CHAPTER 3

FINDINGS AND DISCUSSION

The present study was undertaken to identify training needs in Home Science Education of farm women of Gujarat State. The study also aimed at identifying these needs of farm women from and within three divisions of Gujarat State as well as from tribal and non tribal areas of Gujarat State. It further aimed at identifying the needs of farm women in relation to selected variables such as age, socio-economic status, prior training received at Farmer Training Centre, exposure to different training programmes other than Farmers' Training Centre and proximity to the Centre.

This chapter includes various findings of the study arrived at by careful data collection and systematic statistical calculation. A total of 580 farm women from 17 districts of Gujarat State formed the sample of the study.

The findings are reported in the following manner :

3.1 Description of the respondents.

3.2 Identification of training needs in Home Science Education.

3.3 Differences in mean scores achieved in seven aspects of Home Science. Education of farm women from three divisions, within the divisions, between tribal and non tribal areas of Gujarat State.

3.4 Association between the mean scores achieved in seven selected aspects of Home Science Education of farm women from Gujarat State and the selected variables.

3.1 Description of the Respondents

Although the respondents were drawn from 17 districts of Gujarat State, they were treated as one sample and categorized according to their -

3.1.1 Age

3.1.2 Socio-economic status

3.1.3 Prior training from Farmers Training Centre

3.1.4 Exposure to different programmes other than those of Farmers Training Centre

3.1.5 Proximity to the Centre.

3.1.1 AGE OF THE RESPONDENTS

Age of the respondents ranged between 18 and 45 years and above. They were categorised into three group as shown in the table below.

Table 9. Percentage Distribution of the Respondents According to Age

N = 580

Age Group	F	Respondents Percentage
18 - 30 Years	354	61.33
31 - 45 Years	224	38.63
46 and above	2	00.04
Total...	580	100.00

As seen in the table above, 61.33 per cent of the respondents fall in the category of 18 and 30 years of age and 38.63 per cent fall in the category of 31 and 45 years of age, whereas only .04 per cent of the respondents fall in the category of 46 years and above. It was apparent that most of the farm women belonged to younger age group. There was very negligible percentage of the farm women who were above 46 years of age. It seemed that majority of the younger farm women had attended the training programmes who might have been enthusiastic in the courses. Probably old aged mothers and mother-in-laws permitted daughters and daughter-in-law to attend the programmes rather than attending themselves.

For further analysis of data according to age only two categories were made which were as follow.

Younger group 18 - 30 years

Older group 31 - 45 years and above.

3.1.2 SOCIO-ECONOMIC STATUS OF THE RESPONDENTS

The respondents' families were categorised in to five categories of Socio-Economic Status according to prescribed ranges of scores in the mannual of Socio Economic Status scale by Parikh.

Table 10. Percentage Distribution of the Respondents According to Socio-Economic Status of Their Families

N = 580

Socio-Economic Status	F	Respondents' Percentages
1. Upper class	10	1.72
2. Upper middle class	76	13.10
3. Middle class families	198	34.14
4. Lower Middle class	163	28.10
5. Lower class	133	22.94
Total...	580	100.00

The distributions of the respondents given in table above showed that majority of them belonged to middle class families consisting of 34.14 per cent of the respondents. Lesser than those that is 28.10 per cent of the respondents belonged to lower class were as lower middle class consisted of 22.94 per cent of respondents. Comparatively, very low per cent of 13.10 consisted of the respondents who belonged to upper middle class.

Least per cent (1.72) was found to come within the category of upper class. Possibly, the farm women from upper class might not have been attending the training programmes as they remained more busy with homebased activities. This was supported by findings of Pandya and Gaekwad (1985). The families from upper class might not be

feeling important to attend these types of training programmes, on the contrary, the respondents from the other categories might have got the incentives of receiving stipend for attending training programmes. In some cases even socio-economic status could be the indicator for selecting trainees for training.

SES BASED ON SOCIAL BACKGROUND

When percentage and frequencies were calculated for each sub item on SES to discover the caste, land, house and type of family, the data revealed that majority of the respondents belonged to dominant caste (32.58 per cent). They possessed land of about 5.10 acres (28.62 per cent) had mixed house (33.44 per cent) and belonged to joint families (51.03 per cent) having more than five family members (65.00 per cent). Majority of the families of the respondents possessed about 3-4 drought animals (33.62 per cent), majority of the heads of the families were found to be having no membership in any social organisation (45.51 per cent).

SES BASED ON ECONOMIC BACKGROUND

Majority of the heads of the respondents' families indicated cultivation as their occupation (56.03 per cent). As for education, 25.24 per cent heads of the families had education up to high school. More than 65 per cent of families possessed cycles, radios, chairs, whereas comparatively few families possessed improved agricultural

implements (45.68 per cent). More than 48 per cent possessed television.

Analysis of this preliminary data revealed two distinct groups, therefore, it was decided to form only two categories of socio-economic status for further analysis of the data.

Table 11. Percentage Distribution of the Respondents According to Two Categories of SES Status

Categories of SES Status	F	Respondents' Percentages
Higher SES	196	33.98
Lower SES	384	66.02
Total...	580	100.00

The median was thought of as the appropriate statistical measure to categorise two levels of Socio-Economic status. The above table indicated that higher percentage (66.02) of the farm women were from the lower socio-economic group and lower percentage (33.98) of the farm women were from the higher socio-economic group.

3.1.3 PRIOR TRAINING BY FARMERS TRAINING CENTRE

All the respondents were categorised in two categories of training, that is, trained and untrained. Distribution of respondents according to the training received from Farmers' Training Centres is shown in table given below.

Table 12. Percentage Distribution of the Respondents According to the Prior Training Received by Farmers' Training Centres

Training	F	Respondents' Percentages
Trained	240	41.37
Untrained	340	58.63
Total...	580	100.00

As shown in table above, majority of them were not trained under the Farmers' Training Centres (58.63 per cent). As mentioned earlier that only 12 Farmers' Training Centres had conducted training programmes in Gujarat State. Therefore, only 41.37 per cent of the respondents were found to have been trained under these training programmes.

3.1.4 PROXIMITY TO THE CENTRE

Equal percentages of respondents were selected from the villages which were nearer to the centres (those within the radius of 15 kilometers from the centres) and those villages which were far (that is, those having distance of more than 15 kilometers) from the centre, for the purpose of the study. This was followed in every district of Gujarat State included in the study. Therefore, in both the categories the respondents were equal in number . The total number of the respondents was 580, out of which 290. respondents were from the villages closer to centres and the remaining 290 were from the villages which were away from the centres.

3.1.5 EXPOSURE TO DIFFERENT PROGRAMMES OTHER THAN THOSE OF FARMERS TRAINING CENTRE

It was noted that out of 580 farm women from 17 districts of Gujarat State, only three (3) farm women had attended training programmes other than Farmers' Training Centres within last two years. These farm women were from centres nearer to Deesa, Navsari and Thasra. This indicated that the programmes did not reach all the women. The women from Deesa, Navsari and Thasra had attended training course under Krishi Vigyan Kendra and Sardar Smruti Kendra which were at Deesa, Navsari and Anand respectively.

3.2 Identification of Training Needs in Home Science Education of the Selected Farm Women in Gujarat State

This section dealt with identifying training needs in Home Science Education of the selected farm women under the jurisdiction of training centres in Gujarat State.

For the purpose of administration and promotion of training programmes, the State of Gujarat is divided into three divisions, namely, South Gujarat with head quarter at Navsari, Central Gujarat with head quarter at Ahmedabad, and Saurashtra and Kutch division with head quarter at Rajkot. They are referred to as Navsari, Ahmedabad and Rajkot divisions.

3.2.1 AHMEDABAD DIVISION

The Farmers' Training Centres in Central Gujarat were at Ahmedabad, Thasra, Pilwai, Khedbrahma and Deesa under Ahmedabad division. They catered to the farmers and farm women from Ahmedabad, Kaira, Mehsana, Sabarkantha and Banaskantha districts.

The following table presents the population and number of villages in five districts of Gujarat State.

Table 13. Description of Number of Villages and Population in Five Districts and Talukas in Ahmedabad Division

District Talukas	No. of Villages	Male	Female	Total
1. Ahmedabad	653*	6,65,963	5,28,753	11,94,716*
Ahmedabad		12,316	11,194	23,510*
2. Kaira	965	12,57,978	11,50,694	24,08,672**
Thasra, Kaira	92	1,00,094	91,295	1,91,389
3. Mehsana	1089**	1,30,130	10,07,237	20,37,367
(Pilwai, Vijapur)	107	1,62,773	1,61,428	3,24,201**
4. Banaskantha	1368	7,82,700	7,41,046	15,23,746
Deesa	145	1,12,364	1,06,438	2,18,802
5. Sabarkantha	1359	6,83,133	6,70,441	13,53,574
Khedbrahma	132	61,310	59,846	1,21,156

* Least number of villages and population
** Most number of villages and population

The above table indicated that the most populated district in Central Gujarat under Ahmedabad division was Kaira. The least populated district was Ahmedabad (11,94,716). The most populated Taluka was Vijapur (3,24,201) in Mehsana district and least populated Taluka

was again Ahmedabad (23,510). There were less number of villages in Ahmedabad district (653) and more number of villages in Banaskantha district (1368).

Out of these five Farmers' Training Centres Khedbrahma is the Tribal Farmers' Training Centre. The major crops of this division are wheat, Toor, pulses, cotton, Juvar and Cumeen seeds. Deesa, Khedbrahma and Mehsana are the dry areas in this division, whereas Thasra (Kaira district) is more fertile and prosperous agricultural area.

The origin of agricultural schools is in (Anand) Kaira district in Gujarat State, which is later turned into Gujarat Agricultural University. It was established in 1972 with its main campus at Sardar Krushi Nagar (Dantiwada) in Banaskantha district with its other campuses at Anand, Junagadh and Navsari. Gujarat Agricultural University at Anand, in Kaira district, has agricultural school. Particularly Home Science School imparting two years' Diploma training to the farmers' daughters in various aspects of Home Science. Kaira district is also influenced by milk dairy and milk co-operatives.

Ahmedabad formerly was the capital of Gujarat State. The highest percentages of literacy in Gujarat State was in Ahmedabad (55.9 per cent) as per the 1981 census. Ahmedabad is connected to all the other districts. The National and State Highways passes through Ahmedabad. Therefore, it became the main trade market as well as main city of Gujarat

State which has its impact particularly on the nearby villages.

Khedbrahma (Sabarkantha) district is the district in backward area in Ahmedabad division. The people of this area were very poor and backward.

Mehsana and Banaskantha are also less developed areas as compared to Ahmedabad and Kaira districts except Krishi Nagar, where the main campus of Gujarat Agricultural University is established at Dantiwada near Deesa. Krishi Nagar might have some impact on the development of the area as well as on people.

3.2.2 NAVSARI DIVISION

The training centres in South Gujarat division were at Navsari, Vyara, Chhotaudepur, Rajpipla and Dahod. These training centres came under Navsari division. They catered to the farmers and farm women from Valsad, Surat, Bharuch, Vadodara, and Panchmahal districts.

The following table indicates the population and the number of villages in five districts as well as Talukas of Navsari division where Farmers' Training Centres were running.

Table 14. Description of Number of Villages and Population in Five Districts and Talukas in Navsari Division

District Talukas	No. of Villages	Male	Female	Total
1. Valsad	821*	6,90,262	6,95,012	13,85,272
(Navsari)	139	1,13,019	1,11,685	2,24,704**
2. Surat	1190	7,19,932	7,07,240	14,27,172
(Vyara)	148	79,270	78,810	1,58,080
3. Vadodara	1651	8,83,385	7,74,180	16,57,565
(Chhotaudepur)	276	1,09,315	1,07,403	2,16,718
4. Bharuch	1123	5,41,357	5,13,585	10,54,942*
(Rajpipla, Nanded)	205	78,034	71,995	1,48,072*
5. Panchmahal	1895**	10,52,633	10,11,504	20,64,137**
(Dahod)	119	1,06,924	1,07,142	2,14,066

* Least number of villages and population
** Most number of villages and population

The above table indicated the most populated district was Panchmahal (20,64,137) having more number of villages (1895). The least populated district was Bharuch having a population of 10,54,942. The most populated taluka was Navsari (2,24,704) and the least populated taluka was Nanded in Bharuch district having population of 1,48,072. The least number of villages (821) were in Valsad district.

Navsari is connected by roads and railway with all these districts. It is an important junction on Bombay-Ahmedabad-Delhi railway line and was connected to National Highway Number eight towards Ahmedabad.

Out of these five centres in Navsari division, Navsari taluka itself is the fertile area for food production. It grows more of fruits and vegetable as compared to other areas in Gujarat State. Paddy and sugarcane are the main crops in this taluka. Comparatively, the other four areas Vyara, Chhotaudepur, Rajpipla and Dahod are the dry areas. These areas are categorised as tribal areas. Bajra, maize and few pulses are the major food crops in these areas. The map of Gujarat showed that all these four areas are situated on eastern side of Gujarat State.

Navsari has one of the Agricultural University campuses where farmers' training and services were available. There were tribal upliftment programmes in all four tribal areas such as ICDS programmes in Chhotaudepur, NARDE Association in Vyara, SEVA RURAL institution near Rajpipla, tribal upliftment project research centre in Devgadh Baria and Dahod. These centres provide training and services to these tribal people in their respective areas.

3.2.3 RAJKOT DIVISION

Rajkot division had the highest number of training centres numbering seven, catering to each of the seven district namely, Rajkot, Surendranagar, Junagadh, Jamnagar, Amreli, Bhavnagar and Bhuj.

Table 15. Description of Number of Villages and Population in Seven District and Talukas in Rajkot Division

District Talukas	No. of Villages	Male	Female	Total
1. Rajkot	854	6,29,639	5,99,133	12,28,772
Rajkot	93	62,622	58,883	1,21,505
2. Surendranagar	648	3,80,281	3,56,917	7,37,198*
Surendranagar	46	39,279	36,671	75,950*
3. Junagadh	1071**	7,46,509	7,14,399	14,60,908**
Junagadh	77	55,566	51,530	1,07,096
4. Jamnagar	693	4,45,036	4,26,448	8,71,484
Jamnagar	99	70,914	67,883	1,38,436**
5. Kutch	887	3,82,972	3,92,817	7,75,789
Bhuj	145	66,980	67,883	1,34,863
6. Amreli	595*	4,33,229	4,25,526	8,58,755
Amreli	70	59,143	58,449	1,17,992
7. Bhavnagar	866	6,37,275	6,16,491	12,53,766
Bhavnagar	58	46,281	43,906	90,187

* Least number of villages and population
** Most number of villages and population

The above table revealed Junagadh (14,60,908) was the most populated district of Rajkot division with higher number of villages (1071). The least populated district (7,37,198) as well as taluka (75,950) was Surendranagar. The most populated taluka was Jamnagar having the population of 1,38,436. Amreli district had least number (595) of villages.

Rajkot is a central place of Saurashtra area. It is connected directly to all districts in Rajkot division by rail and road. The major crops in Rajkot division differ in

each districts. Surendranagar and Rajkot produce more cotton and Juvar. Jamnagar, Bhavnagar, Amreli and Surendranagar produce Juvar and Bajari, Coconut, and wheat are grown in Junagadh. Wheat in Bhavnagar and Amreli. The groundnut production is found in entire Saurashtra.

One of the campuses of Gujarat Agricultural University is in Junagadh for Saurashtra division with Sardar Smruti Kendra (SSK) under it. Jamnagar,Junagadh, Amreli and Bhavnagar were independent States under British rule and depict their influence in many ways. Kutch is more a desert area and is connected with Vankaner and Morvi by National Highway.

3.2.4 RANK ORDER OF THE ASPECTS IN HOME SCIENCE EDUCATION BY EXPERTS

The aspects of the study identified by the investigator as those in which training programme in Home Science Education can be undertaken were (1) Foods and Nutrition (2) Household storage (3) Grain Storage (4) Child Care (5) Health and Sanitation (6) Family Planning, and (7) Energy Management. Under each aspect number of statements describing the content of facts and practices were developed by the investigator on the basis of the syllabi of different training programmes organised for farm women in Gujarat State. Few more items were added which were based on new innovations and aspects related to present developmental programmes.

These items were validated and were given weightage by the experts in terms of importance. Since the respondents were neo literate and illiterate, these statements were read to them by the investigator. The responses were noted with tickmark against 'Yes' or 'No' which indicated whether or not they possessed knowledge projected through these statements.

Each of the statements was assigned a score on the basis of weightage given by the experts. These scores were used for affirmative responses which were added up aspectwise to arrive at total score for each of the respondents in each of the seven aspects of Home Science Education.

Those scores were used to compute aspectwise mean scores for respondents in total and according to divisions, centres within divisions, tribal and non tribal areas and also in relation to selected variables to identify training needs in selected aspects of Home Science Education. 't' tests were computed to study significant differences in mean, scores in selected aspects due to the divisions, centres within division as well as tribal and non tribal areas in Gujarat State. The Chi Square tests were used to find out the association between training needs and the selected variable under the study.

The following table showed the weightage given by the experts to each aspect separately and thus the rank order of the aspects are arranged on the basis of this weightage.

Table 16. Rank Order of Aspects in Home Science Education on the Basis of Weightage Assigned by the Experts

Aspects	Scores Assigned	Percentage Weightage	Rank Assigned
A. Foods and Nutrition	147	25.00	1
B. Health and Sanitation	112	19.04	2
C. Child Care	104	17.68	3
D. Grain Storage	84	14.28	4
E. Energy Management	65	11.05	5
F. Family Planning	53	9.00	6
H. Household Storage	23	3.92	7

According to the table above, Foods and Nutrition was given one fourth weightage and ranked first by the experts and trainers. This was in line with the developmental programmes promoted by Government of India through Applied Nutrition, special Nutrition as well as Supplementary Nutrition Programmes. INHEP which was the programme of Integrated Nutrition and Health Education Programme was reflected in 19.04 per cent weightage allotted to Health and Sanitation. In all of those programmes child has been an important target which was reflected in the choice of Child Care as the third important area of training under Home Science Education, with a weightage of 17.68 per cent.

Grain Storage received significant attention under extension programmes of Agricultural Universities which seemed to be the reason for allotting fourth rank to this aspect with 14.28 per cent weightage. Energy conservation and promotion of non-conventional energy sources among rural home makers has been a recent concern of planners and policy makers. Fifth rank was allotted to this area of Energy Management which seemed to follow the plans for Energy Education, for energy conservation. "Family Planning" which was undertaken as an important nation wide programme was ranked sixth, may be because of various socio-cultural constraints and already existing propaganda of the programmes and campaigns. Household storage, however, was considered the seventh and the last aspect of Home Science Education by the experts and trainers for which training should be imparted through these training centres.

3.2.5 RANK ORDER OF THE ASPECTS AS PER MEAN PERCENTAGE ACHIEVED BY THE FARM WOMEN IN GUJARAT STATE

When the data were analysed after receiving the responses of the selected farm women, the rank order changed on the basis of mean percentage including weightage given to each of the seven aspects of Home Science Education by them. Table No.17 indicated the revised rank order based on percentage. It also indicated the mean scores of the respondents which corresponded with the rank orders given by the experts.

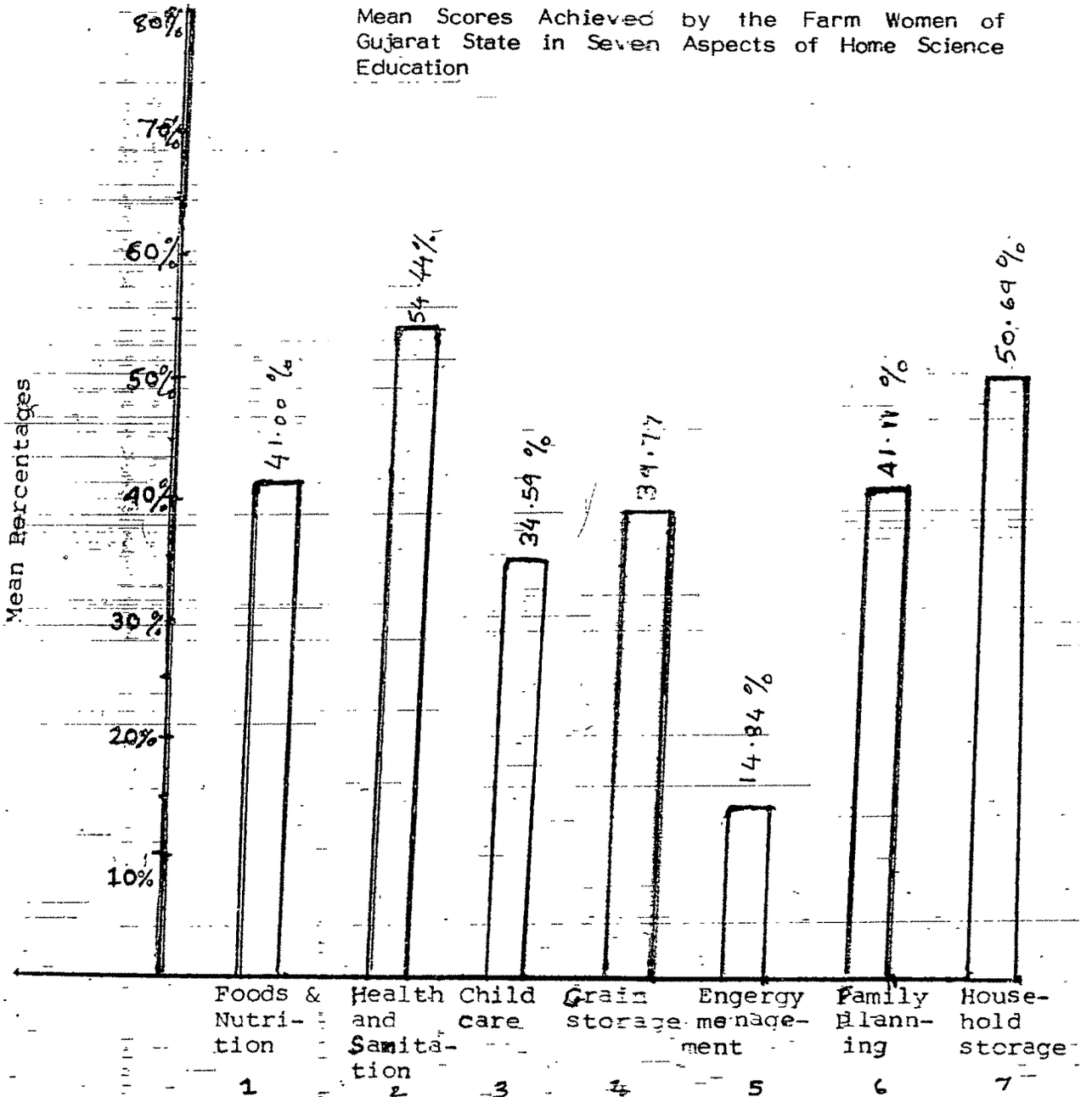
Table 17. Distribution of Seven Aspects in Home Science Education Based on the Mean Percentage Achieved by the Selected Farm Women According to Rank Orders Given by the Experts

Aspects	Rank Order given by the experts	Mean Scores achieved by resp-ondents	Percentage Weightage	Revised Rank Order
A. Health and Sanitation	2	60.98	54.44	1
B. Household Storage	7	11.66	50.69	2
C. Family Planning	6	21.79	41.11	3
D. Foods and Nutrition	1	60.27	41.00	4
E. Grain Storage	4	33.41	39.77	5
F. Child Care	3	35.98	34.59	6
G. Energy Management	5	9.65	14.84	7

Percentage, to arrive at rank orders were computed as mean scores in proportion with total scores which were not the same for each aspect of Home Science Education identified in the present study. All tables in the following section are reported according to revised rank orders and base of 100 as a score for all the aspects.

According to the above table Health and Sanitation aspect was ranked first having a mean percentage of 54.44 and mean score of 60.98. Household storage was ranked second with a mean percentage of 50.69 and a mean score of 11.66,

Mean Scores Achieved by the Farm Women of Gujarat State in Seven Aspects of Home Science Education



Rank order given by experts to the seven aspects in Home Science Education.

Family Planning was ranked third with mean percentage of 41.11 and a mean score of 21.79. Fourth rank was given to the aspect of Foods and Nutrition having a mean percentage of 41.00 and a mean score of 60.27, Grain Storage was ranked fifth with a mean percentage 39.77 and a mean score of 33.41, Child Care ranked sixth with a mean percentage of 34.59 and a mean score of 35.98. Energy Management was assigned seventh rank since it had a lowest mean percentage of 14.84 and a lowest mean score of 9.65.

Thus, it can be concluded that the farm women in Gujarat State had training needs in five aspects out of seven aspects, namely Family Planning, Foods and Nutrition, Grain Storage, Child Care and Energy Management.

The farm women had higher training needs in the aspect of Energy Management followed by the aspect of Child Care, and Grain Storage. However, in the aspects of Family Planning and Foods and Nutrition the needs for training were less compared to the above aspects.

3.2.6 IDENTIFICATION OF TRAINING NEEDS IN SELECTED ASPECTS OF HOME SCIENCE EDUCATION OF SELECTED FARM WOMEN FROM THREE DIVISIONS OF GUJARAT STATE

When the mean scores in selected aspects of Home Science Education achieved by the farm women from three divisions of Gujarat State, namely, Ahmedabad, Navsari and Rajkot were compared, the data revealed as per the following table.

Table 18. Distribution of Mean Scores in Selected Aspects of Home Science Education of the Farm Women Belonging to Three Divisions of Gujarat State

N = 580

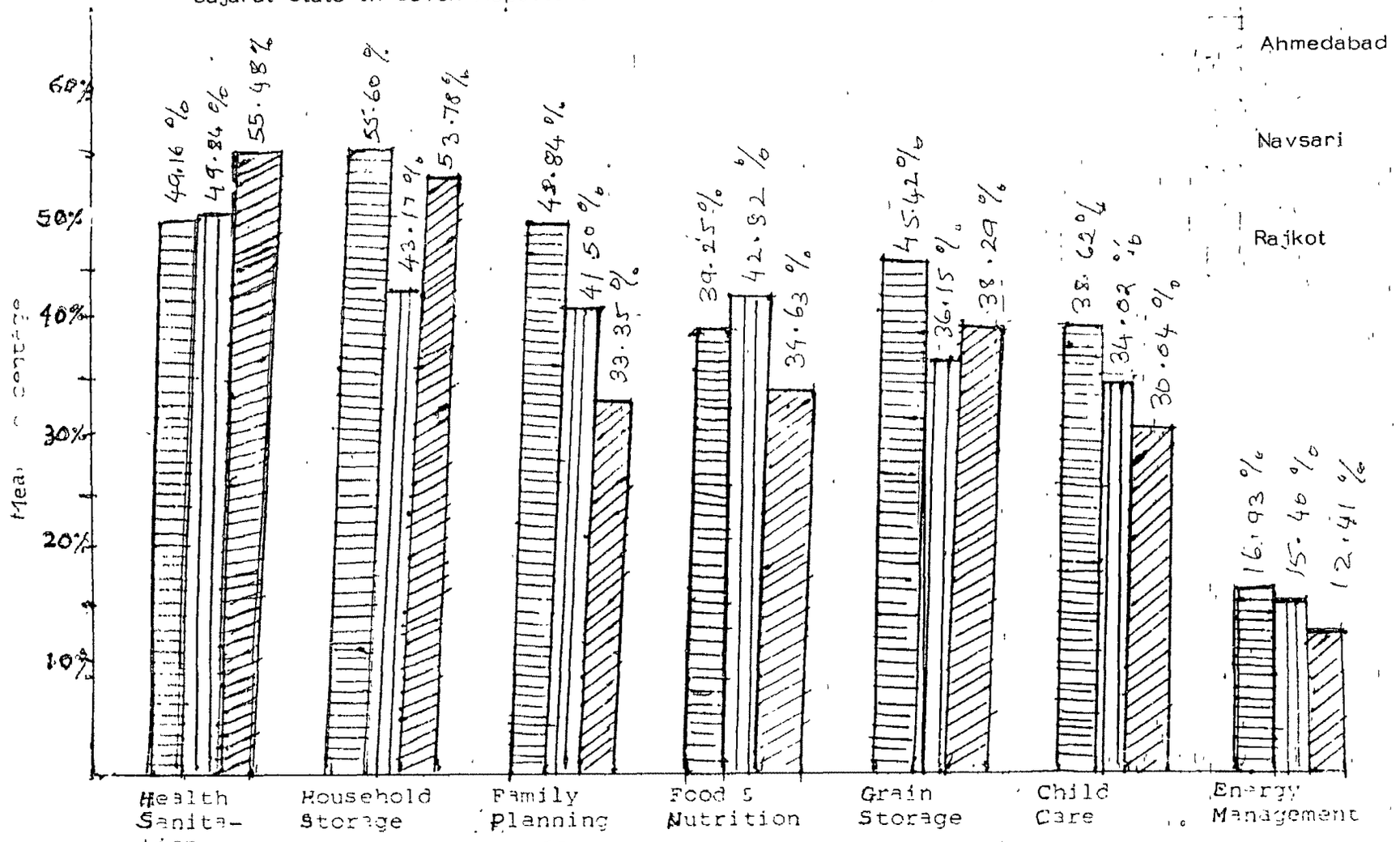
No.	Aspects	Divisions of Gujarat State Ahmedabad N = 180	Navsari N = 200	Rajkot N = 200
A.	Health and Sanitation	49.56	49.84	55.48*
B.	Household Storage	55.60*	43.17	53.78
C.	Family Planning	48.84	41.50	33.35
D.	Foods and Nutrition	39.25	42.82	34.63
E.	Grain Storage	45.42	36.15	38.29
F.	Child Care	38.62	34.02	30.04
G.	Energy Management	16.93	15.40	12.41

* Mean Score above 50 %

In the aspect of Health and Sanitation, which ranked first, the farm women from Rajkot division had the highest mean score of 55.48 followed by those from Navsari having 49.84 followed by those from Ahmedabad division having 49.46. Since those having scores below 50 were considered as those who need training in those aspects, it was concluded that the farm women from Ahmedabad had need for training in Health and Sanitation aspect.

In the second aspect of Household Storage the farm women from Ahmedabad had the highest mean score of 55.60 with those from Rajkot division scoring 53.78. The farm

Mean Scores Achieved by the Farm Women from Three Divisions of Gujarat State in Seven Aspects of Home Science Education



women from Navsari division had the lowest mean score of 43.17 indicating training needs for them in this aspect of Household Storage.

In the third aspect of Family Planning again the farm women from Ahmedabad division had the highest mean score of 48.84, closely followed by those from Navsari having 41.50 and those from Rajkot division with the lowest mean score of 33.35. From the mean scores of less than 50 earned by the farm women from three divisions in this aspect, the data indicated that all of them needed training in Family Planning.

In the aspect of Foods and Nutrition which was ranked fourth, the farm women from Navsari division had the highest mean score of 42.82 followed by those from Ahmedabad division having 39.25. The lowest mean score of 34.63 was earned by those from Rajkot division. The data thus revealed that farm women from all the three divisions needed training in Foods and Nutrition aspect of Home Science Education since the mean scores earned by the farm women from those divisions for this aspect was less than fifty.

In the aspect of 'Grain Storage' which was ranked fifth, the farm women from Ahmedabad division had the highest mean score of 45.42 followed by those from Rajkot division scoring 38.29 mean score whereas the lowest mean score of 36.15 was scored by those from Navsari division. These mean scores were less than fifty, thus, indicated that

there is a need for training them in this aspect.

In the aspect of Child Care, which was ranked sixth the highest mean score of 38.62 was achieved by the farm women from Ahmedabad division followed by those from Navsari division having a mean score of 34.02. The farm women from Rajkot division had the lowest mean score of 30.04, even in the aspect of Child Care. Thus, this data lead to conclude that the farm women from all three divisions had need for training in Child Care aspect.

In the seventh aspect of Energy Management the overall mean scores of the farm women belonging to three divisions were low. However, among them those from Ahmedabad had the highest mean score of 16.93 followed by those from Navsari having a mean score of 15.40 and those from Rajkot having the lowest mean of 12.41. Data, thus, revealed great need for training the farm women from all the three divisions in Energy Management aspect.

3.2.7 IDENTIFICATION OF TRAINING NEEDS IN SELECTED ASPECTS OF HOME SCIENCE EDUCATION OF SELECTED FARM WOMEN FROM THE AREAS NEAR TO TRAINING CENTRES WITHIN THREE DIVISIONS

When the data concerning training needs indicated by the mean scores achieved by the farm women belonging to the areas near the training centres in each of these three divisions were analysed, the following information was revealed.

3.2.7.1 Within Ahmedabad division. In Ahmedabad division there were five centres at Ahmedabad, Thasra, Pilwai, Khedbrahma and Deesa, which catered the information to the farm women from Ahmedabad, Kaira, Mehsana, Sabarkantha and Banaskantha districts.

Table 19. Distribution of Mean Scores in Selected Aspects of Home Science Education Achieved by the Farm Women from Areas Near the Farmers' Training Centres of Ahmedabad Division

N = 180

Aspects	Ahme-dabad	Thasra	Pilwai	Khed-brahma	Deesa
A. Health and Sanitation	66.01*	69.58*	49.69	55.38*	44.15
B. Household Storage	50.43*	72.73*	56.95*	42.00	56.26*
C. Family Planning	53.60*	63.26*	37.50	42.05	46.75
D. Foods and Nutrition	52.26*	54.50*	36.57	45.61	36.61
E. Grain Storage	49.29	54.35*	44.21	37.76	37.68
F. Child Care	41.83	41.18	31.45	38.00	36.60
G. Energy Management	25.06	21.56	8.63	13.46	11.00

* Mean Score above 50 %

The above table revealed that the farm women from Ahmedabad had the mean score above 50 in four aspects namely, Health and Sanitation (66.01), Household Storage (50.43), Family Planning (53.60) and Foods and Nutrition (52.26) indicating training needs in Grain Storage and Energy Management and Child Care. Farm women from Thasra had

mean score above 50 in five out of seven aspects, indicating training needs only in two aspects namely, Child Care (41.18) and Energy Management (21.56). Those from Ahmedabad had mean score of more than 50 in four out of seven aspects indicating needs for training in three aspects namely Grain Storage (49.29), Child Care (41.83) and Energy Management (25.06).

The Farm women from Pilwai had more than 50 mean score in two aspects, namely Household Storage as well as Health and Sanitation indicating needs for training in five aspects, namely, Grain Storage (44.21), Family Planning (37.50), Foods and Nutrition (36.57), Child Care (31.45) and Energy Management (8.63).

The farm women from Khedbrahma and Deesa had mean scores of more than 50 in only one aspect each, namely, Health and Sanitation (55.38) for those from Khedbrahma and in Household Storage (56.26) for those from Deesa. Farm women from Khedbrahma needed training in Foods and Nutrition (45.61). Household Storage (42.00), Family Planning (42.05), Child Care (38.00), Grain Storage (37.76) and Energy Management (13.46). In case of those from Deesa, they needed training in Family Planning (46.75), Health and Sanitation (44.15), Grain Storage (37.68), Foods and Nutrition (36.61), Child Care (36.60) and Energy Management (11.00).

It can be, therefore, concluded that the farm women from the areas near to Thasra in Kaira district had training needs in only two areas. They were better off in other

aspects of Home Science Education. They scored more than 60 as mean score in Family Planning (63.26), Health and Sanitation (69.58) and Household Storage (72.73). They scored almost equal mean score in Foods and Nutrition (54.50) and Grain Storage (54.35) which were more than 50.

Farm women from Ahmedabad scored more than 60 as mean score in only one aspect, namely, Health and Sanitation (66.01) and scored almost equally in Family Planning (53.60) and Foods and Nutrition (52.26).

The lowest mean scores in more aspects were found for the farm women from Khedbrahma and Deesa, both belonging to North Gujarat and closer to the Gujarat Agricultural University having college of Home Science. These centres also have well trained Home Science staff which should really indicate better preparation and lesser need for training in aspects of Home Science Education.

3.2.7.2 Within Navsari division. In Navsari division, there were five centres. Navsari, which was non-tribal and other four were the tribal areas, namely, Vyara, Chhota-udepur, Rajpipla and Dahod. They catered the information to the farm women from Navsari, Surat, Vadodara, Bharuch and Panchmahal districts respectively.

Table 20. Distribution of Mean Scores in Selected Aspects of of Home Science Education Achieved by the Farm Women Belonging to Navsari Division of Gujarat State

N = 200

Aspects	Navsari	Vyara	Chhota-udepur	Rajpipla	Dahod
A. Health and Sanitation	66.70*	42.16	56.45*	50.89*	49.58
B. Household Storage	60.00*	35.34	44.43	35.69	40.47
C. Family Planning	67.00	28.28	49.13	38.64	25.98
D. Foods and Nutrition	55.00	36.32	45.37	36.93	39.88
E. Grain Storage	55.82	25.16	36.11	30.70	32.66
F. Child Care	43.91	29.50	39.41	30.49	34.23
G. Energy Management	21.84	11.50	18.27	11.63	13.81

* Mean Score above 50 %

As revealed by the table above, the farm women from areas near to Navsari centre had more than 50 as mean score in five out of seven aspects of Home Science Education. The mean score of 43.91 and 21.84 for Child Care and Energy Management respectively indicated need for training for those farm women in those two aspects only. Farm women from the areas near to Vyara indicated need for training in all the seven aspects of Home Science Education as indicated by their mean scores in each of these aspects namely Health and Sanitation (42.16), Foods and Nutrition (36.32), Household

Storage (35.34), Child Care (29.50), Family Planning (28.28), Grain Storage (25.16) and Energy Management (11.50) which were lower than 50 per cent. Farm women from the areas near to Chhotaudepur scored a mean of 56.45 in the aspect of Health and Sanitation. However, in all the rest of the six aspects of Home Science Education, there was a need for training them. Their mean scores in each of the remaining six areas were as follows : Family Planning (49.13), Foods and Nutrition (45.37), Household Storage (44.43), Child Care (39.41), Grain Storage (36.11) and Energy Management (18.27).

The Farm women from the areas closer to Rajpipla and Dahod had the same mean scores of (50.89) and (49.58) respectively in Health and Sanitation. In the rest of the six aspects of Home Science Education they need to be trained as revealed by their mean scores in each of these aspects. The mean scores of the farm women from from the areas nearer to Rajpipla indicated that they needed training in Family Planning (38.64), Foods and Nutrition (36.93), Household Storage (35.69), Grain Storage (30.70), Child Care (30.49) and Energy Management (11.63). Whereas the mean score of the farm women from areas closer to Dahod center indicated that they needed training in Household Storage (40.47) followed by Foods and Nutrition (39.88) followed Child Care (34.23), Grain Storage (32.66), Family Planning (25.98) and Energy Management (13.81).

The analysis of the data in Navsari division led to conclude that only the farm women closer to Navsari centre were benefited and had better mean scores in majority of the aspects (five) in Home Science Education. Whereas the farm women from the other three centres had better mean scores only in one aspect that is Health and Sanitation. Farm women nearer to Vyara, which is a backward area inhabitated by tribal indicated need for training in all the aspects of Home Science Education. They had the lowest mean scoresin all the seven aspects when compared to the farm women from the areas closer to the other centres.

Data further indicated that the farm women from the areas near to Chhotaudepur, Rajpipla and Dahod centres too had greater need for training in six out of seven aspects of Home Science Education. These areas too belonged to backward areas of Baroda, Bharuch and Panchmahal districts, respectively. Thus, it can be concluded that there is a need to conduct training programmes in most of the aspects identified under Home Science Education by training centres located in backward areas of Surat, Bharuch, Vadodara and Panchmahal districts.

3.2.7.3 Rajkot division. When the data for identifying training needs in seven aspects in Home Science Education for the farm women belonging to the areas near the training centres under Rajkot division were analysed, following information was revealed.

There are seven centres in Rajkot division. All of them are non-tribal areas. They are Rajkot, Surendranagar, Junagadh, Jamnagar, Bhuj, Amreli and Bhavnagar, which are the districts of Gujarat State. They catered information to the farm women from their own districts.

Table 21. Distribution of Mean Scores in Selected Aspects of Home Science Education Achieved by the Farm Women Belonging to Rajkot Division of Gujarat State

N=200

Aspects	Surendra--nagar	Rajkot	Juna-gadh	Jam-nagar	Bhuj	Amreli	Bhav-nagar
A. Health and Sanitation	60.89*	60.94*	65.70*	42.45	42.25	47.29	46.96
B. Household Storage	56.00*	55.65*	60.30*	45.60	54.13*	51.00*	42.43
C. Family Planning	44.03	27.90	38.22	29.90	27.67	30.03	25.30
D. Foods and Nutrition	39.10	40.18	37.59	26.18	31.31	27.72	27.32
E. Grain Storage	40.53	40.36	47.66	26.48	29.80	34.95	34.67
F. Child Care	31.31	29.98	36.72	28.70	28.63	24.33	26.77
G. Energy Management	12.95	11.90	15.10	10.76	8.23	6.87	12.32

* Mean Score above 50 %

The above table revealed that the over all means scores of the farm women from the areas around the seven centres of Rajkot division indicated poor knowledge in six aspects of

Home Science Education. Only in the aspect of Health and Sanitation the farm women from the areas near to Surendranagar (60.89), Rajkot (60.94) and Junagadh (65.70) had high mean scores denoting lesser training needs in these aspects. Those from the areas near to Surendranagar (56.00), Rajkot (55.65), Junagadh (60.30) as well as Bhuj (54.13) and Amreli (51.00) had the mean scores higher than 50 in the aspects of Household Storage denoting lesser training needs in this aspect. However, in the rest of the five aspects namely Family Planning, Foods and Nutrition, Grain Storage, Child Care, and Energy Management, the farm women from the areas near to all the seven centres indicated greater training needs as revealed by their mean scores which were quite low.

The farm women from the areas near to Surendranagar had mean scores of 44.03 in Family Planning, 40.53 in Grain Storage, 39.10 in Foods and Nutrition, 31.31 in Child Care, and only 12.95 in Energy Management. The farm women from the areas closer to Rajkot scores 40.36 in Grain Storage, 40.18 in Foods and Nutrition, 29.98 in Child Care, 27.90 in Family Planning and 11.90 in Energy Management. For those closer to Junagadh centre the mean scores were 47.66 in Grain Storage followed by 38.22 in Family Planning and almost same in Foods and Nutrition, 37.59 and Child Care (36.72) and 16.10 in Energy Management.

The farm women from Bhuj and Amreli had mean scores lower than 50 in six out of seven aspects of Home Science

Education. The Farm women from Bhuj scored mean scores of (54.13) and Amreli (51.00) in the aspect of Household Storage. In the other three aspects of Health and Sanitation (47.29), Grain Storage (34.95), and Family Planning (30.03) the farm women from the areas near to Amreli centre had comparatively higher mean than those from Bhuj who had 42.25, 29.80 and 27.67 mean scores in Health and Sanitation, Grain Storage and Family Planning aspects respectively. However, in the other three aspects namely Foods and Nutrition (31.31), Child Care (28.63) and Energy Management (8.23), they had better mean scores than those who were from places near Amreli who had 27.72 in Foods and Nutrition, 24.33 in Child Care and only 6.87 in Energy Management.

The farm women from the area near to Jamnagar had low mean scores in all the seven aspects. They scored the mean of 45.60 in Household Storage, 42.45 in Health and Sanitation, 29.90 in Family Planning, 28.70 in Child Care, 26.48 in Grain Storage, 26.18 in Foods and Nutrition and 10.76 in Energy Management. The farm women from Bhavnagar too had low mean score in all the seven aspects of Home Science Education with 46.96 in Health and Sanitation, 42.43 in Household Storage, 34.67 in Grain Storage, 27.32 in Foods and Nutrition, 26.77 in Child Care, 25.30 in Family Planning and 12.32 in Energy Management.

This analysis of data again confirmed that the farm women from the areas closer to divisional headquarters and agricultural university campus (in this case Junagadh) have better knowledge than those from the areas close to the other centres which are from not so progressive parts of the division. However, the overall mean scores of the farm women from the areas near to centres in Rajkot division were found to be very poor indicating greater need for promoting training programmes in the selected aspects of Home Science Education.

It is necessary to probe further regarding the possible reasons for poor mean scores and factors responsible for the same and over come them to provide better training opportunities for the farm women on these aspects.

3.2.8 IDENTIFICATION OF TRAINING NEEDS IN SELECTED ASPECTS OF HOME SCIENCE EDUCATION OF FARM WOMEN FROM TRIBAL AND NON-TRIBAL AREAS OF THREE ADMINISTRATIVE DIVISIONS OF GUJARAT STATE

There were five tribal areas studied under this investigation. The majority (4) of tribal areas were under Navsari division namely Vyara, Chhotaudepur, Rajpipla and Dahod. The fifth tribal area, Khedbrahma was in Ahmedabad division of Gujarat State. There was not a single tribal area in Rajkot division.

The following table provides the data concerning the mean scores achieved in the seven selected aspects of Home Science Education by the farm women from both Tribal and Non-Tribal areas of Gujarat State.

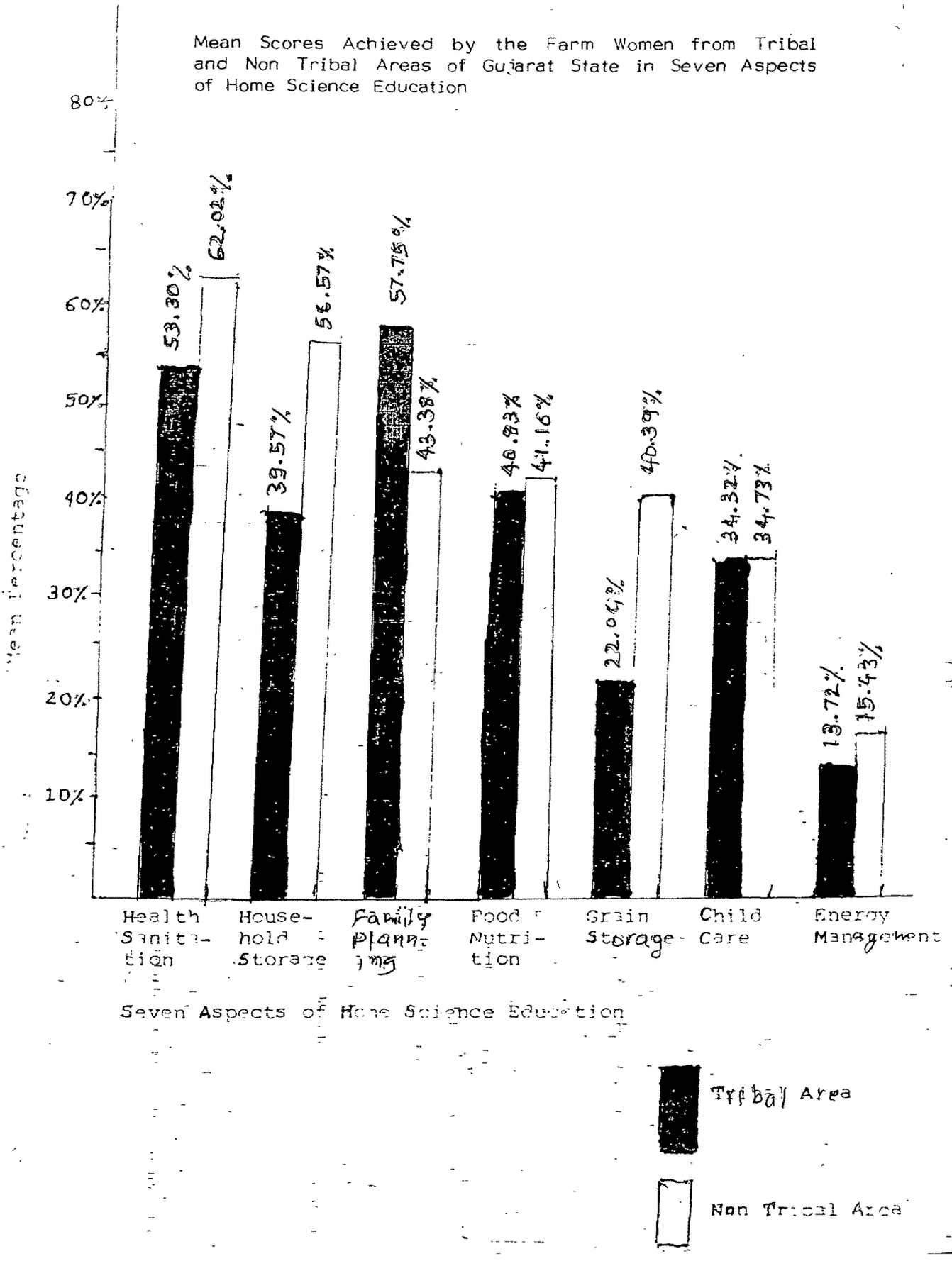
Table 22. Distribution of Mean Scores Obtained in Seven Selected Aspects of Home Science Education by Farm Women in Tribal and Non-Tribal Areas of Three Administrative Divisions of Gujarat State

N = 580

Aspects in Home Science	Mean Scores Achieved by the Farm Women in	
	Tribal Area	Non-Tribal Area
1. Health and Sanitation	53.30	62.02
2. Household Storage	39.57	56.57
3. Family Planning	57.75	43.38
4. Foods and Nutrition	40.83	41.10
5. Grain Storage	22.04	40.39
6. Child Care	34.32	34.73
7. Energy Management	13.72	15.43

On the basis of the mean scores achieved by the farm women from Tribal and Non Tribal centres revealed that out of seven aspects in four aspects namely Health and Sanitation (62.02), Household Storage ((56.57), Grain Storage (40.39) and Energy Management (15.43) the farm women from Non-Tribal centres achieved higher mean scores

Mean Scores Achieved by the Farm Women from Tribal and Non Tribal Areas of Gujarat State in Seven Aspects of Home Science Education



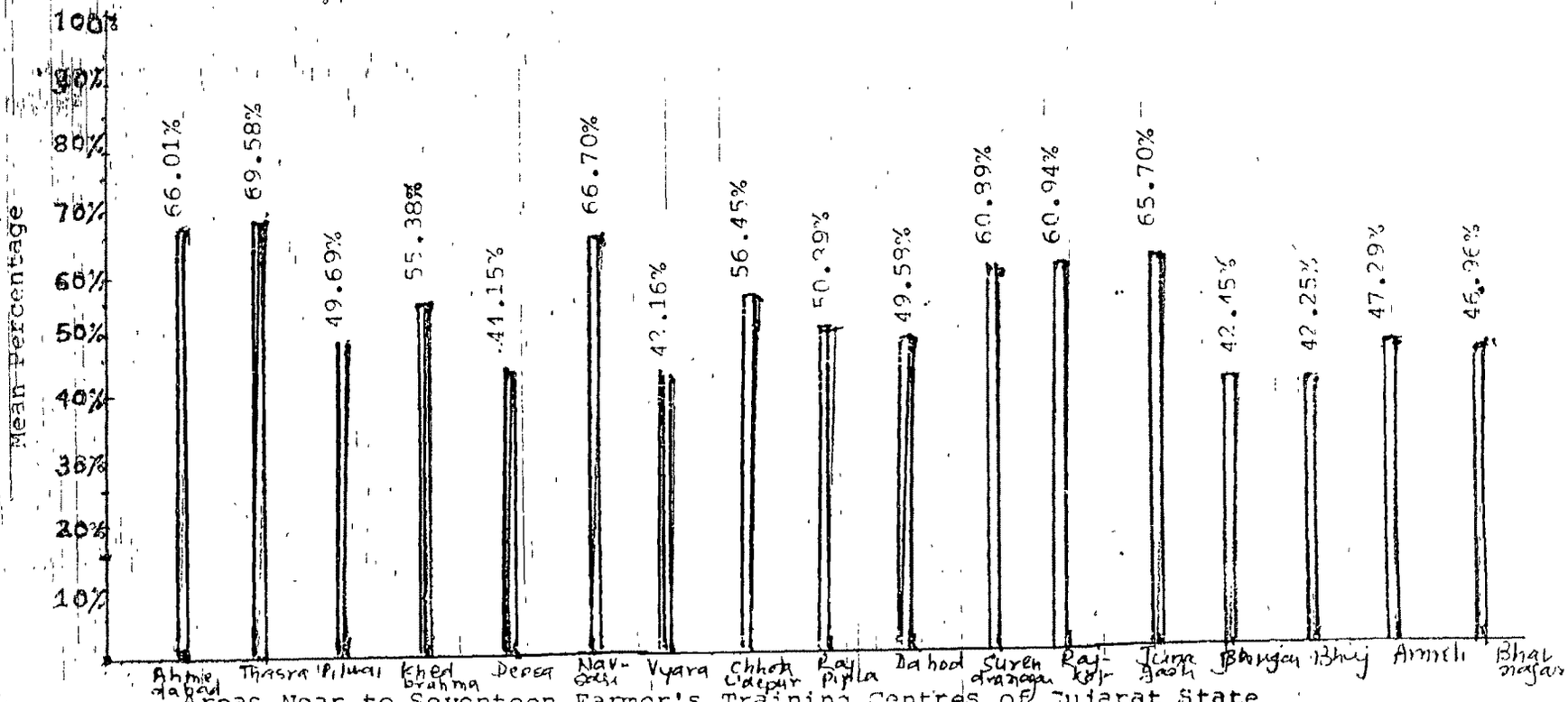
indicating lesser training needs in those aspects when compared to the mean scores achieved by their counter parts from Tribal Centres.

In the aspect of Foods and Nutrition and Child Care the farm women from Non Tribal areas scored 41.10 and 34.73 respectively and farm women from tribal areas scored 40.83 and 34.32 respectively which indicated almost similar level of training needs.

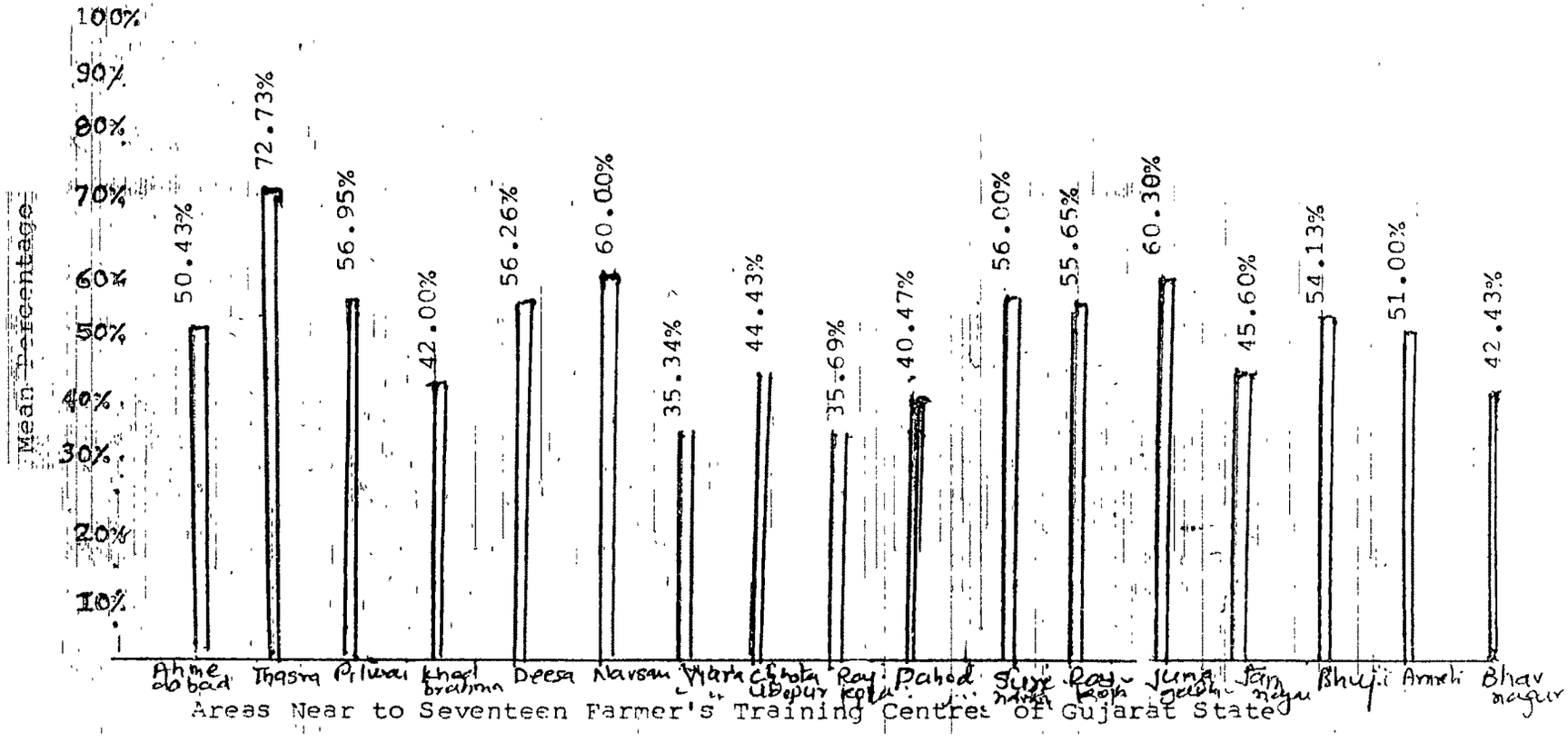
It is to be noted that in the aspect of Family Planning the farm women from tribal areas achieved higher mean score (57.75) than the farm women (43.38) from Non Tribal areas.

It was also noted that the farm women from Non Tribal areas had lesser extent of training need in the aspect of Health and Sanitation whereas the farm women from Tribal areas indicated lesser training needs in the aspects of Family Planning. The farm women from Tribal and Non-Tribal areas had higher training needs in the aspect of Energy Management.

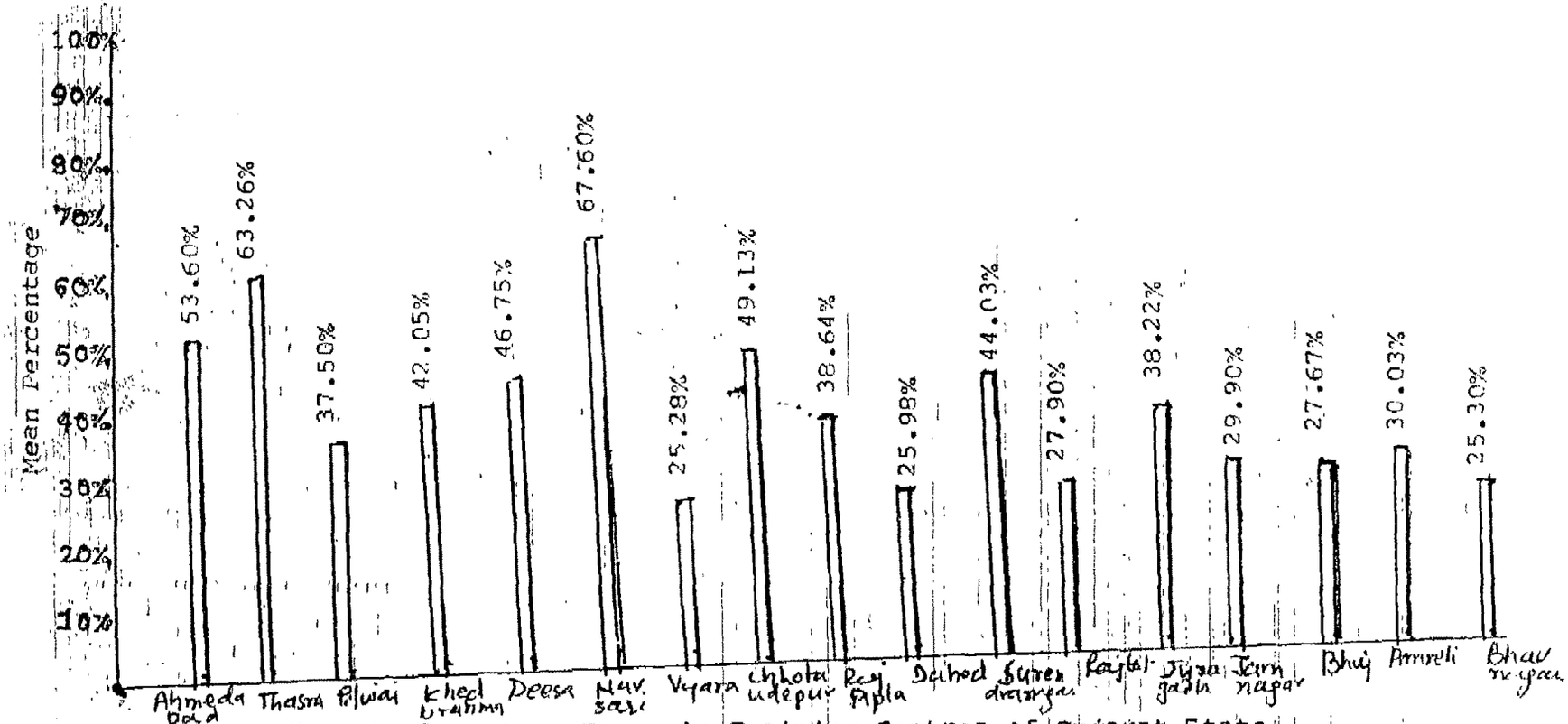
Mean Scores Achieved by the Farm Women from the Areas Near to Seventeen Farmers' Training Centres of Gujarat State in the aspect of Health & Sanitation



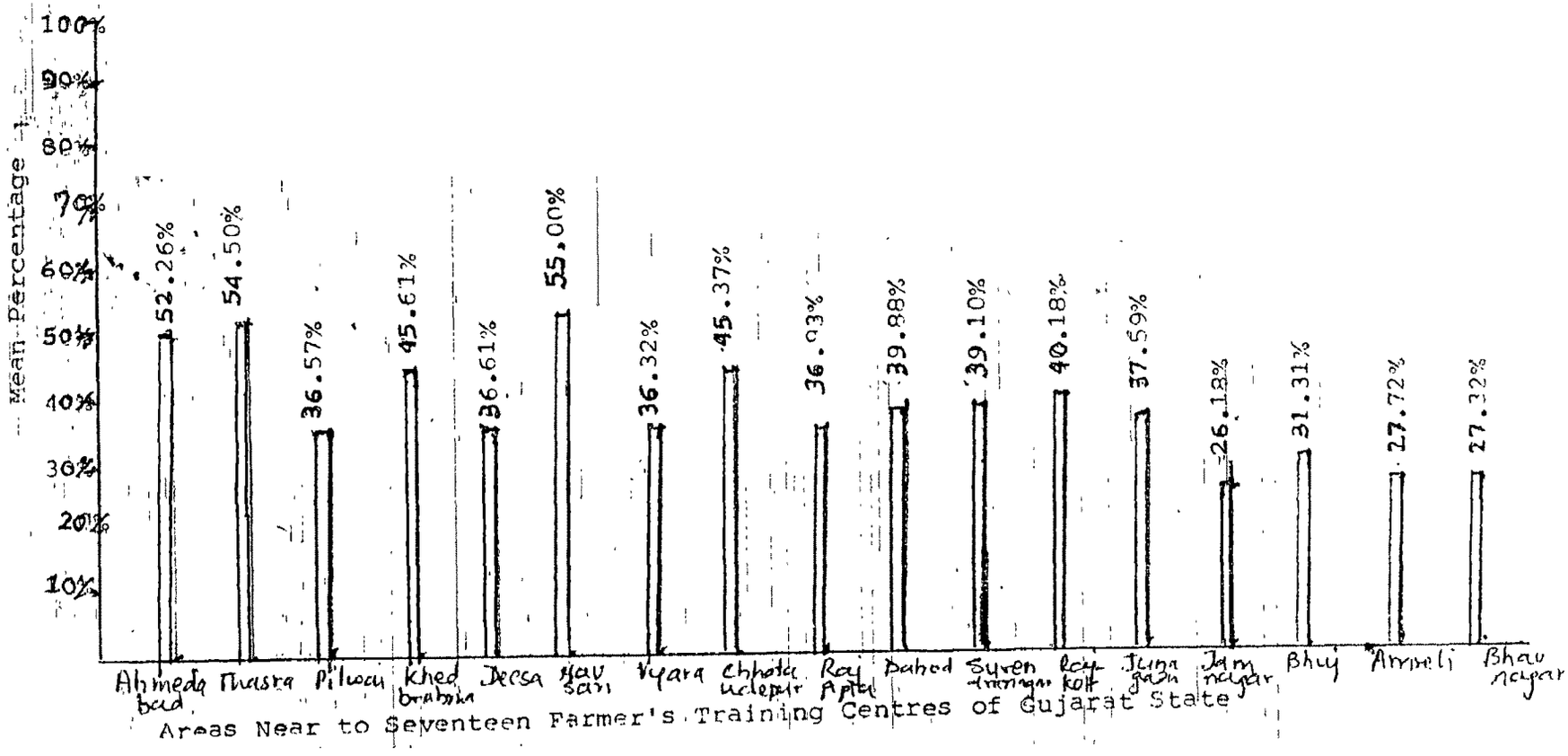
Mean Scores Achieved by the Farm Women from the Areas Near to Seventeen Farmers' Training Centres of Gujarat State in the aspect of Household Storage



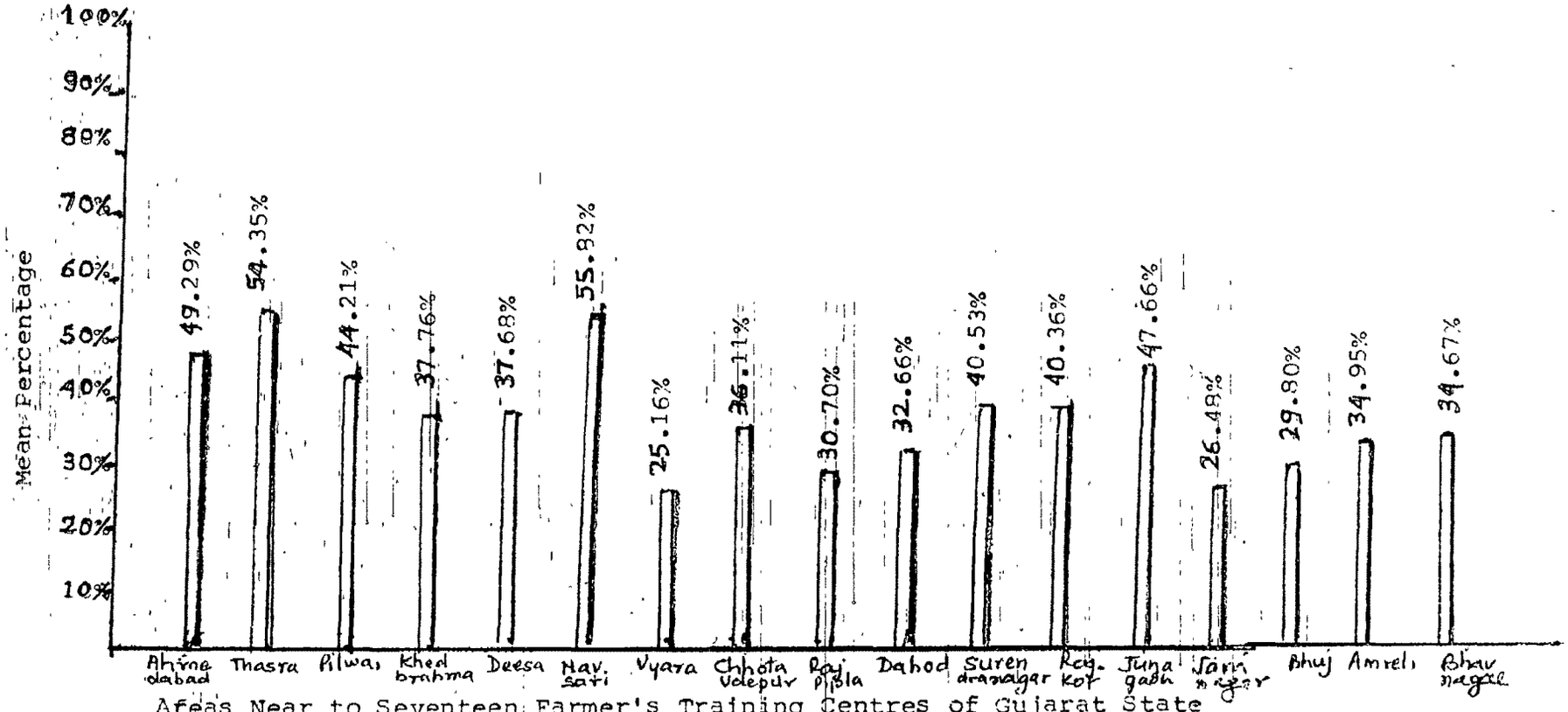
Mean Scores Achieved by the Farm Women from the Areas Near to Seventeen Farmers' Training Centres of Gujarat State in the aspect of Family Planning



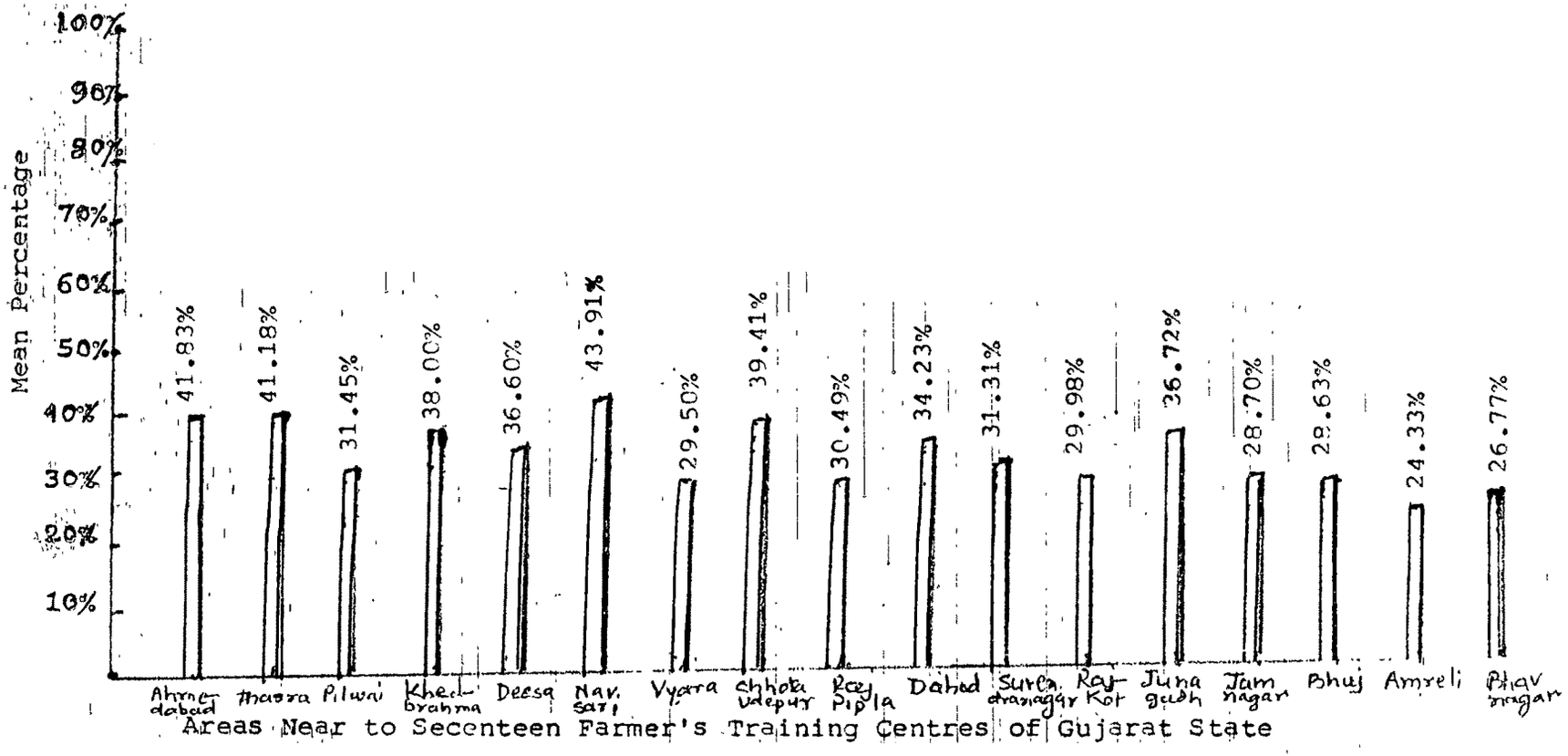
Mean Scores Achieved by the Farm Women from the Areas Near to Seventeen Farmers' Training Centres of Gujarat State in the aspect of Foods & Nutrition.



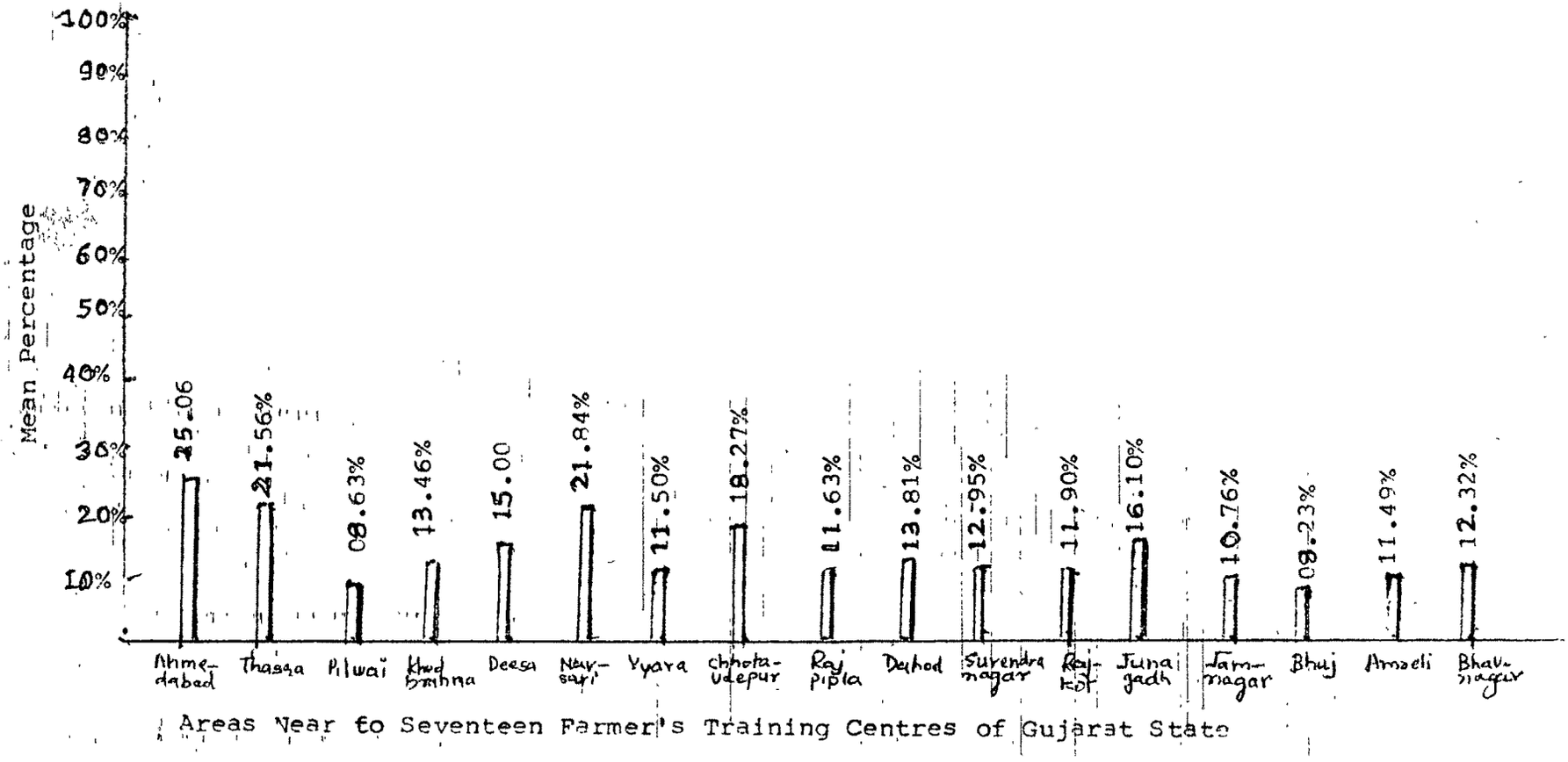
Mean Scores Achieved by the Farm Women from the Areas Near to Seventeen Farmers' Training Centres of Gujarat State in the aspect of Grain Storage



Mean Scores Achieved by the Farm Women from the Areas Near to Seventeen Farmers' Training Centres of Gujarat State in the aspect of Child Care



Mean Scores Achieved by the Farm Women from the Areas Near to Seventeen Farmers' Training Centres of Gujarat State in the aspect of Energy Management



3.3 Differences in Mean Scores Achieved in Seven Aspects of Home Science Education of Farm Women From Three Divisons Between Tribal and Non Tribal Areas of of Gujarat State

The 't' test is applied to study the differences in mean scores achieved in seven aspects of Home Science Education of the farm women from the three administrative divisions and from the areas nearer to training centres within three divisions of Gujarat State as well as Tribal and Non Tribal areas of Gujarat State.

3.3.1 DIFFERENCES IN THE MEAN SCORES OF FARM WOMEN IN SEVEN ASPECTS OF HOME SCIENCE BETWEEN THREE DIVISIONS OF GUJARAT STATE

This part dealt with the differences in the mean scores achieved by the farm women between three divisions namely Ahmedabad, Navsari and Rajkot in each aspect separately in their rank order. These differences indicated the need for training for the farm women from these three divisions of Gujarat State.

The following tables indicated the 't' values denoting mean differences in the mean scores achieved in seven selected aspects in Home Science Education by the farm women from three divisions namely Ahmedabad, Navsari and Rajkot.

3.3.1.1 Differences in Training Needs in the aspect of Health and Sanitation. The following table revealed the 't' values denoting mean differences in the mean scores achieved in the aspect of Health and Sanitation by the farm women from three divisions, namely, Ahmedabad, Navsari and Rajkot.

Table 23. Differences in Mean Scores Achieved by the Farm Women from Three Divisions of Gujarat State in the Aspect of Health and Sanitation

Divisions of Gujarat State	Means Percentage	Divisions of Gujarat State 't' Value and df	
		Navsari	Ahmedabad
Rajkot	55.48	4.28* (398)	4.43* (378)
Navsari	49.84	--	0.30 (378)
Ahmedabad	49.46	--	--

* significant at .01 level of confidence

The above table indicated 't' values of 4.43 with the mean scores of the farm women from Ahmedabad (49.46) and Rajkot (55.48) which was found to be highly significant at .01 level of confidence for 378 df indicating significant difference in the training needs for the farm women from Ahmedabad and Rajkot divisions.

The computed 't' value 4.28 with the mean score of the farm women from Navsari (49.84) and Rajkot (55.48) was also found to be significant at .01 level of confidence for

398 df. This indicated that there was a significant difference in the training needs of the farm women from Navsari and Rajkot. However, the computed 't' value of .30 in the mean scores of the farm women from Navsari (49.48) and Ahmedabad (49.46) was not found significant as per tabled 't' value.

The null hypothesis that there will be no significant difference in the extent of need for training in the aspect of Health and Sanitation for the farm women belonging to three administrative divisions of Gujarat State was rejected in case of the farm women from Ahmedabad and Rajkot and also Navsari and Rajkot. The same null hypothesis was retained in case of the farm women from Navsari and Ahmedabad.

Thus, it can be concluded that there were significant differences in the training needs of the farm women from Rajkot and Navsari as well as Rajkot and Ahmedabad. The training needs were higher for the farm women from Navsari and Ahmedabad than those were from Rajkot in the aspect of Health and Sanitation.

3.3.1.2 Differences in Training Needs in the aspects of Household Storage. The following table showed the computed 't' value of 5.48 and the mean scores of the farm women from Ahmedabad (55.60) and Navsari (43.17) which was found to be highly significant at .01 level of confidence for 378 df.

Table 24. Difference in Mean Scores Achieved by the Farm Women From Three Divisions of Gujarat State in the Aspect of Household Storage

Divisions Gujarat	Mean Percentage	Divisions of Gujarat State 't' Value and df	
		Rajkot	Navsari
Ahmedabad N = 180	55.60	0.85 (378)	5.48* (378)
Rajkot N = 200	53.78	-	4.84* (398)
Navsari N = 200	43.17	-	-

* significant at .01 level of confidence

The computed 't' value of 4.84 in the mean scores of the farm women from Rajkot (53.78) and Navsari (43.17) was found to be highly significant at .01 level of confidence for 398 df. There was no significant difference in the training needs as revealed by the computed 't' value of .85 in the mean scores of the farm women from Ahmedabad (55.60) and Rajkot (53.78) when compared to table 't' value.

The above data revealed that the extent of training needs of the farm women from Navsari were different from the extent of training needs of the farm women from Ahmedabad as well as from Rajkot. However, the needs for training of farm women for Ahmedabad did not differ from needs of the farm women from Rajkot. Thus, the null hypothesis that there will be no significant difference in the need for training in the aspect of Household Storage for the farm

women belonging to three administrative divisions of Gujarat State was rejected in case of Ahmedabad and Navsari as well as Rajkot and Navsari as far as Household Storage aspect was concerned. This null hypothesis was retained in case of Ahmedabad and Rajkot divisions.

3.3.1.3 Differences in the Training Needs in the Aspect of Family Planning. The following table showed the computed 't' values on the basis of mean scores of farm women from three divisions of Gujarat State in the aspect of Family Planning.

Table 25. Differences in Mean Scores Achieved by the Farm Women from Three Divisions of Gujarat State in the Aspect of Family Planning

Divisions of Gujarat State	Means Percentage	Divisions of Gujarat State 't' Value and df	
		Navsari	Rajkot
Ahmedabad N = 180	48.84	3.34 (378)	8.04 (378)
Navsari N = 200	41.50	--	5.01 (398)
Rajkot N = 200	33.35		

* significant at .01 level of confidence

The above table has indicated the computed 't' value of 3.34 and 8.04 in the mean scores of the farm women from Ahmedabad (48.84) and Navsari (41.50) and Ahmedabad (48.34) and Rajkot (33.35) respectively which were found to be highly significant at .01 level of confidence for 378 df.

The computed 't' value 5.01 in the mean scores of the farm women from Navsari (41.50) and Rajkot (33.35) was also found to be highly significant at .01 level of confidence for 398 df. It can, therefore, be concluded from the above data that there were significant differences in the training needs of the farm women of all three divisions of Gujarat State. Therefore, the null hypothesis that there will be no significant difference in the needs for training in the aspect of Family Planning for the farm women belonging to three administrative divisions of Gujarat State was rejected in this aspect.

The data further showed that the higher extent need for training for the farm women was in Rajkot division. The need for training for the farm women was also higher in Navsari division than in Ahmedabad division.

3.3.1.4 Difference in the Training Needs in the Aspect of Foods and Nutrition. As per table No. 6 indicated the computed 't' value in the mean scores of the farm women from three divisions of Gujarat State in the aspect of Foods and Nutrition.

Table 26. Differences in Mean Scores Achieved by the Farm Women from Three Divisions of Gujarat State in Aspect of Foods and Nutrition

Divisions of Gujarat State	Means Percentage	Divisions of Gujarat State 't' Value and df	
		Ahmedabad	Rajkot
Navsari N = 200	42.82	2.80* (378)	7.71* (398)
Ahmedabad N = 200	39.25		4.03* (378)
Rajkot N = 200	34.63		

* significant at .01 level of confidence

The computed 't' values of 2.80 and 4.03 in the mean scores of the farm women from Navsari (42.82) and Ahmedabad (39.25) and from Rajkot (34.63) and Ahmedabad (39.25) respectively were found to be highly significant at .01 level of confidence for 378 df. There was a highly significant difference in the mean scores of the farm women from Navsari (42.82) and Rajkot (34.63) as indicated by the computed 't' value of 7.71 which was also found to be significant at .01 level of confidence for 398 df.

The above data revealed that the extent of the need for training for the farm women from Navsari were less than the needs of the farm women from Ahmedabad and Rajkot divisions. Similarly, the extent of the training needs of the farm women from Ahmedabad division were also lesser than training needs of the farm women from Rajkot division in the aspect of Foods and Nutrition.

Therefore, the null hypothesis that there will be no significant difference in the needs for training in Foods and Nutrition for the farm women belonging to three administrative divisions of Gujarat State was rejected in this aspect of Foods and Nutrition.

3.3.1.5 Differences in the aspect of Grain Storage. The following table has indicated the computed 't' values in the mean score of the farm women from three divisions in the aspect of Grain Storage.

Table 27. Differences in Mean Scores Achieved by the Farm Women from Three Divisions of Gujarat State in the Aspect of Grain Storage

Divisions of Gujarat State	Means Percentage	Divisions of Gujarat State 't' Value and df	
		Rajkot	Navsari
Ahmedabad N = 180	45.92	5.33* (378)	5.99* (378)
Rajkot N = 200	38.29	--	1.52 (398)
Navsari N = 200	36.15	--	--

* significant at .01 level of confidence

The above table revealed that the computed 't' values of 5.99 and 5.33 in the mean scores of the farm women from Ahmedabad (45.92) and Navsari (36.15) as well as Ahmedabad (45.92) and Rajkot (38.29) respectively were found significant at .01 level of confidence for 378 df.

There was no significant difference as per computed 't' value of 1.52 in the mean scores of the farm women from Rajkot (38.29) and Navsari (36.15) as per the 't' value.

It was evident from the table that the extent of the training needs in Grain Storage of the farm women from Rajkot were higher than the extent of the training needs of the farm women from Ahmedabad. In case of Navsari division the extent of training needs in Grain Storage of the farm women were still higher than those from Rajkot and Ahmedabad divisions.

The above data supported the null hypothesis that there will be no significant difference in the extent of needs for training in the aspect of Grain Storage for the farm women belonging to three divisions of Gujarat State, was retained in case of the divisions of Navsari and Rajkot. The same null hypothesis was rejected in case of farm women from Ahmedabad and Rajkot as well as Ahmedabad and Navsari divisions in the aspect of Grain Storage.

3.3.1.6 Difference in the aspect of Child Care. The table No. 28 indicates computed 't' values in the mean scores achieved in the aspect of Child Care by the farm women from three divisions of Gujarat State.

Table 28. Differences in Mean Scores Achieved by the Farm Women from Three Divisions of Gujarat State in the Aspect of Child Care

Divisions of Gujarat State	Means Percentage	Divisions of Gujarat State 't' Value and df	
		Navsari	Rajkot
Ahmedabad N = 180	38.62	3.42* (378)	9.80* (378)
Navsari N = 200	34.02	--	6.59* (398)
Rajkot N = 200	30.04	--	--

* significant at .01 level of confidence

The above table revealed the computed 't' values of 9.80 and 3.42 in the mean scores of the farm women from Ahmedabad (38.62) and Rajkot (30.04) and Ahmedabad (38.62) and Navsari (34.02) respectively, were highly significant at .01 level of confidence for 378 df.

The difference was also found to be significant in the mean scores of the farm women from Navsari (34.02) and Rajkot (30.04) as per computed 't' value of 6.59 which was found highly significant at .01 level of confidence for 398 df.

Thus, the null hypothesis that there will be no significant difference in the extent of needs for training in the aspect of Child Care for the farm women belonging to three divisions of Gujarat State was rejected.

It is, therefore, evident from the above table that the training needs of the farm women were higher in Rajkot division then for those from Navsari and Ahmedabad divisions. It also showed that the needs for training were higher for the farm women from Navsari division than from Ahmedabad division.

3.3.1.7 Differences in the Aspect of Energy Management. The following table has indicated the 't' values in the mean percentage of the farm women from three divisions of Gujarat State.

Table 29. Differences in Mean Scores Achieved by the for Farm Women from Three Divisions of Gujarat State in the Aspect of Energy Management

Divisions of Gujarat State	Means Percentage	Divisions of Gujarat State 't' Value and df	
		Navsari	Rajkot
Ahmedabad N = 180	16.93	2.90* (378)	8.35* (378)
Navsari N = 200	15.40	--	5.88* (398)
Rajkot N = 200	12.41	--	--

* significant at .01 level of confidence

The computed 't' values of 8.35 and 2.90 in the mean scores of the farm women from Ahmedabad (16.93) and Rajkot (12.41), and Ahmedabad (16.93) and Navsari (15.40) respectively were found significant at .01 level of confidence at 378 df.

The computed 't' value of 5.88 in the mean scores of the farm women from Navsari (15.40) and Rajkot (12.41) was also found significant at .01 level of confidence at 398 df.

The null hypothesis that there will be no significant difference in the extent of needs for training in the aspect of Energy Management for the farm women belonging to three divisions of Gujarat State was rejected.

Thus, it can be concluded that there were significant differences in the mean scores of the farm women from three divisions of Gujarat State which indicated the differences in the extent of training needs of these farm women.

The extent of training needs for the farm women was higher in Rajkot division than those from Navsari and Ahmedabad division. The extent of training needs of the farm women from Navsari division also differed from the extent of training needs of the farm women from Ahmedabad division.

3.3.2 DIFFERENCES IN MEAN SCORES ACHIEVED IN SEVEN ASPECTS OF HOME SCIENCE EDUCATION OF FARM WOMEN FROM AREAS NEAR TO TRAINING CENTRES OF AHMEDABAD, NAVSARI AND RAJKOT DIVISIONS OF GUJARAT STATE

This section describes these differences within divisions, among the centres in each aspect in their rank order in each division separately.

3.3.2.1 Ahmedabad division. There were five centres in Ahmedabad division namely Ahmedabad, Thasra, Khedbrahma, Pilwai and Deesa. The following tables indicate 't' values denoting the mean differences in the mean scores achieved in different aspects of Home Science by the farm women from areas nearer to those Farmer's Training Centres.

Differences in Training Needs in the Aspect of Health and Sanitation

Table 30. Differences in Mean Scores Achieved by for the Farm Women From the Five Centres of Ahmedabad Division of Gujarat State in the Aspect of Health and Sanitation

Farmer's Training Centre	Mean Percentage	Farmers' Training Centres in Ahmedabad Division 't' values and at Ahmedabad	Khedbrahma	Pilwai	Deesa
Thasra N = 40	69.58	1.0 (78)	3.89* (78)	5.36* (78)	6.06* (58)
Ahmedabad N = 40	66.01	--	3.03* (78)	4.49* (78)	5.38* (58)
Khedbrahma N = 40	55.38	--	--	1.56 (78)	2.69* (58)
Pilwai N = 40	49.69	--	--	--	1.29 (58)
Deesa N = 20	44.15	--	--	--	

* Significant at .01 level of confidence.

The table indicated 't' value denoting mean differences in training needs in the aspect of Health and Sanitation of the farm women from Ahmedabad division of Gujarat State. Examination of the table revealed highly significant differences in the mean scores of the farm women from the areas nearer to Khedbrahma (55.38) and Thasra (69.58) as well as those from Pilwai (49.69) and Thasra (69.58) as the computed 't' values of 3.89 and 5.36 for these two groups respectively were found to be highly significant at .01 level of confidence for 78 df.

The computed 't' value of 6.06 indicating highly significant differences in the mean scores of the farm women from the areas nearer to Deesa (44.15) and Thasra (69.58), was found highly significant at .01 level of confidence for 58 df. However, the computed 't' value of 1.00 for indicating differences in the mean scores of the farm women from areas nearer to Ahmedabad (66.01) and Thasra (69.58) was not found significant when compared to table 't' value. This revealed that the farm women from the areas nearer to these two centres did not vary significantly with respect to extent of their training needs in the aspect of Health and Sanitation. This was confirmed by the high mean scores of 66.01 and 69.58 of the farm women from the areas, which were nearer to these two centres. The mean scores of farm women from Pilwai (49.69) and Khedbrahma (55.38) and Deesa (44.15) were lower than those of Thasra (69.58) indicating

significant differences and greater extent of need for training of the farm women from the areas nearer to these training centres in the aspect of Health and Sanitation.

The computed 't' values of 3.03 indicating significant difference in the mean scores of the farm women from the areas nearer to Khedbrahma (55.38) and Ahmedabad (66.01) and 't' value of 4.49 indicating significant difference in the mean scores of the farm women from the areas near to Pilwai (49.69) and Ahmedabad (66.01) were found highly significant at .01 level of confidence for 78 df. The computed 't' value of 5.38 indicating significant difference in the mean scores of the farm women from the areas near to Deesa (44.15) and Ahmedabad (66.01) was also found highly significant at .01 level of confidence for 58 df.

The table further revealed that there was no significant difference in the mean scores achieved by farm women from Khedbrahma (55.38) and Pilwai (49.69) as the computed 't' value of 1.56 was not found significant as per tabled 't' value.

There was significant difference between the training needs of farm women near to Khedbrahma (55.38) and Deesa (44.15) as the computed 't' value of 2.69 was found significant at .01 level of confidence for 58 df. It indicated that the extent of training needs of farm women nearer to Deesa were higher than those from Khedbrahma.

The computed 't' value of 1.29 for indicating difference in the mean scores of the farm women from the areas nearer to Deesa (44.15) and Pilwai (49.69) centre was not found significant when compared to table 't' value Hence, it was concluded that farm women from the areas nearer to these centres had need for training and that there was no significant difference in these needs as indicated by the mean scores.

The null hypothesis that there will be no significant difference in the extent of needs for training in the selected aspect of Health and Sanitation for farm women from the areas near to different centres within Ahmedabad division of Gujarat State was retained in cases of farm women from Thasra and Ahmedabad, Khedbrahma and Pilwai as well as Pilwai and Deesa. The same hypothesis was rejected in cases of farm women from Thasra and Khedbrahma, Thasra and Pilwai and Thasra and Deesa. The null hypothesis was also rejected in cases of farm women from Ahmedabad and Khedbrahma, Ahmedabad and Pilwai and Ahmedabad and Deesa. It was also rejected in case of farm women from Khedbrahma and Deesa.

Differences in Training Needs in the Aspect of Household Storage

Table 31. Differences in Mean Scores Achieved by the Farm Women From the Five Centres of Ahmedabad Division of Gujarat State in the Aspect of Household Storage

Farmer's Training Centre	Mean Percentage	Farmers' Training Centres in Ahmedabad Division			
		Pilwai	Deesa	Ahmedabad	Khedbrahma
Thasra N = 40	72.74	4.02* (78)	3.74* (58)	5.35* (78)	8.11* (78)
Pilwai N = 40	56.95	--	0.12 (58)	1.41 (78)	3.49* (78)
Deesa N = 20	56.28	--	--	1.04 (58)	2.84* (58)
Ahmedabad N = 40	50.43	--	--		1.86*** (78)
Khedbrahma N = 40	42.00	--	--	--	--

* Significant at .01 level of confidence.
*** Significant at .1 level of confidence

The table showed the difference in mean scores of the farm women from the areas near to Pilwai (56.95) and Thasra (72.74) as well as Ahmedabad (50.43) and Thasra (72.74) were indicated by the computed 't' values of 4.02 and 5.35, respectively were found significant at .01 level of confidence at 78 df. Very highly significant difference in the mean scores of the farm women from the areas nearer to Thasra (72.74) and Khedbrahma (42.00) was indicated by the computed 't' value of 8.11 which was found highly

significant at .01 level of confidence at 78 df.

The computed 't' value of 3.74 also indicated significant differences n mean scores of the farm women from the areas nearer to Deesa (56.28) and Thasra (72.74) as it was found to be highly significant at .01 level of confidence at 58 df. This revealed that extent of training needs of the farm women from the areas nearer to Pilwai, Deesa, Ahmedabad and Khedbrahma were higher than those from Thasra.

The computed 't' value 3.49 indicating significant difference in the mean scores of the farm women from the areas nearer to the centres at Khedbrahma (42.00) and Pilwai (56.95) was found to be highly significant at .01 level of confidence at 78 df. The computed value of 2.84 indicating significant difference in the mean scores scores of the farm women from the areas nearer to the centre at Khedbrahma (42.00) and Deesa (56.28) which was also found to be highly significant at .01 level of confidence at 58 df. It showed that the extent of training needs of the farm women from the areas nearer to Khedbrahma were higher than those from Pilwai and Deesa.

The computed 't' value of .12 for indicating difference in the mean scores of the farm women from the areas near to Deesa (56.28) and Pilwai (56.95) as well as 't' values of 1.04 for indicating differences in the mean scores of the farm women from the areas near Ahmedabad

(50.43) and Deesa (56.28) were found insignificant when compared to the table 't' value at 58 df. The computed 't' value of 1.41 in the mean scores of the farm women from the areas nearer to Pilwai (56.95) and Ahmedabad (50.45) was not found significant as per tabled 't' value.

The computed 't' value of 1.86 in the mean scores of the farm women from the area near Ahmedabad (50.43) and Khedbrahma (42.00) did vary with lesser difference which was significant at .1 level of confidence for 78 df. It showed the extent of training needs of the farm women from Khedbrahma were higher than those from Ahmedabad.

The null hypothesis that there will be no significant difference in the extent of needs for training in the aspect of Household Storage for the farm women from the areas near to different centres within Ahmedabad division of Gujarat State, was retained in cases of farm women from Pilwai and Deesa, Pilwai and Ahmedabad as well as Ahmedabad and Deesa.

The above null hypothesis was rejected in cases of the farm women from Thasra and Pilwai, Thasra and Deesa and from Thasra and Ahmedabad and also from Thasra and Khedbrahma. It was also rejected in cases of the farm women from Pilwai and Khedbrahma from Deesa and Khedbrahma as well as from Ahmedabad and Khedbrahma.

Difference in Training Needs in the Aspect of Family Planning

When the data were analysed to study the difference in the mean scores of the farm women from the areas closer to various training centres of Ahmedabad division in the aspect of Family Planning the data indicated as per the following table.

Table 32. Differences in Mean Scores Achieved by the Farm Women From the Five Centres of Ahmedabad Division of Gujarat State in the Aspect of Family Planning

Farmer's Training Centre	Mean	Farmers' Training Centres in Ahmedabad Division			
		Ahmedabad	Deesa	Khedbrahma	PIlwai
Thasra (N = 40)	63.93	6.18* (78)	8.10* (58)	12.92* (78)	16.31* (78)
Ahmedabad. (N = 40)	53.20	--	3.24* (58)	6.81* (78)	10.21* (78)
Deesa (N = 20)	46.74	--	--	2.26*** (58)	5.10* (58)
Khedbrahma (N = 40)	42.57	--	--	--	.20 (78)
Pilwai (N = 40)	37.67	--	--	--	--

* Significant at .01 level of confidence.
*** Significant at .1 level of confidence.

The computed 't' value of 16.3 and 12.92 indicating significant differences in the mean scores of the farm women from the areas near to Pilwai (37.67) and Thasra (63.93) as well as Khedbrahma (42.57) and Thasra (63.93) were found to be very highly significant at .01 level of confidence for

78 df. The computed 't' value of 6.18 in the mean scores of the farm women from Ahmedabad (53.20) and Thasra (63.93) indicated significant difference which was found significant at .01 level of confidence at 78 df.

The computed 't' value of 10.21 and 6.81 indicating significant difference in the mean scores of the farm women from the areas near to Pilwai (37.67) and Ahmedabad (53.20), as well as Khedbrahma (42.57) and Ahmedabad (53.20) were also found to be highly significant at .01 level of confidence at 78 df.

The significant difference was also indicated by the computed 't' value of 3.24 in the mean scores of the farm women from the areas nearer to Ahmedabad (53.20) and Deesa (46.74) which was found significant at .01 level of confidence at 58 df.

The computed 't' value of 8.10 and 5.10 indicated high significant differences in the mean scores of the farm women from the areas nearer to Deesa (46.74) and Thasra (63.93) as well as Deesa (46.76) and Pilwai (37.67) were found to be highly significant at .01 level of confidence for 58 df. The computed 't' value of 2.26 indicated significant difference in the mean scores of the farm women from the areas nearer to Khedbrahma (42.57) and Deesa (46.74) which was found significant at .05 level of confidence at 58 df.

However, the computed 't' value of .20 indicating

no difference in the mean scores of the farm women from the areas closer to Khedbrahma (42.57) and Pilwai (37.67) was not found significant when compared to table 't' value at 78 df.

The null hypothesis that there will be no significant difference in the extent of needs for training in the aspect of Family Planning for farm women from the areas near to different centres within Ahmedabad division of Gujarat State was retained in case of farm women from Khedbrahma and Pilwai. The same null hypothesis was rejected in cases of farm women from the following areas -

- Between Thasra centre and Ahmedabad, Deesa, Khedbrahma and Pilwai centres.
- Between Ahmedabad centre and Deesa, Khedbrahma and Pilwai centres.
- Between Deesa centre and Khedbrahma and Pilwai centres.

Thus it was concluded that the extent of training needs of the farm women from the areas nearer to Pilwai, Khedbrahma and Deesa were higher than those from Thasra. The extent of training needs of the farm women from the areas nearer to Pilwai, Khedbrahma and Deesa were higher than those from Ahmedabad. The extent of training needs of the farm women from the areas nearer to Deesa were higher than those from Thasra, where lower than those from Pilwai and Khedbrahma.

Difference in Training Needs in the Aspect of Foods and Nutrition

As per the following table, when 't' values for the aspect of Foods and Nutrition were computed, the data indicated that the computed 't' value of 2.76 for the farm women from the areas nearer to Khedbrahma (45.61) and Thasra (54.49) and 't' value of 5.93 for the farm women from the areas nearer to Pilwai (36.57) and Thasra (54.49) were found to be significant at .01 level of confidence with 78 df.

Table 33. Differences in Mean Scores Achieved by for the Farm Women From the Five Centres of Ahmedabad Division of Gujarat State in the Aspect ofFoods and Nutrition

Farmer's Training Centre	Mean	Farmers' Training Centres in Ahmedabad Division			
		Ahmedabad	Khedbrahma	Pilwai	Deesa
Thasra (N = 40)	54.49	.67 (78)	2.76* (78)	5.93* (78)	4.88* (58)
Ahmedabad (N = 40)	52.26	--	2.09** (78)	5.23* (78)	4.32* (58)
Khedbrahma (N = 40)	45.61	--	--	3.12* (78)	2.61** (58)
Pilwai (N = 40)	36.57	--	--	--	.006 (58)
Deesa (N = 20)	36.55	--	--	--	--

* Significant at .01 level of confidence.
** Significant at .05 level of confidence.

The computed 't' value of 4.88 for those nearer to Deesa (36.55) and Thasra (54.49) as well as the value of 4.32 for those nearer to Deesa (36.55) and Ahmedabad (52.26) were found to be highly significant at .01 level of confidence with 58 df indicating highly significant differences in the extent of training needs of the farm women from the areas nearer to these centres in the aspect of Foods and Nutrition.

Significant differences were also found in the mean scores of the farm women from the areas nearer to Pilwai (36.57) and Ahmedabad (52.26) and Pilwai (36.57) and Khedbrahma (45.61) as indicated by the computed 't' values of 5.23 and 3.12 which were found significant at .01 level of confidence at 78 df.

The computed 't' value of 2.09 indicating significant differences between the mean scores of the farm women from the areas nearer to Khedbrahma (45.61) and Ahmedabad (52.26) was found to be significant at .05 level of confidence for 78 df indicating significant difference in the training needs as revealed by mean scores of the farm women from these two areas in this aspect. The extent of needs for training for the farm women from Khedbrahma were higher than from Ahmedabad.

The computed 't' value of 2.61 in the mean scores of the farm women from the areas nearer to Khedbrahma (45.61) and Deesa (36.55) was found significant at .05 level of

confidence for 58 df which further indicated the extent of needs for training for the farm women from the areas nearer to Deesa was higher than those from Khedbrahma.

However, the computed 't' values of .67 and .006 for indicating significant differences in the mean scores of the farm women from the areas nearer to Ahmedabad (52.26) and Thasra (54.49) as well as Pilwai (36.57) and Deesa (36.55) respectively were found insignificant when compared to the table 't' values

The null hypothesis that there will be no significant difference in the extent of needs for training in the aspect of Foods and Nutrition for farm women from the areas near to different centres within Ahmedabad division of Gujarat State was retained in cases of farm women from Ahmedabad and Thasra as well as those from Deesa and Pilwai.

The null hypothesis was rejected in cases of the farm women from the following areas -

- Between Thasra centre and Khedbrahma, Pilwai and Deesa centres.
- Between Ahmedabad centre and Khedbrahma, Pilwai and Deesa centres.
- Between Khedbrahma centre and Pilwai and Deesa centres.

These findings showed that the extent of training needs of the farm women from the area nearer to Khedbrahma, Pilwai

and Deesa were higher than those from Thasra. It also showed that the extent of training needs of the farm women from Pilwai were higher than those from Ahmedabad and Khedbrahma whereas the extent of training needs of farm women from Deesa were higher than by those from Ahmedabad.

Difference in Training Needs in the Aspect of Grain Storage

Table 34. Differences in the Mean Scores Achieved by for the Farm Women From the Five Centres of Ahmedabad Division of Gujarat State in the Aspect of Grain Storage

Farmer's Training Centre	Mean Percentage	Farmers' Training Centres in Ahmedabad Division			
		Ahmedabad	Pilwai	Khedbrahma	Deesa
Thasra (N = 40)	54.45	1.65 (78)	3.34* (78)	4.60* (78)	3.23 (58)
Ahmedabad (N = 40)	49.29	--	1.74*** (78)	3.06* (78)	3.09* (58)
Pilwai (N = 40)	43.08	--	--	1.33 (78)	1.27 (58)
Khedbrahma (N = 40)	37.75	--	--	--	.002 (58)
Deesa (N = 20)	37.73	--	--	--	--

* Significant at .01 level of confidence
*** Significant at .1 level of confidence

When data was examined to study the differences in the mean scores of the farm women near to different centres of Ahmedabad division the following results were revealed.

The computed 't' value of 3.23 and 3.09 in the mean scores of the farm women from the area near to Deesa (37.73) and Thasra (54.45) as well as Deesa (37.73) and Ahmedabad (49.29) were found to be significant at .01 level of confidence for 58 df.

The highly significant differences were found in the mean scores of the farm women from the area near to Khedbrahma (37.75) and Thasra (54.45) as well as Khedbrahma (37.75) and Ahmedabad (49.29) as indicated by the computed 't' value of 4.60 and 3.06 which were significant at .01 level of confidence for 78 df.

The computed 't' value of 3.34 in the mean score of the farm women from the area near to Pilwai (43.08) and Thasra (54.45) was found to be significant at .01 level of confidence for 78 df. The significant difference was also found in the mean score of the farm women from the area near to Pilwai (43.08) and Ahmedabad (49.29) as indicated by the 't' value of 1.74 which was found to be significant at .1 level of confidence for 98 df.

However, there were no significant differences in the mean scores of the farm women from the areas near to Ahmedabad (49.29) and Thasra (54.45) as well as Khedbrahma (37.75) and Deesa (37.73) as indicated by the computed 't' value of 1.65 and .002 respectively which was not found significant as per table 't' value.

The computed 't' value of 1.33 and 1.27 in themean scores of the farm women from the areas near to Pilwai (43.08) and Khedbrahma (37.75) as well as Pilwai (43.08) and Deesa (87.73) which were found insignificant as per tabled 't' value.

The null hypothesis that there will be no significant difference in the extent of needs for training in the aspect of Grain Storage for the farm women from the areas near to different centres within Ahmedabad division of Gujarat State was retained in cases of the farm women from Thasra and Ahmedabad, between Pilwai and Khedbrahma, Deesa centre, between Khedbrahma and Deesa. The same null hypothesis was rejected in cases of the farm women from the following areas:

- Between Thasra centre and Pilwai, Khedbrahma, Deesa centres.
- Between Ahmedabad centre and Pilwai, Khedbrahma, Deesa centre.

The table showed that the farm women belonging to the areas nearer to Deesa and Khedbrahma had higher extent of training need in this aspect, which was followed by the farm women from Pilwai and Ahmedabad. Among them the farm women from Thasra had lesser extent of training needs.

Difference in Training Needs in the Aspect of Child Care

When data to study significant difference in the mean scores of the farm women from areas nearer to various training centres of Ahmedabad division in the aspect of Child Care were analysed and following results were revealed.

Table 35. Differences in Mean Scores Achieved by the Farm Women From the Five Centres of Ahmedabad Division of Gujarat State in the Aspect of Child Care

Farmer's Training Centre	Mean Percentage	Farmers' Training Centres in Ahmedabad Division			
		Thasra	Khedbrahma	Deesa	Pilwai
Ahmedabad (N = 40)	41.83	.29 (78)	1.55 (78)	1.91*** (58)	5.81* (78)
Thasra (N = 40)	41.18	--	1.45 (78)	1.66*** (58)	5.66* (78)
Khedbrahma (N = 40)	38.01	--	--	.49 (58)	3.24* (78)
Deesa (N = 20)	36.68	--	--	--	2.82* (58)
Pilwai (N = 40)	31.45	--	--	--	--

* Significant at .01 level of confidence
*** Significant at .1 level of confidence

The computed 't' values of 5.66 and 5.81 for the farm women from the areas nearer to Thasra (41.18) and Pilwai (31.45) as well as from Pilwai (31.45) and Ahmedabad (41.83)

were found significant at .01 level of confidence for 78 df. There was a difference in the mean scores of the farm women from the areas nearer to Pilwai (31.45) and Khedbrahma (38.01) as indicated by the computed 't' value of 3.24 which was found significant at .01 level of confidence at 78 df.

The computed 't' value of 2.82 for the farm women from the area near to Deesa (36.68) and Pilwai (31.45) was also found highly significant at .01 level of confidence for 58 df. These findings showed that the training needs of the farm women from Pilwai were higher than those from Thasra, Ahmedabad, Khedbrahma and Deesa.

The computed 't' values of 1.91 and 1.66 in the mean scores of the farm women from the areas near to Deesa (36.68) and Ahmedabad (41.83) as well as from Deesa (36.68) and Thasra (41.18) respectively were found significant at .1 level of confidence for 58 df. It further indicated that the extent of training needs of the farm women from Deesa was higher than those from Ahmedabad and Thasra.

The computed 't' values of 1.55 and 1.45 in the mean scores of the farm women from the areas near to Khedbrahma (38.01) and Ahmedabad (41.83) as well as Khedbrahma (38.01) and Thasra (41.18) respectively were found insignificant when compared to table 't' value. It also indicated insignificant differences in the mean scores of the farm women from the areas near to Thasra (41.18) and Ahmedabad (41.83) as well as Deesa (31.68) and Khedbrahma (38.01) as

indicated by the computed 't' values of .29 and .49 respectively, which were insignificant as per tabled 't' value.

The null hypothesis that there will be no significant difference in the extent of needs for training in the aspect of Child Care for the farm women from the areas near to different centres within Ahmedabad division of Gujarat State was retained in cases of the farm women from Thasra and Ahmedabad as well as from Deesa and Khedbrahma. It is also retained in case of the farm women from Khedbrahma and Ahmedabad as well as Khedbrahma and Thasra. The same null hypothesis was rejected in cases of the farm women from the following -

- Between Pilwai centre and Ahmedabad, Thasra, Khedbrahma and Deesa centres.
- Between Deesa centre and Ahmedabad and Thasra centres.

Thus, it was concluded that the extent of training needs of the farm women from Pilwai and Deesa was higher than those from Ahmedabad, Thasra and Khedbrahma. Similarly, the extent of training need of the farm women from Deesa was higher than those from Ahmedabad and Thasra.

Differences in the Training Needs in the Aspect of Energy Management

Table 36. Differences in Mean Scores Achieved by the Farm Women From the Five Centres of Ahmedabad Division of Gujarat State in the Aspect of Energy Management

Farmer's Training Centre	Mean Percentage	Farmers' Training Centres in Ahmedabad Division			
		Thasra	Deesa	Khedbrahma	Pilwai
Ahmedabad (N = 40)	16.29	1.73*** (78)	3.28* (58)	6.33* (78)	6.75* (78)
Thasra (N = 40)	14.02	--	2.26** (58)	5.21* (78)	5.63* (78)
Deesa (N = 20)	9.81	--	--	.89 (58)	2.22** (58)
Khedbrahma (N = 40)	8.75	--	--	--	2.10** (78)
Pilwai (N = 40)	5.61	--	--	--	--

* Significant at .01 level of confidence
*** Significant at .1 level of confidence

The computed 't' value of 6.75 and 6.33 indicating significant differences in the mean scores of the farm women from the areas near to Ahmedabad (16.29) and Pilwai (5.61) as well as Ahmedabad (16.29) and Khedbrahma (8.75) were found highly significant at .01 level of confidence for 78 df. The significant differences in the mean scores of the

farm women from the area near to Ahmedabad (16.29) and Deesa (9.81) were also found as revealed by the computed 't' value of 3.28 which was significant at .01 level of confidence for 58 df. The computed 't' value of 1.73 in the mean scores of the farm women from the areas near to Ahmedabad (16.29) and Thasra (14.02) was also found significant at .1 level of confidence at 78 df. The lower mean scores of the farm women from Pilwai, Khedbrahma, Deesa and Thasra than those from Ahmedabad indicated higher training needs in this aspect.

The computed 't' value of 5.63 and 5.21 indicated significant differences in themean scores of the farm women from the areas near to Pilwai (5.61) and Thasra (14.02) as well as Khedbrahma (8.75) and Thasra (14.02) whch were found significant at .01 level of confidence for 78 df. The significant differences in the mean scores of the farm women from the areas ner to Deesa (9.81) and Pilwai (5.61) as well as Deesa (9.81) and Thasra (14.02) were also found as revealed by the computed 't' value of 2.22 and 2.26 which were significant at .05 level of confidence for 58 df. The computed 't' value of 2.10 in the mean scores of the farm women from the areas near to Pilwai (5.61) and Khedbrahma (8.75) was also found significant at .05 level of confidence for 78 df. It further revealed that the farm women from Pilwai had the highest training need inthis aspect. The farm women from Khedbrahma, Deesa and Thasra had higher

training needs than those from Ahmedabad. The farm women from Khedbrahma and Deesa had higher training needs than those from Thasra. Farm women from Pilwai had higher training needs than those from Deesa and Khedbrahma.

The null hypothesis that there will be no significant difference in the extent of needs for training inthe aspect of Energy Management for the farm women from the areas near to different centres within Ahmedabad division of Gujarat State was retained in case of farm women from Deesa and Khedbrahma.

The null hypothesis was rejected in cases of farm women from the following areas -

- between Ahmedabad centre and Thasra, Deesa, Khedbrahma and Pilwai centres.
- between Thasra centre and Deesa, Khedbrahma, Pilwai centres.
- between Pilwai centre and Deesa and Khedbrahma centres.

4.3.2.2 Navsari Division. There were five centres in Navsari division namely, Navsari, Vyara, Chhotaudepur, Rajpipla and Dahod. In all the seven aspects of the Home Science the 't' values of the mean scores achieved by the farm women from the areas nearer to the above five centres are given in the following pages.

Differences in Training Needs in Aspect of Health and Sanitation

Table 37. Differences in Mean Scores Achieved by of the Farm Women From Navsari Division of Gujarat State in the Aspect of Health and Sanitation

Farmers' Training Centres	Mean Percentage	Farmers' Training Centres in Navsari Division 't' values and df			
		Chhota-udepur	Rajpipla	Dahod	Vyara
Navsari N = 40	66.70	4.99* (78)	7.07* (78)	7.49* (78)	9.37* (78)
Chhotaudepur N = 40	56.45	--	3.08* (78)	3.96* (78)	5.97* (78)
Rajpipla N = 40	50.89	--	--	.22 (78)	3.22* (78)
Dahod N = 40	49.58	--	--	--	2.73 (78)
Vyara N = 40	42.16	--	--	--	--

* Significant at .01 level of confidence

The above table revealed the highly significant differences in the mean scores of the farm women from the areas near to Navsari (66.70) and Chhotaudepur (56.45) and

Navsari (66.70) and Rajpipla (50.89), as the computed 't' values of 4.99 and 7.07 respectively were found significant at .01 level of confidence for 78 df. The computed 't' values of 9.37 and 7.49 in the mean scores of the farm women from the areas near to Vyara (42.16) and Navsari (66.70) as well as Dahod (49.58) and Navsari (66.70) respectively were also found highly significant at .01 level of confidence at 78 df.

It further indicated that the extent of training needs from Vyara, Dahod, Rajpipla and Chhotaudepur were higher than those from Navsari.

The computed 't' values of 5.97 in the mean score of the farm women from the area near to Vyara (42.16) and Chhotaudepur (56.45) was also found highly significant at .01 level of confidence for 78 df.

The computed 't' values of 3.08 and 3.96 also showed the differences in the mean scores of the farm women from the area near to Rajpipla (50.89) and Chhotaudepur (56.45) as well as Chhotaudepur (56.45) and Dahod (49.58) respectively were found to be significant at .01 level of confidence for 78 df. This revealed that extent of training needs of the farm women from Vyara, Dahod and Rajpipla were higher than those from Chhotaudepur.

The computed 't' value of 3.22 and 2.73 in the mean scores of the farm women from the area near to Vyara (42.16)

and Rajpipla (50.89) as well as Vyara (42.16) and Dahod (49.58) respectively were found to be significant at .01 level of confidence for 78 df. However, there was no significant difference in the mean scores of the farm women from the area near to Dahod (49.58) and Rajpipla (50.89) as computed 't' value of .22 was not significant when compared to tabled 't' value.

Therefore, the null hypothesis that there will be no significant difference in the extent of needs for training in the aspect of Health and Sanitation for the farm women from the areas nearer to different centres within Navsari division of Gujarat State was retained in cases of the farm women from Rajpipla and Dahod. The same hypothesis was rejected in cases of the farm women from the following areas:

- Between Navsari centre and Chhotaudepur, Rajpipla and Dahod and Vyara centres.
- Between Chhotaudepur centre, Rajpipla, Dahod and Vyara centres.
- Between Rajpipla centre and Vyara as well as between Dahod centre and Vyara centres.

Differences in Training Needs in the Aspect of Household Storage

The following table indicated the 't' values computed for showing the mean differences in training needs for the farm women from Navsari division of Gujarat State in the aspect of Household Storage.

Table 38. Differences in Mean Scores Achieved by of the Farm Women From Navsari Division of Gujarat State in the Aspect of Household Storage

Farmers' Training Centres	Mean Percentage	Farmers' Training Centres in Navsari Division 't' values and df			
		Chhota-udepur	Dahod	Rajpipla	Vyara
Navsari N = 40	60.00	2.30** (78)	5.10* (78)	5.37* (78)	6.03* (78)
Chhotaudepur N = 40	44.43	--	0.50 (78)	1.20 (78)	1.33 (78)
Dahod N = 40	40.47	--	--	1.07 (78)	1.29 (78)
Rajpipla N = 40	35.69	--	--	--	0.07 (78)
Vyara N = 40	35.34	--	--	--	--

* Significant at .01 level of confidence
** Significant at .1 level of confidence

The above table indicated the computed 't' value of 5.37 and 6.03 in the mean scores of the women from the areas near to Navsari (60.00) and Rajpipla (35.69) as well as Navsari (60.00) and Vyara (35.34) respectively were found

to be significant at .01 level of confidence for 78 df. It also indicated the significant differences in the mean scores of the farm women from the areas near to Navsari (60.00) and Dahod (40.47) as indicated by the computed 't' values of 5.10 which was found significant at .01 level of confidence for 78 df.

The computed 't' value of 2.30 in the mean score of the farm women from Navsari (60.00) and Chhotaudepur (44.43) was found to be significant at .05 level of confidence for 78 df. The computed 't' value of .50 and 1.20 in the mean scores of the farm women from the area near to Chhotaudepur (44.43) and Dahod (40.47) as well as Chhotaudepur (44.43) and Rajpipla (35.69) respectively were found insignificant. Thus, indicated no difference in the extent of training needs of the farm women in this aspect.

The computed 't' values of 1.07 and 1.29 in the mean scores of the farm women from area near to Dahod (40.47) and Rajpipla (35.69) as well as Dahod (40.47) and Vyara (35.34) respectively indicated no significant difference among them. Similarly, the computed 't' values of 1.33 and .07 in the mean scores of the farm women from the areas near to Chhotaudepur (44.43) and Vyara (35.34) as well as Rajpipla (35.69) and Vyara (35.34) respectively were also found insignificant as per tabled 't' value.

The null hypothesis that there will be no significant difference in the extent of needs for training in the aspect of Household Storage for the farm women from the areas nearer to different centres within Navsari division of Gujarat State, was retained in cases of the farm women from the following areas -

- Between Chhotaudepur centre and Dahod, Rajpipla, and Vyara centres.
- Between Dahod centre and Rajpipla and Vyara centres.
- Between Rajpipla and Vyara centres.

The same hypothesis was rejected in cases of the farm women from Navsari centre and Chhotaudepur, Dahod, Rajpipla and Vyara.

It was evident from the table that the mean scores achieved by the farm women in this aspect were lower in four areas near to Vyara, Rajpipla, Dahod and Chhotaudepur than the mean scores achieved by the farm women from Navsari district. Therefore, it can be concluded that the higher extent of training needs was for the farm women near to Vyara. Rajpipla was another centre where the farm women needed training in this aspect. The extent of training need was also higher for the farm women from Dahod land Chhotaudepur than Navsari. Navsari was the only area where lesser extent of need for training was indicated by the score achieved by the farm women from this centre.

Difference in Training Needs in the Aspect of Family Planning

From the table given below the computed 't' values could be observed denoting the mean differences in training needs for the aspect of Family Planning.

Table 39. Differences in Mean Scores Achieved by the Farm Women From the Five Centres of Navsari Division of Gujarat State in the Aspect of Family Planning

Farmers' Training Centres	Mean Percentage	Farmers' Training Centres in Navsari Division 't' values and df			
		Chhota-udepur	Rajpipla	Vyara	Dahod
Navsari N = 40	67.00	3.26* (78)	6.86* (78)	8.42* (78)	8.46* (78)
Chhotaudepur N = 40	49.13	--	2.03** (78)	4.56* (78)	4.83* (78)
Rajpipla N = 40	38.64	--	--	2.57** (78)	2.95** (78)
Vyara N = 40	28.28	--	--	--	.64 (78)
Dahod N = 40	25.98	--	--	--	--

* Significant at .01 level of confidence
** Significant at .05 level of confidence

The above table revealed the highly significant difference in the mean scores of the farm women from the areas near to Navsari (67.00) and Vyara (28.28) as well as Navsari (67.00) and Dahod (25.98) as indicated by the computed 't' values of 8.42 and 8.46 espectively were found

to be highly significant at .01 level of confidence for 78 df. The computed 't' values of 6.86 and 3.26 in the mean scores of the farm women from the areas near to Navsri (67.00) and Rajpipla (38.64) as well as Navsari (67.00) and Chhotaudepur (49.13) were also found to be significant at .01 level of confidence for 78 df.

It also revealed that the computed 't' values of 4.56 and 4.83 in the mean scores of the farm women from the areas near to Chhotaudepur (49.13) and Vyara (28.28) as well as Chhotaudepur (49.13) and Dahod (25.98) respectively were also found to be significant at .01 level of confidence for 78 df. The significant difference in the mean score of the farm women from thea reas near to Rajpipla (38.64) and Dahod (25.98) was indicated by the computed 't' value of 2.95 which was found to be significant at .01 level of confidence for 78 df.

The significant differences were found in the mean score of the farm women from the area near to Chhotaudepur (49.13) and Rajpipla (38.64) as well as Rajpipla (38.64) and Vyara (28.28) as revealed by the computed 't' values of 2.03 and 2.57 respectively were found to be significant at .05 level of confidence for 78 df. However, there was no significant difference found in the mean score of the farm women from the area near to Vyara (28.28) and Dahod (25.98) as indicated by computed 't' value of .64 as per table 't' value.

The null hypothesis that there will be no significant difference in the extent of needs for training in the aspect of Family Planning for the farm women from the areas near to different centres within Navsari division of Gujarat State was retained in case of the farm women from Rajpipla and Vyara.

The same hypothesis was rejected in cases of the farm women from the following areas -

- Between Navsri centre and Chhotaudepur, Rajpipla, Vyara and Dahod centres.
- Between Chhotaudepur centre and Rajpipla, Vyara and Dahod centres.
- Between Rajpipla centre and Vyara and Dahod centres.

Thus, it was concluded that the extent of need for training for the farm women was lesser in Navsari district. There was no difference in the extent of training needs of the farm women from Vyara and Dahod. The higher extent of needs for training for the farm women in this aspect were in Dahod followed by Vyara, Rajpipla and Chhotaudepur.

Differences in Training Needs in the Aspect of Foods and Nutrition

The table indicated 't' values for differences in the mean score of the farm women from five areas in Navsri division in the aspect of Foods and Nutrition.

Table 40. Differences in Mean Scores Achieved by of the Farm Women From Navsari Division of Gujarat State in the Aspect of Foods and Nutrition

Farmers' Training Centres	Mean Percentage	Farmers' Training Centres in Navsari Division 't' values and df			
		Chhota-udepur	Dahod	Rajpilla	Vyara
Navsari N = 40	55.00	3.04* (78)	4.56* (78)	5.82* (78)	5.87* (78)
Chhotaudepur N = 40	45.37	--	2.37** (78)	3.86* (78)	3.95* (78)
Dahod N = 40	39.88	--	--	1.15 (78)	1.34 (78)
Rajpipla N = 40	36.93	--	--	--	.25 (78)
Vyara N = 40	36.32	--	--	--	--

* Significant at .01 level of confidence
** Significant at .05 level of confidence

The table showed highly significant differences in the mean scores of the farm women from the areas near to Navsari (55.00) and Rajpipla (36.93) as well as Navsari (55.00), Vyara (36.32) as revealed by computed 't' values of 5.82 and 5.87 respectively were found to be significant at .01 level of confidence for 78 df. The computed 't' value of 4.56 and 3.04 in the mean score of the farm women from the area near to Navsari (55.00) and Dahod (39.88) as well as Navsari (55.00) and Chhotaudepur (45.37) also were found to be significant at .01 level of confidence for 78 df.

The table also showed the highly significant difference in the meanscores of the farm women from the area near to Chhotaudepur (45.37) and Rajpipla (36.93) as well asChhotaudepur (45.37) and Vyara (36.32) as revealed by computed 't' values of 3.86 and 3.95 which were found significant at .01 level of confidence for 78 df.

The significant difference was also found in the mean scores of the farm women from the area near to Chhotaudepur (45.37) and Dahod (39.88) as indicated by 't' value of 2.37 which was significant at .05 level of confidence for 78 df.

There was no significant differences found in the mean scores of the farm women from the areas near to Dahod (39.88) and Rajpipla (36.93) as well as Vyara (36.32) and Dahod (39.88) as computed 't' values of 1.15 and 1.34 respectively were found insignificant as per tabled 't' values. There was also no significant difference in the mean scores of the farm women from the areas near to Rajpipla (36.93) and Vyara (36.32) which was indicated by computed 't' value of .25 as per tabled 't' value.

The null hypothesis that there will be no significant differences in the extent of needs for training in the aspect of Foods and Nutrition for the farm women from the areas near to different centres within Navsari division of Gujarat State was retained in the cases of the farm women from the following areas -

- Between Dahod centre and Rajpipla and Vyara centres.
- Between Rajpipla and Vyara centres.

The same hypothesis was rejected in the areas of the farm women from the followings -

- Between Navsari centre and Chhotaudepur, Dahod, Rajpipla and Vyara centres.
- Between Chhotaudepur centre and Dahod, Rajpipla and Vyara centres.

Thus, it can be concluded that there were significant differences in the extent of training needs of the farm women among these areas in Navsari division. The higher extent of training needs in this aspect was in Vyara, followed by Rajpipla, Dahod and Chhotaudepur. The lowest extent of need for training for the farm women in Navsari district in this aspect of Foods and Nutrition.

Differences in Training Needs in the Aspect of Grain Storage

The table No.41 indicated 't' values for mean difference for the training needs of the farm women from the areas near to five centres in Navsari divisiion of Gujarat State.

Table 41. Differences in Mean Scores Achieved by the Farm Women From Navsari Division of Gujarat State in the Aspect of Grain Storage

Farmers' Training Centres	Mean Percentnage	Farmers' Training Centres in Navsari Division 't' values and df			
		Chhota-udepur	Dahod	Rajpipla	Vyara
Navsari N = 40	55.32	5.30* (78)	7.13* (78)	7.23* (78)	8.67* (78)
Chhotaudepur N = 40	36.11	--	.95 (78)	1.30 (78)	2.79** (78)
Dahod	32.66	--	--	.56 (78)	2.15** (78)
Rajpipla N = 40	30.70	--	--	--	1.47 (78)
Vyara N = 40	26.15	--	--	--	--

* Significant at .01 level of confidence
** Significant at .05 level of confidence

It was seen from the table that the computed 't' values of 7.23 and 8.67 in the mean scores of the farm women from the areas near to Navsari (55.32) and Rajpipla (30.70) as well as Navsari (55.32) and Vyara (26.15) respectively were found to be very highly signficant at .01 level of confidence for 78 df. It also showed the significant differences in the mean scores of the farm women from the areas near to Navsari (55.32) and Dahod (32.66) as well as Navsari (55.32) and Chhotaudepur (36.11) as indicated by the computed 't' values of 7.13 and 5.30 respectively were

found to be significant at .01 level of confidence for 78 df.

The computed 't' value of 2.79 and 2.15 in the mean scores of the farm women from the areas near to Chhotaudepur (36.11) and Vyara (26.15) as well as from Dahod (32.66) and Vyara (26.15) respectively were found to besignificant at .01 level and .05 level of confidence respectively for 78 df.

However, there were no significant differences found in the mean scores of the farm women from the areas near to Chhotaudepur (36.11) and Dahod (32.66) as well as Chhotaudepur (36.11) and Rajpipla (30.70) as revealed by the computed 't' values of .95, 1.30 respectively which were not found significant as per tabled 't' values. The computed 't' value of .56 and 1.47 in the mean scores of the farm women from the areas near to Dahod (32.66) and Rajpipla (30.70) as well as Rajpipla (30.70) and Vyara (26.15) indicated no significant differences when computed to table 't' value.

The null hypothesis that there will be no significant difference in the extent of needs for training in the aspect of Grain Storage for the farm women from the areas near to different centres within Navsari division of Gujarat State was retained in cases of the farm women from the following areas -

- Between Chhotaudepur centre and Dahod and Rajpipla centres.
- Between Dahod centre and Rajpipla centre.

- Between Rajpipla centre and Vyara centre.

The same hypothesis was rejected in cases of the farm women from the following area -

- Between Navsari centre and Chhotaudepur, Dahod, Rajpipla and Vyara centres.
- Between Chhotaudepur centre and Vyara centre.
- Between Dahod centre and Vyara centre.

It was also seen from the table that there was lowest need for training for farm women from Navsari district. The need for training for farm women was found in the remaining four areas, namely, Chhotaudepur, Dahod, Rajpipla and Vyara among them the highest need for training found was in Vyara followed by Rajpipla, Dahod and Chhotaudepur.

Differences in Training Needs in the Aspect of Child Care

The following table showed the computed 't' values denoting mean differences for training needs in the different areas of Navsari division.

Table 42. Differences in Mean Scores Achieved by the Farm Women From Navsari Division of Gujarat State in the Aspect of Child Care

Farmers' Training Centres	Mean Percentage	Farmers' Training Centres in Navsari Division 't' values and df			
		Chhota-udepur	Dahod	Rajpipla	Vyara
Navsari N = 40	43.91	2.29** (78)	5.16* (78)	7.18* (78)	8.85* (78)
Chhotaudepur N = 40	39.41	--	2.36** (78)	4.31* (78)	4.70* (78)
Dahod N = 40	34.23	--	--	2.10** (78)	2.11** (78)
Rajpipla N = 40	30.49	--	--	--	.51 (78)
Vyara N = 40	29.50	--	--	--	--

* Significant at .01 level of confidence
** Significant at .05 level of confidence

The above table revealed the computed 't' values of 7.18 and 8.85in the mean scores of the farm women from the areas near to Navsari (43.91) and Rajpipla (30.49) as well as Navsari (43.91) and Vyara (29.50) respectively were found to be highly significant at .01 level of confidence for 78 df. The computed 't' value of 5.16 in the mean scores of the farm women from the areas near to Navsari (43.91), and Dahod (34.23) was found to be significant at .01 level of confidence for 78 df.

The computed 't' values of 4.70 and 4.31 in the mean scores of the farm women belonging to the area near Chhotaudepur (39.41) and Vyara (29.50) as well as Chhotaudepur (39.41) and Rajpipla (30.49) were also found significant at .01 level of confidence for 78 df.

The computed 't' values of mean score of 2.11 and 2.10 in the mean score of farm women from the areas near to Dahod (34.23) and Rajpipla (30.49) as well as Dahod (34.23) and Vyara (29.50) were also found significant at .05 level of confidence for 78 df.

The significant differences were also found in the mean scores of the farm women from the areas near to Navsari (43.91) and Chhotaudepur (39.41) as well as Chhotaudepur (39.41) and Dahod (34.23) as revealed by the computed value of 2.29 and 2.36 respectively which were found to be significant at .05 level of confidence for 78 df.

However, the difference was not found significant in the mean scores of the farm women from the area near to Rajpipla (30.49) and Vyara (29.50) as the computed 't' value of .51 was not found significant as per tabled 't' value.

The null hypothesis that there will be no significant differences in the extent of needs for training in the aspect of Child Care for the farm women from the areas near to different centres within Navsari division of Gujarat

State was retained in case of the farm women from Rajpipla centre and Vyara.

The same hypothesis was rejected in cased of the farm women from the following -

- Between Navsari centre and Chhotaudepur, Dahod, Rajpipla and Vyara.
- Between Chhotaudepur centre and Dahod, Rajpipla and Vyara.
- Between Dahod centre and Rajpipla and Vyara.

It was concluded that the extent of need for training for farm women was higher in Vyara and Rajpipla. The extent of need for training for farm women was also higher in Dahod and Chhotaudepur than those from Navsari. However, in all the areas the farm women had other training needs in this aspect.

Differences in the Training Needs in the aspect of Energy Management

The table given below has shown the computed 't' values in the mean scores of the farm women from the five areas of Navsari division in the aspect of Energy Management.

Table 43. Differences in Mean Scores by of the Farm Women From Navsari Division of Gujarat State in the Aspect of Energy Management

Farmers' Training Centres	Mean Percentage	Farmers' Training Centres in Navsari Division 't' values and df			
		Chhota-udepur	Dahod	Rajpipla	Vyara
Navsari N = 40	21.84	1.58 (78)	4.25* (78)	5.80* (78)	5.95* (78)
Chhotaudepur N = 40	18.27	--	2.52** (78)	4.11* (78)	4.23* (78)
Dahod N = 40	13.81	--	--	2.05** (78)	2.20** (78)
Rajpipla N = 40	11.63	--	--	--	.16 (78)
Vyara N = 40	11.50	--	--	--	--

* Significant at .01 level of confidence
** Significant at .05 level of confidence

The table above indicated the highly significant differences in the mean scores of the farm women from the areas near to Navsari (21.84) and Vyara (11.50) as well as Navsari (21.84) and Rajpipla (11.63) as indicated by

computed 't' value of 5.95 and 5.80 respectively were found to be significant at .01 level of confidence for 78 df. The computed 't' value of 4.25 in the mean scores of the farm women from the areas near to Navsari (21.84) and Dahod (13.81) was also found significant at .01 level of confidence at 78 df.

The computed 't' values of 4.23 and 4.11 in the mean scores of the farm women from the areas near to Vyara (11.50) and Chhotaudepur (18.27) as well as Rajpipla (11.63) and Chhotaudepur (18.27) were also found to be significant at .01 level of confidence for 78 df.

The computed 't' values of 2.20 and 2.05 in the mean scores of the farm women from the area near to Vyara (11.50) and Dahod (13.81) as well as Rajpipla (11.63) and Dahod (13.81) were also found significant at .05 level of confidence for 78 df. The significant difference was also found in the mean scores of the farm women from the area near to Dahod (13.81) and Chhotaudepur (18.27) as revealed by the computed 't' value of 2.52 which was found significant at .05 level of confidence for 78 df.

However, no significant differences were found in the mean scores of the farm women from the areas near to Chhotaudepur (18.27) and Navsari (21.84) as well as Vyara (11.50) and Rajpipla (11.63) as revealed by the computed 't' values of 1.58 and .16 respectively which were insignificant as per table 't' value.

Therefore, the null hypothesis that there will be no significant difference in the extent of needs for training in the aspect of Energy Management for the farm women from the areas near to different centres within Navsari division of Gujarat State was retained in cases of the farm women from Navsari and Chhotaudepur as well as those from Rajpipla and Vyara.

The same hypothesis was rejected in cases of the farm women from the following areas -

- Between Navsari centre and Dahod, Rajpipla and Vyara centres.
- Between Chhotaudepur centre and Dahod, Rajpipla and Vyara centres.
- Between Dahod centre and Rajpipla and Vyara centres.

Thus, it was concluded that the training need for farm women in this aspect of Energy Management was in all the areas of Navsri division. However, higher extent of training need was in the area near to Vyara followed by Rajpipla, Dahod, Chhotaudepur.

RAJKOT DIVISION

There were seven centres in Rajkot division namely Rajkot, Surendranagar, Junagadh, Bhavnagar, Amreli, Jamnagar and Bhuj.

The following tables indicated 't' values indicating mean differences in the mean scores achieved in different aspects of Home Science Education by the farm women from the areas nearer to those seven Farmers' Training Centres in Rajkot division.

Differences in Training Needs in the Aspect of Health and Sanitation

Table 44. Differences in Mean Score Achieved by the Farm Women From Seven Centres of Rajkot Division of Gujarat State in the Aspect of Health and Sanitation

Farmers Training Centres	Mean Percentage	Farmers' Training Centres in Rajkot Division 't' values and df					
		Rajkot	Surend-ranagar	Amreli	Bhav-nagar	Jam-nagar	Bhuj
Junagadh N = 40	73.59	1.67*** (78)	1.87*** (78)	4.60* (58)	4.64* (58)	5.50* (58)	7.67* (58)
Rajkot N= 40	68.26	--	.02 (78)	3.84* (58)	4.60* (58)	5.50* (58)	7.47* (58)
Surendra--nagar N = 40	68.20	--	--	3.30* (58)	3.90* (58)	5.00* (58)	6.95* (58)
Amreli N = 20	52.97	--	--	--	.06 (38)	.83 (38)	1.18 (38)
Bhavnagar N = 20	52.60	--	--	--	--	.89 (38)	1.04 (38)
Jamnagar N = 20	48.11	--	--	--	--	--	.18 (38)
Bhuj N = 20	47.23	--	--	--	--	--	--

* Significant at .01 level of confidence
*** Significant at .1 level of confidence

Table indicated highly significant differences in the mean scores of the farm women from the areas nearer to Junagadh (73.59) and Amreli (52.97), and Junagadh (73.59) and Bhavnagar (52.60) as indicated by computed 't' values of 4.60 and 4.64 respectively which were found significant at .01 level of confidence for 58 df.

The computed 't' values of 5.50 and 7.67 in the mean scores of the farm women from the areas nearer to Junagadh (73.59) and Jamnagar (48.11) and Junagadh (73.59) and Bhuj (47.23) respectively were also found to be significant at .01 level of confidence for 58 df.

The computed 't' values of 1.67 and 1.87 in the mean scores of the farm women from the areas nearer to Junagadh (73.59) and Rajkot (68.26) and Junagadh (73.59) and Surendranagar (68.20) respectively were found significant at .1 level of confidence for 58 df.

Table also indicated highly significant differences in the mean scores of the farm women from the areas nearer to Rajkot (68.26) and Amreli (52.97) as well as Rajkot (68.26) and Bhavnagar (52.60) respectively as the computed 't' values of 3.84 and 4.60 were found significant at .01 level of confidence for 58 df.

The computed 't' values of 5.50 and 7.47 in the mean scores of the farm women from the areas nearer to Rajkot

(68.26) and Jamnagar (48.11) and Rajkot (68.26) and Bhuj (47.23) respectively were found significant at .01 level of confidence at 58 df. This revealed that the needs for training for the farm women from Amreli, Bhavnagar, Jamnagar and Bhuj were higher than those from Rajkot.

There were differences in the mean scores of the farm women from the areas nearer to Surendranagar (68.20) and Amreli (52.97) and Surendranagar (68.20) and Bhavnagar (52.60) as indicated by computed 't' value of 3.30 and 3.90 which were found significant at .01 level of confidence at 58 df. The computed 't' values of 5.00 and 6.95 in the mean scores of the farm women from the areas nearer to Surendranagar (68.20) and Jamnagar (48.11) and Surendranagar (68.20) and Bhuj (47.23) which were found highly significant at .01 level of confidence for 58 df.

However, there were no differences in the mean scores of the farm women from the areas nearer to Rajkot (68.26) and Surendranagar (68.20) as indicated by the computed 't' values of .02 which was not significant as per tabled 't' value. The computed 't' value of .06 in the mean scores of the farm women from the areas nearer to Amreli (52.97) and Bhavnagar (52.60) was also not found significant as per tables 't' value. The table also indicated no significant differences in the mean scores of the farm women from the areas nearer to Amreli (52.97) and Jamnagar (48.11) and

Amreli (52.97) and Bhuj (47.23) as indicated by the computed 't' values of .83 and 1.18 as per tabled 't' value. The computed 't' values of .89 and 1.44 in the mean scores of the farm women from the areas nearer to Bhavnagar (52.60) and Jamnagar (48.11) and Bhavnagar (52.60) and Bhuj (47.23) were not found significant as per tabled 't' value. The table also indicated that there was no difference found in the mean scores of the farm women from the areas nearer to Jamnagar (48.11) and Bhuj (47.23) as indicated by computed 't' value of .18, which was not significant as per tabled 't' value.

Thus, the hypothesis that there will be no significant difference in the extent of needs for training in the aspect of Health and Sanitation for the farm women from the areas nearer to different centres within Rajkot division of Gujarat State was retained in the following areas -

- Between Rajkot centre and Surendranagar centre.
- Between Amreli centre and Bhavnagar, Jamnagar, Bhuj centres.
- Between Bhavnagar centre and Jamnagar and Bhuj centres.
- Between Jamnagar centre and Bhuj centre.

The same hypothesis was rejected in case of the farm women from following areas -

- Between Junagadh centre and Rajkot, Surendranagar, Amreli, Bhavnagar, Jamnagar, Bhuj centres.
- Between Rajkot centre and Amreli, Bhavnagar, Junagadh, Bhuj centres.
- Between Surendranagar centre and Amreli, Bhavnagar, Jamnagar and Bhuj centre.

These findings indicated that the extent of training needs of the farm women from Bhuj, Jamnagar, Bhavnagar, Amreli, Surendranagar and Rajkot were higher than those from Junagadh. It can be inferred that the extent of the training needs of the farm women from Amreli, Bhavnagar, Jamnagar and Bhuj were higher than those from Surendranagar.

Thus, it can be concluded that the highest training need for the farm women from the areas near to Bhuj and Jamnagar followed by Bhavnagar and Amreli and than followed by Surendranagar and Rajkot. The lowest training need for the farm women from the area near to Junagadh.

Differences in the Training Needs in the Aspect of Household Storage

Table 45. Differences in Mean Score Achieved by the Farm Women From Seven Centres of Rajkot Division of Gujarat State in the Aspect of Household Storage

Farmers Training Centres	Mean Percentage	Farmers' Training Centres in Rajkot Division 't' values and df					
		Surend-nagr	Rajkot ranagar	Bhuj	Amreli nagar	Jam-nagar	Bhav-nagar
Junagadh N = 40	60.30	.95 (78)	1.01 (78)	1.63 (58)	2.43** (58)	2.95* (58)	3.25* (58)
Surendra-nagar N = 40	56.00	--	.07 (78)	.12 (58)	1.00 (58)	1.89*** (58)	2.81* (58)
Rajkot N = 40	55.65	--	--	.05 (58)	.76 (58)	1.56 (58)	2.23** (58)
Bhuj N = 20	54.13	--	--	--	.79 (38)	1.52 (38)	1.80*** (38)
Jamnagar N = 20	45.60	--	--	--	--	--	.46 (38)
Bhavnagar N = 20	42.43	--	--	--	--	--	--

* Significant at .01 level of confidence
** Significant at .05 level of confidence
*** Significant at .1 level of confidence

The computed 't' values of 3.25 and 2.95 in the mean scores of the farm women from the area near to Bhavnagar (42.43) and Junagadh (60.30) as well as Jamnagar (60.30) and Junagadh (60.30) were found to be significant at .01 level of confidence for 58 df. There was a significant difference in the mean score of the farm women closer to Bhavnagar (42.43) and Surendranagar (56.00) as indicated by computed 't' value of 2.81 which was found to be significant at .01

level of confidence.

The computed 't' values of 2.23 and 2.43 in the mean scores of the farm women from the area near to Amreli and Junagadh as well as Bhavnagar (42.43) and Rajkot (55.65) were found significant at .05 level of confidence for 58 df. The computed 't' value of 1.89 in the mean scores of the farm women from the area near to Jamnagar (45.60) and Surendranagar (56.00) was also found to be significant at .1 level of confidence at 38 df.

However, there were no differences in the mean scores of the farm women from the area near to Junagadh (60.30) and Surendranagar (56.00) as well as Junagadh (60.30) and Rajkot (55.65) as indicated by computed 't' values of .95 and 1.01 which were found insignificant at tabled 't' value.

Similarly, there was no difference in the mean scores of the farm women from the area near Junagadh (60.30) and Bhuj (54.13) as well as Bhuj (54.13) and Surendranagar (56.00) respectively as shown by computed 't' values of 1.63 and .12 which were not significant as per table 't' value.

The computed 't' values of .07 and 1.00 in the mean scores of the farm women from the area near to Surendranagar (56.00) and Rajkot as well as Surendranagar (56.00) and Amreli (51.00) were not found significant as per table 't' values.

The computed 't' values of .05 and .76 in the mean scores of the farm women from the area near to Rajkot (55.65) and Bhuj (54.13) as well as Rajkot (55.65) and Amreli (51.00) respectively were also found insignificant as per table 't' value.

There were no significant differences in the mean scores f the farm women from the areas near to Bhuj (54.13) and Amreli (51.00) as well as Bhuj (54.13) and Jamnagar (45.60) as indicated by the computed 't' values of .79 and 1.52 respectively were not found significant as per table 't' value.

The computed 't' values of 1.56 and .46 in the mean scores of the farm women from the area near to Jamnagar (45.60) and Rajkot (55.65) as well as Jamnagar (45.60) and Bhavnagar (42.43) were also not found significant as per table 't' value.

The computed 't' values of .75 and 1.40 in the mean scores of the farm women from the areas near to Amreli (51.00) and Jamnagar (45.60) as well as Amreli (51.00) and Bhavnagar (42.43) respectively were found in significant as per table 't' values.

Thus, the null hypothesis that there will be no significant difference in the extent of needs for training in the aspect of Household Storage for the farm women from the area near to different centres within Rajkot division

of Gujarat State, was retained in cases of the farm women from the following areas.

- Between Junagadh centre and Surendranagar, Rajkot and Bhuj centres.
- Between Surendranagar centres and Rajkot, Bhuj and Amreli centres.
- Between Rajkot centres and Bhuj, Amreli, Jamnagar centres.
- Between Bhuj centres and Amreli, Jamnagar centres.
- Between Amreli centre and Jamnagar, Bhavnagar centres.
- Between Jamnagar centre and Bhavnagar centres.

The same hypothesis was rejected in the cases of the farm women from the following areas -

- Between Junagadh centre and Amreli, Jamnagar and Bhavnagar centres.
- Between Surendranagar centre and Jamnagar, Bhavnagar centres.
- Between Rajkot centre and Bhavnagar centre.
- Between Bhuj centre and Bhavnagar centre.

Thus, it can be concluded that the farm women from the areas near to Bhavnagar and Jamnagar had greater extent of training needs in this aspect. However, the farm women from Junagadh, Surendranagar had lesser extent of training need than farm women from Rajkot, Bhuj and Amreli.

Differences in the Training Needs in the Aspect of Family Planning

Table showed 't' value denoting mean differences in training needs in the aspect of Family Planing for the farm women of Rajkot division

Table 46. Differences in Mean Score Achieved by the Farm Women From Seven Centres of Rajkot Division of Gujarat State in the Aspect of Family Planning

Farmers Training Centre	Mean Percentage	Farmers' Training Centres in Rajkot Division 't' values and df					
		Junagadh	Amreli	Jam-nagar	Rajkot	Bhuj	Bhav-nagar
Surendra--nagar N = 40	22.34	.81 (78)	1.54 (58)	2.56** (58)	4.26* (78)	2.93* (58)	3.73* (58)
Junagadh N = 40	20.26	--	.76 (58)	1.69*** (58)	2.98* (78)	2.10** (58)	2.77* (58)
Amreli N = 20	18.15	--	--	.83 (38)	2.18** (58)	1.21 (38)	1.91*** (38)
Jamnagar N = 20	15.85	--	--	--	.65 (58)	.46 (38)	1.20 (38)
Rajkot N = 40	14.79	--	--	--	--	.06 (58)	.98 (58)
Bhuj N = 20	14.67	--	--	--	--	--	.56 (38)
Bhavnagar N = 20	13.41	--	--	--	--	--	--

* Significant at .01 level of confidence
** Significant at .05 level of confidence
*** Significant at .1 level of confidence

The table indicated highly significant differences in

the mean scores of the farm women from the areas nearer to Surendranagar (22.34) and Rajkot (14.19) as indicated by computed 't' value of 4.26 which was found significant at .01 level of confidence for 78 df. This showed that the need for training was higher for the farm women from Rajkot than those from Surendranagar. The computed 't' value of 2.93 and 3.73 in the mean scores of the farm women from the areas nearer to Surendranagar (22.34) and Bhuj (14.67) as well as from Surendranagar (22.34) and Bhavnagar (13.41) were found significant at .01 level of confidence at 58 df.

The computed 't' value of 2.98 in the mean scores of the farm women from area near to Junagadh (20.26) and Rajkot (14.79) was found significant at .01 level of confidence at 78 df. The significant difference was also found in the mean scores of the farm women from the areas nearer to Junagadh (20.26) and Bhavnagar (13.41) as indicated by the computed 't' value of 2.77 which was found significant at .01 level of confidence at 58 df.

The computed 't' value of 2.56 and 2.10 in the mean scores of the farm women from the areas nearer to Surendranagar (22.34), Jamnagar (15.85) and from Junagadh (20.26) and Bhuj (14.67) respectively, were found significant at .05 level of confidence for 58 df. The significant difference was also found in the mean scores of the farm women from the areas nearer to Amreli (18.15) and

Rajkot (14.79) as indicated by the computed 't' value of 2.18 which was found significant at .05 level of confidence at 58 df which further indicated that the training needs of the farm women from Rajkot was higher than those from Amreli.

The computed 't' value of 1.69 and 1.91 in the means scores of the farm women from the areas nearer to Junagadh (20.26) and Jamnagar (15.85) as well as Amreli (18.15) and Bhavnagar (13.41) were found to be significant at .1 level of confidence at 58 and 38 df respectively.

However, there were no differences in the mean scores of the farm women from the areas nearer to Surendranagar (22.34) and Junagadh (20.26) as well as from Surendranagar (22.34) and Amreli (18.15) as indicated by the computed 't' value of .81 and 1.54 respectively which were found not significant as per tabled 't' value. The computed 't' value of .76 indicated no significant difference in the mean scores of the farm women from the areas nearer to Junagadh (20.26) and Amreli (18.15) as per tabled 't' value.

It was also seen from the table that computed 't' value of .83 and 1.21 in the mean scores of the farm women from the areas nearer to Amreli (18.15) and Jamnagar (15.85) as well as Amreli (18.15) and Bhuj (14.67) indicated no significant differences as per tabled 't' value.

The table also showed no significant difference in the mean scores of the farm women from the areas nearer to Jamnagar (15.85) and Bhavnagar (13.41) as well as from Jamnagar (15.85) and Bhuj (14.67) which were indicated by the computed 't' values of 1.20 and .46 as per tabled 't' value. Similarly, no significant difference was found in the mean scores of the farm women from the areas nearer to Jamnagar (15.85) and Rajkot (14.79) as indicated by the computed 't' value of .65 as per tabled 't' value. The computed 't' values of .06 and .98 in the mean scores of the farm women from the areas nearer to Rajkot (14.79) and Bhuj (15.67) and Rajkot (14.79) and Bhavnagar (13.41) indicated no significant differences as per tabled 't' value. The table also indicated that there was no significant difference in the mean scores of the farm women from the areas near to Bhavnagar (13.41) and Bhuj (14.67) as indicated by 't' values of .58 as per tabled 't' value.

Thus the hypothesis that there will be no significant difference in the extent of needs for training in aspect of Family Planning for the farm women from the areas nearer to different centres within Rajkot division of Gujarat State, was retained in case of the following areas -

- Between Surendranagar centre and Junagadh, Amreli centres.
- Between Junagadh centre and Amreli centre.
- Between Jamnagar centre and Rajkot, Bhuj and Bhavnagar centres.

- Between Rajkot centre and Bhuj, Bhavnagar centres.
- Between Bhuj centre and Bhavnagar centre.

The same hypothesis was rejected in case of the farm women from the following areas -

- Between Surendranagar centre and Jamnagar, Rajkot Bhuj, Bhavnagar centres.
- Between Junagadh centre and Jamnagar, Rajkot, Bhuj, Bhavnagar centres.
- Between Amreli centre and Rajkot, Bhavnagar centres.

Thus, it can be concluded that the extent of the training needs of the farm women from Bhuj and Bhavnagar were higher than those from Surendranagar. The extent of training needs of the farm women from Rajkot was higher than those from Junagadh. The extent of training need of the farm women from Bhavnagar was higher than those from Junagadh. The extent of training need of the farm women from Jamnagar was higher than those from Surendranagar. Similarly the extent of training needs of the farm women from Bhuj was higher than those from Junagadh. The extent of training needs of the farm women from Jamnagar and Bhavnagar were higher than those from Junagadh and Amreli respectively.

Differences in the Training Needs in the Aspect of Foods and Nutrition

Table indicating 't' value, denoting mean differences in training needs in the aspect of Foods and Nutrition for

the farm women of Rajkot division of Gujarat State.

Table 47. Differences in Mean Score Achieved by the Farm Women From Seven Centres of Rajkot Division of Gujarat State in the Aspect of Foods and Nutrition

Farmers Training Centre	Mean	Farmers' Training Centres in Rajkot Division 't' values and df					
		Surend-ranagar	Junagadh	Bhuj	Amreli	Bhav-nagar	Jam-nagar
Rajkot N = 40	59.07	.47 (78)	1.09 (78)	3.58* (58)	4.77* (58)	4.83* (58)	6.51* (58)
Surend-ranagar N = 40	57.48	--	.69 (78)	3.41* (58)	4.63* (58)	4.73* (58)	5.21* (58)
Junagadh N = 40	55.27	--	--	2.66* (58)	4.08* (58)	4.17* (58)	4.30* (58)
Bhuj N = 20	46.03	--	--	--	2.05** (38)	2.33** (38)	2.73* (38)
Amreli N = 20	40.76	--	--	--	--	.17 (38)	.57 (38)
Bhavnagar N = 20	40.26	--	--	--	--	--	.49 (38)
Jamnagar N = 20	38.49	--	--	--	--	--	--

* Significant at .01 level of confidence
** Significant at .05 level of confidence

The table indicated highly significant differences in the mean scores of the farm women from the area nearer to Rajkot (59.07) and Bhuj ((46.03) as well as Rajkot (59.07) and Amreli (40.76) as indicated by computed 't' values of 3.58 and 4.77, respectively which were found to be highly

significant at .01 level of confidence at 58 df. The computed 't' values of 4.83 and 6.51 in the mean scores of the farm women from the areas nearer to Rajkot (59.07) and Bhavnagar (40.26) and Rajkot (59.07) and Jamnagar (38.49) respectively indicated highly significant differences at .01 level of confidence at 58 df. This showed that the extent of training needs of the farm women from Bhuj, Amreli, Bhavnagar and Jamnagar were higher than those from Rajkot.

The computed 't' values of 3.41 and 4.63 indicating significant differences in the mean scores of the farm women from the are nearer to Surendranagar (57.48) and Bhuj (46.03), Surendranagar (57.48) and Bhavnagar (40.26) were found to be significant at .01 level of confidence at 58 df. There were differences in the mean scores of the farm women from the areas nearer to Surendranagar (57.48) and Bhavnagar (40.26) and Surendranagar (57.48) and Jamnagar (38.49) as indicated by computed 't' values of 4.73 and 5.21 which were significant at .01 level of confidence for 58 df.

The table indicated significant differences in the mean scores of the farm women from the areas nearer to Junagadh (55.27) and Bhuj (46.03) and Junagadh (55.27) and Amreli (40.76) as indicated by computed 't' values of 2.66 and 4.08 respectively, which were found to be significant at .01 level of confidence at 58 df. Similarly, the computed 't' values of 4.17 and 4.30 in the mean scores for the farm women from the areas nearer to Junagadh (55.27) and Bhavnagar (40.17) and Junagadh (55.27) and Jamnagar (38.49),

respectively indicated significant differences at .01 level of confidence at 58 df.

The computed 't' value of 2.73 in the mean scores of the farm women from the areas nearer to Bhuj (46.03) and Jamnagar (38.49) was found to be significant at .01 level of confidence at 38 df. The computed 't' values of 2.05 and 2.33 in the mean scores of the farm women from the areas nearer to Bhuj (46.03) and Amreli (40.76) and Bhuj (46.03) and Bhavnagar (40.26), respectively were found significant at .05 level of confidence at 38 df.

However, there were no significant differences found in the mean scores of the farm women from the areas nearer to Rajkot (59.07) and Surendranagar (57.48) and Rajkot (59.07) as well as Junagadh (55.27) as indicated by computed 't' value of .47 and 1.09, respectively which were found not significant as per tabled 't' value.

The computed 't' value of .69 and .49 in the mean scores of the farm women from the areas nearer to Surendranagar (57.48) and Junagadh and Bhavnagar (40.26) and Jamnagar (38.49) indicated no significant differences as per tabled 't' value.

The table also indicated no significant differences in the mean scores of the farm women from the areas nearer to Amreli (40.76) and Bhavnagar (40.26) and Amreli (40.76) and Jamnagar (38.49) as indicated by computed 't' values of .17

and .57 respectively, which were not significant as per tabled 't' values.

Therefore, the hypothesis that there will be no significant difference in the extent of needs for training the aspect of Foods and Nutrition for farm women from the areas nearer to different centres within Rajkot divisions of Gujarat State was retained in the following areas -

- Between Rajkot centre and Surendranagar, Junagadh centres.
- Between Surendranagar centre and Junagadh centre.
- Between Amreli centre and Bhavnagar and Jamnagar centres.
- Between Bhavnagar centre and Jamnagar centre.

The same hypothesis was rejected in case of the following areas -

- Between Rajkot centre and Bhuj, Amreli, Bhavnagar Jamnagar centres.
- Between Junagadh centre and Bhuj, Amreli, Bhavnagar Junagadh centres.
- Between Bhuj centre and Amreli, Bhavnagar Jamnagar centres.

It is seen from the table that the training needs of the farm women from the areas near to Bhuj, Amreli,Bhavnagar and Jamnagar were higher than those from Surendranagar. This showed that the training needs of the farm women from Bhuj, Amreli, Bhavnagar and Jamnagar were higher than those from

Junagadh. This indicated that the training needs of the farm women from the areas nearer to Jamnagar, Amreli and Bhavnagar were higher than those from Bhuj.

Differences in Training Needs in the Aspect of Grain Storage

The table showed 't' values, denoting mean differences in training needs for the aspect of Grain Storage for the farm women of Rajkot division of Gujarat State.

Table 48. Differences in Mean Score Achieved by the Farm Women From Seven Centres of Rajkot Division of Gujarat State in the Aspect of Grain Storage

Farmers Training Centre	Mean Percentage	Farmers' Training Centres in Rajkot Division 't' values and df					
		Surend-ranagar	Rajkot	Amreli	Bhav-nagar	Bhuj	Jam-nagar
Junagadh N = 40	40.04	2.45* (78)	2.47** (78)	3.51* (58)	3.65* (58)	5.68* (58)	5.96* (58)
Surendra--nagar N = 40	34.05	--	.05 (78)	1.68*** (58)	1.71*** (58)	3.70* (58)	4.19* (58)
Rajkot N = 40	33.91	--	--	1.55 (58)	1.57 (58)	3.41* (58)	3.95* (58)
Amreli N = 20	29.36	--	--	--	.06 (38)	1.85*** (38)	2.31** (38)
Bhavnagar N = 20	29.13	--	--	--	--	1.47 (38)	2.01*** (38)
Bhuj N = 20	25.04	--	--	--	--	--	1.12 (38)
Jamnagar N = 20	22.55	--	--	--	--	--	--

* Significant at .01 level of confidence
** Significant at .05 level of confidence
*** Significant at .1 level of confidence

The computed 't' values of 5.96 and 5.68 in the mean scores of the farm women from the areas nearer to Junagadh (40.04) and Jamnagar (22.55) and Junagadh (40.04) and Bhuj (25.04) respectively were found highly significant at .01 level of confidence at 58 df.

Similarly, the computed 't' values of 3.65 and 3.51 in the mean scores of the farm women from the areas nearer to Junagadh (40.04) and Amreli (29.36) respectively, were found significant at .01 level of confidence for 58 df. The computed 't' values of 2.45 and 2.47 indicated significant differences in the mean scores of the farm women from the areas nearer to Junagadh (40.04) and Surendranagar (34.05), from Junagadh (40,.04) and Rajkot (33.91) were found significant at .05 level of confidence at 78 df.

The computed 't' values of 4.19 and 3.70 in the mean scores of the farm women from the areas nearer to Surendranagar (34.05) and Jamnagar (22.25), and Surendranagar (34.05) and Bhuj (25.04) were found highly significant at .01 level of confidence at 58 df. The computed 't' values of 1.68 and 1.71 in the mean scores of the farm women from the areas nearer to Surendranagar (34.05) and Amreli (29.36) as well as Surendranagar (34.05) and Bhavnagar (29.13) respectively were found to be significant at .1 level of confidence at 58 df. There were significant differences in the mean scores of the farm

women from the areas nearer to Rajkot (33.91) and Jamnagar (22.25) and Rajkot (33.91) and Bhuj (25.04) as indicated by computed 't' values of 3.95 and 3.41 which were found significant at .01 level of confidence at 58 df. There were no significant differences in the mean scores of the farm women from the areas nearer to Rajkot (33.91) and Surendranagar (34.05) as indicated by computed 't' values of .05 which was not found significant as per tabled 't' value. The computed 't' value of 1.55 and 1.57 in the mean scores of the farm women from the areas nearer to Rajkot (33.91) and Amreli (29.36), and Rajkot (33.91) and Bhavnagar (29.13) were also not found significant as per tabled 't' value.

There were also significant differences in the mean scores of the farm women from the areas near to Amreli (29.39) and Jamnagar (22.25) and Bhavnagar (29.13) as indicated by 't' values of 2.31 and 2.01 were found to be significant at .05 level of confidence at 38 df.

The computed 't' value of 1.85 in the mean scores of the farm women from the areas nearer to Amreli (29.36) and Bhuj (25.04) was found significant at .1 level of confidence at 38 df. There were no significant differences in the mean scores of the farm women from the areas nearer to Amreli (29.36) and Bhavnagar (29.13) and Bhuj (25.04) and Bhavnagar (29.13) as the computed 't' values of .06 and 1.47 were not found significant as per tabled 't' value. Similarly, the computed 't' value of 1.12 in the mean score of the farm women from the areas nearer to Bhuj (25.04) and Jamnagar

(22.25) was also not found significant as per tabled 't' value.

Thus, the hypothesis that there will be no significant differences in the extent of needs for training in the aspect of Grain Storage for farm women from the areas nearer to different centres within Rajkot division of Gujarat State was retained in case of the following areas -

- Between Surendranagar centre and Rajkot centre.
- Between Rajkot centre and Amreli, Bhavnagar centre.
- Between Amreli centre and Bhavnagar centre.
- Between Bhavnagar centre and Bhuj centre.
- Between Bhuj centre and Jamnagar centre.

The same hypothesis was rejected in cases of the following areas -

- Between Junagadh centre and Surendranagar, Rajkot Amreli, Bhavnagar, Bhuj and Jamnagar centres.
- Between Surendranagar centre and Amreli, Bhavnagar, Bhuj, Jamnagar centres.
- Between Rajkot centre and Bhuj, Jamnagar centres.
- Between Amreli centre and Bhuj and Jamnagar centres.
- Between Bhavnagar centre and Jamnagar centre.

These findings showed that the extent of training needs of the farm women from Jamnagar, Bhuj, Bhavnagar and Amreli were higher than those from Junagadh. The extent of training

needs of the farm women from Surendranagar and Rajkot were higher than those from Junagadh. This indicated that the extent of training needs of the farm women from the areas nearer to Jamnagar and Bhuj were higher than those from Surendranagar. The training extent of needs of the farm women from Amreli and Bhavnagar were slightly higher than those from Surendranagar. This confirmed that the extent of training needs of the farm women from Jamnagar were higher than those from Amreli and Bhavnagar.

It showed that the extent of training needs of the farm women from Bhuj were slightly higher than those from Amreli. This showed that the training needs of the farm women from Jamnagar and Bhuj were higher than those from Rajkot.

Difference in the Training Needs in the Aspect of Child Care

The table showed the 't' values indicating significant differences in the mean scores of the farm women from the different areas in Rajkot division in the aspect of Child Care.

Table 49. Differences in Mean Score Achieved by the Farm Women From Seven Centres of Rajkot Division of Gujarat State in the Aspect of Child Care

Farmers Training Centre	Mean	Farmers' Training Centres in Rajkot Division 't' values and df					
		Surendra-ranagar	Rajkot	Jam-nagar	Bhuj	Bhav-nagar	Amreli
Junagadh N = 40	38.19	2.83* (78)	3.35* (78)	3.49* (58)	4.08* (58)	4.72* (58)	5.66* (58)
Surendra--nagar N = 40	32.57	--	.65 (78)	1.12 (58)	1.60 (58)	2.10** (58)	3.12* (58)
Rajkot N = 40	32.18	--	--	.51 (58)	.60 (58)	1.37 (58)	2.33** (58)
Jamnagar N = 20	29.83	--	--	--	.02 (38)	.82 (38)	1.77*** (38)
Bhuj N = 20	29.78	--	--	--	--	.79 (38)	1.36 (38)
Bhavnagar N = 20	27.85	--	--	--	--	--	1.17 (38)
Amreli N = 20	25.31	--	--	--	--	--	--

* Significant at .01 level of confidence
** Significant at .05 level of confidence
*** Significant at .1 level of confidence

The significant differences were also found in the mean scores of the farm women from the areas nearer to Junagadh

(38.19) and Bhavnagar (27.85) and Junagadh (38.19) and Amreli (25.31) as indicated by computed 't' value of 4.72 and 5.66 respectively which were found significant at .01 level of confidence at 58 df. The computed 't' values of 3.49 and 4.08 indicating highly significant differences in the mean scores of farm women from the areas nearer to Junagadh (38.19) and Jamnagar (29.78) as well as Junagadh (38.19) and Bhuj (29.78) respectively were found significant at .01 level of confidence at 58 df. The table showed the computed 't' values of 2.83 and 3.35 indicating highly significant differences in the mean scores of the farm women from the areas nearer to Surendranagar (32.57) and Junagadh (38.19) and from Rajkot (31.18) and Junagadh (38.19) respectively which were found at .01 level of confidence at 78 df.

The computed 't' value of 2.10 and 2.33 in the mean scores of the farm women from the areas near to Surendranagar (32.5) and Bhavnagar (27.85), and Rajkot (31.18) and Amreli (25.31) respectively were found significant at .05 level of confidence for 58 df.

There was a significant difference in the mean scores of the farm women from the areas near to Surendranagar (32.57) and Amreli (25.31) as indicated by computed 't' value of 3.12 which was found significant at .01 level of confidence at 58 df. This showed that training needs of the farm women from the areas near to Amreli was higher than those from Surendranagar.

The computed 't' value of 1.77 in the mean scores of the farm women from the areas nearer to Jamnagar (29.83) and Amreli (25.31) was found significant at .01 level of confidence for 38 df which indicated the extent of training needs of the farm women from Amreli was higher than those from Jamnagar.

However, there was no difference found in the mean scores of the farm women from the areas nearer to Surendranagar (32.57) and Rajkot (31.10) as indicated by computed 't' value of .65 which was found not significant as per tabled 't' value. There was no significant differences in the mean sores of the farm women from the areas nearer to Jamnagar (29.83) and Surendranagar (32.57) as well as Bhuj (29.78) and Surendranagar (32.57) as revealed by the computed 't' values of 1.12 and 1.60 respectively were not significant as per tabled 't' values. The computed 't' values of .51 and .60 in the mean scores of the farm women from the areas nearer to Rajkot (31.18) and Jamnagar (29.83) as well as Rajkot (31.18) and Bhuj (29.78) were not found significant as per table 't' value. There was also no significant difference found in the mean scores of the farm women from the area near to Rajkot (31.18) and Bhavnagar (27.85) as indicated by computed 't' value of 0.79 which was not as per tabled 't' value. The computed 't' value of .02 and .82 in the mean scores of the farm women from the areas nearer to Jamnagar (29.83) and Bhuj (29.78) as well as

Jamnagar (29.83) and Bhavnagar (27.85) respectively were also found insignificant as per tabled 't' value. There was also no significant differences in the mean scores of the farm women from the areas nearer to Bhuj (29.78) and Bhavnagar (27.85) as well as Bhuj (29.78) and Amreli (25.31) as indicated by the computed 't' value of 1.14 and 1.36 respectively which were not significant as per tabled 't' value.

The computed 't' value of 1.17 in the mean scores of the farm women from the areas nearer to Bhavnagar (27.85) and Amreli (25.31) was also found insignificant as tabled 't' value.

Thus, the hypothesis that there will be no significant differences in the extent of needs for training in the aspect of Child Care for the farm women from the areas nearer to different centres within Rajkot division of Gujarat State was retained in cases of the following areas -

- Between Surendranagar centre and Rajkot, Jamnagar, Bhuj centres.
- Between Rajkot centres and Jamnagar, Bhuj Bhavnagar centres.
- Between Jamnagar centre and Bhuj, Bhavnagar centres.
- Between Bhuj centre and Bhavnagar , Amreli centres.
- Between Bhavnagar centre and Amreli centre.

The same hypothesis was rejected in cases of the following areas -

- Between Junagadh centre and Surendranagar, Rajkot, Jamnagar, Bhuj, Bhavnagar, Amreli centres.
- Between Surendranagar centre and Bhavnagar, Amreli.
- Between Rajkot centre and Amreli centre.
- Between Jamnagar centre and Amreli centre.

It can be concluded that the farm women from the areas nearer to Surendranagar, Rajkot, Jamnagar, Bhuj, Bhavnagar and Amreli had higher extent of need than those from Junagadh. It showed that the extent of training needs of the farm women from Bhavnagar and Amreli were higher than those from Surendranagar and Rajkot respectively.

Differences in the Training Needs in the Aspect of Energy Management

The table showed the 't' values indicating significant differences in the mean scores of the farm women from the different areas in Rajkot division.

Table 50. Differences in Mean Score Achieved by the Farm Women From Seven Centres of Rajkot Division of Gujarat State in the Aspect of Energy Management

Farmers Training Centre	Mean	Farmers' Training Centres in Rajkot Division 't' values and df					
		Surendra-nagar	Bhav-nagar	Rajkot	Amreli	Jam-nagar	Bhuj
Junagadh N = 40	10.47	5.54* (78)	5.85* (58)	7.58* (78)	6.38* (58)	7.79* (58)	12.19* (58)
Surendra-nagar N = 40	8.42	--	.87 (58)	2.00** (78)	.61 (58)	3.84* (58)	8.34* (58)
Bhavnagar N = 20	8.01	--	--	1.10 (58)	1.25 (38)	2.89* (38)	9.17* (38)
Rajkot N = 40	7.74	--	--	--	.64 (58)	2.47** (58)	6.53* (58)
Amreli N = 20	7.47	--	--	--	--	1.43 (38)	4.93* (38)
Jamnagar N = 20	6.65	--	--	--	--	---	2.76* (38)
Bhuj N = 20	5.35	--	--	--	--	--	--

* Significant at .01 level of confidence
** Significant at .05 level of confidence

The table showed the highly significant difference in the mean scores of the farm women from the areas near to Junagadh (10.47) and Jamnagar (6.65) as well as Junagadh (10.47) and Bhuj (5.35) as indicated by the computed 't' values of 7.79 and 12.19 which were found highly significant at .01 level of confidence for 58 df. The computed 't' values of 5.85 and 6.38 were found to be highly significant

in the mean scores of the farm women from the areas near to Junagadh (10.47) and Bhavnagar (8.01) as well as Junagadh (10.47) and Amreli (7.47) which were found significant at .01 level of confidence for 58 df. The computed 't' values of 5.54 and 7.58 in the mean scores of the farm women from the areas near to Junagadh (10.47) and Surendranagar (98.42) as well as Junagadh (10.47) and Rajkot (7.74) were also found significant at .01 level of confidence for 78 df.

The table also showed the highly significant differences in the mean scores of the farm women from the area near to Bhuj (5.35) and Surendranagar (8.42) as well as Jamnagar (6.65) and Surendranagar (8.42) as revealed by the computed 't' values of 8.34 and 3.84 respectively which were found significant at .01 level of confidence at 58 df. The significant difference was also found in the mean scores of the farm women from the area near to Surendranagar (8.42) and Rajkot (7.74) as indicated by the computed 't' value of 2.00 which was found significant at .05 level of confidence for 78 df.

It was seen from the table that the computed 't' value of 9.17 and 2.89 in the mean scores of the farm women from the area near to Bhuj (5.35) and Bhavnagar (8.01) as well as Jamnagar (6.65) and Bhavnagar (8.01) respectively were also found significant at .01 level of confidence for 38 df. It further indicated that the training needs of the farm women from Bhuj and Jamnagar were higher than those from Bhavnagar.

The significant difference was also found in the mean scores of the farm women from the area near to Bhuj (5.35) and Rajkot (7.74) as indicated by the computed 't' values of 6.53 which was found significant at .01 level for 58 df. The computed 't' value of 2.47 in the mean scores of the farm women from the area near to Jamnagar (6.65) and Rajkot (7.74) was found significant at .05 level of confidence for 58 df.

The table also indicated the differences in the mean scores of he farm women from the area near to Bhuj (5.35) and Amreli (7.47) as well as Bhuj (5.35) and Jamnagar (6.65) as revealed by the computed 't' value of 4.93 and 2.76 respectively,which were found significant t .01 level of confidence for 38 df.

However, there were no significant differences found in the mean scores of the farm women from the area near to Surendranagar (8.42) and Bhavnagar (8.01) as well as Rajkot (7.74) and Bhavnagar (8.01) as indicated by the computed 't' values of .87 and 1.10 which were insignificant as per tabled 't' value. There were no significant differences in the mean scores of the farm women from Bhavnagar (8.01) and Amreli (7.47) as well as Rajkot and Amreli as revealed by the computed 't' value of 1.25 and .64 respectively which were not found significant as per tabled 't' value. The computed 't' values of 1.43 in the mean scores of the farm women from the area near to Amreli (7.47) and Jamnagar

(6.65) also was not found significant as per tabled 't' value.

Thus, the hypothesis, that there will be no significant differences in the extent of need for training in the aspect of Energy Management for the farm women from the areas nearer to different centres within Rajkot division of Gujarat State was retained in cases of the following areas -

- Between Surendranagar, Junagadh centre and Surendranagar, Bhavnagar, Amreli, Rajkot, Jamnagar, Bhuj centres.
- Between Surendranagar centre and Bhavnagar centre.
- Between Bhavnagar centre and Rajkot, Amreli centre.
- Between Amreli centre and Jamnagar centre.

The same hypothesis was rejected in cases of the farm women from the following areas -

- Between Surendranagar centre and Rajkot, Amreli, Jamnagar and Bhuj centres.
- Between Bhavnagar centre and Jamnagar, Bhuj centres.
- Between Rajkot centre and Jamnagar, Bhuj centres.
- Between Bhuj centre and Amreli, Jamnagar centres.

The means scores of the farm women from these areas namely Bhuj, Jamnagar, Amreli, Rajkot,Bhavnagar and Surendranagar were lower than those from Junagadh indicating significant differences and higher extent of needs for

training in this aspect. The lower mean scores of the farm women from Bhuj and Jamnagar indicated higher training needs than those from Surendranagar. This showed that the training needs of the farm women from Bhuj and Jamnagar were higher than those from Rajkot. The lower mean scores of farm women from Bhuj indicated higher training needs than those from Amreli and Jamnagar in this aspect. It further revealed that there were no significant differences in the extent of training needs of the farm women from Bhavnagar and Surendranagar, Bhavnagar and Rajkot as well as Bhavnagar and Amreli. Similarly there were no difference in the training needs of the farm women from Amreli and Rajkot as well as Amreli and Jamnagar.

3.3.3 DIFFERENCES IN THE MEAN SCORES OF FARM WOMEN BELONGING TO TRIBAL AND NON-TRIBAL AREAS

There were five tribal areas and twelve non-tribal areas studied under this investigation.

The table No.51 indicated mean differences in the score achieved by farm women from tribal and non-tribal areas from Gujarat State by using 't' test.

Table 51. Differences in the Mean Score Achieved by the Farm Women from Tribal and Non-Tribal Areas of Gujarat State

Aspects in Home Science Education	Tribal Area	Non-Tribal Area	't' Value
1. Health and Sanitation	53.30	62.02	10.77*
2. Household Storage	39.57	56.57	13.53*
3. Family Planning	57.75	43.38	7.62*
4. Foods and Nutrition	40.83	41.10	.38*
5. Grain Storage	22.04	40.39	22.15*
6. Child Care	34.32	34.73	.81
7. Energy Management	13.72	15.43	4.87*

df 578 significant at .01 level of confidence.

The table showed 't' values of 10.77 indicating highly significant differences in the mean score of the farm women from tribal area (62.02) and non-tribal area (53.30) in the aspect of Home Science Education which was found to be significant at .01 level of confidence at 578 df. This showed that tribal farm women (53.30) had lower mean score than those from non-tribal areas (62.02) indicated higher extent of training needs in this aspect.

The significant difference was also found in the mean score of the farm women from tribal areas (9.10) and non-

tribal areas (13.01). In the aspect of Household Storage as indicated by computed 't' value of 13.53 which was found to be significant at .01 level of confidence at 578 df. It showed that the mean scores of the farm women from non-tribal area (13.01) was higher than those from tribal areas (9.10) which subsequently indicated the higher extent of need for training farm women from tribal areas than those were from non tribal areas. It was noted from the table that only in the aspect of Family Planning the farm women from tribal area (57.75) had achieved higher mean score than those from non-tribal areas (43.48). The computed 't' value of 7.62 in the mean score achieved by farm women from tribal (57.75) are and non tribal area (43.38) indicated highly significant difference at .01 level of confidence at 578 df. This has brought the notice that the farm women from non-tribal areas had higher extent of need for training in this aspect than those from tribal areas.

The computed 't' value of 22.15 in the mean score obtained by the farm women from tribal area (40.39) was found to be highly significant at .01 level of confidence at 578 df. The mean score of the farm women from tribal area in this aspect of Grain Storage was lower than those from non-tribal area which indicated the higher extent of training needs for them as compared to those from non-tribal area.

In two aspects namely Foods and Nutrition and Child Care there were no significant differences found in the mean score of the farm women from tribal and non tribal areas. The computed 't' value of .38 inthe mean score of the farm women from non tribal area (60.02) and non tribal area (53.30) was not found to be significant when compared to 't' value in the aspect of Foods and Nutrition. While computed 't' value of .81 in the mean score of the farm women from the tribal area (84.32) and non-tribal area (34.73) was not found to be significant as per table 't' value in the aspect of Child Care. This showed that the mean scores of the farm women from both the areas, tribal and non tribal, were similar in both the aspects, therefore the extent of the needs for training in both the aspects in both the areas did not differ from each other.

The computed 't' value of 4.87 in the mean score of the farm women from tribal area (13.72) and non-tribal area (15.43) was found to be significant at .01 level of confidence at 578 df. The table showed that the mean score of the farm women from non-tribal area was higher when compared to the mean score of those from tribal areas, which further indicated that the extent of the need for training was higher for the farm women from tribal areas.

Thus, the null hypothesis that there will be no significant difference in the extent of need for training in the seven selected aspects of Home Science for the farm women from tribal and non-tribal areas of Gujarat State was

retained in the two aspects, namely, Foods and Nutrition and Child Care.

Whereas the same hypothesis was rejected in the five aspects namely, Health and Sanitation, Household Storage, Family Planning, Grain Storage and Energy Management.

Thus, it can be concluded that the extent of need for training was higher for the farm women from tribal areas in five aspects whereas it did not differ with the farm women from Non-Tribal areas in the aspect of Foods and Nutrition and Child Care.

3.4 Association Between Training Needs of the Farm women in Different Aspects of Home Science Education and the Selected Variables

This section shows the association between the training needs of the farm women in Home Science Education and the following selected variables.

a. Age of the farm women
b. Socio-economic status of the farm women
c. Prior training received by the farm women from Farmers' Training Centre
d. Proximity to the training centre
e. Exposure to the different training programmes

The categories within the selected variables have been made according to the data obtained. Only two categories in each variable made were as follows :

a. Age of the farm women

Young

Old

b. Socio-economic status of the farm women

High

Low

c. Training received by the farm women from Farmers Training Centre

Trained

Untrained

d. Proximity to the centre

Farness (More than 15 Kilometers)

Nearness(Less than 15 Kilometers)

e. Exposure to the different Training programmes other than Farmers' Training Centre

Exposed

Not exposed.

To find out the association between the training needs of the farm women and the selected variables Chi-Square and

coefficient of Contingency (C tests) were calculated. The findings and relevant discussion for this section are presented below.

3.4.1 ASSOCIATION BETWEEN TRAINING NEEDS OF THE FARM WOMEN AND THEIR AGE

The age of the farm women were divided into two categories of 18-30 years and above 31 years to 45 years of age. The data were categorical and the association was found out by using Chi-Square and 'C' tests. The values of Chi-Square tests and 'C' tests for the training needs in all different aspects of Home Science Education were obtained by using training needs as a dependent variable with the age of the farm women as independent variable as shown in table.

Table 52. Association Between Training Needs of the Farm Women in Selected Aspects of Home Science Education and Their Age

N = 580

Sr. No.	Aspects in Home Science	Age	Training Needs Lesser	Higher	X^2	C
1.	Health and Sanitation	Y	204 (57.62)	150 (42.38)	11.95*	.142
		O	97 (42.92)	129 (57.08)		
2.	Household Storage	Y	170 (48.02)	184 (51.97)	.003	.002
		O	108 (47.78)	118 (52.22)		
3.	Family Planning	Y	168 (47.45)	186 (52.55)	.11	.01
		O	104 (48.81)	122 (53.99)		
4.	Foods and Nutrition	Y	203 (57.34)	151 (42.66)	42.54*	.201
		O	67	159		
5.	Grain Storage	Y	177 (50.00)	177 (50.00)	.17	.012
		O	117 (51.76)	109 (48.24)		
6.	Child Care	Y	210 (59.32)	144 (40.68)	50.16*	.282
		O	66 (29.20)	160 (70.80)		
7.	Energy Management	Y	184 (51.97)	170 (48.03)	93.21*	.376
		O	28 (12.38)	198 (87.62)		

Table showed that in the aspect of Health and Sanitation (X^2 11.95), Foods and Nutrition (X^2 42.54), Child Care (X^2 50.16) and Energy Management (X^2 95.21) the calculated X values were much greater than the table value of 3.841 at .05 level. Whereas in the aspect of Household

Storage (X^2 .003), Family Planning (X^2 .11) and Grain Storage (X^2 .17), the calculated X^2 value were found to be less than the table value.

Therefore, the null hypothesis that there will be no association between training needs of farm women and their age, was accepted in the aspect of Household Storage, Family Planning and Grain Storage and the same hypothesis was not accepted in the aspects of Health and Sanitation, Foods and Nutrition, Child Care and Energy Management.

The data further revealed that proportion of respondent belonging to younger age group was higher and had lesser training needs in the aspects of Health and Sanitation, Foods and Nutrition, Child Care and Energy Management than the farm women from the older age group. Whereas the farm women from the older age group had higher training needs in these aspects. Among them the first three aspects were interrelated and the fourth aspect was a newly developed area. The younger farm women were expected to have more participation as beneficiaries under these programmes than the farm women from older age group which may be the reason for their possessing better knowledge. The younger women were ore exposed and thus farm women with various Health, Nutrition, Child Care as well as Energy Management Educational Programmes as direct and indirect beneficiaries. Thus, they acquired more information than the older group.

This was supported by Mital's study (1981) on educational needs of rural mothers for family desirable habits in children of 46 years of age which revealed the significant association between levels of knowledge on child feeding and the age of the respondents. It was also supported by Patel's study (1963) where it was reported that food habits were found to differ on the basis of age.

Regarding Health and Sanitation, Kapoor's (1977) study on value preferences of rural homemakers regarding general sanitation and cleanliness of house revealed that age had influenced on values for sanitation.

Further the data revealed that in the aspect of Household Storage, Grain Storage and Family Planning equal proportion of the farm women from both the age groups - younger and older - had training needs. The first two aspects related to Grain Storage and Household Storage in which the farm women from both the age groups usually followed traditional storage practices. There are scientific innovations, in Grain Storage as well as Household Storage in Agriculture Universities which necessitate the training for the farm women. This finding was supported by Upadhyaya (1990) who reported that age had no significant impact on the adoption of Grain Storage.

In the aspect of Family Planning, both the age groups had training needs, it revealed that there was no

association between training needs and age of the respondents, which was also supported by Rai (1987) who reported that age of the farm women had no association with the level of knowledge on Family Planning.

Thus, it was concluded that in four aspects, namely Health and Sanitation, Foods and Nutrition, Child Care and Energy Management younger the age of the women, lesser the training needs and older the age group of women, higher the training need.

3.4.2 ASSOCIATION BETWEEN TRAINING NEEDS OF THE FARM WOMEN AND THEIR SOCIO-ECONOMIC STATUS

The socio-economic status of the farm women were divided into two categories of high socio-economic status and low socio-economic status. The association was found out by using Chi-Square and 'C' tests between the training needs in different aspects of Home Science Education as dependent variable and the socio-economic status as independent variable.

Table 53. Association Between Training Needs of the Farm Women in Home Science Education and Their Socio-Economic Status

N = 580

Sr. No.	Aspects in Home Science	SES	Training Needs Lesser N %	Training Needs Higher N %	X^2	C
1.	Health and Sanitation	H	166 (84.69)	30 (15.31)	29.11*	.216
		L	242 (63.02)	142 (36.98)		
2.	Household Storage	H	49 (25.00)	147 (75.00)	3.06	.070
		L	123 (32.05)	261 (67.95)		
3.	Family Planning	H	156 (79.59)	30 (20.41)	33.15*	.232
		L	212 (55.20)	172 (44.80)		
4.	Foods and Nutrition	H	119 (60.71)	77 (39.29)	2.08	.059
		L	209 (54.42)	175 (45.58)		
5.	Grain Storage	H	178 (90.81)	18 (9.19)	155.66*	.459
		L	139 (36.19)	245 (63.81)		
6.	Child Care	H	112 (57.14)	84 (42.85)	1.07	.042
		L	202 (52.60)	182 (47.40)		
7.	Energy Management	H	45 (22.95)	15 (77.05)	1.77	.055
		L	108 (28.13)	276 (71.87)		

df = 1 Table value at .05 level = 3.841
Table value at .1 level = 6.635
H High Socio-Economic Status
L Low Socio-Economic Status

The table showed that in the aspect of Health and Sanitation (X^2 29.11), Family Planning (X^2 33.15) and Grain Storage (X^2 155.66) the calculated Chi-Square value were much greater than the table value at .01 level of confidence.

Therefore, the null hypothesis that there will be no association between training needs of the farm women and their socio-economic status was rejected in relation to these aspects, namely, Health and Sanitation, Family Planning and Grain Storage. Whereas in the aspect of Household Storage (X^2 3.06), Foods and Nutrition (X^2 2.08), Child Care (X^2 1.07) and Energy Management (X^2 1.77), the calculated Chi-Square value were found to be much less than the table value, hence the same hypothesis was accepted in these aspects.

It was seen from the table that large proposition of the farm women from higher socio-economic status had lesser training needs in the aspect of Health and Sanitation (84.69), Family Planning (79.5) and Grain Storage (90.81).

In the aspect of Health and Sanitation and Family Planning, the common component was Health. The farm women from higher socio-economic status were having facilities of watching television and radio listening, where some health programmes as well as some hints on health and sanitation are being telecasted and broadcasted. These gave them the opportunities to receive information on health aspect.

Therefore, larger proportion of farm women from high SES had lesser training needs.

The above findings were supported by Patel's (1963) study on dietary practices of low socio-economic groups which revealed that poor health was due to poor socio-economic status. This was also supported by Kapoor's study (1977) on value preferences of rural homemakers regarding general sanitation and cleanliness of the home, which indicated that below poverty line lower caste uneducated homemakers did not have value for sanitation.

3.4.3 ASSOCIATION BETWEEN TRAINING NEEDS OF THE FARM WOMEN AND PRIOR TRAINING RECEIVED BY THEM

All the respondents were categorised into two categories as Trained and Untrained. The farm women those who had received training prior from Farmers' Training Centres were categorised as Trained and those who did not receive training fall under the category of Untrained. The association was found by using Chi-Square and 'C' test. The prior training of the farm women was the independent variable under the study whereas training need of the farm women was dependent variable.

Table 54. Association Between Training Needs of the Farm Women in Different Aspects of Home Science Education and Prior Training Received From Farmers' Training Centres

N = 580

Sr. No.	Aspects in Home Science	Trained Untrained	Training Needs Lesser N %	Higher N %	X^2	C
1.	Health and Sanitation	T	184 (76.66)	56 (23.34)	109.07*	.430
		U	111 (32.64)	229 (67.26)		
2.	Household Storage	T	150 (62.50)	90 (37.50)	13.99*	.153
		U	159 (46.76)	181 (53.24)		
3.	Family Planning	T	164 (68.33)	76 (31.67)	63.88	.314
		U	118 (34.70)	222 (65.30)		
4.	Foods and Nutrition	T	199 (82.91)	41 (17.09)	18.49*	.175
		U	87 (25.28)	253 (74.42)		
5.	Grain Storage	T	183 (76.25)	57 (23.75)	112.84*	.403
		U	107 (31.47)	233 (68.53)		
6.	Child Care	T	162 (67.50)	78 (82.50)	79.77*	.343
		U	102 (30.00)	238 (70.00)		
7.	Energy Management	Y	131 (34.58)	109 (45.42)	61.11*	.308
		U	78 (22.94)	262 (77.06)		

df = 1 Table Value at .05 level = 3.841
Table Value at .1 level = 6.635

T = Trained by Farmers' Training Centre
U = Not Trained by Farmers' Training Centre

The table indicated that the calculated Chi-Square values were much greater than the table value at .01 level in all the aspects of Home Science Education. The greatest Chi-Square value, 112.84 was in the aspect of Grain Storage followed by the aspect of Health and Sanitation, showing Chi-Square value of 109.07 and Energy Management were the aspects which had Chi-Square value of 63.88 and 61.11 respectively. In the aspect of Foods and Nutrition and Household Storage the Chi-Square values of 18.49 and 13.99, respectively also were greater than the table value.

Therefore, the hypothesis that there will be no association between training needs of the farm women and the previous training received from Farmers Training Centres was rejected in all the aspects of Home Science Education.

The table showed that proportion of trained farm women was lower and they had lesser training need in all aspects. The proportion of untrained farm women was higher under the study and they had higher training needs in all the aspects than those from trained farm women. Thus, it indicated that the prior training of farm women was associated with training needs of the farm women. Trained women are exposed to different programmes and it helps them to gain some knowledge. Trained women possessed more knowledge as compared to the untrained farm women in all the aspects of Home Science Education.

Most of the studies have proved that training given to farm women helped them to possess some degree of knowledge. This finding is supported by the following studies.

A study by Kaushik (1968) indicated that 40 per cent of rural women showed favourable changes in dietary pattern. It was also supported by Verma's study (1985) on Training Needs of rural women which revealed that rural women had acquired sufficient level of knowledge regarding improved home practices particularly in Nutrition and Child Care.

Upadhyaya (1990) and Thombre Deshmukh (1987) studied the impact of Home Science Extension Programme on farm women's gain in knowledge of Foods and Nutrition practices and revealed that majority of women realised the importance of cooking materials and methods which indicated training was necessary as it increased the awareness and brought changes in their practices.

A study in gain in knowledge and change in attitude through training on improved homemaking tasks by Verma, Jain Devi (1989) also supported by revealing the significant gain in knowledge of rural women as well as changes in their attitudes in the aspect of Child Care and Nutrition on which training was given to them.

This was also supported by Deshpande (1987) in his study on behavioural change of rural women through training by observing that at the end that the women who received

training become knowledgeable, alert, bold and conscious of their needs and problems.

Thus, it can be concluded that trained farm women had some degree of knowledge and therefore lesser training needs. Whereas untrained farm women lack the knowledge and therefore had high training needs in the aspects of Home Science.

3.4.4 ASSOCIATION BETWEEN TRAINING NEEDS OF THE FARM WOMEN AND PROXIMITY TO THE CENTRE

The equal percentage of the respondents were selected from those villages which were within the radius of 15 kilometers from the centre and from those which were far villages, had more than 15 kilometers distance from the centre. This was followed in every district of Gujarat State including the study. Therefore, in both the categories the number of the respondent was equal. The total number of the respondent was 580 out of which 290 respondents were from nearer villages and the rest 290 were from the far villages.

Table 55. Association Between Training Needs of the From Women in Home Science Education and Proximity to the Centre

N = 580

Sr. No.	Aspects in Home Science Education	Proximity to the Centre	Training Needs Lesser	Higher	X^2	C
1.	Health and Sanitation	N	207 (71.37)	83 (28.63)	82.15	.352
		F	98 (33.79)	192 (66.21)		
2.	Household Storage	N	234 (80.68)	56 (19.32)	118.13	.411
		F	105 (36.20)	185 (63.80)		
3.	Family Planning	N	207 (71.37)	83 (28.63)	120.25	.414
		F	75 (25.86)	215 (74.14)		
4.	Foods and Nutrition	N	193 (66.55)	97 (33.45)	67.60	.323
		F	94 (32.41)	196 (67.59)		
5.	Grain Storage	N	198 (68.27)	92 (31.73)	67.63	.323
		F	99 (34.13)	191 (65.87)		
6.	Child Care	N	197 (67.93)	93 (32.07)	70.35	.328
		F	96 (33.10)	194 (66.90)		
7.	Energy Management	N	14.7 (50.68)	14.3 (49.32)	54.04	.291
		F	62 (21.37)	228 (78.63)		

df = 1 Table value at .05 level = 3.841 at .01 level 6.63

N = Near to the centre within the radius of 15 Kilometers
F = Far away from the centre beyond 15 Kilometer from FTC

The table showed that in all the aspects there was an association between the training needs of the farm women and the proximity to the centre. It was seen from the table that in aspect of Family Planning (X^2 120.25) and Household Storage (X^2 118.13) the calculated Chi-Square were much greater than the table value at .01 level of confidence.

In the aspect of Health and Sanitation (X^2 82.15) and Child Care (X^2 70.3) the calculated Chi-Square values were also greater than the table value of .01 level of confidence. The Chi-Square values of 67.60 and 67.63 which were very similar in the aspect of Grain Storage and Foods and Nutrition respectively were also found greater than those from table value at .01 level of confidence. In the aspect of Energy Management (X^2 54.04) the calculated Chi-Square value was also found greater than the table value at .01 level of confidence.

The table further showed that the higher proportion of farm women who were staying within the radius of 15 Kilometers had indicated lesser extent of training needs and those who were staying beyond 15 Kilometers, far from Farmers Training Centre indicated higher extent of training needs. Thus, it indicated a need for training centre at block and taluka level where women will have easy access to training. It was observed in this study that training the farm women helped them to possess some degree of knowledge.

This was supported by the findings by Deshpande (1987) on behavioural change of rural women through training which revealed the awareness among the women studied was more than 90 per cent. The participation of women increased and gradually the technology was adopted.

Gujarat Agricultural University, State Department of Agriculture and few voluntary associations should build up few training and information centre where farm women can be invited and some information regarding innovation and scientific methods in household activities can be imparted to them. The Krishi Vigyan Kendra are established with similar aims.

With the above discussion it can be concluded that there was an association between training needs of the farm women and the proximity to the centre.

Major Findings

Overall in Gujarat State

1. Majority of the farm women were from the untrained, younger age group with low socio-economic status not exposed to any programme and fifty per cent of them staying within the radius of 15 Kilometers from Farmers' Training Centres.

2. Farm women from Gujarat State had training needs in five out of seven aspects of Home Science Education namely Family Planning, Foods and Nutrition, Grain Storage, Child Care and Energy Management.

3. Farm women from Gujarat State had higher training needs in the aspect of Energy Management followed by the aspect of Child Care and Grain Storage and have lesser training needs in the aspects of Family Planning and Foods and Nutrition as compared to the above aspects.

Overall in Divisions of Gujarat State

4. The farm women from Ahmedabad of division of Gujarat State had training needs in six out of seven aspects of Home Science Education, namely, Health and Sanitation, Family Planning, Foods and Nutrition, Grain Storage, Child Care and Energy Management except in Household Storage, which was ranked seventh.

5. Farm women from Navsari division had training needs in all the aspects of Home Science, namely, Health and Sanitation, Household Storage, Family Planning, Foods and Nutrition, Grain Storage, Child Care and Energy Management.

6. Farm women from Rajkot division had need for training in five out of seven aspects of Home Science Education, namely, Family Planning, Foods and Nutrition, Grain Storage, Child Care and Energy Management except the aspect of Health and Sanitation and Household Storage, which were ranked second and seventh respectively by the experts in the subject matter.

7. There was a significant difference in the extent of training needs of the farm women from the divisions of Rajkot and Navsari as well as Rajkot and Ahmedabad in the aspect of Health and Sanitation.

8. There was a significant difference in the extent of training needs of the farm women from the divisions of Navsari and Ahmedabad as well as Navsari and Rajkot in the aspect of Household Storage.

9. There were significant differences in the extent of the training needs of the farm women from all the three divisions, namely, Rajkot, Ahmedabad and Navsri in both the aspects of Family Planning and Child Care in which the farm women from Rajkot division had higher extent of training needs than those from Navsari and Ahmedabad.

10. There were significant differences in the extent of training needs of the farm women among three divisions namely, Rajkot, Ahmedabad and Navsari in the aspects of Foods and Nutrition and Energy Management in which again the farm women from Rajkot had the higher extent of training needs than those from Ahmedabad and Navsari division.

Within Ahmedabad Division

11. The farm women from Ahmedabad district had training needs in the aspects of Grain Storage, Child Care and Energy Management. These farm women had the higher extent of training needs in the aspects of Energy

Management followed by Child Care and Grain Storage.

12. The farm women from Kaira district (Thasra) had training needs in the aspect of Child Care and Energy Management. The higher extent of training needs was in the aspect of Energy Management followed by Child Care.

13. The farm women from Mehsana (Pilwai) had training needs in six out of seven aspects of Home Science Education. The higher extent training needs of the farm women from this area was in the aspect of Energy Management, following by Child Care, Foods and Nutrition, Family Planning, Grain Storage in Home Science Education.

14. The farm women from Sabarkantha (Khedbrahma) had training needs in six out of seven aspects of Home Science Education. They had higher extent of training needs in the aspects of Energy Management followed by Grain Storage, Child Care, Household Storage, Family Planning and Foods and Nutrition.

15. The farm women from Banaskantha (Deesa) had training needs in six out of seven aspects of Home Science Education. The higher extent of training need was in the aspects of Energy Management followed by Child Care, Foods and Nutrition, Grain Storage, Health and Sanitation and Family Planning.

Within Navsari Division

16 Farm women from Valsad (Navsari) had training needs in two out of seven aspects. They had higher extent of need for training in the aspect of Energy Management followed by Child Care.

17. The farm women from Surat (Vyara), a tribal area had needs for training in all the aspects of Home Science Education. They had higher extent of training needs in the aspects of Energy Management, followed by Grain Storage, Family Planning,Child Care, Household Storage, Foods and Nutrition and Health and Sanitation.

18. The farm women from the area of Chhotaudepur had need for training in six out of seven aspects of Home Science Education. They had higher extent of training needs in the aspect of Energy Management followed by Grain Storage, Child Care, Household Storage, Foods and Nutrition and Family Planning.

19. The farm women from Bharuch (Rajpipla) had training needs in six out of seven aspects of Home Science Education. The higher extent of training need were in the aspects of Energy Management followed by Grain Storage and Child Care followed by Household Storage, Foods and Nutrition and Family Planning.

Within Rajkot Division

20. The farm women from Rajkot area had training needs in five out of seven aspects of Home Science Education. The higher extent of training need was in the aspect of Energy Management followed by Family Planning, Child Care, Foods and Nutrition and Grain Storage.

21. The farm women from Surendranagar had training need in all the seven aspects of Home Science Education. The higher extent of training need was in the aspect of Energy Management followed by Child Care, Foods and Nutrition, Family Planning and Grain Storage.

22. The farm women form Jamnagar had training needs in all the aspects of Home Science Education. The higher extent of training needs was in the aspect of Energy Management, followed by Foods and Nutrition, Grain Storage, Child Care, Family Planning, Health and Sanitation and Household Storage.

23. The farm women from Bhuj had training needs in six out of seven aspects of Home Science Education. The higher extent of training need was in the aspect of Energy Management, followed by Family Planning, Child Care, Grain Storage, Foods and Nutrition and Health and Sanitation.

25. The farm women from Amreli had training needs in six out of seven aspects of Home Science Education, the higher extent of training need was in the aspect of Energy Management, followed by Child Care, Foods and Nutrition, Family Planning, Grain Storage and Health and Sanitation.

26. The farm women from Bhavnagar had training needs in all the aspect of Home Science Education. The higher extent of training need was in the aspects of Energy Management followed by Family Planning, Child Care, Foods and Nutrition, Grain Storage, Household Storage and Health and Sanitation.

CONCLUSION

Training programme in Home Science Education for farm women is a prime necessity. The main aim of any training programme leads to improve the standard of living of the family.

In Gujarat State training programme for farm women are required in seven selected aspects of Home Science Education. These training programme need to be focussed more on these aspects namely foods and Nutrition, Grain storage, Child Care, Family Planning and Energy Management.

The extent of training needs for the farm women differs from division to division and among divisins from district to district.

In Ahmedabad division training programmes need to be focussed on six aspects of Home Science Education namely Health and Sanitation, Family Planning, Foods and Nutrition, Child Carre, Grain storage and Energy management. The farm women belong to Mehsana (Pilwai), Banaskantha (Deesa) and Sabarkantha (Khedbrahma) need more training programme than those from Ahmedabad and Kaira (Thasra).

Farm women in majority in Navsari division belong to tribal areas. They require training programmes in all the aspects of Home Science Education. The extent of training needs of tribal farm women also differ among them. The farm women from Baruch (Rajpipala), Surat (Vyara) and Sabarkantha (Khedbrahma) require more and continous programme in all the aspects of Home Science Education than those from Vadodara (Chhotaudepur) and Panchamahal (Dahod).

In Rajkot division the training programme organised should be more on Foods and Nutrition, Child Care, Grains Storage, Family Planning and Energy management.

The extent of training programme differ from district to district. The farm women from Bhuj, Jamnagar, Bhavnagar, Amreli and Surendranagar need more training programmes in all aspects of Home Science Education.

Overall, the aspects of Energy Management is absent in all the training programme. This requires attention of the planners and policy makers of the

training institutions to include this aspects in training programme.

Moreover, the vacancies of the post of female demostrators in the Farmers Training Centres should be filled immediately so that it will become possible to organise the training programme effectively for the farm women.