

Training Needs of Farm Women about Improved Animal Husbandry Practices in Saurashtra Region of Gujarat

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ABSTRACT

Animal husbandry is an integral component of rural farmers and female dominated enterprise in India. It is established beyond a shadow of doubt that women always participated in animal husbandry activities in addition to their daily household chores. In spite of active involvement of farm women, their contribution are undermined, underestimated and lack of exposure and access to new technology has restricted to show their full potential for the growth of livestock sector. Training is one of the important aspects, which can enhance knowledge, improve skill and change the attitude of farm women. Keeping this in view, present study was thought to be taken out with to measure the training needs of farm women about improved animal husbandry practices in Saurashtra region of Gujarat state, India. Because of Saurashtra region has significant contribution of local cows (45%) among the different region of state. The present investigation was conducted in Junagadh and Gir-Somnath districts of Saurashtra Region which was purposively selected. Two talukas selected from each selected district and three villages were from each purposively selected taluka having more population of cattle and buffalo. Ten respondents from each selected village were taken by using random sampling technique with a condition that the farm women have been rearing animals on their farm at least 3 years or having herd. Thus, total 120 farm women were selected for research purpose. The result of the research study revealed that the most important training needs areas were; construction of scientific low-cost cattle shed (89.17 per cent), followed by selection of breed (86.67 per cent), infertility problems and reproductive disorder (54.16 per cent), chaffing of fodder (53.34 per cent) and watering animal (48.34 per cent). The health care management was information on infectious diseases (87.50 per cent), fodder production is preservation of fodder crops (hay/silage making) (72.50 per cent), hygienic method of clean milk production (55.00 per cent) and use of mineral mixtures/common salt (47.50 per cent). In marketing practices like banking and insurance (91.67 per cent), followed by marketing of livestock and store milk in summer season (88.34 per cent), farm women had low level of knowledge about the loan facility (65.83 per cent) and loan interest rate (67.50 per cent). The overall preference of training needs of farm women on improved dairy farming practices, housing facility (2.69 mean score) was the most preferred training area of rural women (first ranked) followed by health care practices (2.59 mean score), fodder production (2.56 mean score) got second and third ranked, respectively. The financial practices, breeding practices, marketing practices, feeding practices, management practices, daily practices and milk products making got fourth, fifth, sixth, seventh, eighth, ninth and tenth ranked, respectively. So, the study implies that respondents were interested to receive training on improved dairy farming practices for their betterment and society as well. The results of the study will help the extension agencies to develop suitable training modules for the dairy farmers in improved dairy farming practices to improve their milk production and make the dairying a successful enterprise.

Keywords

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Introduction

Animal husbandry plays a pivotal role in the economy as well as socio-economic development of our country. Women play an important role in animal husbandry occupation as manager, decision makers and skilled workers. In fact, the major share of the credit for India's position as the largest milk producing country in the world and the significant increase in the per capita availability of milk in the country has to go to the largely illiterate rural women dairy farmers (Patel, 1998). In spite of active involvement of women in different animal husbandry activities, lack of exposure and access to new technology has restricted women to show their full potential for the growth of livestock sector. Hence upon, it is said that adequate training is necessary for gaining knowledge in any field which is essential for acceptance and adoption of any ideas (Sheela and Sundara, 1993). Training provides a systematic improvement of knowledge and skills which in turn helps the trainees to function effectively and efficiently in their given task on completion of the training.

In this situation, it is thought worthwhile to determine knowledge of farm women regarding to animal husbandry practices and training need for effective dairy management, considering all above things, a study was entitled "Training Needs of Farm Women about Improved Animal Husbandry Practices in Saurashtra Region".

Materials and Methods

The study was conducted in Junagadh and Gir Somnath districts in south Saurashtra region of Gujarat. Ex-post facto research design was followed. Multistage purposive and random sampling was used for selection of districts, taluk as and respondents. Two talukas

selected from each selected district and three villages from each selected taluka were selected purposively with having more population of cattle and buffalo. The ten respondents from each selected village were taken by using random sampling technique with a condition that the farm women have been rearing animals on their farm at least 3 years or having herd, thus, making sample size 120 farm women. Interview schedule was prepared to study parameters of training needs that was pretested and translated in local language. The data of this study were collected through personal interview. The presentation of data was done to give pertinent, valid and reliable answer to the specific objectives. Data were coded, classified, tabulated and analyzed using the software.

In order to measure the training needs of farm women, a training needs schedule consisted of 62 sub items of 10 main items was prepared and then the items were arranged against three point rating scale. At the time of personal interview, the respondents were asked to rate each item in any one of the three response categories i.e. "most needed", "somewhat needed" and "not needed". The rating given to the items were quantified by assigning the score of 3, 2 and 1 for "most needed", "somewhat needed" and "not needed", respectively.

The overall training need was calculated by multiplying the frequencies of occurrence with the respective score of the category and adding them up. These added score were then divided by the number of respondents (n) to obtain the mean score. Based on the mean score, the training needs were ranked in order of importance.

The overall training needs of an individual respondent were also calculated by ratio scale called Training Need Quotient (TNQ), which

was especially developed for the study. This scale accommodates variation in number of items checked and ranges between “0” and “186” and thus fits with our frame of reference. It was computed by the following formula:

$$TNQ = \frac{\sum OS_{ij}}{\sum MS_{ij}} \times 100$$

Where,

$\sum OS_{ij}$ = Sum of observed score of j^{th} individual for i^{th} items

$\sum MS_{ij}$ = Maximum score attributable to the items rated by j^{th} individual

TNQ = Training Need Quotient

Results and Discussion

Training needs of farm women about improved animal husbandry practices

Regular training is necessary to impart technologies and practices that raise their level of competence which increase the return from their farming. Training needs assessment helps to identify, prioritize and select the specific action as a part of training programme which needs to make training relevant and comfortable. It was determined through task analysis by each item wise training needs analysis and overall training needs of farm women pertaining to dairy management.

Training needs for housing facility

Almost all the farmers did not keep their animals at a single place throughout the year or even for a whole day and night. Provision of proper housing facilities to the animals not only reduces the energy wastage in maintaining thermo neutral zone but also provides good hygienic condition, reduces the

incidence of diseases, protects them from predators and provides better working condition to the farmers. The main item was divided into five subitems as under. So far as, training needs are concerned on this aspect, the data collected are presented in Table 1.

The data presented in Table 1 revealed that majority of the respondents opted the degree of training needs most needed in case of construction of scientific low-cost cattle shed (89.17 per cent), followed by arrangement of scientific housing (82.50 per cent), provide facilities like fuel, land, construction material etc. for construction of cattle shed (79.17 per cent), plastering floors (65.84 per cent) and arrangement of fan facilities (79.17 per cent).

In the construction of scientific low-cost cattle shed was first ranked followed by frequency of arrangement of scientific housing (second ranked), arrangement of fan facilities (third ranked), provide facilities like fuel, land, construction material etc. for construction of cattle shed (fourth ranked) and plastering floors (fifth ranked).

It is worth to note that respondents had more training need in construction of scientific low-cost cattle shed because farm women do not have knowledge about scientific low-cost housing due to low level of social participation and poor economic condition.

Similar findings were reported by Rani and Subhadra (2009), Saiyad and Badhe (2012).

Training needs for daily management practices

A daily management practices refers to day to day work related to animal husbandry practices. It plays a vital role in better livestock management. So, it is necessary to having good knowledge about different practices as mention below.

The data mentioned in Table 2 depicted that farm women felt maximum training needs in chaffing of fodder (53.34 per cent), followed by watering animal (48.34 per cent), soaking feed (45.84 per cent), milking of animal (45.00 per cent), cleaning of animal shed (38.34 per cent), feeding fodder and feed (42.50 per cent), cleaning utensil (36.67 per cent), bathing of animal (35.00 per cent) and least needed in fodder collection (30.00 per cent) and making dung cake (17.50 per cent).

The above-mentioned practices are regularly performed by women, but its content low level of knowledge in performing these activates. In same way, chaffing of fodder was get first ranked. Whereas, watering animal, soaking feed and milking of animal, cleaning of animal shed, feeding fodder & feed and fodder collection were get second, third, fourth and fifth rank, respectively. But least needed in area of cleaning utensil and bathing of animal and making dung cake got sixth and seventh rank, respectively.

In the villages, farm women were used to give without chaffed fodder to animals which lead to a huge wastage of fodder. The probable reason behind it that farm women do not have chaffing cutter at their home and they thing that animal are comfortable to eat without chaffed fodder. Farm women were used traditional method in milking of animals and watering of animals which was indicate low level of knowledge due to low extension participation and less use of mass media exposure.

Training needs for breeding practices

Proper and better care of breeding stock helps in developing good dairy herd and getting good returns too. The information regarding breeding practices followed by dairy farm women are presented in Table 3.

The data presented in Table 3 disclosed that farm women mostly perceived training in selection of breed (86.67 per cent) was first ranked, followed by infertility problems and reproductive disorder (54.16 per cent) and reproductive efficiency of dairy animals (53.33 per cent) both were second ranked and knowledge of high yielding breed (52.50 per cent) and repeat breeding management (51.67 per cent) third ranked, time of artificial insemination(50.84 per cent) fourth ranked, pregnancy diagnosis (49.17 per cent) fifth ranked, artificial insemination (50.84 per cent) sixth ranked and detection of heat symptoms (39.17 per cent) seventh ranked.

Farm women were unaware about improved breed and also about their high productivity due to low social participation and illiteracy and lack of veterinary services, repeat breeding problem is also a reason behind adoption of improved animal husbandry practices.

Above findings are supported by Saiyad and Badhe (2012), Patel *et al.*, (2013), Patel *et al.*, (2015b),

Training needs for feeding practices

Feeding is one of the most important practices in animal husbandry. It is generally agreed that all the animals fail to prove their full genetic potential for higher production when fed at low levels.

The dairy animal owners must have a thorough understanding of the facts that milk production can be increased by adoption of improved animal feeding practices. The data regarding the feeding practices followed by the dairy animal owners are presented in Table 4.

It is evident in Table 4 that majority of the respondents were opted the degree of training

need “most needed” in case of use of mineral mixtures/common salt (47.50 per cent) and feed dry fodder (44.17 per cent). Whereas, extra dose of feed to pregnant animal (50.00 per cent), feeding of milch animals (48.33 per cent), balanced feeding (45.00 per cent), feed green fodder/roughage (45.83 per cent) were degreed of training need “somewhat needed”.

If we discussed on mean score, the rank was assigned, the use of mineral mixtures/common salt got first rank, followed by extra dose of feed to pregnant animal and feeding of milch animals, balanced feeding, feed green fodder/roughage, feed dry fodder were ranked second, third, fourth and fifth, respectively.

It is interesting to note that respondents had more training needs in use of mineral mixtures/common salt, it might be due to lack of knowledge of dairy women about nutrient management. The women, who reared crossbred cows, supplied extra salt regularly, followed by feed.

This result is confined to findings of Mustafa *et al.*, (2005), Saiyad and Badhe (2012), Kavithaa and Vimal (2014), Jadav *et al.*, (2014).

Training needs for fodder production

It is very important for the animal to get green and dry fodder for the whole year, which is necessary for its health and growth. In fodder production, important practices of training needs of farm women are illustrated in Table 5.

Data presented in Table 5 apparent that most preferred training area of fodder production is preservation of fodder crops (hay/silage making) (72.50 per cent), followed by storage of fodder crops (70.00 per cent), selection of varieties of fodder crops (62.50 per cent)

drying of fodder crops (61.67 per cent) and cultivation of fodder crops (45.83 per cent).

Preservation of fodder crops (hay/silage making) obtained first rank, followed by storage of fodder crops, selection of varieties of fodder crops, drying of fodder crops and cultivation of fodder crops were second, third, fourth and fifth ranked, respectively.

It is worth to note that no single farm women practiced silage making because of shortage of green fodder and lack of knowledge about silage making. In some area of Gir- Somnath district found that farmer was able to find green fodder whole year regularly, so they do not have need to prepare hay/silage but knowledge of women about varieties of fodder crop and storage structure was find low. Similar results were found by Rajput *et al.*, (2012), Saiyad and Badhe (2012).

Training needs for health care practices

Proper health care practices are required to be followed for maintenance of health, prevention of various diseases and clean milk production. Considering these points’ respondents were asked about the various health care practices followed up and results emerged from the study is presented in Table 6.

The results reported in Table 6 depicts that most preferred area by farm women in health care management was information on infectious diseases (87.50 per cent), followed by care and management of pregnant animals at the time of parturition (86.66 per cent), timely vaccination against diseases (86.66 per cent), deworming (85.84 per cent), vaccination (50.83 per cent), control of ecto-parasites (53.33 per cent), symptoms of common diseases (50.84 per cent), arranging veterinary care (50.83 per cent) and identification and isolation of sick animals (39.16 per cent).

Table.1 Distribution of respondents according to training needs in housing facility (n=120)

Sr. No.	Sub item of housing facility	Degree of training needs			Mean score	Rank
		Most needed	Somewhat needed	Not needed		
1	Construction of scientific low cost cattle shed	107 (89.17)	2 (1.66)	11 (9.17)	2.80	I
2	Arrangement of scientific housing	99 (82.50)	9 (7.50)	12 (10.00)	2.72	II
3	Provide facilities like fuel, land, construction material etc. for construction of cattle shed	95 (79.17)	13 (10.83)	12 (10)	2.69	IV
4	Plastering floors	79 (65.84)	28 (23.33)	13 (10.83)	2.55	V
5	Arrangement of fan facilities	95 (79.17)	14 (11.66)	11 (9.17)	2.70	III

* (Numbers in parenthesis indicates the percent)

Table.2 Distribution of respondents according to their training needs about daily management practices (n=120)

Sr. No.	Sub item of daily management practices	Degree of training needs			Mean score	Rank
		Most needed	Somewhat needed	Not needed		
1	Cleaning of animal shed	46 (38.34)	31 (25.83)	43 (35.83)	2.02	IV
2	Cleaning utensil	44 (36.67)	20 (16.66)	56 (46.67)	1.9	VI
3	Bathing of animal	42 (35.00)	24 (20.00)	54 (45.00)	1.9	VI
4	Milking of animal	54 (45.00)	21 (17.50)	45 (37.50)	2.07	III
5	Feeding fodder and feed	51 (42.50)	26 (21.67)	43 (35.83)	2.06	V
6	Chaffing of fodder	64 (53.34)	23 (19.16)	33 (27.50)	2.25	I
7	Soaking feed	55 (45.84)	19 (15.83)	46 (38.33)	2.07	III
8	Watering animal	58 (48.34)	24 (20.00)	38 (31.66)	2.16	II
9	Making dung cake	21 (17.50)	8 (6.66)	91 (75.84)	1.41	VII
10	Fodder collection	36 (30.00)	46 (38.34)	38 (31.66)	1.98	V

* (Numbers in parenthesis indicates the per cent)

Table.3 Distribution of respondents according to their training needs about breeding practices (n=120)

Sr. No.	Sub item of breeding practices	Degree of training needs			Mean score	Rank
		Most needed	Somewhat needed	Not needed		
1	Selection of breed	104 (86.67)	05 (4.17)	11 (9.16)	2.77	I
2	Infertility problems and reproductive disorder	65 (54.16)	50 (41.67)	05 (4.17)	2.50	II
3	Detection of heat symptoms	47 (39.17)	62 (51.67)	11 (9.16)	2.30	VII
4	Artificial insemination	61 (50.84)	49 (40.83)	10 (8.33)	2.42	VI
5	Pregnancy diagnosis	59 (49.17)	54 (45.00)	07 (5.83)	2.43	V
6	Repeat breeding management	62 (51.67)	52 (43.33)	06 (5)	2.46	III
7	Time of artificial insemination	61 (50.84)	51 (42.5)	08 (6.66)	2.44	IV
8	Knowledge of high yielding breed	63 (52.50)	50 (41.67)	07 (5.83)	2.46	III
9	Reproductive efficiency of dairy animals	64 (53.33)	52 (43.34)	04 (3.33)	2.50	II

* (Numbers in parenthesis indicates the per cent)

Table.4 Distribution of respondents according to their training needs about feeding practices (n=120)

Sr. No.	Sub item of feeding practices	Degree of training needs			Mean score	Rank
		Most needed	Somewhat needed	Not needed		
1	Balanced feeding	53 (44.16)	54 (45.00)	13 (10.84)	2.33	III
2	Feed Green fodder/roughage	52 (43.33)	55 (45.83)	13 (10.84)	2.32	IV
3	Feed dry fodder	53 (44.17)	50 (41.67)	17 (14.16)	2.30	V
4	Use of mineral mixtures/common salt	57 (47.5)	54 (45.00)	09 (7.50)	2.40	I
5	Extra dose of feed to pregnant animal	52 (43.34)	60 (50.00)	08 (6.66)	2.36	II
6	Feeding of milch animals	53 (44.16)	58 (48.33)	09 (7.50)	2.36	II

*(Numbers in parenthesis indicates the per cent)

Table.5 Distribution of respondents according to their training needs about fodder production practices (n=120)

Sr. No.	Sub item of fodder production practices	Degree of training needs			Mean score	Rank
		Most needed	Somewhat needed	Not needed		
1	Selection of varieties of fodder crops	75 (62.50)	38 (31.67)	7 (5.83)	2.57	III
2	Cultivation of fodder crops	55 (45.83)	58 (48.33)	7 (5.84)	2.40	V
3	Drying of fodder crops	74 (61.67)	35 (29.17)	11 (9.16)	2.53	IV
4	Storage of fodder crops	84 (70.00)	29 (24.17)	7 (5.83)	2.64	II
5	Preservation of fodder crops (hay/silage making)	87 (72.50)	27 (22.50)	6 (5.00)	2.67	I

* (Numbers in parenthesis indicates the per cent)

Table.6 Distribution of respondents according to their training needs about health care practices (n=120)

Sr. No.	Sub item of health care practices	Degree of training needs			Mean score	Rank
		Most needed	Somewhat needed	Not needed		
1	Deworming	103 (85.84)	09 (7.50)	08 (6.66)	2.79	IV
2	Vaccination	61 (50.83)	52 (43.33)	07 (5.84)	2.45	V
3	Control of ecto-parasites	64 (53.33)	47 (39.17)	09 (7.50)	2.45	V
4	Identification and isolation of sick animals	47 (39.16)	55 (45.84)	18 (15.00)	2.24	VII
5	Symptoms of common diseases	61 (50.84)	53 (44.16)	06 (5.00)	2.45	V
6	Timely vaccination against diseases	104 (86.66)	8 (6.67)	08 (6.67)	2.8	III
7	Arranging veterinary care	61 (50.83)	51 (42.5)	08 (6.67)	2.44	VI
8	Information on infectious diseases	105 (87.50)	08 (6.66)	07 (5.84)	2.81	I
9	Care and management of pregnant animals at the time of parturition	104 (86.66)	09 (7.50)	07 (5.84)	2.80	II

* (Numbers in parenthesis indicates the per cent)

Table.7 Distribution of respondents according to their training needs about management practices (n=120)

Sr. No.	Sub item of management practices	Degree of training needs			Mean score	Rank
		Most needed	Somewhat needed	Not needed		
1	Maintenance of dairy management records	52 (43.34)	46 (38.33)	22 (18.33)	2.25	III
2	Feed colostrum to newly born calves	41 (34.16)	41 (34.17)	38 (31.67)	2.02	V
3	Follow full hand method of milking	60 (50.00)	46 (38.33)	14 (11.67)	2.38	II
4	Cleaning of newly born calf after birth	42 (35.00)	62 (51.66)	16 (13.34)	2.21	IV
5	Hygienic method of clean milk production	66 (55.00)	47 (39.17)	7 (5.83)	2.49	I

* (Numbers in parenthesis indicates the per cent)

Table.8 Distribution of respondents according to their training needs about marketing practices (n=120)

Sr. No.	Sub item of marketing practices	Degree of training needs			Mean score	Rank
		Most needed	Somewhat needed	Not needed		
1	Banking and insurance	110 (91.67)	05 (4.17)	05 (4.16)	2.87	I
2	Marketing of livestock and livestock products	85 (70.83)	21 (17.50)	14 (11.67)	2.59	III
3	Store milk in summer season	106 (88.34)	09 (7.50)	05 (4.16)	2.84	II
4	Purchase of concentrated feed	46 (38.34)	22 (18.33)	52 (43.33)	1.95	V
5	Selling of milk	42 (35.00)	70 (58.34)	08 (6.66)	2.28	IV

* (Numbers in parenthesis indicates the per cent)

Table.9 Distribution of respondents according to their training needs about milk product making (n=120)

Sr. No.	Sub item of milk product making	Degree of training needs			Mean score	Rank
		Most needed	Somewhat needed	Not needed		
1	Ghee	00 (0.00)	32 (26.67)	88 (73.33)	1.26	II
2	Buttermilk	00 (0.00)	24 (20.00)	96 (80.00)	1.20	III
3	Curd	00 (0.00)	24 (20.00)	96 (80.00)	1.20	III
4	Any other dairy product	06 (5.00)	37 (30.84)	77 (64.16)	1.40	I

* (Numbers in parenthesis indicates the per cent)

Table.10 Distribution of respondents according to their training needs about financial practices (n=120)

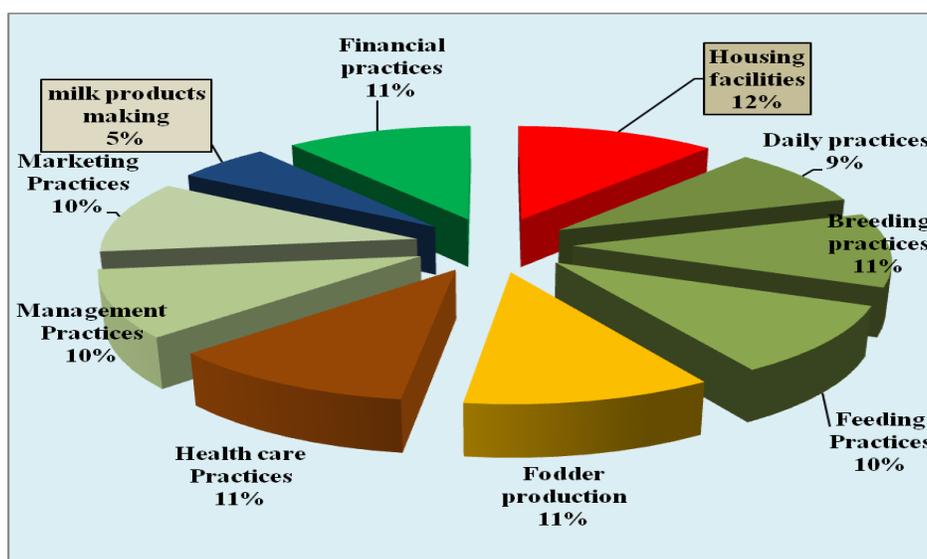
Sr. No.	Sub item of financial practices	Degree of training needs			Mean score	Rank
		Most needed	Somewhat needed	Not needed		
1	Loan facilities	79 (65.83)	21 (17.50)	20 (16.67)	2.49	II
2	Loan interest rate	81 (67.50)	21 (17.50)	18 (15.00)	2.52	I

* (Numbers in parenthesis indicates the per cent)

Table.11 Overall Training needs of rural women on improved dairy farming practices (n=120)

Sr. No.	Training needs	Mean score	Rank
1	Housing facilities	2.69	I
2	Daily practices	1.99	IX
3	Breeding practices	2.48	V
4	Feeding Practices	2.35	VII
5	Fodder production	2.56	III
6	Health care Practices	2.59	II
7	Management Practices	2.27	VIII
8	Marketing Practices	2.43	VI
9	Milk products making	1.27	X
10	Financial practices	2.51	IV

Fig.1 Distribution of the respondents according to their overall training needs about improved animal husbandry



Whereas, most important health care practices by rank wise were information on infectious diseases was first ranked, followed by care and management of pregnant animals at the time of parturition (second ranked), timely vaccination against diseases (third ranked), deworming (fourth ranked), vaccination, control of ecto-parasites and symptoms of common diseases (fifth ranked), arranging veterinary care (sixth ranked) and identification and isolation of sick animals (seventh ranked).

Farm women were not properly aware about health of dairy animals. They did not have knowledge about infectious disease, management of animals at time of parturition and it was also found that some time calves are attempt to death because of ecto-parasites attack. The probable reason might be that unavailability of veterinary staff and poor economic condition, low mass media exposure, low level knowledge about banking and insurance.

This finding is in line with those reported by Kathiriya *et al.*, (2014), Patel *et al.*, (2015).

Training needs for management practices

The results of various management practices followed by dairy farm women in the study area are presented in Table 7.

The perusal of data in the Table 7 observed that farm women were desired to prefer most area of training was hygienic method of clean milk production (55.00 per cent), followed by follow full hand method of milking (50.00 per cent), maintenance of dairy management records (43.34 per cent). Whereas, somewhat needed training was cleaning of newly born calf after birth (51.66 per cent) and feed colostrum to newly born calves (34.17 per cent).

In area of management practices, most needed training about improved animal husbandry practices were clean milk production which occupied first rank, followed by follow full hand method of milking, maintenance of dairy management records, cleaning of newly born calf after birth and feed colostrum to newly born calve get second, third, fourth and fifth ranked, respectively.

It can be concluded that the farm women were not a good adopter of hygienic method of clean milk production and did not follow full hand for milking but had a good knowledge about cleaning of newly born calf after birth and feed colostrum to newly born calve. The probable reason might be that believe in traditional method of milking due to illiteracy and poor economy.

The finding is related with finding of Mustafa *et al.*, (2005).

Training needs for marketing practices

Milk production and marketing is a source of supplement income after agriculture production. Data revealed in Table 8 shows training needs of farm women about different marketing practices.

The data presented in Table 8 explicate that in the area of different marketing practices like banking and insurance (91.67 per cent), followed by store milk in summer season (88.34 per cent), marketing of livestock and livestock products (70.83 per cent) and Purchase of concentrated feed (38.34 per cent) were most needed area of training but selling milk (58.34 per cent) found somewhat needed.

It is interested to know that 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 of the farm women had limited information regarding the various sources from which they could obtain financial assistance and also about the insurance policies. Store the milk in summer season is also a problem in rural area because limited resources are available. But due to availability of milk cooperative society women came to know all criteria of selling milk. Similar results found by Jacob and George (2013).

Training needs for milk product making

Different product made by milk was so popular in rural and also in urban area. The results of milk product making followed by farm women in the study area are presented in Table 9.

Data illustrated in Table 9 shows that in the area of milk product making farm women had an excellence performance and no need of any training in ghee, buttermilk and curd making. This might be due to most of women are used to prepare these all product regularly.

The result of study are corroborate with the findings of Mustafa *et al.*, (2005).

Training needs for financial practices

To take an animal husbandry as a vocation financial assistance is necessary for farm women. There are many problem are arises due to low economic condition and women are unable to adopt improved animal husbandry practices. Data illustrated in Table 10.

The data depicted in Table 10 revealed that farm women had low level of knowledge about the loan facility and interest rate. So, both areas found most needed, loan facility (65.83 per cent) and loan interest rate (67.50 per cent).

The probable reason might be that the farm women are illiterate and low level of participation in extension program.

Overall Training Needs of farm women about improved animal husbandry practices

Overall training needs of farm women about different practices showed in Table 11 and Fig.1, which apparent about the most preferred training area by farm women.

Data depicted in Table 11 lighted that with respect to overall preference of training need of farm women on improved dairy farming practices, housing facility was the most preferred training area of rural women (first ranked), followed by health care practices, fodder production, financial practices, breeding practices, marketing practices, feeding practices, management practices, daily practices and milk products making got second, third, fourth, fifth, sixth, seventh, eighth, ninth and tenth ranked, respectively.

From the study, it is concluded that without the training farm women cannot able to adopt latest technologies of animal husbandry, only training can help to improve the knowledge and skill and also change attitude of the farm women about improved practices of animal husbandry.

From the above discussion, it could be concluded that most important training needs area in practice wise were; construction of scientific low-cost cattle shed (89.17 per cent), followed by selection of breed (86.67 per cent), arrangement of scientific housing (82.50 per cent), infertility problems and reproductive disorder (54.16 per cent), chaffing of fodder (53.34 per cent), reproductive efficiency of dairy animals (53.33 per cent) and watering animal (48.34 per cent). The health care management was

information on infectious diseases (87.50 per cent), care and management of pregnant animals at the time of parturition (86.66 per cent), fodder production is preservation of fodder crops (hay/silage making) (72.50 per cent), storage of fodder crops (70.00 per cent), hygienic method of clean milk production (55.00 per cent), follow full hand method of milking (50.00 per cent), use of mineral mixtures/common salt (47.50 per cent) and feed dry fodder (44.17 per cent).

In marketing practices like banking and insurance (91.67 per cent), followed by marketing of livestock and store milk in summer season (88.34 per cent), farm women had low level of knowledge about the loan facility and interest rate. So, both areas found most needed, loan facility (65.83 per cent) and loan interest rate (67.50 per cent).

The overall preference of training need of farm women on improved dairy farming practices, housing facility was the most preferred training area of rural women (first ranked), followed by health care practices, fodder production, financial practices, breeding practices, marketing practices, feeding practices, management practices, daily practices and milk products making got second, third, fourth, fifth, sixth, seventh, eighth, ninth and tenth ranked, respectively.

In brief, it is concluded that there is a need for conducting a greater number of needs based and well-tailored training programmes suited to farm women who would in turn help them to have more extension agency contacts. Farm operations related to housing should be given top priority in the curriculum of training programmes.

Only training can help to improve the knowledge and skill and also change attitude of the farm women about improved practices of animal husbandry.

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