

P A R T I I I

CHAPTER I

PRESENTATION AND ANALYSIS OF THE DATA

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The data collected with the help of questionnaires and letters through postal correspondence with different educational agencies like the State Board of Secondary Education, State Board of School Leaving Certificate Examination and Directorate of Public Instruction, high schools and higher secondary schools of different States of India was classified, tabulated and statistically analysed in light of the objectives and hypotheses of the study.

The processed data along with proper classification and relevant information are presented in this chapter in two sections. The first section deals with the information provided by the State authorities and the second section deals with the information provided by the senior Home Science teachers of different high schools and higher secondary schools of all the participated States of India.

SECTION I

Information Regarding the Programme of Home
Science Education in Different State of IndiaA. Institutes Offering Home Science at
Secondary Level in Different States of India

A survey of the number of high schools and higher secondary schools offering Home Science as one of the subjects for study at secondary level in different States of India was made to determine the total number of such institutions in India and to know its population in each State. Actually, Home Science is offered as one of the subjects for study with the recommendations of the Mudaliar and Kothari Commission Reports that the educational institutions must provide work experience to the learners and with that recommendation many high schools and higher secondary schools were converted into vocational or multipurpose high schools and higher secondary schools. The growth of such multipurpose high schools and higher secondary schools with Home Science stream at the interval of ten years and 20 years was studied. Thus the years 1962 and 1971 were selected as years for the study of the growth of multipurpose high schools and higher secondary schools that offer Home Science.

In 1982 some of the States like Haryana, Himachal Pradesh and few others were not in existence but for the matter of convenience to compare the growth of number of

Home Science offering institutions at secondary level, the basically acquired data was separated (with the help of the map of India) as per the presently existing number of States. Even from the present existence of the States and Union Territories, few States like Nagaland, Manipur-Tripura and other Union Territories like Div, Daman, Goa, Andaman-Nikobar islands, Dadra-Nagar Haveli, etc. were omitted for the collection of the data as they do not have Home Science stream in any of the systems of education.

The general information of the number of institutions offering Home Science at secondary level in different States of India is presented in Table I.

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| TABLE I |
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The table shows Statewise total number of institutions offering Home Science at secondary level in India in 1962 and 1971. It also indicates the total number of high schools and higher secondary schools offering Home Science as one of the subjects for study in different States of India in the year 1962 and 1971. Thereby it indicates the total number of high schools and higher secondary schools offering Home Science as one of the subjects for study in India in 1962 and 1971.

TABLE I

Number of Secondary Schools Offering Home Science
in Different States of India in 1962 and in 1971

| Sr. No. | Name of the States | Total No. of Schools in | | No. of Higher Secondary Schools in | | No. of High Schools in | |
|---------|--------------------|---|------|------------------------------------|------|------------------------|------|
| | | 1962 | 1971 | 1962 | 1971 | 1962 | 1971 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Andhra Pradesh | 24 | 62 | 20 | 22 | 4 | 40 |
| 2 | Assam | - | 9 | - | 9 | - | - |
| 3 | Bihar | No information was provided by the State authority. | | | | | |
| 4 | Delhi & U.P. | 288 | 292 | 288 | 290 | - | 2 |
| 5 | Gujarat | 20 | 44 | - | 4 | 20 | 40 |
| 6 | Himachal Pradesh | 5 | 5 | 5 | 5 | - | - |
| 7 | Jammu Kashmir | Home Science is not offered at Secondary level. | | | | | |
| 8 | Kerala | 7 | 14 | - | - | 7 | 14 |
| 9 | Madhya Pradesh | 97 | 116 | 97 | 116 | - | - |
| 10 | ■ Madras | 38 | 38 | - | - | 38 | 38 |
| 11 | Maharashtra | 29 | 375 | - | 29 | 29 | 346 |
| 12 | Mysore | 52 | 53 | 2 | 2 | 50 | 51 |
| 13 | Orissa | - | 3 | - | 2 | - | 1 |
| 14 | Punjab-Haryana | 11 | 15 | 11 | 15 | - | - |
| 15 | Rajasthan | 20 | 82 | 7 | 19 | 13 | 63 |
| 16 | West Bengal | 65 | 81 | 65 | 81 | - | - |
| Total | | 656 | 1189 | 495 | 594 | 161 | 595 |

B. Some Particular Information about
the Programme of Home Science
Education at State Level

In order to have complete information about the salient features of Home Science programme in different States of India, the data regarding the initial stage of introduction of Home Science subject in the secondary system, where it is a compulsory or an optional subject and reasons for introducing Home Science in secondary system, reasons for opening more number of Home Science offering schools, financial aids granted by the State Department of Education, its popularity and unpopularity, examination pattern and weightage given to different sections of the Home Science subject etc. were collected.

The data regarding the above mentioned points are presented in Table II.

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| TABLE II |
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SECTION II

After inquiring about the basic facts and figures related to the programme of Home Science education in different States of India, to gain specific information, further correspondences were made with the individual high schools through the questionnaire and letters. The

questionnaire was posted to the schools as per the list of the Home Science offering schools which was received from the State Government authorities. The importance of the study was emphasised a lot in the forwarding letter but due to lack of readiness to co-operate with the investigator, very poor response was received from the participating institutions in the initial stage. As far as possible, all the while reminders were written many times, questionnaires were sent again and again as and when they were asked for. Then only atleast response upto 50.5 per cent was achievable. Later on due to lack of enthusiasm on the part of the participating institutions, no correspondences were made with the rest of the institutions.

The details about the number of participating high schools and higher secondary schools of different States of India are presented in Table III.

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| TABLE III |
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A. Type of Schools Participated in the Study

The co-educational high schools as well as higher secondary schools and also pure girls higher secondary schools and high schools with Home Science stream participated in providing the information.

The details about the number of co-education higher

TABLE III

Number of Institutes Participated from Different States, in Providing the Relative Information

| Sr. No. | Name of the States | No. of Higher Secondary Schools participated | Number of High schools participated | Total No. of participating Higher Secondary Schools and High Schools |
|---------|--------------------|---|-------------------------------------|--|
| 1 | Andhra Pradesh | 20 | 33 | 53 |
| 2 | Assam | 9 | - | 9 |
| * 3 | Bihar | No information was provided | | |
| 4 | Delhi and U.P. | 188 | 2 | 190 |
| 5 | Gujarat | 4 | 40 | 44 |
| 6 | Himachal Pradesh | 5 | - | 5 |
| 7 | Jammu-Kashmir | Not offering Home Science at secondary level. | | |
| 8 | Kerala | - | 14 | 14 |
| 9 | Madhya Pradesh | 68 | - | 68 |
| 10 | Madras | - | 30 | 30 |
| 11 | Maharashtra | 1 | 37 | 38 |
| 12 | Mysore | 2 | 36 | 38 |
| 13 | Orissa | 1 | 2 | 3 |
| 14 | Punjab and Haryana | 15 | - | 15 |
| 15 | Rajasthan | 19 | 33 | 52 |
| 16 | West Bengal | 41 | - | 41 |
| Total | | 373 | 227 | 600 |

* Bihar is the only State that did not send the list of High Schools and Higher Secondary Schools with Home Science wing so here also the number of participating institutions from Bihar is absent.

secondary schools and high schools as well as the number of girls higher secondary schools and high schools with Home Science stream are presented in Table IV.

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| TABLE IV |
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The table also indicates the total number of co-educational higher secondary schools and high schools as well as the girls higher secondary schools and high schools who participated in providing the information pertaining to the programme of Home Science education at the respective institutions. All these schools were multipurpose schools offering varied subjects for the boys and the girls.

B. Location of the Home Science Offering Schools

As far as the utility of the Home Science education is concerned, it is personally thought that the programme of Home Science education will be of the highest necessity in villages because the city and town dwellers obtain the necessary information pertaining to home-making and house-keeping by reading the periodicals, books and other materials but the village girls who are neglected at school to guide them for home-making and house-keeping are least informed.

It is very surprising that most of the Home Science offering schools are situated in big cities and towns and very few schools are situated in villages where Government or the

TABLE IV
Types of Schools

| Sr. No. | Name of the States | Co-educational Schools | | | | Girls' Schools | | | |
|---------|--------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| | | Higher Secondary Schools | High Schools |
| | | Total No. of schools participated |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | Andhra Pradesh | - | - | 3 | 3 | 22 | 20 | 37 | 30 |
| 2 | Assam | 4 | 4 | - | - | 5 | 5 | - | - |
| 3 | Bihar | No information | was received | so far | | | | | |
| 4 | Delhi and U.P. | - | - | - | - | 290 | 188 | 2 | 2 |
| 5 | Gujarat | 4 | 4 | 14 | 14 | - | - | 26 | 26 |
| 6 | Himachal Pradesh | - | - | - | - | 5 | 5 | - | - |
| 7 | Jammu-Kashmir | Not offering | Home Science at Secondary level | | | | | | |
| 8 | Kerala | - | - | - | - | - | - | 14 | 14 |
| 9 | Madhya Pradesh | 18 | 16 | - | - | 98 | 52 | - | - |
| 10 | Madras | - | - | 10 | 10 | - | - | 28 | 20 |
| 11 | Maharashtra | 1 | 1 | 26 | - | - | - | 348 | 37 |
| 12 | Mysore | - | - | 14 | 10 | 2 | 2 | 37 | 26 |
| 13 | Orissa | 1 | 1 | 2 | 2 | - | - | - | - |
| 14 | Punjab-Haryana | - | - | - | - | 15 | 15 | - | - |
| 15 | Rajasthan | 6 | 6 | 5 | 5 | 13 | 13 | 58 | 28 |
| 16 | West Bengal | 7 | 6 | - | - | 74 | 36 | - | - |
| Total | | 41 | 37 | 74 | 44 | 524 | 336 | 550 | 183 |

local leaders have taken little interest in popularising Home Science in their villages. The village girls are the one who need most up-to-date information pertaining to Home-making but due to lack of finance and enthusiasm on the part of the administrators, they are not benefitted much by this subject.

The details about the number of higher secondary schools and high schools of different states of India as how many are located in villages, towns and cities are presented in Table V.

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| TABLE V |
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C. Number of Home Science Teachers, Their Qualifications and Their Teaching Experience

The effectiveness of teaching in any programme depends on the qualities of the teachers and the knowledge and experience they possess. With a view to know the number of teachers working as Home Science teachers in the Home Science teaching high schools and higher secondary schools of India, their qualifications, whether trained or untrained and since how long time they teach the Home Science subject, few questions were structured.

The details about the number of teachers working as Home Science teachers in the high schools and higher secondary

TABLE V
Location of the Secondary Schools with Home Science Stream

| Sr. No. | Name of the States | In villages | | | In towns | | | In cities | | |
|---------|--------------------|--------------------------|--------------------------|-----------------|--------------------------|--------------------------|--------------|--------------------------|--------------------------|--------------|
| | | Higher Secondary Schools | Higher Secondary Schools | High Schools | Higher Secondary Schools | Higher Secondary Schools | High Schools | Higher Secondary Schools | Higher Secondary Schools | High Schools |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1 | Andhra Pradesh | - | - | 5 | 11 | 17 | 29 | - | - | - |
| 2 | Assam | - | - | - | - | 9 | - | - | - | - |
| 3 | Bihar | No information | was received | - | - | - | - | - | - | - |
| 4 | Delhi & U.P. | - | - | 50 | - | 240 | 2 | - | - | - |
| 5 | Gujarat | - | 4 | 1 | 8 | 3 | 28 | - | - | - |
| 6 | Himachal Pradesh | - | - | - | - | 5 | - | - | - | - |
| 7 | Jammu-Kashmir | Does not offer | Home Science at | Secondary level | - | - | - | - | - | - |
| 8 | Kerala | - | - | - | 4 | - | 10 | - | - | - |
| 9 | Madhya Pradesh | 11 | - | 59 | - | 46 | - | - | - | - |
| 10 | Madras | - | - | - | 25 | - | 13 | - | - | - |
| 11 | Maharashtra | - | - | 11 | 160 | 18 | 186 | - | - | - |
| 12 | Mysore | - | - | - | 1 | 2 | 50 | - | - | - |
| 13 | Orissa | - | - | - | - | 2 | 1 | - | - | - |
| 14 | Punjab-Haryana | - | - | 2 | - | 13 | - | - | - | - |
| 15 | Rajasthan | - | - | 7 | 35 | 12 | 28 | - | - | - |
| 16 | West Bengal | - | - | 33 | - | 48 | - | - | - | - |
| Total | | 11 | 4 | 168 | 244 | 415 | 347 | - | - | - |

schools of different states are presented in Table VI. The table also presents the number of schools having different number of Home Science teachers.

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| TABLE VI |
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The qualification of the Home Science teachers was studied with a view to know whether they possess the basic qualification as far as the knowledge of the subject matter and methods are concerned. The details about the qualifications of the Home Science teachers are presented in Table VII.

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| TABLE VII |
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As far as the experience of teaching Home Science in the secondary schools is concerned the details are presented in Table VIII.

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| TABLE VIII |
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It was purposefully asked whether the Home Science teachers are responsible for teaching other subjects or not because when they are allotted with the periods of some other subjects, their level of work increases and they do not pay keen attention on the preparation for Home Science

TABLE VI
Number of Home Science Teachers

| Sr. No. | Name of the States | Number of Home Science Teachers | | | | | | More than Three Teachers | |
|---------|--------------------|---------------------------------|----------------------------------|----------------|------------------------------------|------------------------|------------------------|--------------------------|----|
| | | One Teacher | Two Teachers | Three Teachers | Number of Higher Secondary Schools | Number of High Schools | Number of High Schools | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | Andhra Pradesh | 2 | 22 | 4 | 8 | 10 | 3 | 11 | - |
| 2 | Assam | - | - | 5 | - | 4 | - | - | - |
| 3 | Bihar | No information | was received. | | | | | | |
| 4 | Delhi and U.P. | 8 | - | 101 | 2 | 62 | - | 7 | - |
| 5 | Gujarat | 1 | 21 | 3 | 13 | - | 5 | - | 1 |
| 6 | Himachal Pradesh | 2 | - | 3 | - | - | - | - | - |
| 7 | Jammu-Kashmir | Not offering | Home Science at Secondary level. | | | | | | |
| 8 | Kerala | - | 3 | - | 5 | - | 4 | - | 2 |
| 9 | Madhya Pradesh | 18 | - | 43 | - | 9 | - | 8 | - |
| 10 | Madras | - | 15 | - | 12 | - | 2 | - | 1 |
| 11 | Maharashtra | - | 11 | - | 21 | 1 | 3 | - | 2 |
| 12 | Mysore | - | 5 | - | 20 | 1 | 4 | - | 3 |
| 13 | Orissa | 1 | - | - | - | - | - | - | - |

TABLE VII

Qualifications of the Home Science Teachers

| Sr. No. | Name of the States | B.Sc. (Home) | M.Sc. (Home) | B.A. with H.Sc. major | B.Sc. (Home) B.Ed. | M.Sc. (Home) B.Ed. | B.A., B.Ed.+ Any Other* | Number of | | Secondary level. | | | | | |
|---------|--------------------|--------------|----------------|-----------------------|--------------------|--------------------|-------------------------|-----------|-------------|------------------|----|----|----|----|----|
| | | | | | | | | H.S.S. | H.S.S. H.S. | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | Andhra Pradesh | 13 | 29 | 19 | 3 | 8 | 8 | 6 | 2 | - | 1 | 7 | 3 | 3 | 3 |
| 2 | Assam | 12 | - | 10 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | Bihar | | No information | | | | | | | was received. | | | | | |
| 4 | Delhi and U.P. | 198 | - | 26 | - | 30 | 4 | 136 | - | - | - | 33 | - | 1 | - |
| 5 | Gujarat | - | 19 | 5 | 4 | - | 28 | - | 9 | - | - | - | 5 | 2 | 1 |
| 6 | Himachal Pradesh | 2 | - | - | - | 5 | - | - | - | - | - | 1 | - | - | - |
| 7 | Jammu-Kashmir | | Not offering | | | Home Science | | at | | | | | | | |
| 8 | Kerala | - | 14 | - | 2 | - | 8 | - | 2 | - | - | - | 4 | - | 3 |
| 9 | Madhya Pradesh | 63 | - | 14 | - | 71 | - | 4 | - | 1 | - | 9 | - | 1 | - |
| 10 | Madras | - | 29 | - | 10 | - | 5 | - | 2 | - | - | - | 1 | - | 2 |
| 11 | Maharashtra | 1 | 17 | 2 | 3 | - | 31 | - | 4 | - | 2 | - | 8 | - | 5 |
| 12 | Mysore | 2 | 23 | 3 | 2 | - | 26 | 1 | 8 | - | - | - | - | - | 7 |
| 13 | Orissa | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - | - |

TABLE VIII

Teaching Experience of the Home Science Teachers

| Sr. No. | Name of the States | One year | | Two years | | Three years | | Four years | | Five years | | More than five years | |
|---------|--------------------|-----------|---------------------|-----------|---------------------|-------------|---------------------|------------|---------------------|------------|---------------------|----------------------|---------------------|
| | | Number of | Higher High Schools | Number of | Higher High Schools | Number of | Higher High Schools | Number of | Higher High Schools | Number of | Higher High Schools | Number of | Higher High Schools |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 1 | Andhra Pradesh | 23 | 18 | 20 | 16 | 10 | 11 | 3 | - | - | 1 | - | 1 |
| 2 | Assam | 6 | - | 12 | - | 21 | - | - | - | - | - | - | - |
| 3 | Bihar | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | Delhi and U.P. | 98 | - | 139 | 2 | 137 | 1 | 21 | 1 | 25 | - | 4 | - |
| 5 | Gujarat | - | 16 | 2 | 16 | 3 | 18 | 2 | 12 | - | 3 | - | 1 |
| 6 | Himachal Pradesh | 2 | - | 2 | - | 3 | - | 1 | - | - | - | - | - |
| 7 | Jammu-Kashmir | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | Kerala | - | - | - | - | - | 12 | - | 12 | - | 4 | - | 5 |
| 9 | Madhya Pradesh | 23 | - | 42 | - | 12 | - | 24 | - | 31 | - | 31 | - |
| 10 | Madras | - | 9 | - | 8 | - | 17 | - | 14 | - | 1 | - | - |
| 11 | Maharashtra | - | 27 | - | 17 | 2 | 14 | 1 | 8 | - | 1 | - | 3 |
| 12 | Mysore | - | 24 | - | 30 | 3 | 14 | 1 | 1 | 1 | 1 | 1 | 3 |

subject.

The details about the subjects taught by the Home Science teachers are presented in Table IX.

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| TABLE IX |
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D. Allotment of Periods and Time
Per Period of Home Science

Teaching is not possible unless and until sufficient time is scheduled in the time table. So with a view to know as how many schools are in a position to give sufficient time for teaching this subject, to know whether the teachers are satisfied with the allotted time, does it contribute to make the teaching of this subject more practical, this factor was studied.

The details about the periods allotted to this subject and also the allotment of minutes to each period are presented in Tables X and XI respectively.

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| TABLES X & XI |
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When the teachers were specifically asked whether they are satisfied with the duration and number of periods allotted to the subject, most of the teachers showed their satisfaction.

TABLE IX
Subjects Taught by the Home Science Teachers

| Sr. No. | Name of the States | Only Home Science | | General Science | | Physiology Hygiene | | Languages | | Social Studies | | Any Other | |
|---------|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | | Number of |
| | | Higher Second-Schools |
| 1 | Andhra Pradesh | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 2 | Assam | 16 | - | 2 | - | 2 | - | 2 | - | 1 | - | - | - |
| 3 | Bihar | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | Delhi and U.P. | 361 | 4 | 13 | - | 26 | - | 11 | - | 9 | - | 4 | - |
| 5 | Gujarat | 7 | 46 | - | 8 | - | 8 | - | 4 | - | - | - | - |
| 6 | Himachal Pradesh | 6 | - | - | - | - | - | 2 | - | - | - | - | - |
| 7 | Jammu-Kashmir | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | Kerala | - | 21 | - | - | - | 4 | - | 3 | - | 3 | - | 2 |
| 9 | Madhya Pradesh | 93 | - | 19 | - | 28 | - | 17 | - | 3 | - | - | - |
| 10 | Madras | - | 29 | - | 8 | - | 8 | - | 4 | - | - | - | - |
| 11 | Maharashtra | 3 | 59 | - | - | - | 4 | - | 4 | - | 3 | - | - |
| 12 | Mysore | 6 | 53 | - | - | - | 8 | - | 6 | - | 4 | - | 2 |
| 13 | Orissa | 1 | 2 | - | - | - | - | - | - | - | - | - | - |
| 14 | Punjab-Haryana | 39 | - | - | - | - | - | 6 | - | - | - | - | - |
| 15 | Rajasthan | 39 | - | - | 4 | - | 4 | - | 3 | - | 2 | - | 1 |
| 16 | West Bengal | 0 | - | - | - | 2 | - | 2 | - | 2 | - | 2 | - |
| Total | | 620 | 34 | 22 | 61 | 45 | 45 | 33 | 21 | 14 | 11 | 5 | 5 |

TABLE X
Allotment of Periods per Class for Home Science
Subject

| Sr. No. | Name of the States | Two periods | | Three periods | | Four periods | | Five periods | | More than five periods | |
|---------|--------------------|--|------------------------------|--|------------------------------|--|------------------------------|--|---|------------------------------|----|
| | | Number of Higher Second- ary Schools | Number of High Schools | Number of Higher Second- ary Schools | Number of High Schools | Number of Higher Second- ary Schools | Number of High Schools | Number of Higher Second- ary Schools | Number of Higher Secondary Schools | Number of High Schools | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | Andhra Pradesh | - | - | 6 | 12 | 8 | 12 | 6 | 9 | - | - |
| 2 | Assam | - | - | 9 | - | - | - | - | - | - | - |
| 3 | Bihar | - | - | - | - | - | - | - | - | - | - |
| 4 | Delhi and U.P. | - | - | 59 | 2 | 34 | - | 30 | - | 5 | - |
| 5 | Gujarat | - | 8 | - | 21 | - | 11 | 4 | - | - | - |
| 6 | Himachal Pradesh | - | - | - | - | - | - | 5 | - | - | - |
| 7 | Jammu-Kashmir | - | - | - | - | - | - | - | - | - | - |
| 8 | Kerala | - | - | - | 3 | - | 6 | - | 5 | - | - |
| 9 | Madhya Pradesh | - | - | 28 | - | 14 | - | 14 | - | 12 | - |
| 10 | Madras | - | - | - | 12 | - | 12 | - | 6 | - | - |
| 11 | Maharashtra | - | - | - | 22 | - | 13 | 1 | 2 | - | - |
| 12 | Mysore | - | 6 | - | 30 | - | - | - | - | 2 | - |
| 13 | Orissa | - | - | - | - | - | - | 1 | 2 | - | - |
| 14 | Punjab-Haryana | - | - | - | - | - | - | 15 | - | - | - |
| 15 | Rajasthan | - | - | - | 13 | - | 15 | 10 | 5 | 9 | - |
| 16 | West Bengal | - | - | - | - | - | - | 41 | - | - | - |
| Total | | 14 | 102 | 115 | 56 | 69 | 187 | 29 | 29 | 89 | - |

TABLE XI

Allotment of Minutes to Each Period

| Sr. No. | Name of the States | 30 minutes | | 35 minutes | | 40 minutes | | 45 minutes | | More than 45 minutes | | |
|---------|--------------------|------------------------------------|------------------------|---|------------------------|------------------------------------|------------------------|------------------------------------|------------------------|------------------------------------|------------------------|--|
| | | Number of Higher Secondary Schools | Number of High Schools | Number of Higher Secondary Schools | Number of High Schools | Number of Higher Secondary Schools | Number of High Schools | Number of Higher Secondary Schools | Number of High Schools | Number of Higher Secondary Schools | Number of High Schools | |
| 1 | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| 1 | Andhra Pradesh | - | - | 6 | 9 | 8 | 12 | 6 | 12 | - | - | |
| 2 | Assam | - | - | - | - | - | - | 9 | - | - | - | |
| 3 | Bihar | - | - | No information was received. | | | | | | | | |
| 4 | Delhi & U.P. | 5 | - | 9 | - | 34 | - | 59 | 2 | - | - | |
| 5 | Gujarat | - | - | 9 | - | - | 11 | - | 21 | - | 8 | |
| 6 | Himachal Pradesh | - | - | 5 | - | - | - | - | - | - | - | |
| 7 | Jammu-Kashmir | - | - | Not offering Home Science at Secondary level. | | | | | | | | |
| 8 | Kerala | - | - | - | 5 | - | 6 | - | 3 | - | - | |
| 9 | Madhya Pradesh | 12 | - | 14 | - | 14 | - | 28 | - | - | - | |
| 10 | Madras | - | - | - | 6 | - | 12 | - | 12 | - | - | |
| 11 | Maharashtra | - | - | 1 | - | - | 13 | - | 22 | - | - | |
| 12 | Mysore | 2 | - | - | - | - | - | - | 30 | - | 6 | |
| 13 | Orissa | - | - | 1 | 2 | - | - | - | - | - | - | |
| 14 | Punjab-Haryana | - | - | 15 | - | - | - | - | - | - | - | |
| 15 | Rajasthan | 9 | - | 10 | 5 | - | 5 | - | 13 | - | - | |
| 16 | West Bengal | - | - | 41 | - | - | - | - | - | - | - | |
| Total | | 23 | - | 187 | 29 | 56 | 69 | 102 | 115 | - | 14 | |

E. Aims of the Home Science Offering Schools, Girls and Their Parents

The philosophy of the school administrators always affects the building of a programme and controls the way in which the curriculum is to be developed. Also it affects the selection and use of facilities, admission policy for the students and selection of the staff. With the aim to study the effect of their philosophy few questions were asked.

The aim with which the schools teach Home Science is to help an individual to achieve a rich and satisfying home and family life. As it deals with the social, economical, ethical, managerial, health and esthetic aspects of family relations, child development, food and nutrition, housing, clothing, etc., it serves a triple purpose, namely educating girls for personal growth and development, for family living and for profession.

The girls and their parents also try to be helpful in offering Home Science subject with the similar aim i.e. to be a good house-wife.

F. Popularity of the Subject

All the participating schools of different states mentioned that Home Science is not a much popular subject among the girls due to high impact of science education. It is just popular among the slow and mediocre learner because they think it as an easy subject to pass and to obtain marks

around 50 per cent very easily.

G. Admission Policy

1. When the admitted learners are interested in learning something and if proper selection is done through some procedure, then only the effort of the teachers are found successful. With that aim only the admission policy was studied. The pattern of admitting girls in Home Science class differs from state to state and among states also from school to school. The details about the same is presented in Table XII.

TABLE XII

2. Standards and Divisions: As far as the Home Science discipline is concerned the learners can choose this stream from the standard VIII onwards. All the schools were found to have the facilities of teaching of this subject upto Std. XI. Some schools allow the learners to finalize the subjects for the secondary school leaving certificate examination from Stx. X but most of the schools allow their learners to finalize the subjects for the secondary school leaving certificate examination in Standard XI.

As far as the divisions under each standard were concerned, it was not possible to analyse fully because there was no formal pattern found for the distribution of the learners in respective division. The allotment of

TABLE XII

Admission Policy

| Sr. No. | Name of the States | As per learners | | Interest Aptitude | | Test perfor- mance | No fixed policy | | Any other | | |
|---------|--------------------|-----------------|-----------|-------------------|-----------|-----------------------|-----------------|--------|-----------|----|----|
| | | Number of | Number of | Number of | Number of | | H.S.S. | H.S.S. | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | Andhra Pradesh | 8 | 11 | 8 | 19 | 11 | 3 | - | - | - | - |
| 2 | Assam | - | - | 4 | - | 5 | - | - | - | - | - |
| 3 | Bihar | - | - | - | - | - | - | - | - | - | - |
| 4 | Delhi and U.P. | 48 | - | 65 | 2 | 70 | - | 5 | - | - | - |
| 5 | Gujarat | 1 | - | 2 | 28 | 1 | - | - | 12 | - | - |
| 6 | Himachal Pradesh | 1 | - | - | - | - | - | 4 | - | - | - |
| 7 | Jammu-Kashmir | - | - | - | - | - | - | - | - | - | - |
| 8 | Kerala | - | - | - | - | - | - | - | 14 | - | - |
| 9 | Madhya Pradesh | 19 | - | 42 | - | - | - | 7 | - | - | - |
| 10 | Madras | - | - | - | 20 | - | 10 | - | - | - | - |

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|-------------------|----|----|----|-----|-----|-----|----|----|----|----|----|----|
| 11 Maharashtra | - | - | - | - | 1 | 24 | - | 4 | - | 9 | - | - |
| 12 Mysore | - | - | - | 17 | 2 | 17 | - | 2 | - | - | - | - |
| 13 Orissa | - | - | - | - | - | - | - | - | 1 | 2 | - | - |
| 14 Punjab-Haryana | - | - | - | - | 15 | - | - | - | - | - | - | - |
| 15 Rajasthan | - | - | - | - | 8 | 20 | 7 | 13 | 4 | - | - | - |
| 16 West Bengal | 21 | - | - | - | - | - | - | - | - | - | - | - |
| Total | 98 | 28 | 28 | 147 | 130 | 107 | 32 | 21 | 37 | - | - | - |

H.S.S. means Higher Secondary School

H.S. means High School

division was made available depending upon many factors like availability of the physical facilities like classrooms available to sit, furniture etc., availability of the class teachers, school policy etc. Some schools formed divisions as per the performance of the learners in the examination i.e. brilliant in A division, mediocre in B division, slow learners in C division, repeaters in D division and likewise. Some schools formed divisions as per the groups of subjects chosen by the learners. Also the number of divisions differed from standard to standard. The details are as under:

TABLE XIII

Number of Schools with Number of Divisions
per Standard

| Number of divisions | Std.VIII | Std.IX | Std. X | Std. XI |
|---------------------|----------|--------|--------|---------|
| 1 | 2 | 3 | 4 | 5 |
| Division I | 156 | 282 | 312 | 456 |
| Division II | 265 | 212 | 196 | 111 |
| Division III | 139 | 93 | 92 | 33 |
| Division IV | 40 | 13 | -- | - |
| Division V | - | - | - | - |
| More | - | - | - | - |

The details regarding the number of students admitted in each division, was also found out with an

intention to find out the student teacher ratio. The data was found as under:

TABLE XIV

Number of Schools with the Number of Students Admitted in Each Division (Class)

| Number of Students admitted | | Std. VIII | Std. IX | Std. X | Std. XI |
|-----------------------------|----|-----------|---------|--------|---------|
| 1 | | 2 | 3 | 4 | 5 |
| Below | 30 | 61 | - | - | 52 |
| 31 to | 35 | 72 | 87 | 56 | 61 |
| 36 to | 40 | 83 | 99 | 118 | 172 |
| 41 to | 45 | 94 | 134 | 129 | 184 |
| 46 to | 50 | 115 | 139 | 138 | 99 |
| 51 to | 55 | 92 | 101 | 112 | 32 |
| 55 to | 60 | 83 | 40 | 33 | - |
| 60 onwards | | - | - | 14 | - |

H. Type of Orientation Programme for the New Comers

Unless and until there are properly oriented learners, the learners are not going to select the stream with their own aptitude and interest but with some other reasons they might join the stream. Also it happens that when their friends join one stream, many times, due to the stretch of the friends' force one selects the stream without knowing much about it or without thinking deeply over it.

With this view in mind, the orientation programme methods were studied. Also when there is no proper orientation of the subject, there may be less number of learners. So to popularize a subject in a right way, orientation is a must. The details about the same is presented in the following Table.

| |
|----------|
| TABLE XV |
|----------|

I. Type of Records Kept and Utilized for the Students

The records of the students kept by the class teacher as well as the subject teacher provides direct information about the learners, their progress, their originality etc.

With a view to know as what type of records are maintained by the schools offering Home Science, this item was studied intensively because after knowing the interest and aptitude, related skill and proficiency of the learners only one can be advised to join the relative field. The details about the same is presented in the following table.

TABLE XV

Methods of Orientation Programme

| Sr. No. | Name of the States | No orientation in formal way | Orientation through | | | | | Any other | | | | | |
|---------|--------------------|------------------------------|---------------------|---|--|------------------|------------------|-----------|------------------|----|----|----|----|
| | | | Oral information | Exhibition of work done by the previous batch | Experts from nearby Home Science college | Number of H.S.S. | Number of H.S.S. | | Number of H.S.S. | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 1 | Andhra Pradesh | 11 | 16 | 3 | 8 | 3 | 5 | 1 | 4 | 2 | - | - | - |
| 2 | Assam | 5 | - | 2 | - | 2 | - | - | - | - | - | - | - |
| 3 | Bihar | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | Delhi & U.P. | 104 | 2 | 33 | - | 13 | - | 21 | - | 13 | - | 4 | - |
| 5 | Gujarat | - | 22 | 4 | 14 | - | - | - | - | - | 4 | - | - |
| 6 | Himachal Pradesh | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | Jammu-Kashmir | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 8 | Kerala | - | 8 | - | 6 | - | - | - | - | - | - | - | - |
| 9 | Madhya Pradesh | 38 | - | 18 | - | 7 | - | 5 | - | - | - | - | - |

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|-------------------|-----|-----|----|----|----|----|----|---|----|----|----|----|----|----|
| 10 Madras | - | 11 | - | - | - | - | 6 | - | - | - | - | 13 | - | - |
| 11 Maharashtra | - | 20 | - | - | 14 | - | - | - | - | - | 1 | 3 | - | - |
| 12 Mysore | - | 21 | - | - | - | - | - | - | - | - | 2 | 15 | - | - |
| 13 Orissa | 1 | 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| 14 Punjab-Haryana | 9 | - | - | 6 | - | - | - | - | - | - | - | - | - | - |
| 15 Rajasthan | 11 | 18 | - | - | 15 | - | 4 | - | - | - | 4 | - | - | - |
| 16 West Bengal | 22 | - | - | 9 | 10 | - | - | - | - | - | - | - | - | - |
| Total | 201 | 120 | 75 | 75 | 57 | 57 | 50 | 5 | 27 | 4 | 22 | 35 | 4 | - |

H.S.S. means Higher Secondary School

H.S. means High School

TABLE XVI
Records of the Students Kept

| Sr. No. | Name of the States | Progress Record | | Cumulative Record | | Any Other | |
|---------|--------------------|--|-------------|-------------------|-------------|------------------|-------------|
| | | Higher Secondary | High School | Higher Secondary | High School | Higher Secondary | High School |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Andhra Pradesh | 20 | 33 | 20 | 33 | - | - |
| 2 | Assam | 9 | - | 9 | - | - | - |
| 3 | Bihar | No information was received. | | | | | |
| 4 | Delhi & U.P. | 180 | 2 | 188 | 2 | - | - |
| 5 | Gujarat | 4 | 40 | 4 | 40 | - | - |
| 6 | Himachal Pradesh | 5 | - | 5 | - | - | - |
| 7 | Jammu Kashmir | Not offering Home Science at secondary level | | | | | |
| 8 | Kerala | - | 14 | - | 14 | - | - |
| 9 | Madhya Pradesh | 68 | - | 68 | - | - | - |
| 10 | Madras | - | 30 | - | 30 | - | - |
| 11 | Maharashtra | 1 | 37 | 1 | 37 | - | - |
| 12 | Mysore | 2 | 36 | 2 | 36 | - | - |
| 13 | Orissa | 1 | 2 | 1 | 2 | - | - |
| 14 | Punjab Haryana | 15 | - | 15 | - | - | - |
| 15 | Rajasthan | 19 | 33 | 19 | 33 | - | - |
| 16 | West Bengal | 41 | - | 41 | - | - | - |
| Total | | 373 | 227 | 373 | 227 | - | - |

J. Guidance Programme

Out of all the participating schools with Home Science, none of them has formal guidance programme in the form of tutorial classes or allotment of consultants or guide or by consulting the counsellor because the student teacher ratio among the Home Science teachers and the Home Science learner is so high that personal guidance is least possible. Neither the schools have guidance and counselling scheme where they could go and get their problems solved.

K. Activities

To develop leadership qualities as well as to appraise the learning of the girls, different sorts of activities are essential. Through such activities also evaluation of some of the essential skills and aptitudes developed in them can be done. So with a view to know that which are the activities undertaken for the same purpose this point was studied. The details about the same is presented in the following table:

TABLE XVII

Different Activities Undertaken by the Home
Science Teaching Secondary Schools

| Sr. No. | Name of the activity | No. of schools undertook such activities | Percent- ages |
|------------|------------------------|--|------------------|
| 1 | Different competitions | 262 | 43.6 |
| 2 | Group projects | 300 | 50.0 |
| 3 | Individual projects | 177 | 29.5 |
| 4 | Elocutions | 244 | 40.6 |
| 5 | Any other | 53 | 8.9 |

L. Evaluation of the Home Science Programme

When, as per our aims and objectives, any programme is started it is essential to evaluate the programme and its activity because evaluation has proved to be a testing laboratory for the improvement of the same. Maintenance of high standard and improvement of ~~the same~~ any programme will depend upon the continuous evaluation. Such evaluation and appraisal helps the administrator to find out effective and non-effective qualities of any programme because sound evaluation has its depth as well as breadth. So to have sound and due worth of the Home Science education, evaluation is to be done at the end of the year. Home Science is a dynamic science in which the practice and adoption in every field of life changes from time to time due to the

high impact of science and technology. So to know as to how the schools appraise or evaluate the programme of Home Science education either formally or informally this point was studied. The details about the ways of evaluating the programme by different schools of the states of India are presented in the following table:

TABLE XVIII
Number of Schools with Different Methods of
Evaluating the Home Science Programme in a
Particular School

| Sr. No. | Methods of Evaluation | No. of schools | Percentage |
|---------|---|----------------|------------|
| 1 | By getting views of the learners | 467 | 78 app. |
| 2 | By getting views of the parents of the learners | 322 | 52 " |
| 3 | By getting view of the Home Science teachers | 459 | 76 " |
| 4 | By appraising the school programme | 136 | 23 " |
| 5 | By setting an evaluation committee | - | - |
| 6 | By inviting experts from Home Science college | 235 | 39 " |
| 7 | From the performance of the Home Science students | 531 | 88 " |
| 8 | By inviting opinions from the community | - | - |
| 9 | The inspection report | 600 | 100 " |
| 10 | Any other | - | - |

To inquire further, the senior Home Science teachers were requested to give their opinion about the

current programme of Home Science education as how far it is in a position to provide education for home and the family life? Their views are presented in the following table:

TABLE XIX

The Views of Senior Home Science Teachers of Home Science Offering Secondary Schools on "How Far Home Science Education is in a Position to Provide Education for Home and Family Life"?

| Sr. No. | Response | Number of Senior teachers | Percentage |
|---------|---|---------------------------|--------------|
| 1 | 2 | 3 | 4 |
| 1 | Provides home and family life education | 383 | 64 approx. |
| | Fully | 189 | 49.4 approx. |
| | Partly | 194 | 50.5 " |
| 2 | Does not provide home and family life education | 217 | 36 " |

M. Publication of the Activities Related to Home Science Education Programme

The publication of different activities undertaken under any educational programmes is of great importance for the encouragement of the teachers and the learners. When these persons find their names or photographs in some form, some where, they feel appreciated and are tempted to participate more actively in different activities related to

the programme. Of course the encouragement can be provided through materialistic way also but when the school authorities are not in a position to feed the teachers and the learners with the same, at least verbal appreciation in the form of written and spoken words has some place. To know as how the activities undertaken by the teachers and students of Home Science wing are appreciated, the question was asked to the senior Home Science teachers. The details about the same were found as under:

TABLE XX

Ways of Publishing the Activities Related
to the Home Science Education

| Sr. No. | Ways of publicity | No. of schools | Percentage |
|---------|---|----------------|------------|
| 1 | 2 | 3 | 4 |
| 1 | Through the local newspaper | 521 | 86.8 |
| 2 | Through the school magazine | 580 | 96.6 |
| 3 | Through the public address | 583 | 96.7 |
| 4 | Through bulletin and notice board | 569 | 94.8 |
| 5 | Through photographs and album | 498 | 83.0 |
| 6 | Through the annual report of the school | 600 | 100.0 |
| 7 | Through social gathering | 600 | 100.0 |
| 8 | Other method like: | | |
| | (1) Prize giving | 493 | 82.1 |

N. Use of Teaching Methods

Teaching methods are the means of delivering knowledge and transmitting scientific skills by a teacher to his pupils and their comprehension and application by them in the process of studying and learning. In a highly restricted sense, it means ^{what} to teach and how to teach or approach. Each teaching method has something to offer. Each method is active as it does make pupils think and arouse interest in the subject among pupils. These methods develop the abilities of comprehension, generalization and deduction. Also the pupils are in a position to master the methods of studying, listening, observing, experimenting and speaking. So to know as what are the methods that are used most frequently and never, ~~at~~ this point was studied deeply.

It was also an aim to study and suggest the methods, techniques and approaches of teaching either in isolation or in combination of periods, an ample opportunity in developing reflective atmosphere in the classroom and in the laboratory. The details about the same are presented in the following table.

TABLE XXI

Frequency of Teaching Methods Used by the Home Science Teachers

| Sr. | Teaching methods and techniques | Mostly used | | | Sometimes used | | | Never used | | |
|-----|---------------------------------|------------------------------------|------------------------|------------------------------------|------------------------------------|------------------------|------------------------------------|------------------------|------------------------------------|--|
| | | Number of Higher Secondary Schools | Number of High Schools | Number of Higher Secondary Schools | Number of Higher Secondary Schools | Number of High Schools | Number of Higher Secondary Schools | Number of High Schools | Number of Higher Secondary Schools | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | |
| 1 | Narration-cum-lecture method | 373 | 227 | - | - | - | - | - | - | |
| 2 | Demonstration | 296 | 156 | 73 | 71 | 4 | - | - | - | |
| 3 | Laboratory practice | 296 | 137 | 70 | 83 | 7 | 7 | 7 | 7 | |
| 4 | Group discussion | 213 | 98 | 85 | 90 | 75 | 39 | 39 | 39 | |
| 5 | Socio drama | - | - | 72 | 27 | 301 | 200 | 200 | 200 | |
| 6 | Story telling | - | - | 42 | 21 | 331 | 206 | 206 | 206 | |
| 7 | Exhibition | 39 | 39 | 73 | 59 | 264 | 129 | 129 | 129 | |
| 8 | Field trip | 85 | 27 | 135 | 137 | 157 | 59 | 59 | 59 | |
| 9 | Study tour | - | - | - | - | 373 | 227 | 227 | 227 | |
| 10 | Guest speakers | 63 | 15 | 122 | 43 | 188 | 169 | 169 | 169 | |

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----|-------------------|---|----|----|----|-----|-----|-----|
| 11 | Projects | | 56 | 42 | 79 | 98 | 238 | 87 |
| 12 | Library study | | - | - | 96 | 107 | 277 | 120 |
| 13 | Assignments | | 25 | 15 | 88 | 51 | 260 | 161 |
| 14 | Term paper | | - | - | 28 | 48 | 345 | 179 |
| 15 | Guided study | | - | - | - | - | 373 | 227 |
| 16 | Problem solving | | - | - | - | - | 373 | 227 |
| 17 | Remedial teaching | | - | - | - | - | 373 | 227 |
| 18 | Any Other | | - | - | - | - | - | - |

O. Use and Availability of the Audio
Visual Aids and Equipments in
Home Science Subject

When the teaching is supported by the audio-visual aids, the learning becomes effective, long liveable and permanent. Their role in teaching-learning process is unavoidable because they contain some instruction and convince the learners in direct or indirect way.

Home Science also has a wide field of information and it being a practical subject, models, pictures, photographs, films, slides, radio, records, tape-recorder, etc. have much to offer and contribute.

So with a view to know as what are the audio-visual aids and equipments available, if available then whether they are sufficient in kind, amount and in working condition, this point was studied. The details about the same are presented in the following table.

| |
|------------|
| TABLE XXII |
|------------|

As far as the use of these teaching aids are concerned, it is essential to support an oral talk with any of the visual or audio aids so that the learning is either retained.

With an aim to know that how often the varieties

TABLE XXII

Availability of Audio-Visual Aids and Equipments in the Home Science Teaching Schools

| Sr. No. | Teaching aids and equipments | Adequate in kinds and amount | | | | Adequate in quality | | | | Adequate in working condition | | | Audio-visual aids & equipments not available | |
|---------|--------------------------------|------------------------------------|------------------------|------------------------------------|------------------------|------------------------------------|------------------------|------------------------------------|------------------------|------------------------------------|------------------------|------------------------------------|--|------------------------------------|
| | | Number of Higher Secondary Schools | Number of High Schools | Number of Higher Secondary Schools | Number of High Schools | Number of Higher Secondary Schools | Number of High Schools | Number of Higher Secondary Schools | Number of High Schools | Number of Higher Secondary Schools | Number of High Schools | Number of Higher Secondary Schools | Number of High Schools | Number of Higher Secondary Schools |
| 1 | Charts | 217 | 89 | 210 | 81 | 187 | 83 | 156 | 138 | | | | | |
| 2 | Photographs | 143 | 58 | 105 | 58 | 105 | 58 | 225 | 169 | | | | | |
| 3 | Pictures | 142 | 86 | 142 | 88 | 128 | 81 | 231 | 137 | | | | | |
| 4 | Graphs | 138 | 89 | 118 | 82 | 108 | 80 | 235 | 138 | | | | | |
| 5 | Flannel Strips | - | - | - | - | - | - | 373 | 227 | | | | | |
| 6 | Flannel Boards | - | - | - | - | - | - | 373 | 227 | | | | | |
| 7 | Slides | 134 | 99 | 134 | 99 | 134 | 99 | 239 | 128 | | | | | |
| 8 | Films | 22 | 27 | 20 | 27 | 20 | 27 | 351 | 200 | | | | | |
| 9 | Film Strips | 134 | 90 | 132 | 90 | 133 | 90 | 239 | 127 | | | | | |
| 10 | Poster | 219 | 97 | 210 | 98 | 78 | 83 | 158 | 130 | | | | | |
| 11 | Film Projector | 300 | 200 | 300 | 200 | 196 | 189 | 73 | 27 | | | | | |
| 12 | Film Strip cum Slide Projector | 140 | 104 | 140 | 100 | 140 | 100 | 233 | 123 | | | | | |
| 13 | Epidioscope | 32 | 27 | 28 | 27 | 32 | 27 | 341 | 200 | | | | | |
| 14 | Overhead Projector | - | - | - | - | - | - | 373 | 227 | | | | | |
| 15 | Radio | 338 | 172 | 298 | 142 | 305 | 93 | 35 | 55 | | | | | |
| 16 | Tape Recorder | 132 | 111 | 118 | 87 | 66 | 89 | 241 | 116 | | | | | |
| 17 | Record Player | 148 | 60 | 148 | 57 | 115 | 60 | 225 | 167 | | | | | |

of teaching or instructional aids and equipments are used by the Home Science teachers of the participating schools, a question was framed and their response was also obtained.

The details about the frequency of use of the above mentioned teaching aids are presented in the following table.

| |
|-------------|
| TABLE XXIII |
|-------------|

P. Research and Studies Conducted by the Home Science Teachers

For the betterment of the learners and to make Home Science a useful and practical field for girls research studies and experiments have been made to play. Also when world is getting changed due to scientific and technological forces it has indirect effect on education too so to know and find out areas for changes and dimensions for changes, studies/ought to be conducted with limited sample.

So with an aim to know as, Home Science being a developing field, what sort of action researches and studies are being conducted to make the programme more meaningful and effective, this point was studied. The details about the same are presented in the following table.

TABLE XXIII

Use of Different Instructional Aids or Materials

| Sr. No. | Teaching Aids | Frequently used | | | Rarely used | | | Never used | |
|---------|------------------------------------|------------------------------------|------------------------|-----------------------------|------------------------------------|------------------------|-----------------------------|------------------------------------|------------------------|
| | | Number of Higher Secondary Schools | Number of High Schools | Number of Secondary Schools | Number of Higher Secondary Schools | Number of High Schools | Number of Secondary Schools | Number of Higher Secondary Schools | Number of High Schools |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| 1 | Charts | 217 | 39 | - | - | - | - | - | - |
| 2 | Photographs | 48 | 28 | 84 | 30 | 16 | - | - | - |
| 3 | Pictures | 142 | 86 | - | - | - | - | - | - |
| 4 | Graphs | - | - | 38 | - | 100 | 89 | - | - |
| 5 | Flannel Strips | - | - | - | - | - | - | - | - |
| 6 | Bulletin/Flannel Board | - | - | - | - | - | - | - | - |
| 7 | Slides/Slide Projector | 72 | 39 | 51 | 19 | 11 | 41 | - | - |
| 8 | Film/Film Projector | 22 | 27 | 196 | 121 | 82 | 52 | - | - |
| 9 | Film Strips & Film Strip Projector | 44 | 41 | 24 | 20 | 66 | 29 | - | - |
| 10 | Posters | - | 14 | 109 | 83 | 110 | - | - | - |



| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----|----------------------------|-----|-----|-----|----|-----|-----|
| 11 | Epidioscope | 18 | 12 | 14 | 10 | - | 5 |
| 12 | Overhead Projector | - | - | - | - | - | - |
| 13 | Radio | - | 27 | 283 | 29 | 55 | 126 |
| 14 | Tape Recorder | 32 | 21 | 36 | 69 | 64 | 21 |
| 15 | Record Player | - | - | - | - | 148 | 60 |
| 16 | Models | 213 | 88 | 100 | 31 | - | - |
| 17 | Mock Ups | - | - | - | - | - | - |
| 18 | Objects and Specimen | 303 | 220 | - | - | - | - |
| 19 | Puppets | - | - | - | - | - | - |
| 20 | T.V. | - | - | - | - | - | - |
| 21 | Sketches and Illustrations | 305 | 201 | 72 | 26 | - | - |
| 22 | Carboons | - | - | - | - | - | - |
| 23 | Diagrams | 303 | 207 | - | 20 | - | - |

TABLE XXIV

Number of Participating Schools Undertaking
Research Studies, Projects and Experiments

| Sr. No. | Item | Undertaken at any time | | Not undertaken at any time | |
|------------|-------------|---|------------------------------|---|---------------------------------|
| | | Number of Higher Secondary Schools | Number of High Schools | Number of Higher Secondary Schools | Number of High Schools |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | Projects | 123 | 135 | 250 | 92 |
| 2 | Experiments | - | - | - | - |
| 3 | Studies | - | - | - | - |
| 4 | Research | - | - | - | - |

When further inquiry was made to know as why such studies, experiments and projects are not conducted, the reasons for not undertaking such activities by the Home Science teachers were found as follows:

TABLE XXV

Reasons for not Conducting any Study, Experiment and Project

| Sr. No. | Reasons | Frequency | |
|---------|--|------------------------------------|------------------------|
| | | Number of Higher Secondary Schools | Number of High Schools |
| 1 | 2 | 3 | 4 |
| 1 | Lack of time | 132 | 129 |
| 2 | Lack of enthusiasm and interest | 321 | 213 |
| 3 | Lack of encouragement and guidance | 313 | 211 |
| 4 | Lack of finance and help | 331 | 188 |
| 5 | Lack of knowledge of conducting study, experiments, projects | 312 | 217 |

Q. Professional Growth

The teaching profession is such that the theories of today may become out of date tomorrow due to the ever changing forces. Likewise teacher also needs to know, improve and refresh one's knowledge and grow professionally. There are several ways and means to sponsor a staff member to grow professionally by the school authorities. So to find out as which are the ways and means adopted for the professional growth of the Home Science teacher, this point was studied. The details about the same are presented in the following table.

TABLE XXVI

Number of Schools with Different Ways and Means
to Promote Professional Growth and Development
of the Home Science Teachers

| Sr. No. | Item | Number of Higher Secondary Schools | Number of High Schools |
|------------|---|---|---------------------------------|
| 1 | 2 | 3 | 4 |
| 1 | The school sends Home Science teachers for basic and upgraded training | 262 | 176 |
| 2 | The school allows and encourages the Home Science teachers to participate in Seminar, Workshop etc. | 258 | 167 |
| 3 | The school encourages the Home Science teachers to join the professional organizations | 311 | 210 |
| 4 | The school allows the Home Science teachers to study further | 329 | 212 |
| 5 | The school encourages to read, study and gain fresh knowledge in the concerned fields of Home Science by subscribing essential journals and periodicals | 185 | 169 |

R. Laboratory Facilities Available
in Home Science Wing

Provision of adequate, convenient and attractive facilities for the Home Science Department contributes towards pupils' learning, enjoyment and satisfaction of

teaching. It is possible even within limited finance to have Home Science Department that is suited to school use, homelike, attractive and well established. An ideal Home Science wing will have following facilities as far as providing an ideal learning situation in the Department is concerned:

1. Adequate space and equipment for teaching different disciplines related to Home Science.
2. Material and equipments suited to the family like considering their cost, utility, usability, community variations, income level of the students, etc.
3. Attractive and homelike, pleasant, washable.
4. Flexible arrangement of equipment and facilities.
5. Safe and sanitary working conditions, good lighting, ventilation.
6. Adequate storage facility.
7. Good water supply, etc.

So to know the prevalence of these ideal conditions as far as the physical facilities especially in laboratories are available or not, this point was studied. The details about the same are presented in the following table.

TABLE XXVII

Number of Schools with Ideal Laboratory Facilities

| Sr. No. | Criteria | Yes | | | | No | |
|---------|---|------------------------------------|------------------------|------------------------|-----------------------------|------------------------|------------------------|
| | | Number of Higher Secondary Schools | Number of High Schools | Number of High Schools | Number of Secondary Schools | Number of High Schools | Number of High Schools |
| 1 | 2 | 3 | 4 | 5 | 6 | | |
| 1 | Types of Laboratories: | | | | | | |
| | (a) All in one type | 231 | 119 | -- | -- | -- | |
| | (b) Separate laboratory for different disciplines | 142 | 61 | -- | -- | -- | |
| | (c) No laboratory | - | 47 | -- | -- | -- | |
| 2 | Sufficiency and Adequacy: | | | | | | |
| | (a) Adequate space to accommodate the full number of girls enrolled in each class | 235 | 127 | 138 | 100 | | |
| | (b) Adequate material and equipments | 172 | 143 | 201 | 84 | | |
| | (c) Suitability of the provided material and equipments to common family life | 301 | 227 | 72 | -- | | |
| | (d) Homelike atmosphere in the laboratory | 337 | 180 | 36 | 47 | | |

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|------------------------------------|-----|-----|-----|----|
| | (e) Washability | 336 | 175 | 37 | 52 |
| | (f) Well lighted, ventilated | 360 | 160 | 13 | 67 |
| | (g) Adequacy of storage facilities | 233 | 140 | 140 | 87 |
| | (h) Adequacy of water supply | 230 | 200 | 143 | 27 |
| | (i) Safe and sanitary | 197 | 200 | 176 | 27 |

S. Library Facilities

Any school must have either common or departmental library to sponsor self learning technique among the learners. It is expected that each school has a facility of keeping up-to-date books related to different disciplines of Home Science, are simple in language, readable in local or regional language and few additional reference books in order to have up-to-date knowledge from the same.

Also subscription of current periodicals and journals in different fields of Home Science is expected. How far this is practised at school situation is still a problem so to know the position of availability of textbooks and reference books along with current periodicals and journals, this point was studied. It was also an aim to inquire whether addition of new books to replace the old one is there or not. The details about the same are presented in the following table.

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|--------------|
| TABLE XXVIII |
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T. Museum

An ideal school always maintains a sort of museum in which essential models, samples, informative charts, graphs, pictures, photographs etc. are kept. One can maintain a departmental museum or a common museum in which

TABLE XXVIII

Number of Schools with Different Sorts of Library Facilities

| Sr. No. | Items | Yes | | No | |
|---------|--|------------------------|------------------------|------------------------|------------------------|
| | | Number of High-Schools | Number of High-Schools | Number of High-Schools | Number of High-Schools |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | Types of Library | | | | |
| | (a) Common Library | 303 | 173 | - | - |
| | (b) Home Science wing Library | 70 | 54 | - | - |
| | (c) No Library | - | - | - | - |
| 2 | Availability of Books | | | | |
| | (a) Sufficient number of books available on different disciplines of Home Science | 173 | 55 | 200 | 172 |
| | (b) School subscribes for pamphlets, periodicals, journals and other literature related to different disciplines of Home Science | 213 | 149 | 160 | 78 |
| | (c) The material is subscribed in: | | | | |
| | Local language | 213 | 149 | 160 | 79 |
| | National language | 213 | 149 | 160 | 79 |
| | Other languages | 194 | 149 | 179 | 79 |

the above mentioned things are kept. It will be a good testing aid and self-explanatory media which will obtain little participation from the learners themselves.

With a view to know as how many high schools and higher secondary schools offering Home Science maintain museum, this point was studied. The data regarding the same are presented in the following table.

TABLE XXIX
Number of Schools Having Museum

| Sr. No. | Item | Number of Higher Secondary Schools | Number of High Schools |
|---------|----------------------|------------------------------------|------------------------|
| 1 | 2 | 3 | 4 |
| 1 | Has museum | 73 | 72 |
| 2 | Does not have museum | 300 | 155 |
| Total | | 373 | 227 |

U. Problems Faced by the Secondary Home Science Teachers as Far as Teaching of Home Science is Concerned

The following problems were found enlisted by the senior Home Science teachers. It was a difficult job to count its accurate frequency so here they are presented as they were found in sequence:

1. Aims and objectives are not clear.
2. Least importance given to Home Science in school budget.
3. No freedom or sufficient authority given to develop the wing on the set lines.
4. Least financial support given.
5. Lack of guidance.
6. Crowded classroom.
7. No selection of the learners. (No fixed policy or standard for admission.
8. Lack of cooperation from learners' parents.
9. Least ideal conditions and facilities essential for effective teaching of Home Science.
10. Insufficient time and periods scheduled for Home Science in the time-table.
11. Teaching aids are not available adequately in kind, amount and in good condition.
12. Inadequate recruitment of Home Science teachers.

13. Non-availability of qualified, trained, experienced and sufficiently competent Home Science teachers.
14. Lack of material and equipments suited to and adequate for the programme to operate, laboratories are not well furnished, well equipped according to the background of the learners.
15. No sufficient and adequate storage facility to store wrappers, teaching aids, illustrated materials, records, reports, equipments, supplies, etc.
16. Insufficient water supply, cleaning supply, equipments, waste disposal facilities.
17. Lack of sufficient reference books, pamphlets and periodicals pertaining to all the disciplines related to Home Science in the local languages.
18. Lack of favourable conditions provided for the broad and rich programme of Home Science.
19. Securing the services of Home Science teachers due to transfer of the guardian, lack of residential facilities.

20. Insufficient training in use of different teaching methods.
21. Old syllabus and new practices in home-making do not go together.
22. Less importance is given to class work, internal tests and periodical tests and much emphasis is laid on terminal and annual examination.

V. Salient Features about Home Science Programme in Each School

1. Home Science teacher is honoured socially.
2. Girls think it as a prospective field for study.
3. Home Scientists are honoured and recognized professionally by the society.

W. Problems Faced by the Home Science Offering Schools

1. Adjustment of required number of periods in the time-table.
2. Day to day increase in the number of learners have compelled for expansion of wing.
3. Ideal student teacher ratio cannot be

maintained due to non-availability of the well qualified, experienced and trained Home Science teachers.

4. Availability of funds and number of girls to be enrolled in the class do not go together.
5. Ensuring well qualified and experienced teachers for various subjects of Home Science.
6. Lack of suitable training programme for the Home Science teachers.
7. How to secure a service of well qualified and experienced Home Science teachers who are alone and unmarried due to lack of residential facilities, transfer of their family members etc.
8. Prevalence of misconceptions and beliefs regarding Home Science field.