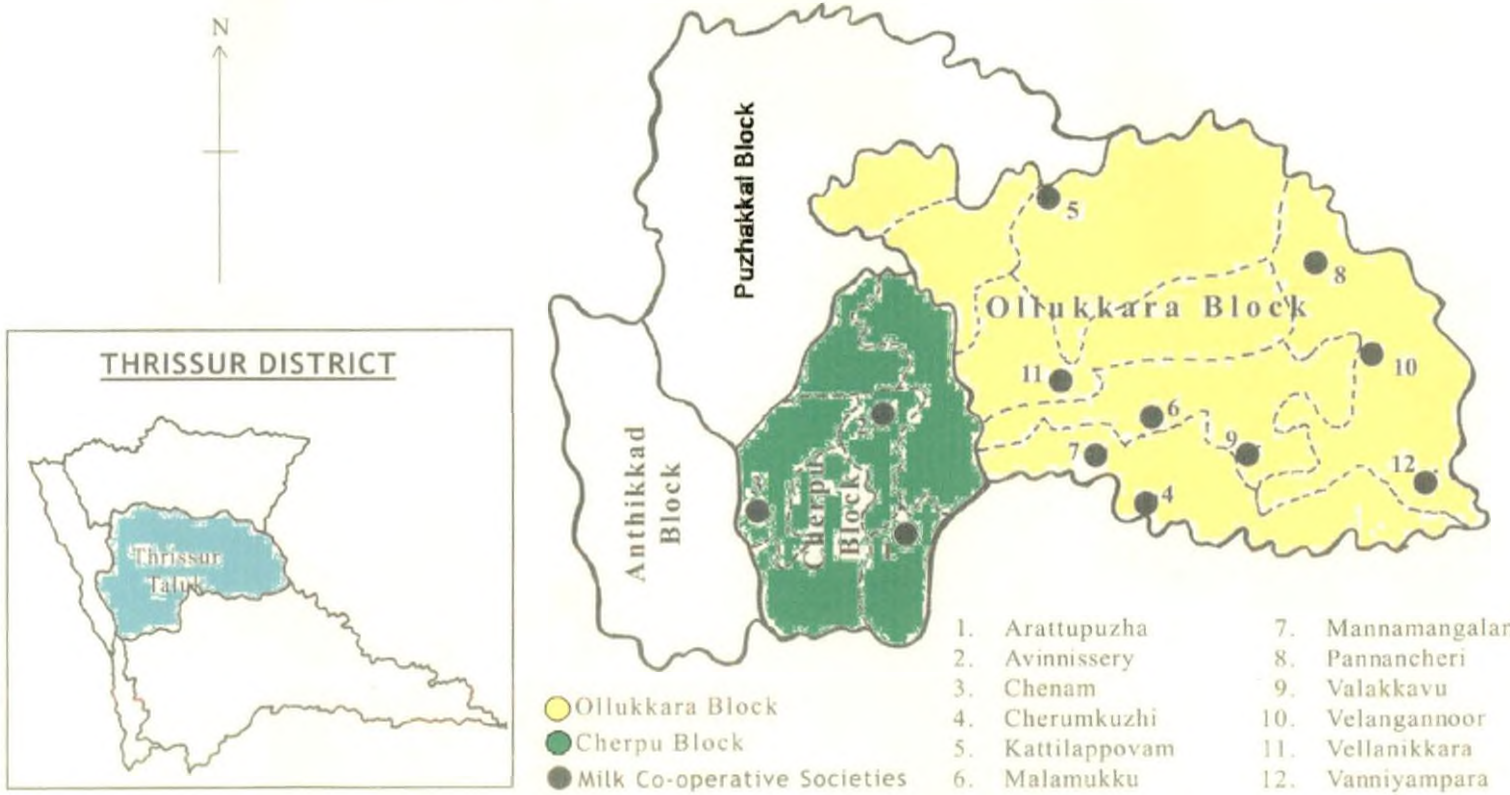
Multistage sampling technique was used to select the respondents. In the first stage, two development blocks namely Ollukkara and Cherpu were selected at random from four development blocks of Thrissur Taluk. In the second stage, twelve milk co-operative societies were randomly selected from the 43 milk co-operative societies functioning in the two development blocks. A list of all the members possessing both dairy and poultry was prepared with the help of extension personnel working in the Dairy Development Department and the secretaries in the selected milk co-operative societies. Then in the third stage, 120 members were selected from the societies by stratified random sampling procedure using proportional allocation. The women actively involved in dairy and poultry farming in the households of 120 selected members constituted respondents of the study.

The selected milk co-operative societies with the number of members possessing both dairy and poultry and the sample size were as follows.

Fig. 1

THRISSUR TALUK

MAP SHOWING SELECTED DEVELOPMENT BLOCKS AND MILK CO-OPERATIVE SOCIETIES



Sl. No.	Name of the milk co-operatives	No. of members possessing milch animals	No. of members possessing both dairy and poultry	No. of members selected
1.	Arattupuzha	56	52	12
2.	Avinnissery	160	39	9
3.	Chenam	398	35	8
4.	Cherumkuzhi	600	57	13
5.	Kattilappovam	210	39	9
6.	Malamukku	160	31	7
7.	Mannamagalam	700	63	15
8.	Pannancheri	160	31	7
9.	Valakkavu	300	31	7
10.	Velangannoor	121	49	11
11.	Vellanikkara	101	44	10
12.	Vanniyampara	100	52	12
	Total	**3066**	**523**	**120**

3.2 SELECTION OF VARIABLES

(I) Profile of farm women

Based on the objectives of the study, review of literature, a detailed discussion with the experts and observation made by the researcher, a list of profile was framed along with the operationalised definitions and given to 15 experts for eliciting the relevancy of the items on a three point continuum ranging from most relevant, relevant and least relevant (Appendix A). The items which received percentage score below the mean of percentage scores were discarded. The items selected were (i) Personal profile (Age, Education, Occupation, Marital status, Farming experience and Training exposure) (ii) Socio-economic profile (Land holding, Herd size, Flock size, Monthly income from dairy and poultry farming, Social participation, extension agency contact and Information source

utilization) and (iii) Socio-psychological profile (Credit orientation, Risk orientation, Innovation proneness, Economic motivation and Marketing orientation).

(II) Training needs with respect to farm operations in dairy and poultry farming

Based on review of literature, package of practices recommendations (Cattle and Poultry, 2001), discussion with farm women and observation made by the researcher, lists of five major farm operations each comprising of selected minor farm operations/items for dairy and poultry farming were framed. The minor farm operations were relevancy rated for both knowledge and skill training needs by 15 experts on a three point continuum viz. most relevant, relevant and least relevant, the scores assigned being three, two and one respectively (Appendix B & C). The items which received percentage scores below the mean of the percentage scores were discarded for both knowledge and skill aspects. The number of minor farm operations for both knowledge and skill aspects under each major farm operation in dairy and poultry farming are given below.

Major farm operations	Minor farm operations			
	Dairy farming		Poultry farming	
	Knowledge	Skill	Knowledge	Skill
Housing	2	1	2	2
Breeding	5	3	3	1
Feeding and management	5	5	3	3
Heath care	5	3	5	5
Marketing and finance	2	2	2	2

III. Preference for type, method, duration, interval, time, season and venue of training

Based on review of literature, discussion with farm women and observations made by the researcher, preferences towards type, method, duration, interval, time, season and venue of training were identified.

IV. Problems related to major farm operations in dairy and poultry farming

Based on the review of literature, discussion with extension personnel and selected farm women and observation made by the researcher, lists of problems with regard to the five major farm operations each in dairy and poultry farming were identified. The problems were relevancy rated by 15 experts on a three point continuum viz. most relevant, relevant and least relevant with scores three, two and one respectively (Appendix B & C). The items which received percentage score below the mean of the percentage scores were discarded. The number of problems under each major farm operation for both dairy and poultry farming are presented below.

Major farm operations	Minor farm operations	
	Dairy farming	Poultry farming
Breeding	5	2
Feeding and management	6	3
Housing	2	2
Health care	5	4
Marketing and finance	4	5

Table 1: Variables and measurement

	Variables studied	Measurement techniques
I	**Personal profile**	
1.	Age	Structured schedule
2.	Education	- do -
3.	Occupation	- do -
4.	Marital Status	- do -
5.	Farming experience	- do -
6.	Training exposure	- do -
II	**Socio-economic profile**	
1.	Land holding	As given by SFDA
2.	Herd size	Structured schedule
3.	Flock size	- do -
4.	Monthly income from dairy & poultry farming	- do -
5.	Social participation	- do -
6.	Extension agency contact	- do -
7.	Information source utilization	- do -
III	**Socio-psychological profile**	
1.	Credit orientation	Scale developed by Beal and Sibley (1967)
2.	Risk orientation	Scale developed by Supe (1969)
3.	Innovation proneness	Scale developed by Moulik and Rao (1958)
4.	Economic motivation	Scale developed by Supe (1969)
5.	Marketing orientation	Scale developed by Samanta (1977)
IV	**Training needs**	
1.	Dairy farming	Structured schedule
2.	Poultry farming	- do -
V	**Training preferences**	Structured schedule
VI	**Problems in dairy and poultry farming**	Structured schedule

3.3 OPERATIONALISATION AND MEASUREMENT OF VARIABLES

3.3.1 Concept of Farm Woman

For the purpose of the study, a farm woman was operationally defined as a woman in the family who was actively involved in dairy and poultry farming.

3.3.2 Personal Profile

3.3.2.1 *Age*

Age was operationalised as the number of years completed by the respondent at the time of interview. Accordingly, the respondents were arbitrarily categorized into three groups as follows.

Young	Below 30 years
Middle aged	30 – 50 years
Old	Above 50 years

3.3.2.2 *Education*

This was operationalised as the extent of formal education possessed by the respondent at the time of investigation. Accordingly, the respondents were categorized as

Illiterate
Primary
Middle school
High school
College

3.3.2.3 *Occupation*

This was operationalised as the vocation on which major share of time of the respondent was spent for main source of income. Accordingly, the respondents were classified under the following categories of occupation.

Government employment
Private employment
Self employment
Agriculture and allied activities
Agricultural and other labourers
Household work

3.3.2.4 *Marital Status*

It meant whether the respondent was married, unmarried or widow at the time of the study. Based on this, three categories were derived as

unmarried
married
widow

3.3.2.5 *Farming Experience*

It meant the number of years the farm woman has been involved in dairy and poultry farming. The respondents were arbitrarily classified into four categories.

Least experienced	Less than 1 year
Less experienced	1 – 5 years
Experienced	5 – 10 years
Highly experienced	More than 10 years

3.3.2.6 *Training Exposure*

It referred to the number of trainings attended by the farm women in dairy and poultry farming. The categories of respondents were as follows.

No training attended
Attended 1 – 2 trainings
Attended 3 or more trainings

3.3.3 Socio Economic Profile

3.3.3.1 *Land Holding*

This indicated the area of cultivable land possessed by the family of the respondents.

The respondents were classified into four categories based on the criteria followed by Small Farmers Development Agency programme.

Large farmer	Above 2 hectares
Small farmer	1 – 2 hectares
Marginal farmer	Below 1 hectare
Agricultural labourer	10 cents and below

3.3.3.2 *Herd Size*

It meant the number of dairy animals owned by the family at the time of enquiry. Most of the farmers in the area maintained cattle as a supplementary source of income. Hence a very restricted classification had to be resorted to. The respondents were arbitrarily classified into three categories as follows

Small	Those with herd size of 2 and below
Medium	Those with herd size of 3 to 4
Large	Those with herd size of 5 and above

3.3.3.3 *Flock Size*

It meant the number of birds owned by the family at the time of study. The respondents were arbitrarily classified into three categories based on mean ($\bar{x}$) and standard deviation (S.D).

Small	Below (mean – S.D)
Medium	(Mean – S.D) to (mean + S.D)
Large	Above (mean + S.D)

3.3.3.4 *Monthly Income from Dairy and Poultry Farming*

It referred to the monthly income obtained by the family from dairy and poultry farming. The respondents were classified into following three categories based on mean ($\bar{x}$) and standard deviation (S.D) as follows.

Low	Below (mean – S.D)
Medium	(Mean – S.D) to (mean + S.D)
High	Above (mean + S.D)

3.3.3.5 *Social Participation*

It referred to the degree of involvement of the farm woman in formal organisations as a member or as an office bearer. Accordingly, three arbitrary categories were framed as follows.

Low	Membership in one organisation
Medium	Membership in more than one organisations
High	Office bearer in one or more organisations

3.3.3.6 *Extension Agency Contact*

This referred to the frequency with which a farm woman came in contact with the extension agents viz. veterinary surgeon, dairy extension officer, dairy farm instructor and livestock inspector for getting information on dairy and poultry farming. The respondents were asked to indicate the frequency of their contact with each extension agent on a three point continuum viz. never, occasionally and often with scores zero, one and two respectively. The total score for each respondent was obtained by adding the scores for all the contacts made by her with the extension agents. The respondents were classified into low and high categories based on the mean of the scores obtained.

Low	Below mean
High	Above mean

3.3.3.7 ***Information Source Utilization***

This meant the frequency of utilization of information on dairy and poultry farming from various sources viz. mass media, personal cosmopolite and personal localite channels. The respondents were asked to indicate the frequency of utilization of information for each source on a three point continuum viz never, occasionally and often with scores zero, one and two respectively. The total score for each respondent was obtained by adding the scores for all the information sources utilized by her. The respondents were classified as low, medium and high considering the mean and standard deviation as follows.

Low	Below (mean – S.D)
Medium	(Mean – S.D) to (mean + S.D)
High	Above (mean + S.D)

3.3.4 Socio Psychological Profile

3.3.4.1 ***Credit Orientation***

It referred to the orientation to avail credit by the respondent.

Credit orientation was measured using the scale developed by Beal and Sibley (1967). The scale consisted of five items. The first and last items were measured in 'Yes' or 'No' response with scores 'two' and 'one' respectively. The second item was measured on a four point continuum as ' very difficult', ' difficult', 'easy' and 'very easy' with scores 'one', 'two', 'three' and 'four' respectively. The third item was measured on a four point continuum as 'very badly', 'badly', 'fairly' and 'very fairly' with scores 'one', 'two', 'three' and 'four' respectively. Fourth item was measured on a four point continuum of 'strongly agree', 'agree', 'disagree' and 'strongly disagree' with scores of 'four',

'three', 'two' and 'one' respectively. Summation of these scores of all the items was the credit orientation score of the respondent.

Based on the mean and S.D of the scores obtained, the respondents were categorized as follows.

High	Above (mean + S.D)
Medium	(Mean + S.D) to (mean – S.D)
Low	Below (mean – S.D)

3.3.4.2 *Risk Orientation*

Risk orientation was defined as the degree to which the respondent was oriented towards uncertainty and had the courage to face the problems in dairy and poultry farming.

In this study, the risk orientation was measured with the help of the scale developed by Supe (1969). The scale consisted of six statements out of which four were positive and two were negative. The respondents were asked to indicate their agreement or disagreement towards the statements. Accordingly the statements were rated on a three point continuum viz. agree, undecided and disagree with scores three, two and one respectively for positive statements. The scoring pattern was reversed for negative statements. The risk orientation score for each respondent was the sum of the scores assigned to all the statements by the respondent.

Based on the mean and S.D of the scores obtained, the respondents were categorized as follows.

High	Above (mean + S.D)
Medium	(Mean + S.D) to (mean – S.D)
Low	Below (mean – S.D)

3.3.4.3 *Innovation Proneness*

Innovation proneness in this study was defined as the readiness to accept and orient towards new scientific practices in dairy and poultry farming by the respondent.

In this study, innovation proneness of the farm woman was measured with the help of the self rating scale developed by Moulik and Rao (1965). This scale consisted of three sets of statements. Each set contains three statements, each of scores three, two and one indicating high, medium and low degree of innovation proneness respectively. Out of the three statements in each set, the respondents were asked to select one statement to which they agree the most and also another statement to which they disagree the most. The ratio of the scores of most agreed and least agreed statements of all the three sets were summed up to get the innovation proneness score of the respondent.

Based on the mean and S.D of the scores obtained, the respondents were categorized as follows.

High	Above (mean + S.D)
Medium	(Mean + S.D) to (mean – S.D)
Low	Below (mean – S.D)

3.3.4.4 *Economic Motivation*

It was defined as an indication of occupational excellence in terms of profit making and relative value placed on economic ends by a farm woman.

In this study, the economic motivation was measured with the help of the scale developed by Supe (1969). The scale consisted of six statements out of which five were positive and one was negative. The positive statements were rated in a three point continuum viz. agree, undecided and disagree with scores of three, two and one respectively. The scoring pattern was reversed for negative statements. The sum of scores of all the statements obtained by a respondent was taken as her score for economic motivation.

Based on the mean and S.D of the scores obtained, the respondents were categorized as follows.

High	Above (mean + S.D)
Medium	(Mean + S.D) to (mean – S.D)
Low	Below (mean – S.D)

3.3.4.5 *Marketing Orientation*

Marketing orientation was defined as the capacity of the farm woman to identify the market trend to sell the produce for greater returns.

Marketing orientation was measured using the scale developed by Samanta (1977). The scale consisted of six statements of which three were positive and three were negative. A score of one was given for the agreement and zero for disagreement of the positive statements. The scoring pattern was reversed in the case of negative statements. The sum of the scores for all the statements by an individual was taken as her score for marketing orientation. The minimum and maximum possible scores were one and six respectively.

On the basis of scores obtained, the three categories and scoring pattern were as follows.

Category	**Score range**
High	5 – 6
Medium	3 – 4
Low	1 – 2

3.3.5 Training Needs with Respect to Major Farm Operations in Dairy and Poultry Farming

In this study, the training need was operationalised as the expressed level of training needed by farm women in each of the training areas pertaining to dairy and poultry farming.

The finalized questionnaire was administered to the respondents who were asked to rate the items for their knowledge and skill needs on a three point continuum viz. most needed, needed and least needed.

The scoring pattern adopted was as follows

Category	Score
Most needed	3
Needed	2
Least needed	1

3.3.6 Preference for Type, Method, Duration, Interval, Time, Season and Venue of Training

3.3.6.1 *Preference for Type of Training*

This referred to the choice of the respondents for the type of training viz. institutional training, on-farm training, distance learning and print media.

3.3.6.2 *Preference for Method of Training*

It meant the choice of the respondents for the method of training among the six training methods namely lecture, group discussion, farm visits, study tours, demonstrations and film shows.

3.3.6.3 *Preference for Duration of Training*

It referred to the length of time for a training programme preferred by the respondents. The farm women were given three choices of duration viz. less than one week, one week and more than one week.

3.3.6.4 *Preference for Interval of Training*

It meant the time gap between two subsequent training programmes preferred by the respondents. The respondents were given three choices of interval viz. every three months, every six months and every year.

3.3.6.5 *Preference for Time of Training*

It meant the suitable time in a day preferred most by the respondents for attending the training programme. The respondents were given three choices viz. forenoon, afternoon and any time.

3.3.6.6 *Preference for Season of Training*

It referred to the months preferred by the farm woman for training out of the choices given viz. December to February, March to May, June to September and October to November.

3.3.6.7 *Preference for Venue of Training*

It referred to the venues of training preferred by the farm woman out of the six choices of training institutes given viz. Veterinary College Mannuthy, Local institutions, K.V.K., Animal husbandry training centers, KLDB farms and Extension training centers.

For all the above said dimensions, the respondents were asked to indicate their choice by rating them on a three-point continuum viz. most preferred, some what preferred and least preferred.

The scoring pattern adopted was as follows.

Category	Score
Most preferred	3
Some what preferred	2
Least preferred	1

3.3.7 Problems Related to Major Farm Operations

In the present study, problems were operationalised as those factors which hindered the successful farming as perceived by the farm woman.

The finalized questionnaire was administered to the respondents who were asked to rate the problems on a three point continuum viz. most serious, serious and least serious.

The scoring pattern adopted was as follows

Category	Score
Most serious	3
Serious	2
Least serious	1

3.4 METHOD OF DATA COLLECTION

The data were collected with the help of a well structured pretested interview schedule incorporating all the items pertaining to the specific objectives of the study. The interview schedule was prepared in English (Appendix D) and the same was carefully translated into the respondents mother tongue (Malayalam) to fit into their level of understanding. The schedule consisted of 4 parts. The first part was designed to collect the data pertaining to the profile of respondents. The second part concerned with training preferences in dairy and poultry farming. The third part dealt with training needs and the fourth part with problems in dairy and poultry farming. The interview schedule was pretested in a non sampling area and necessary changes were made before the final administration. The data collection work was carried out during the months of July and August, 2004. The respondents were contacted in person and rapport was established to get unbiased information. The data thus collected were coded, tabulated, analysed and presented in the form of tables.

3.5 ANALYTICAL PROCEDURES

The statistical tools used in this study were frequency, percentage, arithmetic mean, standard deviation, training need index and problem mean score.

3.5.1 Training Need Index

The training need index for each item was calculated using the formula.

Training Need Index for an item (TNI)

$$= \frac{\text{Total training need score for each item}}{\text{Maximum possible score for the item}} \times 100$$

The training need index was calculated separately for both knowledge and skill needs. Then the items were ranked on the basis of training need indices.

The training need index of each of the major domains was found out using the formula.

Training need index for the major farm operation

$$= \frac{\text{sum of training need scores for all items in that major farm operation}}{\text{sum of maximum possible scores for all the items}} \times 100$$

The TNIs for the major farm operations were also calculated separately for both knowledge and skill needs and were ranked accordingly.

3.5.2 Preference Ranking

Ranking was done for training preferences based on percentage scores. Percentage score for each item was calculated as

$$\text{Percentage score} = \frac{\text{Scores obtained for each item}}{\text{Maximum possible score}} \times 100$$

3.5.3 Problem Mean Score

Ranking of problems under each major farm operation was done based on mean score. Mean score for each problem was calculated as

$$\text{Mean score} = \frac{\text{Sum of scores for each problem}}{\text{Total number of respondents}}$$

Ranking of problems with respect to major farm operations was done based on the mean of the mean scores of all the problems under each major farm operation.

Results

4. RESULTS

This chapter highlights the results of the investigation. The results based on the objectives of the study have been presented under four major sections viz.

4.1 Profile of Farm Women

4.2 Training Needs with Respect to Farm Operations in Dairy and Poultry Farming

4.3 Preference for Type, Method, Duration, Interval, Time, Season and Venue of Training

4.4 Problems Related to Farm Operations in Dairy and Poultry Farming

4.1 PROFILE OF FARM WOMEN

4.1.1 Personal Profile

The findings on the personal profile of farm women are presented in tables 2 to 7.

4.1.1.1 *Age*

Table 2: Distribution of respondents based on age

***n = 120**

Sl. No.	Age	Frequency	Percentage
1.	Young (below 30 years)	3	2.5
2.	Middle aged (30 – 50 years)	76	63.33
3.	Old (above 50 years)	41	34.17
	Total	120	100.00

* Sample size

The data in Table 2 reveals that majority of the respondents belonged to middle age group (63.33 per cent) followed by old age group (34.17 per cent). The respondents belonging to young age group was very negligible and were 2.5 per cent.

4.1.1.2 *Education*

Table 3: Distribution of respondents based on education

n = 120

Sl. No.	Level of education	Frequency	Percentage
1.	Illiterate	15	12.5
2.	Primary (I – IV)	29	24.17
3.	Middle school (V – VII)	21	17.50
4.	High school (VIII – X)	51	42.50
5.	College (above class X)	4	3.33
	Total	120	100.00

It is evident from Table 3 that nearly half of the respondents (42.5 per cent) had high school education, followed by those with primary school education (24.17 per cent), middle school education (17.5 per cent), illiterates (12.5 per cent) and college education (3.33 per cent) in the descending order of their percentages in the sample.

4.1.1.3 *Occupation*

Table 4: Distribution of respondents based on occupation

n = 120

Sl. No.	Occupation	Frequency	Percentage
1.	Government employment	1	0.83
2.	Private employment	1	0.83
3.	Self employment	3	2.5
4.	Agriculture and allied activities	49	40.84
5.	Agriculture and other labourers	9	7.5
6.	House hold work	57	47.5
	Total	120	100.00

Data in table 4 reveals that about half of the farm women (47.5 per cent) were engaged in household work followed by almost an equal percentage in

agriculture and allied activities. Agricultural labourers were 7.5 per cent followed by self employed (2.5 per cent). The government and private employees were very negligible and were for 0.83 per cent each.

4.1.1.4 *Marital Status*

Table 5: Distribution of respondents based on marital status

n = 120

Sl. No.	Marital status	Frequency	Percentage
1.	Unmarried	3	2.5
2.	Married	114	95
3.	Widow	3	2.5
	Total	120	100.00

Table 5 shows that 95 per cent of the respondents studied were married and those unmarried and widow were 2.5 per cent each, in the sample.

4.1.1.5 *Experience in Dairy and Poultry Farming*

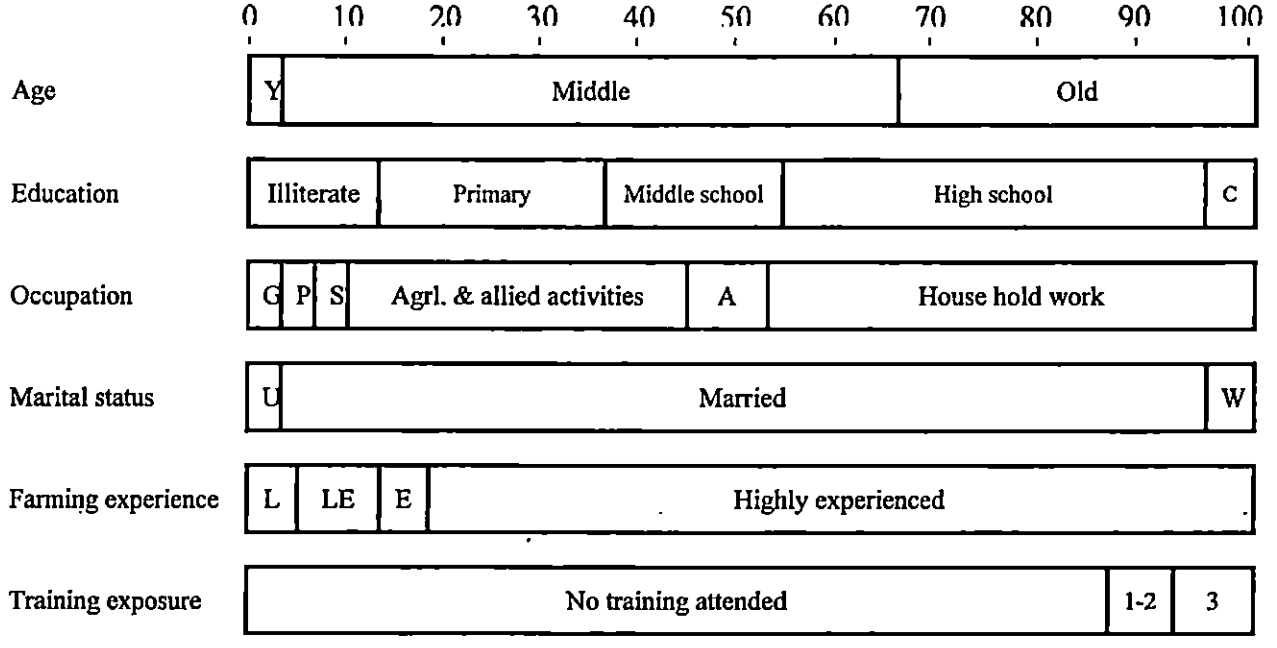
Table 6: Distribution of respondents based on farming experience

n = 120

Sl. No.	Farming experience	Frequency	Percentage
1.	Least experienced (less than 1 year)	5	4.17
2.	Less experienced (1 - 5 years)	9	7.5
3.	Experienced (5 – 10 years)	9	7.5
4.	Highly experienced (more than 10 years)	97	80.83
	Total	120	100.00

With regard to farming experience of the respondents (Table 6) the findings reveal that majority of the farm women (80.83 per cent) were highly

Fig. 2: Personal profile of farm women



Y - Young
C - College
G - Government employment
P - Private employment
S - Self employment
A - Agriculture & other labourers
U - Unmarried
W - Widow
L - Least experienced
LE - Less experienced
E - Experienced
1-2 - Attended 1-2 training
3 - Attended 3 or more trainings

experienced. An equal percentage, (7.5 per cent) each belonged to experienced and less experienced categories. The percentage of least experienced farm women were very negligible accounting for 4.17.

4.1.1.6 *Training Exposure*

Table 7: Distribution of respondents based on training exposure

n = 120

Sl. No.	Training exposure	Frequency	Percentage
1.	No training attended	107	89.17
2.	Attended 1 – 2 trainings	5	4.16
3.	Attended 3 or more trainings	8	6.67
	Total	120	100.00

On analysis of data pertaining to training exposure, it is found that majority of the farm women (89.17 per cent) had not attended any training related to dairy and poultry farming, 4.16 per cent attended one to two trainings, followed by 6.67 per cent attending three or more trainings.

4.1.2 Socio-economic Profile

The findings on the socio-economic profile of farm women are presented in tables 8 to 14.

4.1.2.1 *Land Holding*

Table 8: Distribution of respondents based on land holding

n = 120

Sl. No.	Land holding	Frequency	Percentage
1.	Large farmer (above 2 hectares)	1	0.83
2.	Small farmer (1 – 2 hectares)	11	9.17
3.	Marginal farmer (below 1 hectare)	89	74.17
4.	Agricultural labourer (10 cents and below)	19	15.83
	Total	120	100.00

Table 8 shows that the family of majority of the respondents (74.17 per cent) belonged to the category of marginal farmers followed by 15.83 per cent agricultural labourers and 9.17 per cent small farmers. There was only one family with land holding above 2 hectares (0.83 per cent).

4.1.2.2 *Herd Size*

Table 9: Distribution of respondents based on the size of dairy herd

n = 120

Sl. No.	Herd size	Frequency	Percentage
1.	Small (1 – 2)	77	64.17
2.	Medium (3 – 4)	36	30.00
3.	Large (5 – 6)	7	5.83
	Total	120	100.00

The data in table 9 indicates that majority of the respondents (64.17 per cent) had small sized herds, while 30 per cent had medium sized herds. Only 5.83 per cent had a larger herd.

4.1.2.3 *Flock Size*

Table 10: Distribution of respondents based on flock size

n = 120

Sl. No.	Flock size	Frequency	Percentage
1.	Small (below 3)	3	2.5
2.	Medium (3 – 13)	98	81.67
3.	Large (above 13)	19	15.83
	Total	120	100.00

Mean = 8, S.D = 5

With regard to the number of birds possessed by the family of the respondents, the findings reveal that majority of the respondents had medium flock size (3 – 13 birds). Large flock size (more than 13 birds) were maintained by 15.83 per cent of the respondents. Only a minor group (2.5 per cent) had a small flock size comprising of less than three birds.

4.1.2.4 *Monthly Income from Dairy and Poultry Farming*

Table 11: Distribution of respondents based on monthly income

n = 120

Sl. No.	Income	Frequency	Percentage
1.	High (> Rs. 2683)	6	5.00
2.	Medium (Rs. 889 – 2683)	102	85.00
3.	Low (< Rs. 889)	12	10.00
	Total	120	100.00

Mean = 1786, S.D = 897

The income analysis (Table 11) showed that majority (85 per cent) of the farm women belonged to medium income group followed by low income group (10 per cent) and high income group (5 per cent) in that order.

4.1.2.5. *Social Participation*

Table 12a: Distribution of respondents according to their membership in social organisations

n = 120

Sl. No.	Item	Frequency	Percentage
1.	No membership	48	40
2.	Member	72	60
	Total	120	100.00

Table 12b: Distribution of respondents according to their extent of participation in social organisations

n = 72

Sl. No.	Social participation	Frequency	Percentage
1.	Low (member in one organisation)	56	77.78
2.	Medium (member in more than one organisations)	16	22.22
3.	High (office bearer in one or more organisations)	0	0
	Total	72	100.00

Table 12 a: reveals that 40 per cent of the farm women had no membership in any organisation while 60 per cent had membership in some formal village organisations like milk co-operative societies and self help groups. Table 12 b: shows that out of the farm women who had membership in organisations, majority (77.78) per cent) had low social participation followed by medium social participation (22.22 per cent). None of the respondents had a high social participation.

4.1.2.6 *Extension Agency Contact*

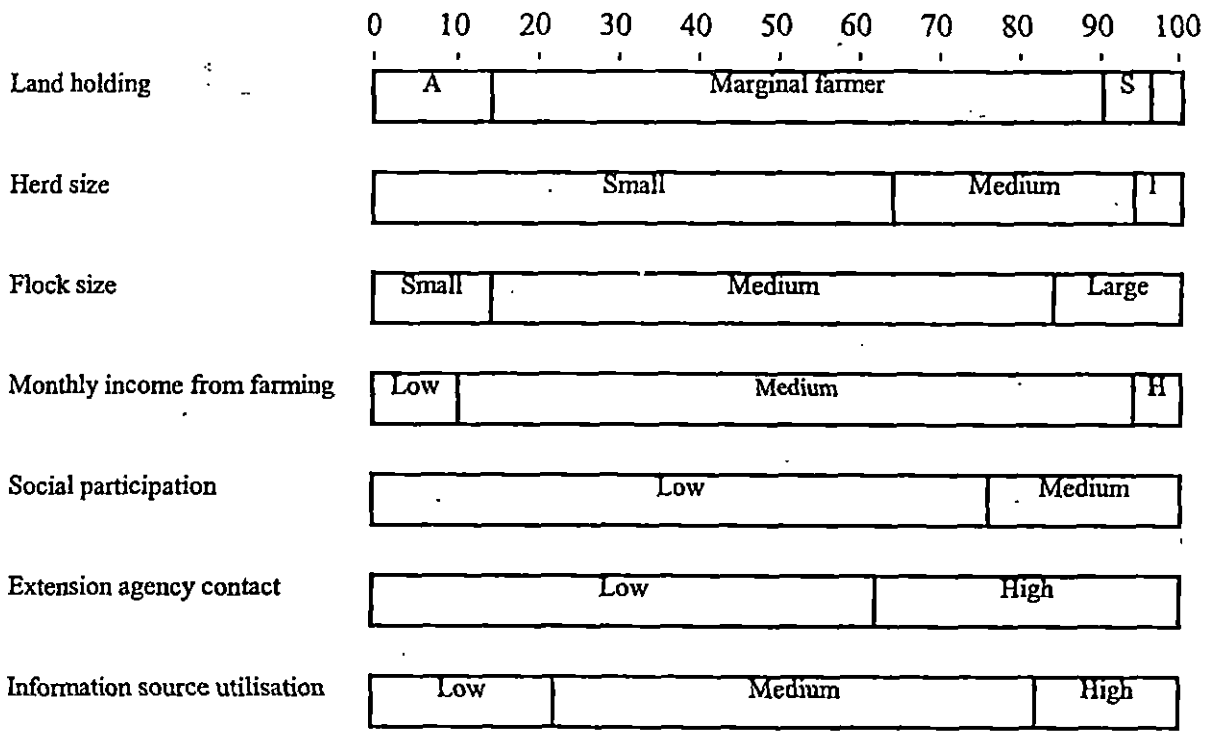
Table 13: Distribution of respondents based on their frequency of contact with various extension agents

n = 120

Sl. No.	Category	Frequency	Percentage
1.	High (above 2.42)	45	37.5
2.	Low (below 2.42)	75	62.5
	Total	120	100.00

Mean = 2.42

Fig. 3: Socio economic profile of farm women



L - Large farmer
S - Small farmer
A - Agricultural labourer
l - large
H - High

From table 13 it can be seen that majority of the respondents (62.5 per cent) had a low level of extension agency contact followed by 37.5 per cent with a high degree of extension agency contact.

4.1.2.7 *Information Source Utilization*

Table 14: Distribution of respondents based on their frequency of information source utilization

n = 120

Sl. No.	Category	Frequency	Percentage
1.	Low (<4.3)	25	20.83
2.	Medium (4.3 to 12.36)	75	62.50
3.	High (>12.36)	20	16.67
	Total	120	100.00

Mean = 8.33, S.D = 4.03

Table 14 reveals that majority of the farm women (62.50 per cent) fell under medium information source utilization category, followed by 20.83 per cent under low and 16.67 per cent under high information source utilization categories.

4.1.3 Socio-psychological Profile

Tables 15 to 19 deal with the findings on the socio-psychological profile of farm women.

4.1.3.1 *Credit Orientation*

Table 15: Distribution of respondents based on credit orientation

n = 120

Sl. No.	Category	Frequency	Percentage
1.	High (>12.08)	9	7.5
2.	Medium (9.58 – 12.08)	96	80
3.	Low (<9.58)	15	12.5
	Total	120	100.00

Mean = 10.83, S.D = 1.25

The data reveals that majority of the respondents (80 per cent) had medium credit orientation followed by those with low (12.5 per cent) and high (7.5 per cent) credit orientation.

4.1.3.2 *Risk Orientation*

Table 16: Distribution of respondents based on risk orientation

n = 120

Sl. No.	Category	Frequency	Percentage
1.	High (>14.1)	15	12.5
2.	Medium (8.8 – 14.1)	86	71.67
3.	Low (<8.8)	19	15.83
	Total	120	100.00

Mean = 11.45, S.D = 2.65

The result relating to risk orientation reveals that majority of the farm women had medium risk orientation (71.67 per cent). Almost an equal percentage of farm women had high and low levels of risk orientation (12.5 per cent and 15.83 per cent) respectively.

4.1.3.3 *Innovation Proneness*

Table 17: Distribution of respondents based on innovation proneness

n = 120

Sl. No.	Category	Frequency	Percentage
1.	High (>4.3)	22	18.33
2.	Medium (0.78 – 4.3)	98	81.67
3.	Low (<0.78)	0	0
	Total	120	100.00

Mean = 2.54, S.D = 1.76

Table 17 shows that majority of the farm women (81.67 per cent) had medium innovation proneness. Farm women with high degree of innovation proneness were 18.33 per cent, where as none had low degree of innovation proneness.

4.1.3.4 *Economic Motivation*

Table 18: Distribution of respondents based on economic motivation

n = 120

Sl. No.	Category	Frequency	Percentage
1.	High (>16.14)	3	2.5
2.	Medium (13 – 16.14)	104	86.67
3.	Low (<13)	13	10.83
	Total	120	100.00

Mean = 14.57, S.D = 1.57

The data in Table 18 reveals that majority of the respondents (86.67 per cent) had high economic motivation followed by 10.83 per cent with low and only 2.5 per cent had high economic motivation.

4.1.3.5 *Marketing Orientation*

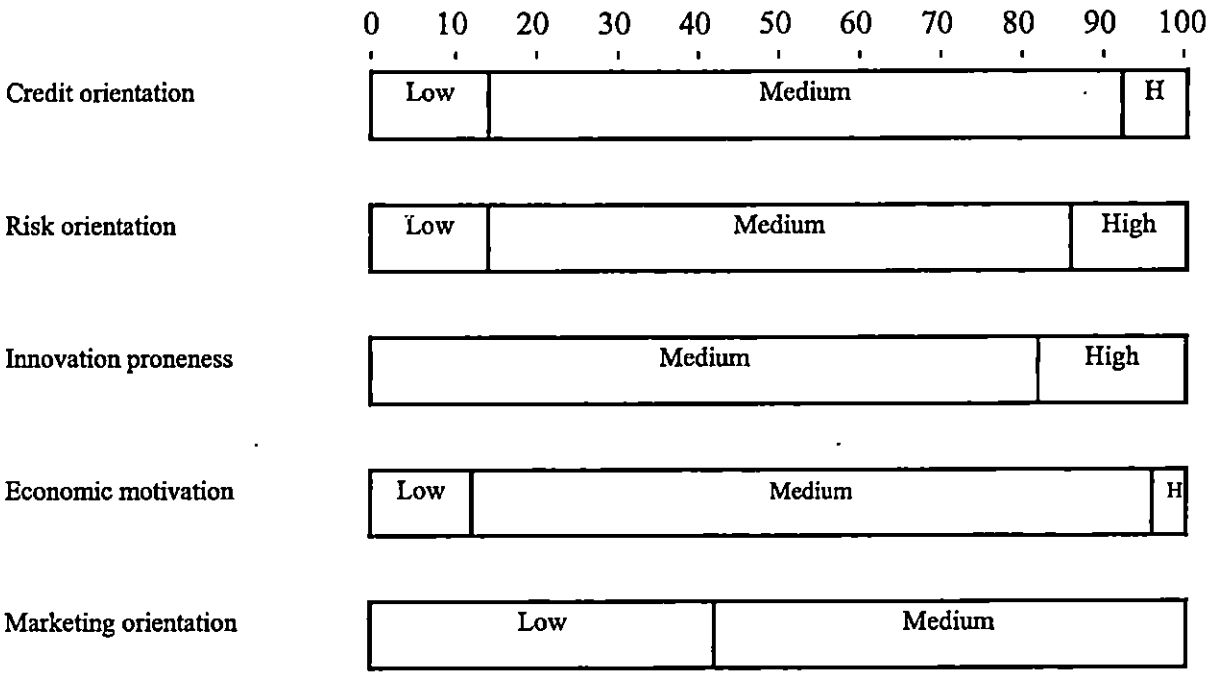
Table 19: Distribution of respondents based on marketing orientation

n = 120

Sl. No.	Category	Frequency	Percentage
1.	High (5 – 6)	0	0
2.	Medium (3 – 4)	70	58.33
3.	Low (1 – 2)	50	41.67
	Total	120	100.00

The data in Table 19 shows that more than half of the farm women (58.33 per cent) fell under medium marketing orientation category followed by 41.67 per cent under low category. None of the respondents had high marketing orientation.

Fig. 4: Socio psychological profile of farm women



H - High

4.2 TRAINING NEEDS WITH RESPECT TO FARM OPERATIONS IN DAIRY AND POULTRY FARMING

The training needs with respect to major and minor farm operations in dairy and poultry farming as perceived by farm women are presented in tables 20 to 22.

4.2.1 Training Needs Pertaining to the Major Farm Operations in Dairy and Poultry Farming for Knowledge and Skill

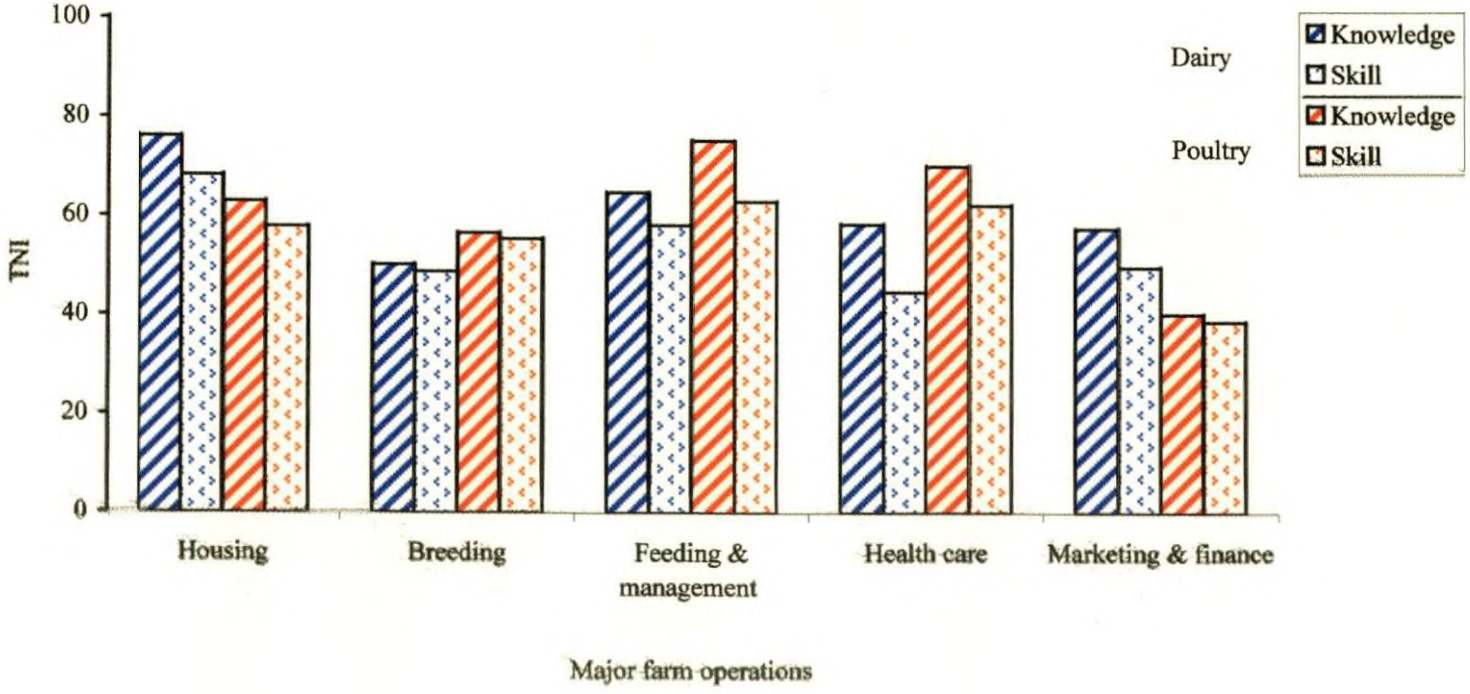
Table 20: Training needs pertaining to the major farm operations in dairy and poultry farming for knowledge and skill

Sl. No.	Major farm operations	Dairy farming				Poultry farming			
		Knowledge		Skill		Knowledge		Skill	
		TNI	Rank	TNI	Rank	TNI	Rank	TNI	Rank
1.	Housing	75.97	I	68.19	I	62.91	III	57.91	III
2.	Breeding	50.17	V	48.79	IV	56.57	IV	55.42	IV
3.	Feeding and management	64.72	II	58.11	II	75.18	I	62.87	I
4.	Health care	58.38	III	44.72	V	70.11	II	62.22	II
5.	Marketing and finance	57.50	IV	49.72	III	40.27	V	38.75	V

It can be observed from table 20 that out of the five major farm operations, the farm women needed training mostly in housing for both knowledge and skill aspects in dairy farming (TNI 75.97 and 68.19). The training on breeding and health care were least preferred for knowledge and skill aspects respectively (TNI 50.17 and 44.72).

In poultry farming, based on the training need indices, feeding and management was ranked as the most important major farm operation followed by health care, breeding, housing and marketing and finance for both knowledge and skill aspects.

Fig.5 : Knowledge and skill oriented training needs in major farm operations in dairy and poultry farming



4.2.2 Training Needs Pertaining to Minor Farm Operations Under Each Major Farm Operation

Table 21: Knowledge and skill oriented training needs of farm women in minor farm operations in dairy farming

Sl. No.	Farm operations	Knowledge		Skill	
		TNI	Rank	TNI	Rank
I	**Housing**				
1.	Construction of scientific low cost cattle shed	74.17	II	69.44	I
2.	Proper design/structure of cattle shed	77.78	I	66.94	II
II	**Breeding**				
1.	Selection of breeds	62.50	I	56.94	I
2.	Heat detection	40.83	V	37.50	III
3.	Time of insemination	42.50	IV	-	-
4.	Maintenance of records on breeding	55.28	II	51.94	II
5.	Time of post partum insemination	49.72	III	-	-
III	**Feeding and management**				
1.	Balanced feeding	70.83	II	63.33	II
2.	Care and management of different age groups	48.61	V	55.83	III
3.	Compounding balanced feed using locally available ingredients	86.94	I	67.50	I
4.	Fodder cultivation	61.67	III	51.94	IV
5.	Clean milk production	55.56	IV	51.94	IV

Contd.....

Sl. No.	Farm operations	Knowledge		Skill	
		TNI	Rank	TNI	Rank
IV	**Health care**				
1.	Deworming	61.94	II	-	-
2.	Vaccination	75.00	I	-	-
3.	Control of ectoparasites	44.72	V	40.28	III
4.	Identification and isolation of sick animals	51.11	IV	46.67	II
5.	Symptoms of common diseases	59.17	III	47.22	I
V	**Marketing and finance**				
1.	Banking and insurance	60.83	I	52.50	I
2.	Marketing of livestock and livestock products	54.17	II	46.94	II

The findings in table 21 reveals that among the two minor farm operations under housing, the farm women needed training mostly on proper design or structure of cattle shed for knowledge (TNI 77.78) where as for skill need they gave top priority to construction of scientific low cost cattle shed (TNI 69.44).

With regard to the training need in the minor farm operations under breeding, selection of breeds ranked first for both knowledge and skill with TNIs 62.50 and 56.94 respectively. Heat detection was found to be the least preferred minor farm operation for both knowledge and skill oriented training needs (TNI 40.83 and 37.50).

As for the minor farm operations of feeding and management, it can be observed that the highest training need for both knowledge and skill was for compounding balanced feed using locally available ingredients (TNI 86.94 and 67.50). Care and management of different age groups was ranked last for knowledge need (TNI 48.61). Clean milk production and fodder production were ranked last for skill need with training need index 51.94 for both.

Regarding the training need in the minor farm operations of health care, vaccination was ranked first for knowledge need (TNI 75.00). With respect to the skill need, symptoms of common diseases was ranked first. Control of ectoparasites was ranked last for both knowledge and skill.

About the training need with respect to the two minor operations of marketing and finance, the farm women needed training mostly on banking and insurance for both knowledge and skill (TNI 60.83 and 52.50) followed by marketing of livestock and livestock products with TNIs 54.17 and 46.94 respectively.

4.2.3 Training Needs Pertaining to Minor Farm Operations Under Each Major Farm Operation in Poultry Farming for Knowledge and Skill

Table 22: Knowledge and skill oriented training needs of farm women in minor farm operations in poultry farming

Sl. No.	Farm operations	Knowledge		Skill	
		TNI	Rank	TNI	Rank
I	**Housing**				
1.	Construction of low cost poultry shed	53.33	II	49.44	II
2.	Proper design/structure of poultry shed	72.50	I	66.39	I
II	**Breeding**				
1.	Selection of eggs for hatching	61.94	I	58.33	I
2.	Care of hatching eggs	57.78	II	52.50	II
3.	Selection of suitable breeds of birds	50.00	III	-	-
III	**Feeding and management**				
1.	Balanced feeding	75.28	II	66.39	II
2.	Compounding balanced feed using locally available ingredients	87.50	I	68.06	I

Contd.....

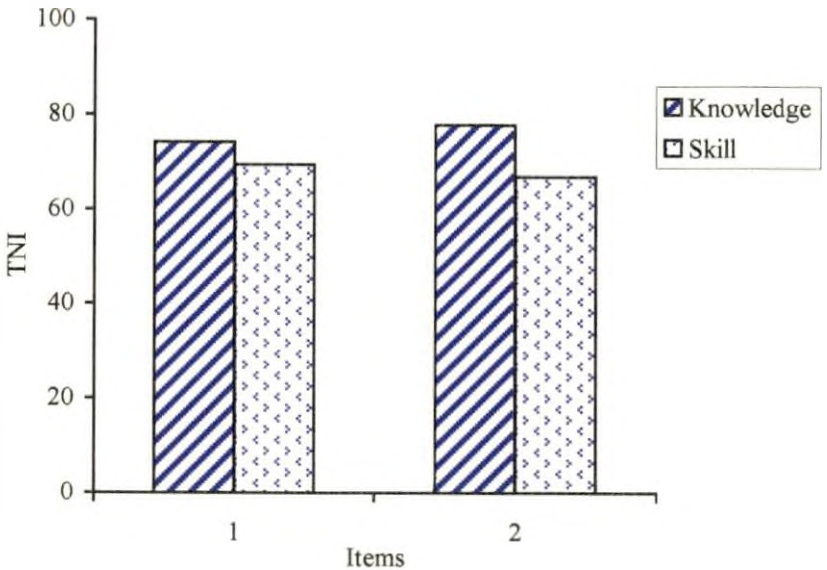
Sl. No.	Farm operations	Knowledge		Skill	
		TNI	Rank	TNI	Rank
3.	Cleaning and disinfection of poultry shed	62.70	III	54.17	III
IV	**Health care**				
1.	Deworming	77.50	II	66.67	II
2.	Vaccination	93.61	I	86.94	I
3.	Control of ectoparasites	67.22	III	62.22	III
4.	Identification and isolation of sick birds	52.50	V	48.61	IV
5.	Symptoms of common diseases	59.72	IV	46.67	V
V	**Marketing and finance**				
1.	Marketing of eggs and birds	36.67	II	35.00	II
2.	Banking and insurance	43.89	I	42.50	I

A perusal of table 22 reveals that among the two minor farm operations of housing, the farm women gave first and second priorities to proper design/structure of poultry shed and construction of low cost poultry shed both for knowledge and skill need with training need indices (72.50 and 66.39) and (53.33 and 49.44) respectively.

With regard to the training need in the minor farm operations of breeding, selection of eggs for hatching ranked first for both knowledge and skill with TNIs 61.94 and 58.33 respectively. The training on selection of suitable breeds of birds was found to be least preferred for knowledge aspect (TNI 50.00) and care of hatching eggs for skill aspect (TNI 52.50).

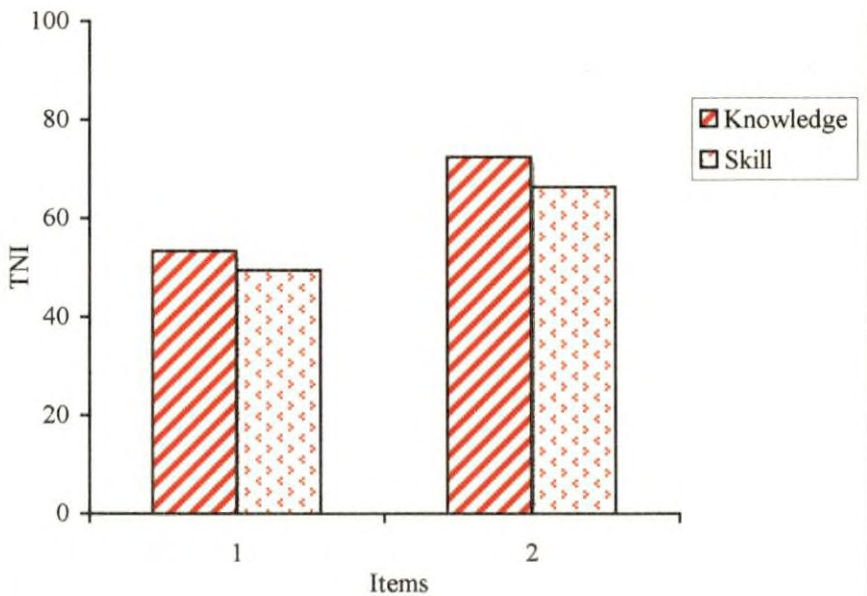
Regarding the training need in the minor farm operations of feeding and management, compounding balanced feed using locally available ingredients was ranked first for both knowledge and skill (TNI 87.50 and 68.06). Cleaning and

Fig. 6a : Knowledge and skill oriented training needs in minor items under 'housing' for dairy farming



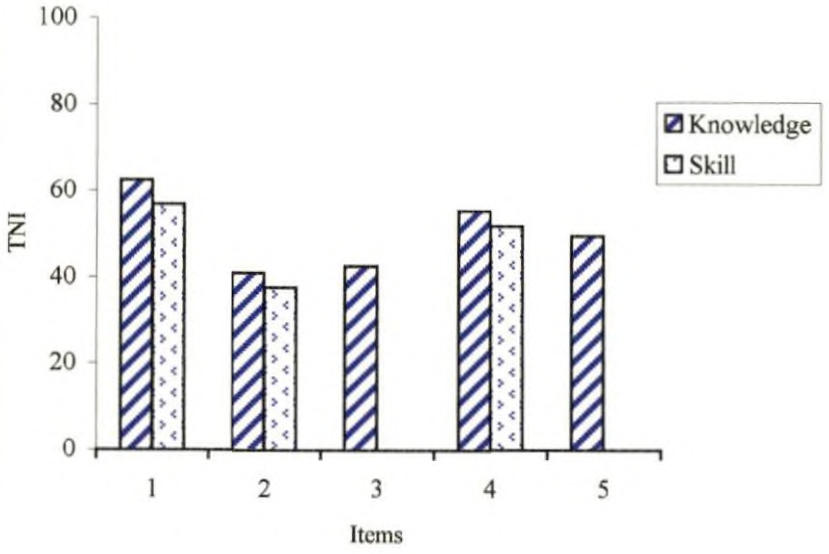
1. Construction of scientific low cost cattle shed
2. Proper design / structure of cattle shed

Fig. 6b : Knowledge and skill oriented training needs in minor items under 'housing' for poultry farming



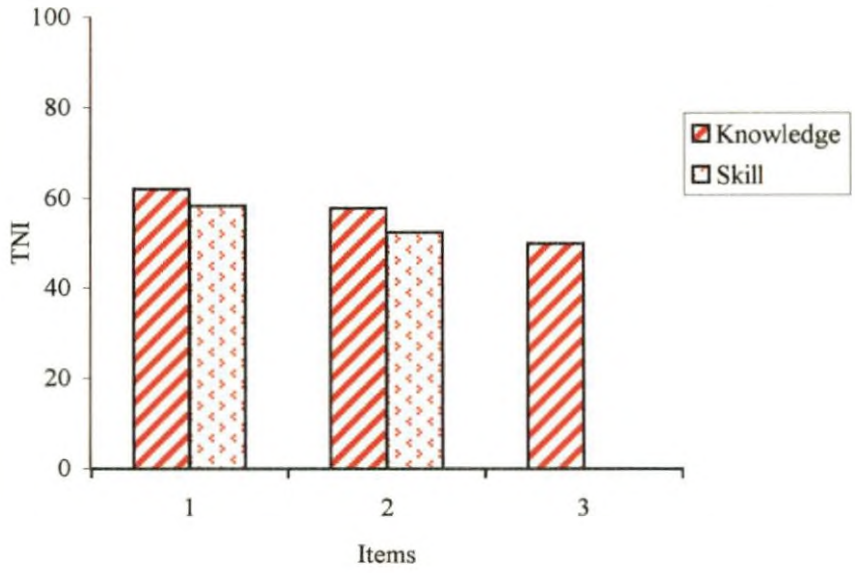
1. Construction of low cost poultry shed
2. Proper design / structure of poultry shed

Fig. 7a : Knowledge and skill oriented training needs in minor items under 'breeding' for dairy farming



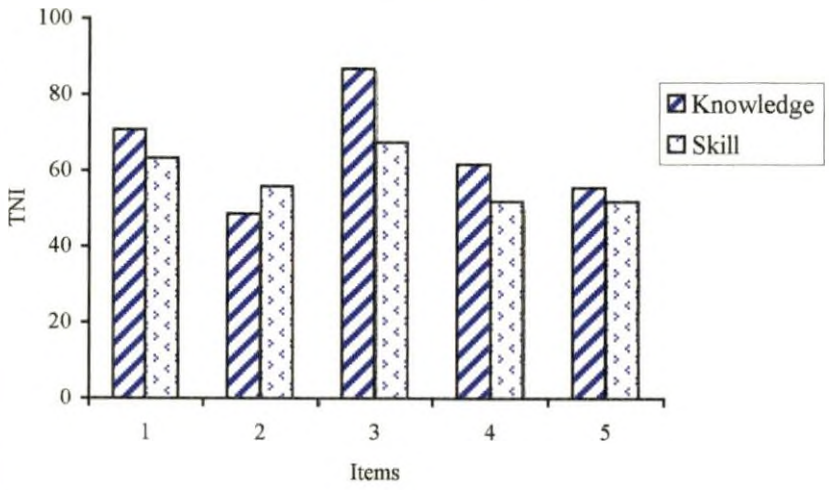
1. Selectionof breeds
2. Heat detection
3. Time of insemination
4. Maintenance of records on breeding
5. Time of post partum insemination

Fig. 7b : Knowledge and skill oriented training needs in minor items under 'breeding' for dairy farming



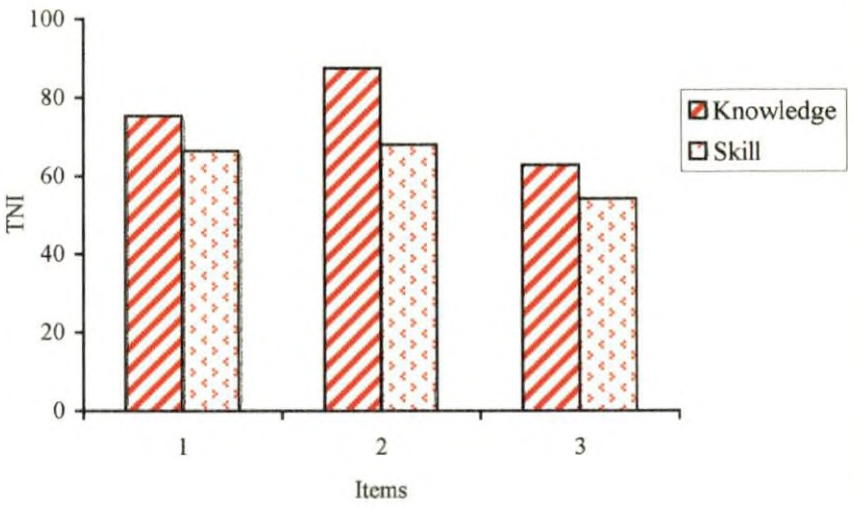
1. Selection of eggs for hatching
2. Care of hetching eggs
3. Selection of suitable breeds of birds

Fig. 8a : Knowledge and skill oriented training needs in minor items under 'feeding & management' for dairy farming



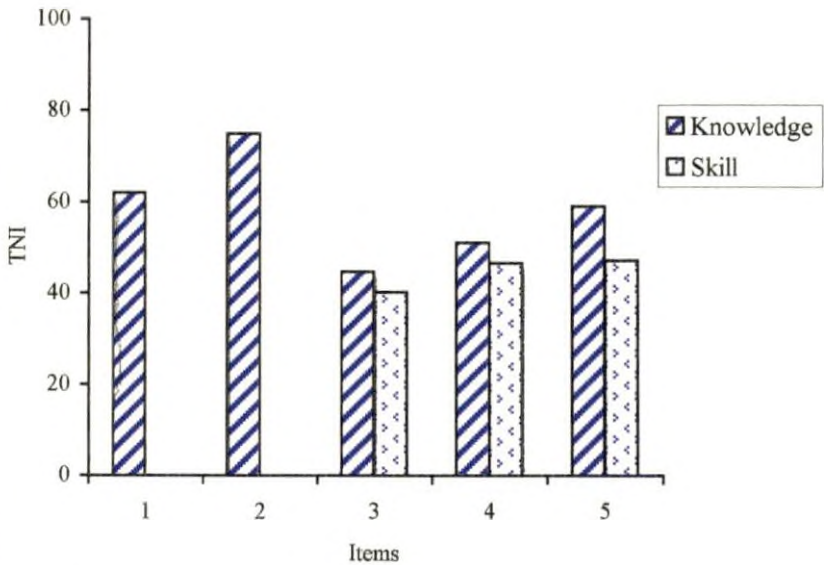
1. Balanced feeding
2. Care and management of differnet age groups
3. Corresponding balanced feed using locally available ingredients
4. Fodder cultivation
5. Clean milk production

Fig. 8b : Knowledge and skill oriented training needs in minor items under 'feeding & management' for poultry farming



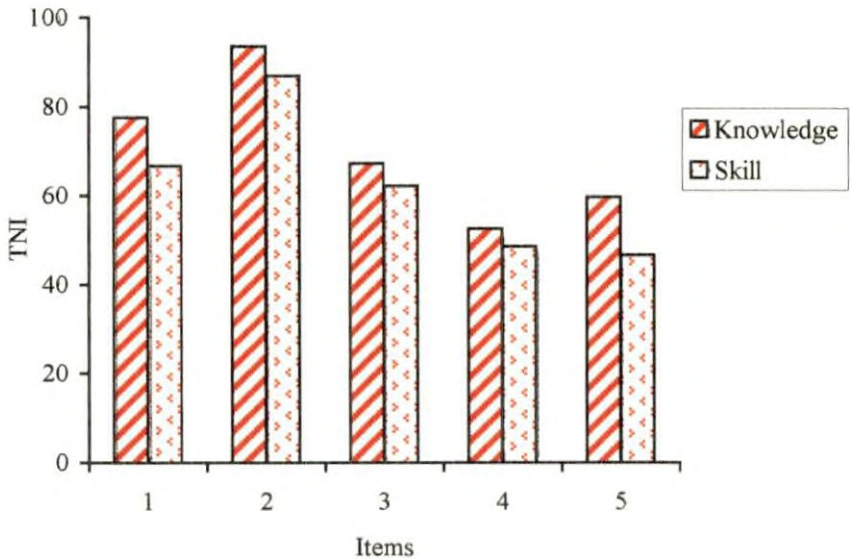
1. Balanced feeding
2. Compounding balanced feed using locally available ingredients
3. Cleaning and disinfection of poultry shed

Fig. 9a : Knowledge and skill oriented training needs in minor items under 'health care' for dairy farming



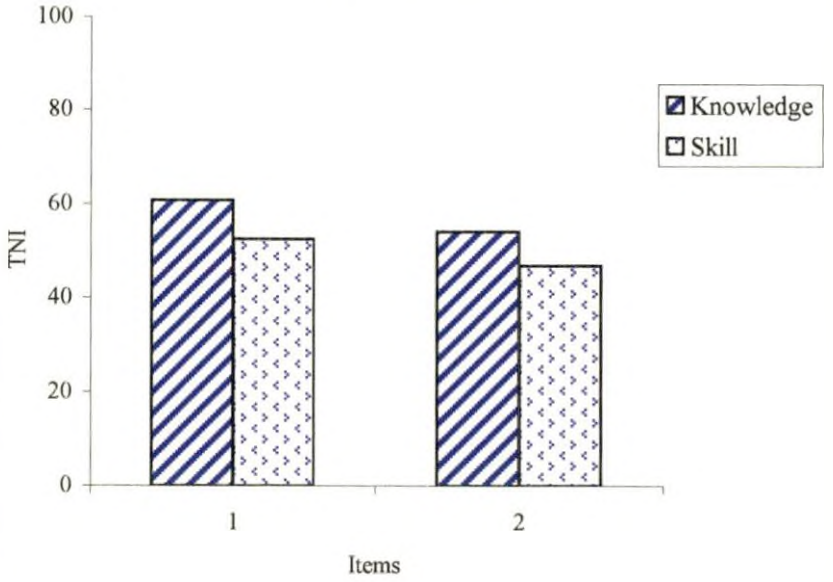
1. Deworming
2. Vaccination
3. Control of ectoparasites
4. Identification and isolation of sick animals
5. Symptoms of common diseases

Fig. 9b : Knowledge and skill oriented training needs in minor items under 'health care' for poultry farming



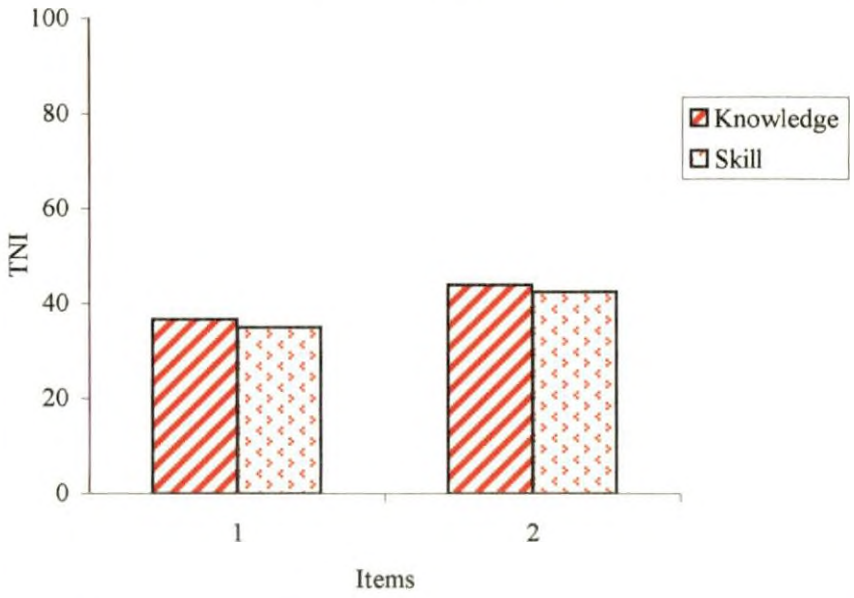
1. Deworming
2. Vaccination
3. Control of ectoparasites
4. Identification and isolation of sick birds
5. Symptoms of common diseases

Fig. 10a : Knowledge and skill oriented training needs in minor items under 'marketing and finance' for dairy farming



1. Banking and insurance
2. Marketing of livestock and livestock products

Fig. 10b : Knowledge and skill oriented training needs in minor items under 'marketing and finance' for poultry farming



1. Marketing of eggs and birds
2. Banking and insurance

disinfection of poultry shed was ranked last for both knowledge and skill training needs with TNIs 62.78 and 54.17 respectively.

Regarding the minor farm operations under health care, vaccination was ranked first for both knowledge and skill need with TNIs 93.61 and 86.94 respectively. The least preferred minor farm operation with respect to training in knowledge and skill was identification and isolation of sick birds and symptoms of common diseases with TNIs 52.50 and 46.67 respectively.

Further, about the two minor farm operations under marketing and finance training was needed the most on banking and insurance for both knowledge and skill (TNI 43.89 and 42.50) followed by marketing of eggs and birds (TNI 36.67 and 35.00).

4.3 PREFERENCE FOR TYPE, METHOD, DURATION, INTERVAL, TIME, SEASON AND VENUE OF TRAINING

Type, method, duration, interval, time, season and venue of training as preferred by farm women on farm operations are furnished in tables 23 to 29.

4.3.1 Type of Training Preferred

Table 23: Type of training preferred by the farm women

Sl. No.	Type of training	Percentage score (PS)	Rank
1.	On- farm training (neighbourhood)	90.83	1
2.	Institutional training	53.33	2
3.	Distance learning	48.61	3
4.	Print media	43.33	4

Table 23 reveals that on-farm training was the most preferred type of training (PS 90.83) followed by institutional training (PS 53.33), distance learning (PS 48.61) and print media (PS 43.33) in the descending order.

4.3.2 Method of Training Preferred

Table 24: Method of training preferred by the farm women

Sl. No.	Method	Percentage score (PS)	Rank
1.	Film shows	95.28	1
2.	Demonstrations	92.50	2
3.	Farm visits	91.94	3
4.	Study tour	71.67	4
5.	Group discussion	71.67	4
6.	Lecture	67.50	5

The data in table 24 reveals that farm women preferred film shows (PS 92.28) as the best method of training. This was followed by demonstrations (PS 92.50), farm visits (PS 9.94), study tour and group discussion (PS 71.67 each) and lecture (PS 67.50), in the descending order of their percentage score.

4.3.3. Duration of Training Preferred

Table 25: Duration of training preferred by the farm women

Sl. No.	Duration	Percentage score (PS)	Rank
1.	Less than 1 week	95.83	1
2.	One week	54.44	2
3.	More than 1 week	38.04	3

It can be seen from table 25 that less than one week duration of training was preferred the most by the farm women (PS 95.83). This was followed by one week training (PS 54.44) and more than one week training (PS 38.06), in that order.

4.3.4 Interval of Training Preferred

Table 26: Interval of training preferred by the farm women

Sl. No.	Interval	Percentage score (PS)	Rank
1.	Every year	87.50	1
2.	Every 6 months	59.44	2
3.	Every 3 months	49.72	3

The data in table 26 shows that the most preferred interval of training was once in a year (PS 87.50). Next, in the order of preference, was every six months (PS 59.44) followed by every three months (PS 49.72).

4.3.5 Time of Training Preferred

Table 27: Time of training preferred by the farm women

Sl. No.	Time	Percentage score (PS)	Rank
1.	Afternoon	77.50	1
2.	Fore noon	46.11	2
3.	Any time	44.44	3

From table 27 it is evident that afternoon time was preferred the most (PS 77.50) followed by forenoon (PS 46.11) and any time (PS 44.44).

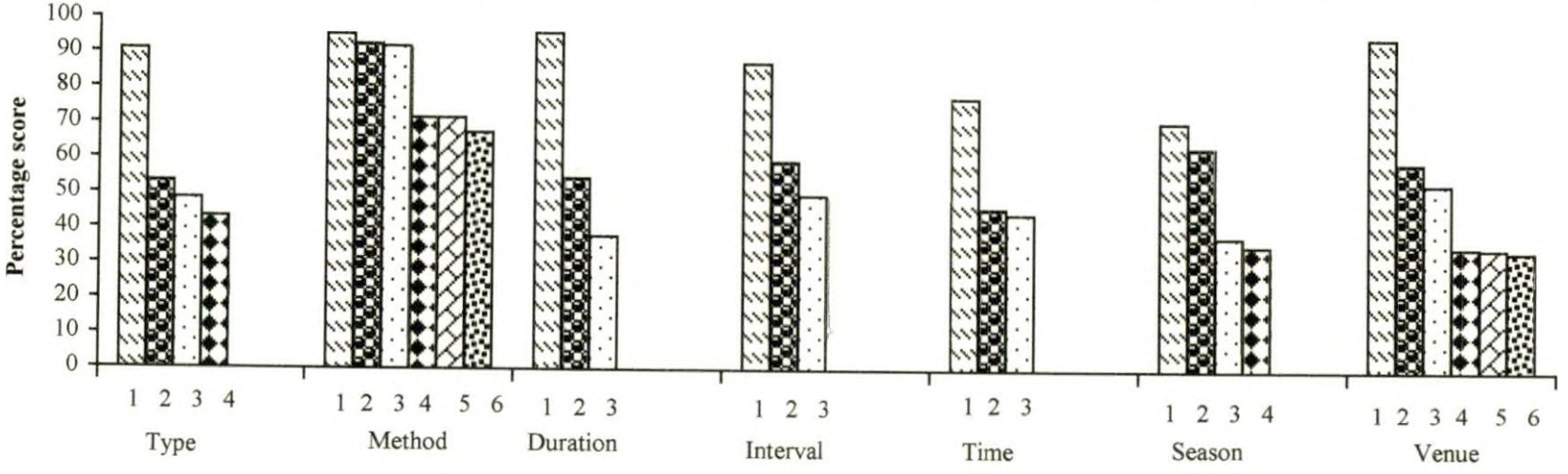
4.3.6 Season of Training Preferred

Table 28: Season of training preferred by the farm women

Sl. No.	Season	Percentage score (PS)	Rank
1.	March to May	70.83	1
2.	June to September	63.61	2
3.	December to February	38.06	3
4.	October to November	35.56	4

It can be seen from table 28 that March to May months were preferred the most by the farm women for attending training programmes (PS 70.83). This was followed by June to September (PS 63.61), December to February (PS 38.06) and October to November (PS 35.56).

Fig. 11: Preference for type, method, duration, interval, time, season and venue of training



Type	Method	Duration	Interval	Time	Season	Venue
1. Institutional training	1. Lecture	1. Less than 1 week	1. Every 3 months	1. Fore noon	1. December to February	1. Veterinary College
2. On farm training	2. Group discussion	2. One week	2. Every 6 months	2. After noon	2. March to May	2. Local Institutions
3. Distance learning	3. Farm visits	3. More than 1 week	3. Every year	3. Any time	3. June to September	3. K.V.K.
4. Print media	4. Study tours				4. October to November	4. A.H.Training Centres
	5. Demonstrations					5. KLDB farms
	6. Film shows					6. E.T.C

4.3.7 Venue of Training Preferred

Table 29: Venue of training preferred by the farm women

Sl. No.	Venue	Percentage score (PS)	Rank
1.	Local institutions	95.00	1
2.	Veterinary College, Mannuthy	59.44	2
3.	ETC	53.33	3
4.	Animal husbandry training centers	35.28	4
5.	KLDB farms	35.00	5
6.	KVK	34.17	6

Table 29 shows that out of the six venues, local institution was the venue preferred the most by the farm women for attending training programmes (PS 95.00). This was followed by Veterinary College, Mannuthy (PS 59.44), Extension training centers (PS 53.33), Animal husbandry training centres (PS 35.28), Kerala Livestock Development Board farms (PS 35) and Krishi Vigyan Kendras (PS 34.17) in that order.

4.4 PROBLEMS RELATED TO FARM OPERATIONS IN DAIRY AND POULTRY FARMING

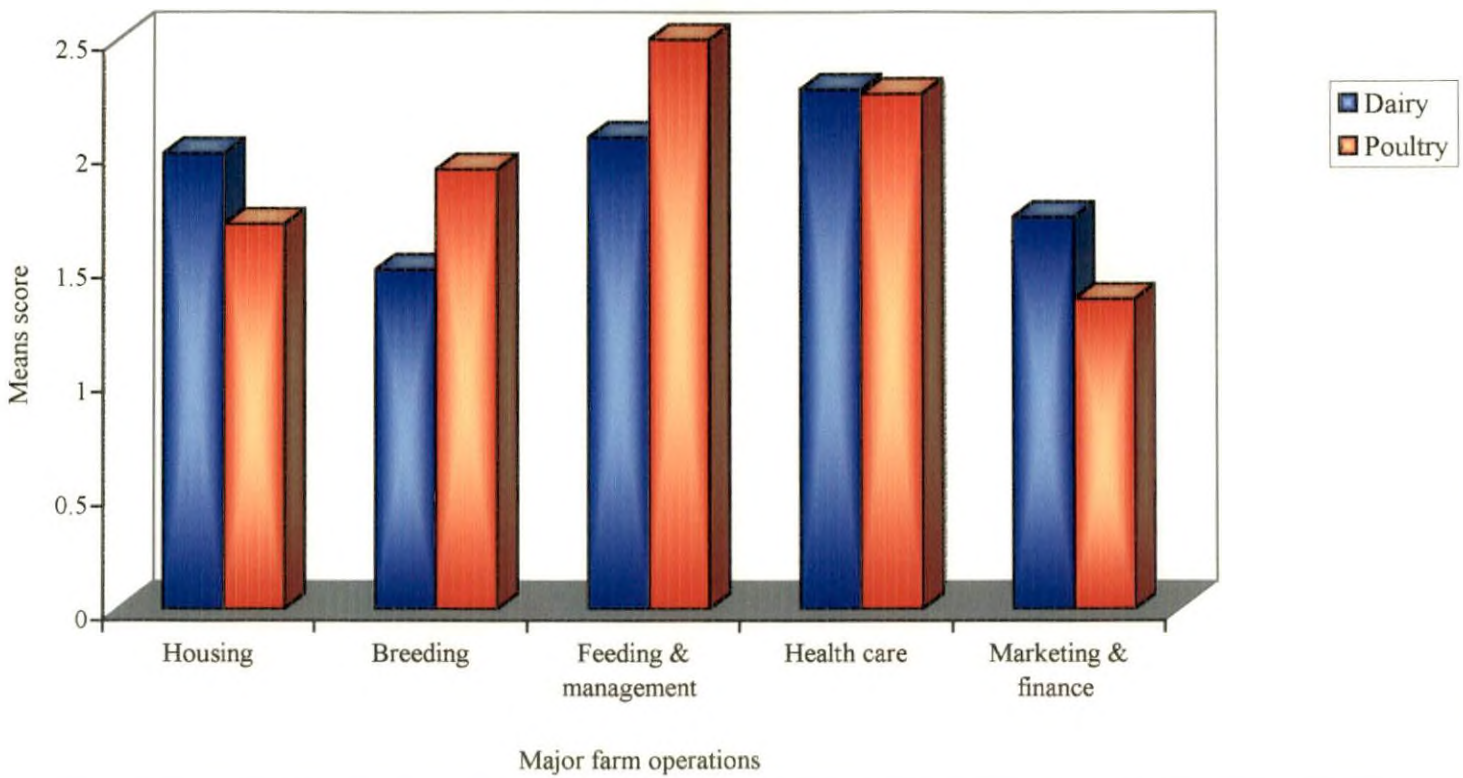
Problems perceived by farm women are presented in tables 30 to 32.

4.4.1 Problems Perceived by Farm Women Pertaining to Major Farm Operations in Dairy and Poultry Farming

Table 30: Problems perceived by farm women pertaining to major farm operations in dairy and poultry farming

Sl. No.	Major farm operations	Dairy farming		Poultry farming	
		MS	Rank	MS	Rank
1.	Housing	2.00	III	1.69	IV
2.	Breeding	1.49	V	1.93	III
3.	Feeding and management	2.07	II	2.50	I
4.	Health care	2.28	I	2.26	II
5.	Marketing and finance	1.72	IV	1.36	V

Fig. 12: Problems perceived by farm women pertaining to major farm operations in dairy and poultry farming



Data in table 30 reveals that in dairy farming, problems in health care ranked first (MS 2.28) followed by those in feeding and management (MS 2.07), housing (MS 2), marketing and finance (MS 1.72) and breeding (MS 1.49).

In poultry farming, the farm women gave first rank to the problems in feeding and management (MS 2.5). This was followed by health care (MS 2.26), breeding (MS 1.93), housing (MS 1.69) and marketing and finance (MS 1.36).

4.4.2 Problems Perceived by Farm Women Pertaining to Minor Farm Operation in Dairy Farming

Table 31: Problems perceived by farm women pertaining to minor farm operations in dairy farming

Sl. No.	Farm operations	MS	Rank
I	**Housing**		
1.	Inadequate knowledge of scientific housing	2.03	I
2.	Lack of facilities like funds, land, construction material etc for construction of cattle shed	1.97	II
II	**Breeding**		
1.	Repeat breeding problems in crossbreds	2.38	I
2.	Failure to diagnose pregnancy at correct time	1.67	II
3.	Distant location of AI centers	1.17	III
4.	Inability to take animals in accordance with the timing of AI centre	1.13	IV
5.	Lack of knowledge of proper heat detection	1.09	V
III	**Feeding and management**		
1.	High cost of concentrate	2.35	I
2.	Non-availability of green fodder through out the year	2.24	II
3.	Scarcity of land for fodder cultivation	2.21	III

Contd.....

Sl. No.	Farm operations	MS	Rank
4.	Non-availability of adequate fodder	2.04	IV
5.	Inadequate knowledge of balanced feeding	2.00	V
6.	Scarcity of water	1.59	VI
IV	**Health care**		
1.	Reduction in milk yield due to diseases	2.62	I
2.	Inadequate supply of medicines from hospitals	2.35	II
3.	Inadequate knowledge of vaccination	2.16	III
4.	High cost of medicines	2.15	IV
5.	Low disease resistance of crossbred animals	2.11	V
V	**Marketing and finance**		
1.	Low price of milk and milk products	2.57	I
2.	Financial difficulties	2.12	II
3.	Problem of spoilage	1.13	III
4.	Irregular payment by the milk societies	1.07	IV

Data in table 31 reveals that under housing, inadequate knowledge of scientific housing was perceived as the most serious problem (MS 2.03) followed by lack of facilities like funds, land, construction materials etc for construction of cattle shed (MS 1.97).

With regard to breeding, repeat breeding problems in crossbreds was expressed as the most serious problem (MS 2.38) followed by failure to diagnose pregnancy at correct time (MS 1.67) and distant location of AI centres (MS 1.17).

Under feeding and management, high cost of concentrates was perceived as most serious problem by the farm women (MS 2.35). This was followed by non-availability of green fodder through out the year (MS 2.24), scarcity of land

for fodder cultivation (MS 2.21), non-availability of adequate fodder (MS 2.04), inadequate knowledge about balanced feeding (MS 2) and scarcity of water (MS 1.59).

The table shows that under health care, reduction in milk yield due to diseases (MS 2.62) was perceived as the most serious problem. This was followed by inadequate supply of medicines from hospitals (MS 2.35), inadequate knowledge about vaccination schedule and control of diseases (MS 2.16), high cost of medicines (MS 2.15) and low disease resistance of crossbred animals (MS 2.11).

Among the two problems studied in marketing and finance, low price of milk and milk products (MS 2.57) was perceived as the most serious problem by the farm women. This was followed by financial difficulties (MS 2.12), problems of spoilage (MS 1.13) and irregular payments by the milk societies (MS 1.07).

4.43 Problems Perceived by Farm Women Pertaining to Minor Farm Operations in Poultry Farming

Table 32: Problems perceived by farm women pertaining to minor farm operation in poultry farming

Sl. No.	Farm operations	MS	Rank
I	**Housing**		
1.	Inadequate knowledge of low cost scientific cage construction	1.99	I
2.	Lack of facilities like funds, land, construction material etc	1.38	II
II	**Breeding**		
1.	Low hatchability of eggs in summer	2.07	I
2.	Inability to select eggs for hatching	1.79	II

Contd.....

Sl. No.	Farm operations	MS	Rank
III	**Feeding and management**		
1.	Problems of predators	2.80	I
2.	Lack of technical guidance	2.47	II
3.	Inadequate knowledge of balanced feeding and mal nutrition	2.22	III
IV	**Health care**		
1.	Losses due to bacterial and viral diseases	2.84	I
2.	Inadequate knowledge of vaccination schedule	2.70	II
3.	Problems of ectoparasites	2.25	III
4.	Non-availability of veterinary services near by	1.23	IV
V	**Marketing and finance**		
1.	Financial difficulties	1.93	I
2.	High interest rate of loans	1.64	II
3.	Problems of spoilage	1.18	III
4.	Inadequate marketing facilities	1.03	IV
5.	Price fluctuation	1.03	IV

Data in table 32 shows that under housing inadequate knowledge of low cost scientific cage construction (MS 1.99) was perceived as the most serious problem and was ranked first. This was followed by lack of facilities such as land, funds and construction material (MS 1.38).

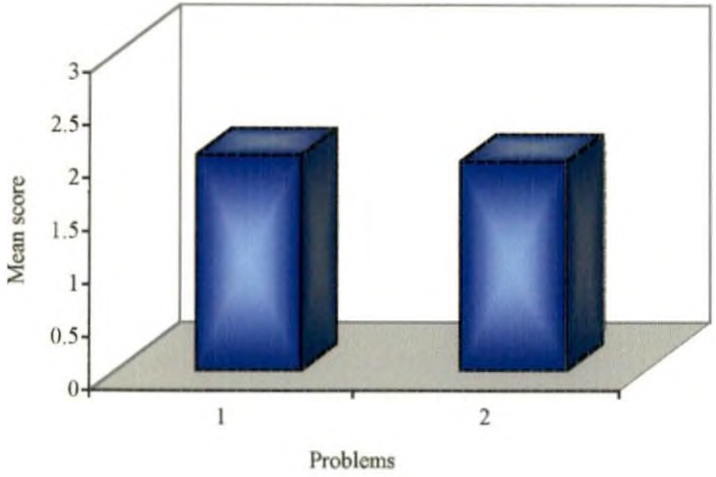
With regard to problems under breeding, low hatchability of eggs in summer (MS 2.07) ranked first followed by inability to select eggs for hatching (MS 1.79).

Under feeding and management, problems of predators (MS 2.80) was perceived as the most serious problem followed by lack of technical guidance (MS 2.47) and inadequate knowledge of balanced feeding and malnutrition (MS 2.22).

Under health care, losses due to bacterial and viral diseases (MS 2.84) was perceived as the most serious problem by the farm women followed by inadequate knowledge of vaccination schedule (MS 2.70), problems of ectoparasites (MS 2.25), and non-availability of veterinary services nearby (MS 1.23).

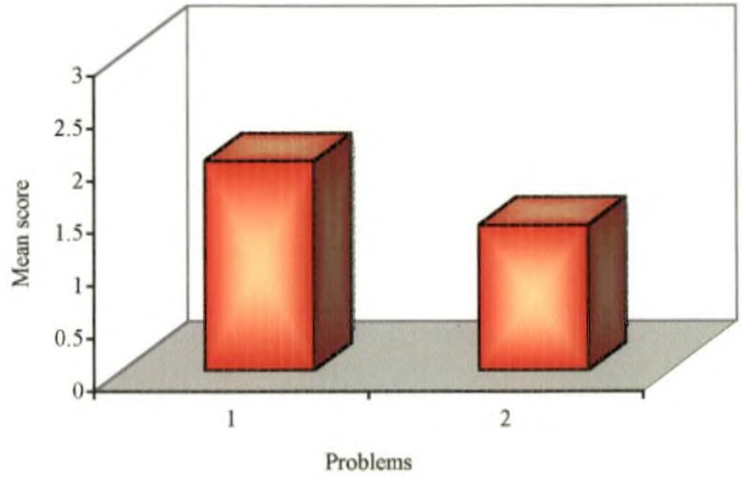
Under marketing and finance, financial difficulties (MS 1.93) was expressed as the most serious problem by the respondents. This was followed by high interest rate of loans (MS 1.64), problems of spoilage (MS 1.18) problem of price fluctuation and inadequate marketing facilities (MS 1.03).

Fig. 13a: Problems perceived by farm women under housing in dairy farming



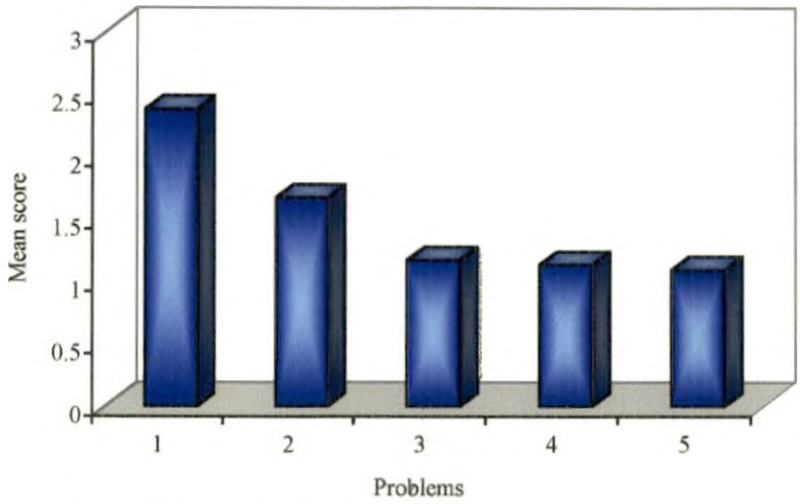
1. Inadequate knowledge about scientific housing
2. Lack of faciltes like funds, land, construction material etc for constructionof cattle shed

Fig. 13b: Problems perceived by farm women under housing in poultry farming



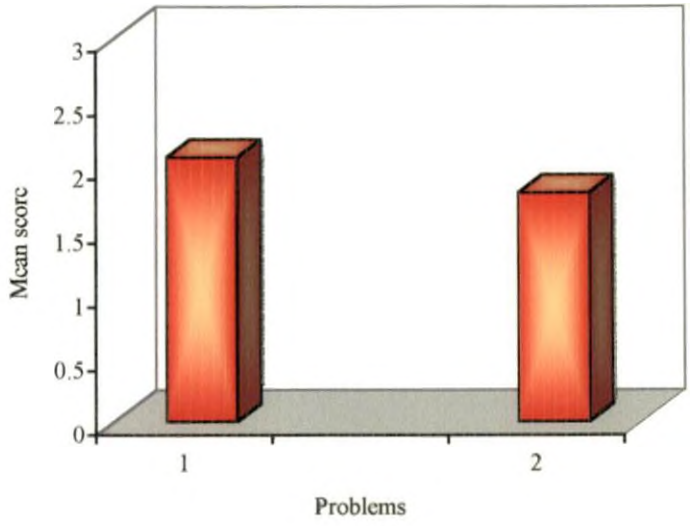
1. Inadequate knowledge about low cost scientific cage construction
2. Lack of facilities like land, fund, construction materal etc

Fig. 14a: Problems perceived by farm women under breeding in dairy farming



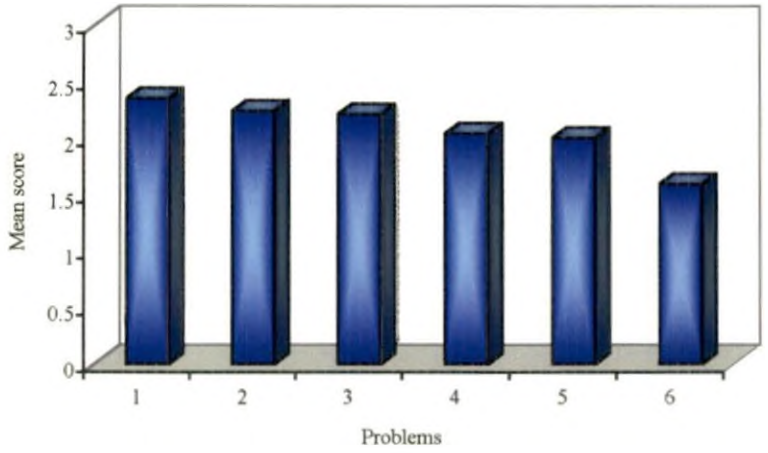
1. Repeat breeding problems in cross breds
2. Failure to diagnose pregnancy at correct time
3. Distant location of AI centres
4. Inability to take animals in accordance with the timing of AI centre
5. Lack of knowledge about proper heat detection

Fig. 14b: Problems perceived by farm women under breeding in poultry farming



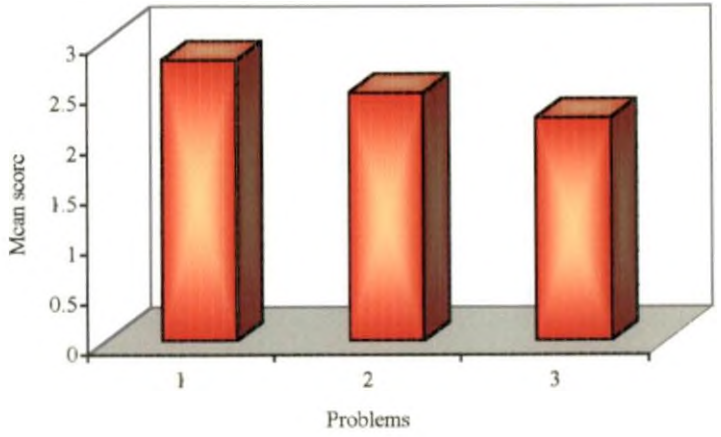
1. Low hatchability of eggs in summer
2. Inability to select eggs for hatching

Fig. 15a: Problems perceived by farmwomen under feeding and management in dairy farming



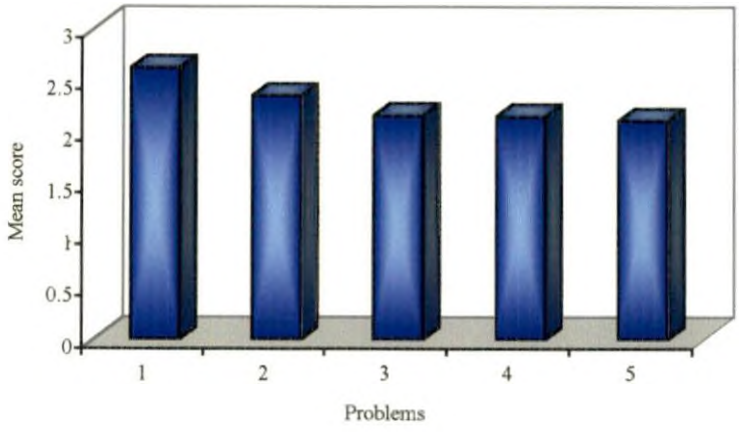
1. High cost of concentrates
2. Non-availability of green fodder through out the years
3. Scarcity of land for fodder culivation
4. Non-availability of adequate fodder
5. Inadequate knowledge about balanced feeding
6. Scarcity of water

Fig. 15b: Problems perceived by farmwomen under feeding and management in poultry farming



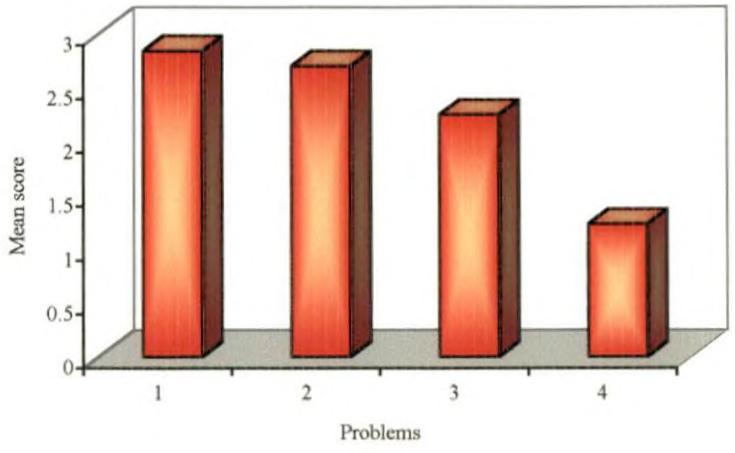
1. Problems of predators
2. Lack of technical guidance
3. Inadequate knowledge about balanced feeding and malnutrition

Fig. 16a: Problems perceived by farmwomen under health care in dairy farming



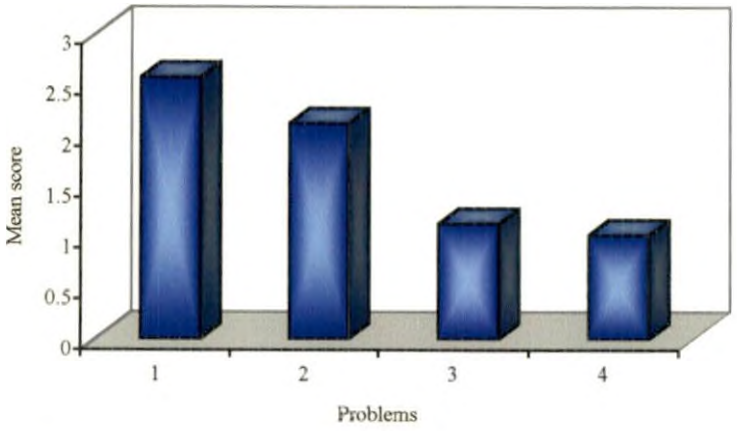
1. Reduction in milk yield due to diseases
2. Inadequate supply of medicines from hospitals
3. Inadequate knowledge about vaccination
4. High cost of medicines
5. Low disese resistance of cross bred animals

Fig. 16b: Problems perceived by farmwomen under health care in poultry farming



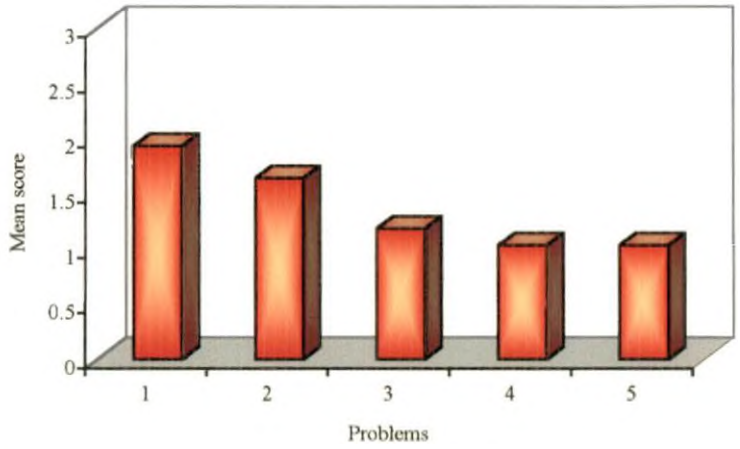
1. Losses due to bacterial and viral diseases
2. Inadequate knowledge about vaccination schedule
3. Problems of ectoparasites
4. Non availability of veterinary services near by

Fig. 17a: Problems perceived by farm women under marketing and finance in dairy farming



1. Low price of milk and milk products
2. Financil difficultires
3. Problem of spoilage
4. Irregular payment by the milk societies

Fig. 17b: Problems perceived by farm women under marketing and finance in poultry farming



1. Financil difficulties
2. High interest reate of loans
3. Problems of spoilage
4. Inadequate marketing facilities
5. Price flactuation

Discussion

5. DISCUSSION

This chapter analyses the results presented in chapter 4. The findings are interpreted and discussed objectivewise under the following headings.

5.1 Profile of Farm Women

5.2 Training Needs of Farm Women with Respect to Farm Operations in Dairy and Poultry Farming

5.3 Preference for Type, Method, Duration, Interval, Time, Season and Venue of Training

5.4 Problems Related to Farm Operations in Dairy and Poultry farming

5.1 PROFILE OF FARM WOMEN

5.1.1 Personal Profile

Results revealed that majority of the farm women were married and belonged to middle age group. This finding is in accordance with that of Balaji (1990). Vaidehi and Joshi (1995), Rath *et al.* (1998), Tripathi and Kunzru (2000), Lalitha and Seethalakshmi (2001), Gosain *et al.* (2002) and Singh (2003) also reported similar findings with regard to the age of farm women. Madivanane (1990) reported that most of the respondents were married. The finding that majority of the farm women were middle aged is in contradiction to those of Madivanane (1990), Narmatha *et al.* (2001) and Mehta and Malaviya (2004) who reported that majority of the farm women were young.

The results of this study indicated that majority of the respondents had high farming experience of more than ten years but had not attended any training related to dairy and poultry farming. Since the farm women were mostly middle aged and house wives doing agriculture and allied activities it was quite natural for them to have more years of farming experience in dairying and poultry keeping. This observation is in agreement with the finding of Rath *et al.* (1998) who reported that majority of the farm women had four to seventeen years of experience in farming.

But the finding is in contradiction with those of Balaji (1990), Narmatha *et al.* (2001) and Subbrahmanyeswari and Reddy (2004) who reported that majority of the farm women had medium level of farming experience and Madivanane (1990) who reported that most of the respondents had low farming experience. The reasons for not attending any training as reported by the respondents themselves were lack of time, lack of information about the training programmes, distant location of training centres and unsuitable timings of training. This finding is in agreement with the observation of Sheela and Sundaraswamy (1999).

It could be observed that nearly half of the farm women were high school educated. Half of the farm women were engaged in house hold work as well as agriculture and allied activities. The high literacy rate of the state might be the reason for higher educational status of the farm women. The finding is keeping with that of Chylek *et al.* (1990) but in contrast with those of Balaji (1990) Madivanane (1990), Gosain *et al.* (2002) and Singh (2003) who reported that majority of the farm women were educated up to primary level and Shreeshailaja (1993) and Rath *et al.* (1998) who opined that fifty per cent of the farm women were illiterate. Where as Vaidehi and Joshi (1995) and Sheela and Sundaraswamy (1999) found that majority of the respondents were illiterate. As for the occupation of farm women the finding is in consonance with that of Balaji (1990).

5.1.2 Socio-economic Profile

The findings of socio-economic profile of farm women revealed that majority of the farm women belonged to medium income group having less than one hectare land, had small sized herd with one or two dairy cows and medium flock size having three to thirteen birds. This might indicate that inspite of the limited resources available, farm women resorted to dairy and poultry farming as a means of subsidiary income. It could be observed that all the respondents possessing birds maintained them on kitchen waste and some grains. Hence it was difficult for them to maintain a large flock with such minimum inputs. The findings regarding income, size of land holding and flock size are in agreement with the results of the study of Narmatha *et al.* (2001). The herd size, flock size and land holding observed in the

study are supported by similar findings of Balaji (1990), Singh *et al.* (2000) and Singh (2003) respectively. The finding regarding income disagrees with those of Balaji (1990), Madivanane (1990) Vaidehi and Joshi (1995) and Singh (2003) who reported that majority of the farm women were in low-income group.

It was found that more than half of the respondents had membership in some formal organizations, but low level of social participation as well as extension agency contact and had medium information source utilisation. This might be because of lack of time due to house hold responsibilities and other obligations. The respondents being farm women living in villages, their social norms and customs might have restricted them from contacting extension personnel frequently. As for information sources, farm women were mostly depending on Television (mass media sources) veterinary surgeon (personal cosmopolite sources) and family members (personal localite sources) where as news papers and farm publications, Research Scientists and Dairy Extension officers were poorly utilized by them. The finding regarding social participation is in line with that of Mehta and Malaviya (2004) but in contrast with that of Subramanyeswari and Reddy (2004) who reported that most of the farm women involved in dairying were with medium social participation. As for the extension agency contact this observation is in agreement with those of Madivanane (1990) and Singh (2003) but not in conformity with those of Rath *et al.* (1998) and Narmatha *et al.* (2001) who opined that majority of the respondents had medium level of extension agency contact. The medium information source utilization observed in the study is supported by a similar finding of Narmatha *et al.* (2001). This finding is in contradiction to those of Madivanane (1990) who reported that majority of the respondents had high mass media exposure and Vaidehi and Joshi (1995), Rath *et al.* (1998), Sheela and Sundaraswamy (1999), Singh (2003) and Mehta and Malaviya (2004) who found that most of the farm women had only low media exposure.

5.1.3 Socio-psychological Profile

It was observed that majority of the farm women had medium level of credit orientation, risk orientation, economic motivation and innovation proneness. More

than half of the respondents had medium marketing orientation. Dairying and poultry keeping were considered as only a means of supplementary income rather than commercial enterprises by the respondents. Naturally, they were not much interested in taking more risk by resorting to loans, not much interested in large scale production and profit making as well. The observations of Singh (2003) and Dahiya *et al.* (2004) agree with that of the present study. The finding regarding innovation proneness is also in accordance with that of Shreeshailaja (1993) but this finding is in contradiction to that of Madivanane (1990) who found that nearly half of the respondents had low risk orientation and one third of the respondents had high innovation proneness.

5.2 TRAINING NEEDS WITH RESPECT TO FARM OPERATIONS IN DAIRY AND POULTRY FARMING

5.2.1 Dairy Farming

The training need analysis revealed housing as the most preferred major farm operation followed by feeding and management for both knowledge and skill based training. The farm operations relating to housing, feeding and management were usually done by the farm women. This might be the reason for the farm women preferring housing and feeding and management as important training areas. The finding is in agreement with that of Sumathi and Alagesan (2001) who found that cent percent of the respondents needed training in maintenance of cattle shed. Madivanane (1990) also found that maintenance of cattle shed ranked as second for getting training in livestock keeping. The results obtained in this study related to feeding concurs well with those of the studies of Chandran and Perumal (1995), Fulzele and Meena (1995), Das and Mishra (2002), Gupta and Tripathi (2002) and Mehta and Malaviya (2004). Singh and Aggarwal (1993) also emphasized feeding aspect as important area of training need. Since the major farm operations of breeding, health care and marketing and finance require outside contact the involvement of farm women was less. This might be the reason for the farm women to perceive these major farm operations as the least preferred areas of training.

Under housing, the farm women needed training the most on proper design of cattle shed for knowledge and construction of scientific low cost cattle shed for skill. It is worth mentioning the finding that the farm women perceived proper design of cattle shed for knowledge training and construction of cattle shed for skill training. With regard to the training need under breeding, selection of breeds ranked first for both knowledge and skill oriented training needs. The farm women might have perceived, selecting a suitable breed as one of the primary factors in achieving productivity in dairy animals. This finding is in line with those of Fulzele and Meena (1995) who reported that selection of breed was a most needed area of training and Raju *et al.* (1999) who reported that selection of animals was one of the most needed area of training.

As for feeding and management, it was observed that the highest training need for both knowledge and skill was for compounding balanced feed using locally available ingredients. The high cost of concentrates might have compelled the farm women to know and learn the mixing of locally available ingredients which in turn would reduce the feed cost. The result obtained in the present study is in line with that of Das and Mishra (2002).

Regarding health care, vaccination was ranked first for knowledge need and symptoms of common diseases with respect to skill need. The farm women might have been interested to know about the control and identification of important diseases. The results are in par with the findings of Fulzele and Meena (1995), Raju *et al.* (1999), Lalitha and Seethalakshmi (1999), Sujaths and Nanjaiyan (1999), Umarani and Thangamani (2000), Das and Mishra (2002) and Gupta and Tripathi (2002).

About the training need with respect to the minor operations of marketing and finance, the farm women needed training the most in banking and insurance for both knowledge and skill. This might be because the farm women had limited information regarding the various sources from which they could obtain financial assistance and also about the insurance policies. This finding is in line with that of Raju *et al.* (1999).

5.2.2 Poultry Farming

The findings on training needs of farm women in poultry farming revealed that the farm women had shown highest preference for training in the major farm operation of feeding and management followed by health care for both knowledge and skill aspects. The fact that feeding and management is a crucial factor for productivity might be the reason for the farm women to perceive this area as the most needed area of training. A training on health care was preferred next to that on feeding and management, the reason reported by farm women being an urgent need for control of diseases which caused high mortality in poultry. This finding is in line with those of Balaji (1990), Madivanane (1990), Chandran and Perumal (1995), Pushpa *et al.* (1995) and Narmatha *et al.* (1996) Sujaths and Najaiyan (1999), Sumathi and Alagesan (2001) and Das and Mishra (2002). Marketing of eggs was not considered to be a serious problem because of the domestic consumption of eggs and the local demand for eggs. Hence, it is quite natural that the farmwomen preferred marketing and finance the least for training.

Among the two minor farm operations of housing, the farm women gave first priority to proper design of poultry shed for both knowledge and skill need. Since proper design of poultry shed would control losses due to predators, knowledge and skill oriented training in this area would be needed.

With regard to the training need in minor farm operations of breeding, selection of eggs for hatching ranked first for both knowledge and skill. Low hatchability of eggs in summer and inability to select eggs for hatching were perceived as the most serious problems under breeding by the farm women. This might be the reason why they preferred selection of eggs for hatching as the most important area in which they needed training in both knowledge and skill. This finding is in accordance with those of Balaji (1990), Chandran and Perumal (1995) and Sumathi and Alagesan (2001).

As for feeding and management, compounding balanced feed using locally available ingredients was ranked first for both knowledge and skill. It was observed that majority of the farm women maintained flock size of three to thirteen birds on

kitchen waste. They might have perceived that supplementing locally available ingredients would enhance the nutritive value of the feed thereby increasing the productivity. Probably, this could be the reason why the farm women preferred compounding balanced feed using locally available ingredient as the important area for training. This finding is in agreement with those of Pushpa *et al.* (1995) and Das and Mishra (2002).

Under health care, vaccination was ranked first for both knowledge and skill needs. This might be due to the interest of the farm women to know about various poultry vaccines available in the market as well as to learn the method of vaccination so that their birds could be protected from various bacterial and viral diseases. The result obtained is similar to those of Pushpa *et al.* (1995), Narmatha *et al.* (1996) and Das and Mishra (2002).

Further, about the two minor farm operations under marketing and finance training was needed the most on banking and insurance for both knowledge and skill. This might be due to the fact that the farm women had very limited information about the various sources from which they could obtain financial assistance and also about the insurance policies.

5.3 PREFERENCE FOR TYPE, METHOD, DURATION, INTERVAL, TIME, SEASON AND VENUE OF TRAINING

Farm women preferred on farm training more than institutional training. The multiple roles performed by the farm women and lack of time might be the reasons for such an observation. This finding is in line with that of Pushpa *et al.* (1995) who reported that top most priority was given to on-farm training followed by institutional training. It was also found that film shows, demonstrations and farm visits were the most preferred training methods. It is quite natural that farm women preferred to get more practical training. Farm visits would provide them an opportunity to see and learn what other farm women are doing. The film shows might have been perceived as both informative and entertaining by the farm women. This finding is similar to those of Madivanane (1990), Shreeshailaja (1993), Raju

et al. (1999) and Gupta and Tripathi (2002) who reported demonstration was the most preferred method for training.

Majority of the farm women preferred a training of less than one week duration, that too once in a year, conducted as afternoon session during March to May. The farm women being preoccupied with household chores including looking after children besides farm operations will have no time to spare for a long duration training programme. For the same reasons it will not be possible for the farm women to attend to many trainings a year and full day sessions. Since the school children have vacation during the months of March to May the farm women might be getting relatively some free time during these months for attending training. There are earlier research reports supporting the present observation, for instance Madivanane (1990), Shreeshailaja (1993), Raju *et al.* (1999), Ahmed *et al.* (2000) and Gupta and Tripathi (2002) reported that the most preferred training programme was one of a short duration. However, Singh *et al.* (2000) reported that respondents preferred training of one to three months duration. Further, the preference for afternoon session was also reported by Madivanane (1990) and Singh *et* al. (2000). None the less preference for noon time was reported by Mehta and Malaviya (2004) probably because of favourable weather since the respondents lived in Haryana, prone to extreme climate. Regarding the preferred months, Madivanane (1990), Raju *et al.* (1999) and Ahmed *et al.* (2000) reported the preference for March, April and May. The finding of Mehta and Malaviya (2004) however differed and the preference was for the month of January obviously for the reason that January is the winter month when children will have vacation.

The venue most preferred by the farm women for training was local institutions. The preference for local institutions is clearly due to their nearness to the homes of the respondents. The preference for local institutions as venues of training was reported earlier by Madivanane (1990), Shreeshailaja (1993), Raju *et al.* (1999), Singh *et al.* (2000), Sumathi and Alagesan (2001), Gupta and Tripathi (2002) and Mehta and Malaviya (2004). This finding disagrees with one of Ahmed *et al.* (2000) who reported that combination of KVK and farmer's field as the most preferred venue of training.

5.4 PROBLEMS RELATED TO FARM OPERATIONS IN DAIRY AND POULTRY FARMING

5.4.1 Dairy Farming

An inference of the study could be that the problems in health care ranked first followed by those in feeding and management, housing, marketing and finance and breeding. Under the problems in health care, reduction in milk yield due to diseases was perceived as the most serious one followed by inadequate supply of medicines from hospitals. Diseases among dairy animals would inturn result in reduced production, mortality and heavy losses. These might be the reasons why the farm women might have perceived health care problems in their animals as the most serious one. Inadequate supply of medicines from the veterinary hospitals was pointed out as a serious problem by the farm women. This observation was in agreement with that of Thirunavukkarasu and Prabaharan (1992). This indicates that animal husbandry department should take initiative in ensuring adequate supply of medicines from the veterinary hospitals. Podikunju *et al.* (2001) reported higher susceptibility to diseases as the important constraint encountered by the farm women whereas Sujaths and Nanjayan (1999) reported rinderpest disease as the major health problem of dairy animals.

As for feeding and management, high cost of concentrates was perceived as the most serious problem followed by non-availability of green fodder through out the year. This finding is in agreement with that of Podikunju *et al.* (2001) who reported that high price of concentrates was an important constraint encountered by farm women. The finding regarding the non-availability of green fodder is in agreement with those of Balaji (1990), Bairathi *et al.* (1997), Vyas and Patel (2000) and Chinnadurai *et al.* (2002). Since Crossbred animals require more concentrate feed the farm women might have found it difficult to afford the cost of concentrates. The problem of non availability of green fodder is because generally people are neither cultivating fodder nor it is readily available on demand.

Inadequate knowledge of scientific housing was perceived as the most serious problem under housing. This points out to the need of imparting training in

this area. This finding is in consonance with that of Bairathi *et al.* (1997) who reported that lack of technical guidance was expressed as very serious constraint by the respondents. Misra and Pal (2003) also found that inadequate technical knowledge was a major constraint of dairy farming.

Among the minor farm operations in breeding, repeat breeding in crossbreds was perceived as the most serious problem followed by failure to diagnose pregnancy at correct time. Probably, this could be due to the fact that these are two major problems which affect the profitability in dairy farming. This finding is in agreement with those of Dabas *et al.* (2004) who reported that repeat breeding was the major problem and Podikunju *et al.* (2001) who reported poor results of A.I as the most important constraint.

Considering the escalated production cost, milk production was not perceived economical by the farm women. To be economical, milk price need to be commensurated with production cost. This is why farm women perceived price of milk and milk products to be not satisfactory. The observations of Balaji (1990). Bairathi *et al.* (1997), Chinnadurai *et al.* (2002) and Dabas *et al.* (2004) agree with that of present study.

5.4.2 Poultry Farming

Farm women perceived problems in feeding and management as most serious followed by health care, breeding, housing and marketing and finance. This result is similar to the findings of Pushpa *et al.* (1995) who reported that non availability of feed at subsidized rate was the major problem of women and Amudha and Veerabhahaiah (2000) who reported higher feed cost as a problem encountered by women in commercial poultry farming. The problem of predators was also reported to be a serious one. In the backyard poultry farming system predator problem is unavoidable unless and until the system itself is atleast partially modernized introducing scientific housing and providing protection interms of proper enclosures especially for chicks. In the absence of such physical protection predator problem would abound resulting in loss of chicks and birds. This result is in agreement with that of Singh *et al.* (2000).

Another serious problem reported by the farm women was the occurrence of viral and bacterial diseases in birds. The heavy losses due to these diseases might be the reason for their perception. This finding is in line with those of Sujaths and Nanjayan (1999) who reported that bacterial diseases was a major problem in poultry farming. Amudha and Veerabhadraiah (2000) and Singh *et al.* (2000) also reported losses due to diseases as a major problem encountered by women in commercial poultry farming and backyard poultry farming respectively.

Low hatchability of eggs in summer was perceived as the most serious problem under breeding. To a greater extent the hatchability of eggs can be improved if and when hatching eggs are scientifically selected as well as preserved. The farm women need to be trained in the ways and means of practising such low-cost, most often, even no-cost technologies. The self reliant groups such as self help group (SHG) and Kudumbasree could be imparted the appropriate training.

As for housing, inadequate knowledge of low cost scientific cage construction was perceived as the most serious problem. This points out the need of imparting training in the construction of low cost shed. Amudha and Veerabhadraiah (2000) also opined that lack of knowledge of improved practices was one of the problems encountered by women in commercial poultry farming.

Financial difficulty was the most serious problem under marketing and finance. This finding is in accordance with those of Balaji (1990) who reported lack of financial help as an important economic problem faced by the farm women in poultry keeping and Amudha and Veerabhadraiah (2000) who reported inadequate capital as a problem encountered by women in commercial poultry farming. Lack of awareness about government sources of financial help might have made it difficult for the farm women to solve their financial problems. However, marketing of eggs was not considered to be a serious problem because of the domestic consumption of eggs and the local demand for eggs.

Summary

6. SUMMARY

Since dairy and poultry farming involve many skillful operations training assumes special significance. Training help in making available to farm women timely information, create in them receptive attitude and impart necessary skill for undertaking improved and innovative farm practices. Through the study entitled "Training needs of farm women of Thrissur Taluk in dairy and poultry farming", a sincere attempt has been made to study the profile, training needs and problems of farm women engaged in dairy and poultry farming.

The study was confined to two development blocks of Thrissur Taluk purposively selected for the investigation. The data were collected through personal interviews using pretested schedules from 120 farm women selected by multistage sampling. Observations were gathered on farm women's profile, training need preferences, preference for type, method, duration, interval, time, season and venue of training and problems in dairy and poultry farming. Statistical tools and procedures like frequency analysis, estimation of percentage, mean, training need index and problem mean score were used to analyse the data.

The salient findings of the study are as follows.

Majority of the farm women were middle aged and had long farming experience of more than ten years but had not attended any training related to dairy and poultry farming. Except a few, all were married. Nearly half of the farm women were high school educated. Half of the farm women were engaged in house hold work as well as agriculture and allied activities. Majority of them belonged to medium income group having less than one hectare land, had small sized herd with one or two dairy cows and medium flock size having three to thirteen birds. More than half of the respondents had membership in some formal organizations but had low level of extension agency contact and medium level of information source utilization. Further, majority of the farm women had medium innovation proneness, economic motivation, credit and risk as well as marketing orientation.

Out of the five major farm operations studied in dairy farming, the farm women needed training the most in housing for both knowledge and skill aspects. The most needed areas of training with respect to knowledge, as preferred by the respondents were proper design/structure of cattle shed, selection of breeds, compounding balanced feed using locally available ingredients, vaccination and banking and insurance. With respect to skill need, construction of scientific low cost cattle shed, selection of breeds, compounding balanced feed using locally available ingredients, symptoms of common diseases and banking and insurance were preferred the most for training.

In poultry farming, feeding and management was the most preferred major farm operation for training. The minor farm operations preferred the most under the major farm operations for training with respect to both knowledge and skill need were proper design/structure of poultry shed, selection of eggs for hatching, compounding balanced feed using locally available ingredients, vaccination and banking and insurance.

Regarding the training preferences, farm women preferred on-farm training of less than one week duration, that too once in a year and as afternoon session during the months of March to May organized in local institutions. Film shows in this regard were mentioned as the best method of training.

As for the problems in dairy farming under the major farm operations, problems in health care were perceived as the most serious one followed by feeding and management, housing, marketing and finance and breeding. Under major farm operations, the most serious problems were inadequate knowledge about scientific housing, repeat breeding in crossbreds, high cost of concentrates, reduction in milk yield due to diseases and low price of milk and milk products.

In poultry farming, among the five major farm operations farm women perceived problems in feeding and management as most serious one followed by health care, breeding, housing and marketing and finance. Under major farm operations, the most serious problems were inadequate knowledge about low cost

scientific cage construction, low hatchability of eggs in summer, problems of predators, losses due to bacterial and viral diseases and financial difficulties.

Implications

A perusal of findings of the study suggests the following implications.

There is a need for conducting more number of need based and well tailored training programmes suited to farm women engaged in dairy and poultry farming. This inturn would help them to have more extension agency contact as well as social participation.

Farm operations related to housing in dairy farming and those related to feeding and management in poultry farming should be given top priority in the curriculum of the training programmes for farm women.

As for the method of training, film shows, demonstrations and farm visits should be given priority and in case of type of training, on-farm training and institutional training should be given preference.

The duration of training should not exceed one week and the interval between two subsequent training should be at least one year.

Trainings should be conducted in after noon hours preferably in the months of March to May. While selecting the venue of training, local institutions such as panchayats, milk co-operative societies and village schools should be given preference.

All the necessary technical inputs such as vaccines, medicines, fodder seeds and concentrate feed in adequate quantity and acceptable quality need to be made available to the farm women.

Extension organizations and local institutions should take adequate steps to impart information regarding credit facilities to procure the necessary inputs for dairy and poultry farming. Also farm women should be made aware of insurance facilities available.

Adequate supply of medicines from veterinary hospitals should be ensured.

Vaccination camps should be conducted frequently to prevent diseases in poultry. Similarly infertility camps to deal with repeat breeding problems in dairy animals should also be organized.

Cultivation of fodder should be encouraged among dairy farm women for which awareness programmes are to be organized as the initial step.

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Appendices

APPENDICES

APPENDIX – A

KERALA AGRICULTURAL UNIVERSITY

Dr. (Mrs.) M.R. Subhadra
Associate Professor & Head

Department of Extension
College of Veterinary &
Animal Sciences,
Mannuthy P.O.,
Thrissur – 680 651

Dated: 07.04.2004

To

Sir/Madam,

Sub: Education – PG – M.V.Sc in Veterinary Extension – Research work – Selection of variable - regarding.

Dr. V. Durgga Rani, M.V.Sc student of this department has taken up a research project entitled "Training needs of farm women of Thrissur Taluk in Dairy and Poultry farming" under my guidance. The objective of the project includes study of the profile, training needs and problems of farmwomen engaged in dairy & poultry farming.

For the above purpose she proposes to select personal, socio economic and socio psychological variables. Hence a list of variables related to the study area are listed with the operational definitions. I shall be highly thankful if you could spare your valuable time and indicate their importance for inclusion in the research study on a three point continuum scale by putting a (✓) mark in the relevant column. If you feel any important variable has been left out kindly add the same with your judgment.

I shall be obliged if you could return the same at the earliest. Thanking in advance for your kind contribution in this academic pursuit.

Yours sincerely,

(M.R. SUBHADRA)

PROFILE

I PERSONAL

MR – Most Relevant R - Relevant LR – Least Relevant

Sl. No.	Variable		MR	R	LR
1.	Age	Defined as the number of calendar years completed by the respondent at the time of interview			
2.	Caste	Refers to the caste hierarchy of farmwomen, whether they belong to forward / back ward/ scheduled caste.			
3.	Education	Refers to the ability of the respondent to read and write or the extent of formal education possessed			
4.	Occupation	Refers to the major & subsidiary income generating activities in which the farmwoman is involved			
5.	Marital status	Refers to whether an individual is married, unmarried or widow			
6.	Type of family	Refers to the nuclear or joint family			
7.	Size of family	Refers to the number of individuals of both sex living in a household			
8.	Farming experience	Refers to the number of years since the farmwoman is involved in dairy & poultry farming			
9.	Training exposure	Refers to the number of trainings attended by the farmwomen			
10.	Participation in extension activities	Refers to the number of extension activities such as campaign, exhibition, demonstration etc. attended by the farmwomen.			
11.	Household consumption	Refers to the amount of milk, meat and egg consumed by the household per day/week/month			

II SOCIO ECONOMIC

Sl. No.	Variable		MR	R	LR
1.	Land holding	Refers to the area of cultivable land available to the family			
2.	Herd size	Refers to the number of animals owned by the family			
3.	Flock size	Refers to the number of birds owned by the family			
4.	Monthly family income	Refers to the total monthly income of the family of the respondent			

contd.....

Sl. No.	Variable		MR	R	LR
5.	Monthly income from livestock & poultry	Refers to the amount of money the farm woman received from livestock and poultry farming			
6.	Extension agency contact	Refers to the extent to which the respondent comes in contact with the extension agency with in a fixed period			
7.	Social participation	Refers to the degree of involvement of the farmwomen in social organization as a member or as an office bearer			
8.	Information source utilisation	Refers to the degree to which the respondents utilized various sources of information such as institutional, non-institutional, mass media and others to get farming related information			

III SOCIO PSYCHOLOGICAL

Sl. No.	Variable		MR	R	LR
1.	Credit orientation	Refers to the orientation of the farmwomen to take advantage of the existing public credit institutions which includes borrowing as well as repayment behavior of the individual			
2.	Risk orientation	Defined as the degree to which the respondent is oriented towards uncertainty and has the courage to face the problems in dairy and poultry farming			
3.	Innovation proneness	Defined as the readiness to accept and orient towards new scientific practices in dairy & poultry farming.			
4.	Economic motivation	Refers to the occupational excellence in terms of profit making and relative value placed on economic ends by a farmwoman			
5.	Management motivation	It is the degree to which the respondent is oriented towards scientific management in dairy and poultry farming			
6.	Self confidence	Refers to the extent of feeling about one's own powers, abilities and resourcefulness to perform any activity which the farmwoman desires to undertake			
7.	Market orientation	Refers to the capacity of the farmwoman to identify the market trend to sell the product for greater returns			

APPENDIX – B

KERALA AGRICULTURAL UNIVERSITY

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Thrissur – 680 651

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For the above purpose a list of variables which are assumed to measure the training needs (both knowledge and skill) and problems of farmwomen engaged in dairy farming are listed. I shall be highly thankful if you could spare your valuable time and indicate their importance for inclusion in the research study on a three point continuum scale by putting a (✓) mark in the relevant column. If you feel any important variable has been left out kindly add the same with your judgement.

I shall be obliged if you could return the same at the earliest. Thanking in advance for your kind contribution in this academic pursuit.

Yours sincerely,

(M.R. SUBHADRA)

SCHEDULE 1

Given below are the items assumed to be associated with knowledge and skill aspect of training needs with respect to dairy farming. You are requested to judge the relevancy of each item on a three point continuum viz. "Most Relevant', 'Relevant' & 'Least Relevant' by making a (✓) mark in the appropriate column

Sl. No.	ITEMS	Knowledge			Skill		
		MR	R	LR	MR	R	LR
I	**HOUSING**						
1.	Proper design/structure of cattle shed						
2.	Scientific construction of low cost cattle shed						
II	**BREEDING**						
1.	Selection of breeds						
2.	Heat detection						
3.	Time of insemination						
4.	Pregnancy diagnosis						
5.	Maintenance of records on servicing						
6.	Time of post partum insemination						
III	**FEEDING AND MANAGEMENT**						
1.	Balanced feeding						
2.	Care and management of different age groups						
3.	Compounding balanced feed using locally available ingredients						
4.	Fodder cultivation						
5.	Urea treatment of straw						
6.	Clean milk production						
IV	**HEALTH CARE**						
1.	Deworming						
2.	Vaccination						
3.	Control of ectoparasites						
4.	Timely culling of unproductive animals						
5.	Identification and isolation of sick animals						
6.	Symptoms of common diseases						

contd.....

Sl. No.	ITEMS	Knowledge			Skill		
		MR	R	LR	MR	R	LR
V	**MARKETING AND FINANCE**						
1.	Banking & insurance						
2.	Marketing of livestock & livestock products						
3.	Maintenance of records						

SCHEDULE 2

Given below are the items assumed to be related to various problems faced by farmwomen engaged in dairy farming. You are requested to judge the relevancy of each item on a three point continuum viz. 'Most Relevant' Relevant' & 'Least Relevant' by making a (✓) mark in the appropriate column

Sl. No.	ITEMS	MR	R	LR
I	**BREEDING**			
1.	Inability to take the animals in accordance with the timings of A I centre			
2.	Repeat breeding problem in crossbreds			
3.	Distant location of A I centres			
4.	Missing the heat due to pre-engagement in some other work			
5.	Lack of knowledge of proper heat detection			
6.	Failure to diagnose pregnancy at correct time			
7.	Inadequate knowledge about proper record keeping			
II	**FEEDING AND MANAGEMENT**			
1.	High cost of concentrates			
2.	Inadequate knowledge about balanced feeding			
3.	Non-availability of green fodder through out the year			
4.	Lack of storage facilities for hay & straw			
5.	Scarcity of land for fodder cultivation			
6.	Non-availability of adequate fodder			
7.	Lack of proper irrigation facilities			

contd.....

Sl. No.	ITEMS	MR	R	LR
8.	Inadequate knowledge of full hand milking			
9.	Lack of technical guidance			
III	**HOUSING**			
1.	Lacking of facilities like funds, land, construction material, water etc for scientific construction of cattle shed			
2.	Inability to maintain cattle shed			
3.	Inadequate knowledge of scientific housing			
IV	**HEALTH CARE**			
1.	Non-availability of emergency veterinary services			
2.	Low disease resistance of crossbred animals			
3.	High cost of medicines			
4.	Inadequate knowledge of vaccination schedule and control of diseases			
5.	Inadequate knowledge of symptoms of various diseases			
6.	Reduction in milk yield due to diseases			
7.	Inadequate knowledge about zoonotic diseases			
8.	Inadequate supply of medicines from hospitals			
V	**MARKETING & FINANCE**			
1.	High interest rate of loans			
2.	High premium rate of insurance			
3.	Transportation difficulties			
4.	Problem of spoilage			
5.	Low price of milk and milk products			
6.	Financial difficulties			
7.	Inability to avail loans			
8.	Irregular payments by the milk societies			

APPENDIX – C

KERALA AGRICULTURAL UNIVERSITY

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For the above purpose a list of variables which are assumed to measure the training needs (both knowledge and skill) and problems of farmwomen engaged in poultry farming are listed. I shall be highly thankful if you could spare your valuable time and indicate their importance for inclusion in the research study on a three point continuum scale by putting a (✓) mark in the relevant column. If you feel any important variable has been left out kindly add the same with your judgement.

I shall be obliged if you could return the same at the earliest. Thanking in advance for your kind contribution in this academic pursuit.

Yours sincerely,

(M.R. SUBHADRA)

SCHEDULE 1

Given below are the items assumed to be associated with knowledge and skill aspect of training needs with respect to poultry farming. You are requested to judge the relevancy of each item on a three-point continuum viz. 'Most Relevant', 'Relevant' & 'Least Relevant' by making a (✓) mark in the appropriate column

Sl. No.	ITEMS	Knowledge			Skill		
		MR	R	LR	MR	R	LR
I	**HOUSING**						
1.	Proper design/structure of poultry shed						
2.	Scientific construction of low cost poultry shed						
II	**BREEDING**						
1.	Selection of eggs for hatching						
2.	Care of hatching eggs						
3.	Selection of suitable breeds of birds						
III	**FEEDING AND MANAGEMENT**						
1.	Balanced feeding						
2.	Care and management of different age groups of birds						
3.	Compounding balanced feed using locally available ingredients						
4.	Cleaning and disinfecting poultry shed						
IV	**HEALTH CARE**						
1.	Deworming						
2.	Vaccination						
3.	Control of ectoparasites						
4.	Identification & isolation of sick birds						
5.	Symptoms of common diseases						
V	**MARKETING AND FINANCE**						
1.	Banking & insurance						
2.	Marketing of eggs & birds						
3.	Maintenance of records						

SCHEDULE 2

Given below are the items assumed to be associated with problems faced by farm women engaged in poultry farming. You are request to judge the relevancy of each item on a three point continuum viz. 'Most Relevant', 'Relevant', Least Relevant' by making a (✓) mark in the appropriate column

Sl. No.	ITEMS	MR	R	LR
I	**BREEDING**			
1.	Low hatchability of eggs			
2.	Inability to select eggs for hatching			
II	**FEEDING AND MANAGEMENT**			
1.	Inadequate knowledge of balanced feeding and malnutrition			
2.	Difficulty in collecting eggs			
3.	Problems of predators			
4.	Lack of technical guidance			
III	**HOUSING**			
1.	Inadequate knowledge of low cost scientific cage construction			
2.	Lack of facilities like lands, fund, construction material etc.			
3.	Inability to maintain cage			
IV	**HEALTH CARE**			
1.	Non-availability of veterinary services nearby			
2.	Losses due to bacterial and viral diseases			
3.	Problems of ectoparasites			
4.	Low disease resistance of birds			
5.	Inadequate knowledge of vaccination schedule			
V	**MARKETING AND FINANCE**			
1.	Transportation difficulties			
2.	Price fluctuation			
3.	Problems of spoilage			
4.	Inadequate marketing facilities			
5.	Financial difficulties			
6.	High interest rate of loans			
7.	Inability to avail loans			

APPENDIX – D

KERALA AGRICULTURAL UNIVERSITY
COLLEGE OF VETERINARY AND ANIMAL SCIENCES, MANNUTHY
DEPARTMENT OF EXTENSION

INTERVIEW SCHEDULE

"TRAINING NEEDS OF FARM WOMEN OF THRISSUR TALUK IN DAIRY AND POULTRY FARMING"

PART – I
PROFILE

Respondent No.

1. Name of the respondent
2. Name of milk society
3. Permanent address
   House name :
   Block :
   Village :
   P.O. :
   Tele. No. :
4. Age
5. Education
   1. Illiterate ☐
   2. Primary ☐
   3. Middle school ☐
   4. High school ☐
   5. College ☐
6. Occupation
   1. Govt. employment ☐
   2. Private employment ☐
   3. Self employment ☐
   4. Agriculture and allied activities ☐
   5. Agricultural and other labourers ☐
   6. House hold work ☐
7. Marital status ☐
   1. Unmarried ☐
   2. Married ☐
   3. Widow
8. Farming experience
   1. Less than one year ☐
   2. One-five years ☐
   3. Five-ten years ☐
   4. More than ten years ☐
9. Previous training exposure in dairy and poultry farming Yes /No
10. If yes, number -
11. Land Holding
    1. Above 2 hectares ☐
    2. 1-2 hectares ☐
    3. Below 1 hectare ☐
    4. 10 cents and below ☐

12. Herd size

Sl. No.	Species	Category	Cross-bred (No.)	Local (No.)	Total (No.)
1.	Cow	Milking			
		Dry			
		Heifer			
		Calf			
		Bull			
2.	Buffalo	Milking			
		Dry			
		Heifer			
		Calf			
		Bull			

13. Flock size

Hen Cock Chicks

14. Monthly income from dairy and poultry farming

15. Social participation

Are you a member in any organisation Yes/No

If yes

1. Member in one organisation
2. Member in more than one organisations
3. Office bearer in one or more organisations

16. Extension agency contact Yes/No

Indicate how often you contact various extension agencies for getting information

Sl. No.	Category of extension	Frequency of contact		
		Often	Occasionally	Never
1.	Veterinary surgeon			
2.	Dairy Extension officer			
3.	Dairy farm instructor			
4.	Livestock inspector			

17. Information source utilisation Yes/No

How often do you use the following information source?

Sl. No.	Sources	Often	Occasionally	Never
1.	Mass media sources			
	Television.			
	Radio			
	Films			
	Newspapers			
	Farm publications			
	Exhibitions			
2.	Personal cosmopolite sources			
	Research scientists			
	Veterinary surgeon			
	Dairy extension officer			
	Others (specify)			

contd.....

Sl. No.	Sources	Often	Occasionally	Never
3.	Personal localite sources			
	Neighbours			
	Friends			
	Family members			
	Relatives			

18. Credit orientation
Please indicate your response in the appropriate columns

Sl. No.	Items				
1.	Do you think a farmwoman like you should borrow money from banks for animal husbandry purposes?	Yes		No	
2.	In your opinion, how difficult it is to secure credit for animal husbandry purposes?	VD	D	E	VE
3.	How a farm woman is treated when she goes to secure credit from banks/co-operative societies?	VB	B	F	VF
4.	There is nothing wrong in taking credit from institutional sources for increasing production	SA	A	DA	SDA
5.	Have you taken credit in the last two years for livestock production?	Yes		No	

19 Risk orientation
Given are a set of statements, you may kindly go through the statements and express your opinion in any response category given along with

Sl. No.	Statements	Agree	Undecided	Disagree
1.	A farmwoman should rather take more chance in making a big profit than to be content with a small but less risky profit.			
2.	A farmwoman who is willing to take greater risk than the average farmwoman, usually do better financially			
3.	It is good for a farmwoman to take risk when she knows her chance of success is fairly high			
4.	Trying an entirely new method in animal husbandry by a farmwoman involves risk, but it is worth it.			
5.	A farmwoman should rear one or two animals to avoid greater risk involved in dealing large number of animals			
6.	It is better for a farmwoman not to try new methods unless most others have used them			

20. Innovation proneness

Three sets of statements are given below. Each of the set contains three statements. You may kindly go through the statements and indicate the most likely and the least likely statement from each set.

Sl. No.	Statements	Most likely statement	Least likely statement
1a.	I try to keep myself up to date with information on new farm practices but that does not mean that I try out all new methods on my farm		
b.	They talk of many new farm practices these days, but who knows whether they are better than the old ones		
c.	I feel restless till I try out a new farm practice that I have heard about		
2a.	From time to time I have heard of several new farm practices and I have tried out most of them in the last few years.		
b.	Usually I want to see the result my neighbours obtained before I try out new farm practices		
c.	Some how I believe that the traditional ways of farming are the best		
3a.	I am cautious about trying a new farm practice		
b.	After all our forefathers were wise in their farming practices and I don't see any reason for changing those old methods		
c.	Quite often new farm practices are not successful, however, if they are promising I would surely like to adopt them		

21. Economic motivation

Given are a set of statements, you may kindly go through the statements and express your opinion in any of the response category given along with

Sl. No.	Statements	Agree	Undecided	Disagree
1.	A farmwoman should work towards more milk and egg production and more profit			
2.	A most successful farm woman is the one who makes most profit			
3.	A farmwoman should try new scientific practices in animal husbandry, which may earn her more profit			
4.	A farmwoman should rear crossbred cattle and birds to produce maximum quantity of milk and egg to increase monetary profits			
5.	It is difficult for the farm woman's children to make a good start unless provided them with economic assistance			
6.	A farmwoman must earn her living but the most important thing in life cannot be defined in economic terms			

22. Marketing orientation

Kindly indicate your opinion with each of the statement given below

Sl. No.	Statements	Agree	Disagree
1.	Market news is not so useful to a farm woman		
2.	A farm woman can obtain good price by grading her produce		
3.	Cold storage facilities can help a farm woman to get better price for her produce		
4.	One should sell her produce to the nearest market irrespective of the price		
5.	One should purchase inputs from the shops where her relatives purchase		
6.	One should grow those crops which have more market demand		

PART – II

TRAINING PREFERENCE

Please indicate your choice for the following

(I) **Type of training**

Sl. No.	Types	Most preferred	Somewhat preferred	Least preferred
1.	Institutional training			
2.	On farm training (Neighbourhood)			
3.	Distance learning (Television, Radio, Farm publications)			
4.	Print media			

(II) **Methods of training**

Sl. No.	Methods	Most preferred	Somewhat preferred	Least preferred
1.	Lecture			
2.	Group discussion			
3.	Farm visits			
4.	Study tours			
5.	Demonstrations			
6.	Film shows			
7.	Any other (specify)			

(III) **Duration of training**

Sl. No.	Duration	Most preferred	Somewhat preferred	Least preferred
1.	Less than one week			
2.	One week			
3.	More than one week			

(IV) **Interval of training**

Sl. No.	Interval	Most preferred	Somewhat preferred	Least preferred
1.	Every three months			
2.	Every six months			
3.	Every year			

(V) **Time of training**

Sl. No.	Time	Most preferred	Somewhat preferred	Least preferred
1.	Fore noon			
2.	After noon			
3.	Any time			

(VI) **Season of training**

Sl. No.	Season	Most preferred	Somewhat preferred	Least preferred
1.	December to February			
2.	March to May			
3.	June to September			
4.	October to November			

(VII) **Venue of training**

Sl. No.	Venue	Most preferred	Somewhat preferred	Least preferred
1.	Veterinary College, Mannuty			
2.	Local institutions			
3.	Krishi Vigyan Kendra			
4.	Animal husbandry training centers			
5.	Kerala Livestock Development Board farms			
6.	Extension Training Centre			

PART III

TRAINING NEEDS

I. DAIRY FARMING

Sl. No.	Items	Knowledge			Skill		
		MN	N	LN	MN	N	LN
A.	**Housing**						
1.	Construction of scientific low cost cattle shed						
2.	Proper design/structure of cattle shed						
B.	**Breeding**						
1.	Selection of breeds						
2.	Heat detection						
3.	Time of insemination						
4.	Maintenance of records on breeding						
5.	Time of post partum insemination						
C.	**Feeding and management**						
1.	Balanced feeding						
2.	Care and management of different age groups						
3.	Compounding balanced feed using locally available ingredients						
4.	Fodder cultivation						
5.	Clean milk production						
D.	**Health care**						
1.	Deworming						
2.	Vaccination						
3.	Control of ectoparasites						
4.	Identification and isolation of sick animals						
5.	Symptoms of common diseases						
E.	**Marketing and finance**						
1.	Banking and insurance						
2.	Marketing of livestock and livestock products						

II. POULTRY FARMING

Sl. No.	Items	Knowledge			Skill		
		MN	N	LN	MN	N	LN
A.	**Housing**						
1.	Construction of low cost poultry shed						
2.	Proper design/structure of poultry shed						
B.	**Breeding**						
1.	Selection of eggs for hatching						
2.	Care of hatching eggs						
3.	Selection of suitable breeds of birds						
C.	**Feeding and management**						
1.	Balanced feeding						
2.	Compounding balanced feed using locally available ingredients						
3.	Cleaning and disinfection of poultry shed						
D.	**Health care**						
1.	Deworming						
2.	Vaccination						
3.	Control of ectoparasites						
4.	Identification and isolation of sick birds						
5.	Symptoms of common diseases						
E.	**Marketing and finance**						
1.	Marketing of eggs and birds						
2.	Banking and insurance						

PART IV

PROBLEMS

I. DAIRY FARMING

Sl. No.	Items	MS	S	LS
A.	**Breeding**			
1.	Inability to take animals in accordance with the timing of AI centre			
2.	Repeat breeding problems in crossbreds			
3.	Lack of knowledge of proper heat detection			
4.	Failure to diagnose pregnancy at correct time			
5.	Distant location of AI centers			
B.	**Feeding and management**			
1.	High cost of concentrates			
2.	Non-availability of green fodder through out the year			
3.	Scarcity of land for fodder cultivation			
4.	Non-availability of adequate fodder			
5.	Scarcity of water			
6.	Inadequate knowledge of balanced feeding			
C.	**Housing**			
1.	Inadequate knowledge of scientific housing			
2.	Lack of facilities like funds, land, construction material etc for construction of cattle shed			
D.	**Health care**			
1.	High cost of medicines			
2.	Low disease resistance of crossbred animals			

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Sl. No.	Items	MS	S	LS
3.	Inadequate knowledge of vaccination schedule and control of diseases			
4.	Reduction in milk yield due to diseases			
5.	Inadequate supply of medicines from hospitals			
E.	**Marketing and finance**			
1.	Problem of spoilage			
2.	Low price of milk and milk products			
3.	Financial difficulties			
4.	Irregular payments by the milk societies			

II	**POULTRY FARMING**			
Sl. No.	Items	MS	S	LS
A.	**Breeding**			
1.	Low hatchability of eggs in summer			
2.	Inability to select eggs for hatching			
B.	**Feeding and management**			
1.	Inadequate knowledge of balanced feeding and malnutrition			
2.	Problems of predators			
3.	Lack of technical guidance			
C.	**Housing**			
1.	Inadequate knowledge of low cost scientific cage construction			
2.	Lack of facilities like land, fund, construction material etc			

contd.....

Sl. No.	Items	MS	S	LS
D.	**Health care**			
1.	Non-availability of veterinary services near by			
2.	Losses due to bacterial and viral diseases			
3.	Problems of ectoparasites			
4.	Inadequate knowledge of vaccination schedule			
E.	**Marketing and finance**			
1.	Price fluctuation			
2.	Problems of spoilage			
3.	Inadequate marketing facilities			
4.	Financial difficulties			
5.	High interest rate of loans			

TRAINING NEEDS OF FARM WOMEN OF THRISSUR TALUK IN DAIRY AND POULTRY FARMING

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ABSTRACT

The objectives of the study were to analyse the profile of farm women, to assess the training needs and to identify the problems of farm women engaged in dairy and poultry farming. The data were collected through personal interviews using pre-tested schedule from 120 respondents selected from two development blocks of Thrissur Taluk by multistage sampling.

Majority of the farm women were middle aged, married, of medium income group, had long years of farming experience with small sized herd and medium flock size but had not attended any training in dairy and poultry farming. Their innovation proneness, economic motivation, risk orientation and credit orientation were found to be medium. Nearly half of them were high school educated. Half of the farm women were engaged in house hold work as well as agriculture and allied activities. More than half of them had low level of social participation and extension agency contact but had medium information source utilization and marketing orientation.

Out of the five major farm operations studied in dairy farming, the farm women needed training the most in housing. The minor items preferred the most for knowledge need were proper design of cattle shed, selection of breeds, compounding balanced feed using locally available ingredients, vaccination and banking and insurance. As for skill need, construction of scientific low cost cattle shed, selection of breeds, compounding balanced feed using locally available ingredients, symptoms of common diseases and banking and insurance were preferred the most. In poultry farming, feeding and management was the most preferred major farm operation. The minor items preferred the most for both knowledge and skill training were proper design of poultry shed, selection of eggs for hatching, compounding balanced feed using locally available ingredients, vaccination and banking and insurance.

In dairy farming, problems in health care was perceived as the most serious one. Under major farm operations, the most serious problems were

inadequate knowledge about scientific housing, repeat breeding in crossbreds, high cost of concentrates, reduction in milk yield due to diseases and low price of milk and milk products. In poultry farming, farm women perceived problems in feeding and management as the most serious one. Under major farm operations, the most serious problems were inadequate knowledge about low cost scientific cage construction, low hatchability of eggs in summer, problems of predators, losses due to bacterial and viral diseases and financial difficulties.