Chapter-3
Spatial Pattern of Female Education

3.1 Introduction

In this chapter, efforts have been made to identify and explain the inter-district spatial patterns of attainment of female education at various levels of education in Haryana. Out of several indicators, education level attained by females has been taken up to measure educational attainment of females.

For analysis, the data has been collected from All India School Education Survey (2002), Census of India (2001) and Statistical Abstract of Haryana (2005-06). All India School Education Survey (2002) data gives enrolment figures for school level classes only as on September 30, 2002. In this data, details for rural and urban areas are also given. Statistical Abstract of Haryana (2005-06) provides data on school going girls without rural-urban details. Census of India 2001 data gives figures for all the education levels-up to graduate and above education level. Data on diploma, unclassified level of education, literacy has also been given. The whole data covers boys and girls separately. Rural-urban details are also given. Thus, due to the limitation of the type of the data available in the Statistical Abstract of Haryana (2005-06) and All India School Education Survey (2002), Census of India (2001) data is used for the present study. The Census provides data on educational levels attained by males and females for all the educational levels.

Six educational levels have been selected to observe the emerging trends in educational attainment of females (Figure 3.1). These are:

- Literacy
- Primary
- Middle
- Secondary
- Senior Secondary
- Graduate and above
Spatial Patterns of inter-district rural-urban variations have been compared. In this context, Census of India 2001, district-wise data has been examined. For analysing the emerging trends in these spatial patterns of female educational attainment, the age-groups have been selected on the following basis:

1. 6 to 14 years age group is the compulsory education age group and 15 to 34 year age-group is the adult education age group. Both are focused age group series in the education system for elevating female education and in both the age groups females had attained various levels of education.

2. Census 2001 data shows impact of National Policy on Education, 1986 on these two age groups differently. The whole Population recorded within 12-14 years age-group in 2001 Census has attained elementary education level after implementation of National Policy on Education1986 and a part of population within 15-34 years age group has also been benefited in the attainment of elementary level of education i.e., when they were in compulsory education age group and when the National Policy on Education (1986) had been implemented, this age group has been benefited in attainment of secondary and above education level.

For the purpose of studying the trends in the spatial patterns of female education, compulsory education age group and Adult education age group have been divided into sub-age groups.

The sub age groups have been arranged in two sets:

1) Up to elementary education level
2) Beyond elementary education level

1) Up to elementary education level

For observing the trends in the spatial patterns of female education up to elementary level, the data has been selected for specific age groups like 7 -14 and 15-34 years on the following basis:

- Census definition considers a person as having attained literacy at the minimum age of 7 years. Census data for literacy attainments is available from the age of 7 years. So, literacy attainment is measured in this text within compulsory education age group (7-14years) and adult education age group (15-34years).
- 6 to 11 years is primary and basic education age group. Census 2001 has provided data for primary education attained females from the age of 9 years. So, Primary education attainment has been measured within compulsory education age group (9-14 years) and adult education age group (15-34 years).

- 6 to 14 years is the elementary education age group. The primary and upper primary or middle stage together constitutes the elementary stage (Govt. of India, 1994). Census 2001 has given data for middle education attained by females from the age of 12 years. So middle education attainment has been measured within compulsory education age group from 12-14 years and adult education age-group from 15-34 years. Within compulsory education age group, sub-age groups are made on the basis of availability of data and cut off age for each education level according to education system in India. Hence, up to elementary education level sub-age groups for examining the trends in the spatial patterns for female education are as follows:

Literacy - 7 to 8, 9 to 11, 12 to 14 and 15 to 34
Primary - 9 to 11, 12 to 14 and 15 to 34.
Middle - 12 to 14 and 15 to 34

2. Education beyond elementary education level and after 14 years age

Beyond elementary education level, census provides data for female education for secondary education level from the age of 15 years, senior secondary education level from the age of 18 years and graduate and above education level from the age of 20 years. 35 years is the cut off age for adult education but as census provides data on breaks of 4 years, so 34 years age is taken as cut off age for adult education. To assess the trends, adult education age group is divided into two sub-age groups at the break of ten years gap from 15 years.

Thus, beyond elementary education level, sub-groups for examining the trends in spatial patterns for female education are as follows:

Secondary - 15 to 24 and 25 to 34
Senior Secondary - 18 to 24 and 25 to 34
Graduate and above - 20 to 24 and 25 to 34.
Figure - 3.1 Plan for selecting the age groups to assess the emerging trends in the Spatial Patterns of Female Educational Attainment at six levels of education

Levels of education are:
- Literacy
- Secondary
- Primary
- Senior Secondary
- Middle
- Graduate and above

Base for Selecting Age Groups
- Focused age groups series in the education system for elevating female education
  - Compulsory Education Age- Group (6 to 14 years)
  - Adult Education Age Group (15 to 35 years)
  Whole 6-14 years age group population has attained elementary education level after implementation of NPE, 1986 and part of 15-34 years age group has attained elementary education after implementation of NPE,1986 (15-24 years) or attended secondary and above education after implementation of NPE,1986 (15-34 years).

Base for Selecting Sub Age Groups
- Availability of education level wise Census data by specific age
  - Primary, from the age of 9 years
  - Secondary, from the age of 15 years
  - Senior Secondary, from the age of 18 years
  - Graduate and above, from the age of 20 years
- Beyond elementary education level according to census data, cut off age (24 years)

Adult education age group is divided into two sub age groups after break of 10 year
Arrangement of Sub Age Groups to observe the trend is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Up to elementary education level</th>
<th>Beyond elementary education level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literacy</td>
<td>15 to 34</td>
<td>Secondary - 25 to 34</td>
</tr>
<tr>
<td>Primary</td>
<td>15 to 34</td>
<td>Senior Secondary - 25 to 34</td>
</tr>
<tr>
<td>Middle</td>
<td>15 to 34</td>
<td>Graduate and above - 25 to 34</td>
</tr>
</tbody>
</table>

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To see the impact of NPE1986 as amended in 1992, District Primary Education Programme, Pro-Female Education Programme or other relevant programme mentioned in the literature survey for minimizing rural – urban disparities and inter-district disparities have been consulted.

Choropleth maps were used as tools to analyze the spatial patterns of educational attainment of females. For preparing choropleth maps, absolute data was changed into percentages. To compare the maps arbitrary method was selected to categorize the educational attainment into five to six categories. Literature was used to study reasons of low level of literacy and educational attainment in certain areas.

3.2 Female Education Attainment Levels–inter-district differences

Table 3.1 and Figure 3.2 shows, age-specific profile of school going females in the age group of 6-11 years, 11 to 14 years and 14 to 17 years. The graph reveals that in the age group 6-11 years, the percentage of girls going to school up to 1970-1 was not only low but also progressed only marginally (from 44.7% to 48%). Between 1975 and 1996, the state experienced a rapid increase in the percentage of girls going to school (from 47.4% to 86.6). The percentage briefly declined up to 2001-2002. Since then, the percentage of girls going to school is increasing.

In the age group between 11 to 14 years, the percentage of girls going to school increased steadily from 16.4 to 26.4% from 1966 to 1981. Then from 1985 to 1999, the percentage of girls going to school increased fast. Since 1999, the percentage of girls going to school is fluctuating though marginally.

In 14-17 years age group, though the percentages of school going girls remained noticeably low from 1966 to 1968 but from 1968 to 1971, it increased to appreciation level. Then, from 1971-1976, percentage increase slowed down. From 1976 to 1986, the percentage fluctuated. From 1986 to 1991, the percentage of school going girls shoot up. From 1991 to 1996, it increased slowly. Beyond 1996, comparable data is not available.
From Figure 3.2, it has also been found that the percentage of girls going to school in 6 to 11 years age-groups has been lower than 6 to 11 years; and in 14 to 17 years age-groups, the percentage has been still lower than 11 to 14 years up to 1996 (last year for which comparable data was available).

These variations were found in district-wise statistics also in 2001-02 and 2004-05. Table-3.2 illustrates that except in Panchkula, Sonepat, Panipat, Rawari and Hisar, percentages of school going girls has decreased from 11 to 14 years age-groups to 6 to 11 years age-groups. Rewari and Panipat districts do not show any change from 6 to 11 years age-group to 11 to 14 years age-group.

Data was not published for year 2002-04 due to All India school education survey. For 14 to 17 years age group data was not available after 1996 in the abstract. Source of Data : Statistical Abstract of Haryana(2005-2006).
Table-3.1 Percentage of School Going Girls in Haryana(1966-2005)

<table>
<thead>
<tr>
<th>Years</th>
<th>Age-Groups</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6 to 11</td>
<td>11 to 14</td>
<td>14 to 17</td>
<td></td>
</tr>
<tr>
<td>1966-67</td>
<td>44.7</td>
<td>16.4</td>
<td>06.4</td>
<td></td>
</tr>
<tr>
<td>1967-68</td>
<td>44.4</td>
<td>18.4</td>
<td>07.4</td>
<td></td>
</tr>
<tr>
<td>1970-71</td>
<td>48.0</td>
<td>20.9</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>1975-76</td>
<td>47.4</td>
<td>24.0</td>
<td>12.4</td>
<td></td>
</tr>
<tr>
<td>1980-81</td>
<td>54.7</td>
<td>26.4</td>
<td>09.4</td>
<td></td>
</tr>
<tr>
<td>1985-86</td>
<td>71.5</td>
<td>45.8</td>
<td>10.4</td>
<td></td>
</tr>
<tr>
<td>1990-91</td>
<td>76.1</td>
<td>50.5</td>
<td>18.8</td>
<td></td>
</tr>
<tr>
<td>1995-96</td>
<td>86.6</td>
<td>55.4</td>
<td>19.8</td>
<td></td>
</tr>
<tr>
<td>1998-99</td>
<td>84.8</td>
<td>62.0</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>1999-2000</td>
<td>82.9</td>
<td>59.4</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2000-2001</td>
<td>79.0</td>
<td>61.0</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2001-2002</td>
<td>76.9</td>
<td>58.6</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2004-2004</td>
<td>79.85</td>
<td>68.25</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2004-2005</td>
<td>87.4</td>
<td>74.7</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>


- Data Not Available

Data was not published for year 2002-04 due to All India School Education Survey.

3.2.1 Education Attained Among Females in Haryana.

3.2.1.1 Literacy

Maps 3.1 to 3.12 are age-specific, district-wise revelations of attainment of literacy among females in the state of Haryana. It is clear that the trend of attainment of literacy among females is picking up in the younger generation. In 15-34 years age group, 51.1% to 78.4% literacy rate range was found amongst females at the district level. In compulsory education age group (7-14 years), 72.5% to 92.4% females were found literate. Map 3.1, 3.4 and 3.7 reveal that 12 to 14 years age group females are more literate than 9-11 years age group females; and 9-11 years age group females are more literate than 7-8 age group females. Meaning thereby, more and more females try to become literate up to the age of 14 years. In other words, females are becoming literate even after attaining the age of 7-8 years (The age in which population is
normally expected to pass literate education level). Gurgaon district showed minimum percentage of literate females followed by Faridabad, Sirsa, Fatehabad and Hisar districts.

**Table 3.2 District wise Percentage of School-Going Females in Haryana (2004-05)**

<table>
<thead>
<tr>
<th>State/ District</th>
<th>Age-Group in years (2001-02)</th>
<th>Age-Group in years (2004-05)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6-11</td>
<td>14-17</td>
</tr>
<tr>
<td>Haryana</td>
<td>76.95</td>
<td>58.65</td>
</tr>
<tr>
<td>Panchkula</td>
<td>68.84</td>
<td>66.80</td>
</tr>
<tr>
<td>Yamunanagar</td>
<td>60.24</td>
<td>60.67</td>
</tr>
<tr>
<td>Jhajjar</td>
<td>67.86</td>
<td>64.81</td>
</tr>
<tr>
<td>Mahendergarh</td>
<td>91.21</td>
<td>65.44</td>
</tr>
<tr>
<td>Gurgaon</td>
<td>84.69</td>
<td>47.90</td>
</tr>
<tr>
<td>Sonepat</td>
<td>115.74</td>
<td>109.56</td>
</tr>
<tr>
<td>Kurukshetra</td>
<td>77.01</td>
<td>60.28</td>
</tr>
<tr>
<td>Karnal</td>
<td>77.69</td>
<td>65.41</td>
</tr>
<tr>
<td>Panipat</td>
<td>60.51</td>
<td>44.84</td>
</tr>
<tr>
<td>Rewari</td>
<td>71.57</td>
<td>69.86</td>
</tr>
<tr>
<td>Rohtak</td>
<td>69.40</td>
<td>60.44</td>
</tr>
<tr>
<td>Faridabad</td>
<td>86.49</td>
<td>64.09</td>
</tr>
<tr>
<td>Bhiwani</td>
<td>87.92</td>
<td>64.24</td>
</tr>
<tr>
<td>Hisar</td>
<td>65.00</td>
<td>54.54</td>
</tr>
<tr>
<td>Fatehabad</td>
<td>60.89</td>
<td>45.16</td>
</tr>
<tr>
<td>Kaithal</td>
<td>80.99</td>
<td>54.87</td>
</tr>
<tr>
<td>Sirsa</td>
<td>70.94</td>
<td>54.54</td>
</tr>
<tr>
<td>Ambala</td>
<td>60.59</td>
<td>71.44</td>
</tr>
<tr>
<td>Jind</td>
<td>92.85</td>
<td>62.42</td>
</tr>
</tbody>
</table>


**Rural-Urban Disparities**

In rural areas, range of literacy rate among females was found wider in rural areas than in urban areas (Rural area maps 3.2, 3.5, 3.8, 3.11 and Urban area maps 3.4, 3.5, 3.8, 3.12) at district level. In other words, among rural areas, literacy rate disparities are more.
In all the districts and among all the age groups, literacy rates among females are more in urban areas than in rural areas. Among rural areas of all the districts, in all the age groups (7-8, 9-11, 12-14 and 15-34 years), rural areas of Gurgaon and Faridabad districts have lower literacy rates due to larger percentage of Meo population. This reflects that those areas of districts wherein elder females are less literate, therein younger females are also less literate as shown in Map-3.2, 3.5, 3.8 and 3.11.

The female literacy intruding impact is found towards western and northern districts of Haryana. In younger age-group females, regional gap with respect to literacy rate gap is found abridging in rural areas of Haryana.

According to census 2001, the change has come late in rural areas than in urban areas. In urban areas, females who could not become literate when they were in 7-8 years age group, try to become literate in later ages (9-11 years or 12-14 years or even beyond that age) due to need of urban life but in rural areas, social and economic conditions keep them back. High female literacy rate pockets are limited to districts situated in the northeast, east, centraleast, and south of Haryana. In 7-8 years age group, districts situated in the west (Sirsa) and central north (Fatehabad) are backward in terms of female literacy in rural as well as urban areas.

In female literacy, most remarkable progress has been observed in urban areas of Mahendergarh district. Here, 75.8% females are literate in 15-34 years age group, 82.4% females are literate in 7-8 years age group, 92.6% females are literate in 9-11 years age group and 94.8% females are literate in 12-14 years age groups. Thus, a large percentage of females have become literate in the compulsory education age group. However, it cannot be ignored that despite adult education programme or implementation of NPE, 1986, every fourth female is illiterate even in urban areas in 15 - 34 years age group. Map 3.4, 3.6, 3.9, 3.12

Female literacy rate in Rewari, Jhajjar and Sonipat district is found increasing from medium to high category in rural as well as urban areas from 15-34 years age group to 12-14 years and from 12-14 years age group to 9-11 years age-group.
AGE-SPECIFIC FEMALE LITERACY IN HARYANA

Data by Districts (2001)

AGE-SPECIFIC FEMALE LITERACY IN HARYANA

Total
Age Group: 7-8
MAP: 2.1

Rural
Age Group: 8-11
MAP: 2.2

Urban
Age Group: 9-11
MAP: 2.3

Age Group: 10-11
MAP: 2.4

Age Group: 12-13
MAP: 2.5

Age Group: 13-14
MAP: 2.6

Age Group: 14-15
MAP: 2.7

Age Group: 15-16
MAP: 2.8

Age Group: 16-17
MAP: 2.9

Age Group: 17-18
MAP: 2.10

Females in Percent

Source of Data: Census of India, 2001

Percentages were calculated within the age-group

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In nutshell, urban areas showed higher percentage of female literacy rate than rural areas and amongst urban areas Rohtak, Ambala, Yamunanagar districts revealed highest female literacy rates in all the age-groups.

Female literacy-wise, who is more backward, Faridabad or Gurgaon?

Table 3.3 Literacy Attained Females in Gurgaon and Faridabad Districts, 2001

<table>
<thead>
<tr>
<th>Age-group in Years</th>
<th>HARYANA</th>
<th>FARIDABAD</th>
<th>GURGAON</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Rural</td>
<td>Urban</td>
</tr>
<tr>
<td>7 to 8</td>
<td>71.6</td>
<td>69</td>
<td>78.7</td>
</tr>
<tr>
<td>9 to 11</td>
<td>85.9</td>
<td>84.7</td>
<td>89.3</td>
</tr>
<tr>
<td>12 to 14</td>
<td>86.2</td>
<td>84.4</td>
<td>90.9</td>
</tr>
<tr>
<td>15 to 34</td>
<td>63.9</td>
<td>57.9</td>
<td>77.8</td>
</tr>
</tbody>
</table>


According to total literacy attained among females in all the age groups, Gurgaon district is more backward. In other words, in terms of female literacy, Gurgaon district is more backward.

3.2.1.2 Primary education

Regarding attainment of primary education level, it has been found that the females have progressed in Haryana. The highest progress is assessed in Panchkula. Here, in 15-34 years age group, 14.5% females are observed as primary educated. In 9-11 years age group, 22.2% females are recorded as primary educated. In 12-14 years age group, 54.4% females are recorded as primary educated. This evidence shows that 32.2% females completed their primary education after attainment of age of 11 years (7 years as the base for attaining first class of primary education) i.e., the expected age to complete primary stage education in normal period of 6 to 11 years (Map 3.16) NCERT (1994). This compels to think for two possibilities, either females join school late or they continue attending schools even after failing in classes for several times.

The highest percentage of primary level educated females is recorded in the north (Kurukshetra, Ambala and Yamunanagar) and south (Mahendergarh) of Haryana.
in the age-group of 15-34 years (Map 3.19). Amongst these districts, Ambala and Yamunanagar districts revealed higher percentage of primary education level attained females in the sub age group 9-11 years (within the compulsory education age group). This also indicates that the females of Ambala and Yamunanagar districts attain primary education level within the expected age group of 6-11 years for primary education. Keeping in view this observation, females of Ambala and Yamunanagar districts can be categorized as educationally most advanced females.

In Kurukshetra and Mahendergarh districts, females attain primary education level in later age than the expected age of 11 years (Map 3.14 and 3.16). This finding is true in case of majority of the other districts of Haryana. There is large homogeneity in the regional surface wherein 10% - 19.9% of the females attain primary education in the age group of 9-11 years. Only females of two small pockets (five districts) situated in the northeast (Panchkula, Ambala, Yamunanagar) and central south (Rewari and Jhajjar) have attained primary education from 20%-29.9% of females in the age group of 9-11 years. Significance of this finding lies in the fact that despite universal efforts, only in five districts, nearly 1/5th girls attain primary education level in Haryana within prescribed age of education system leaving the rest. Uniformly, more than 50% females have attained primary education level in the age of 12-14 years (Map 3.16).

On comparison of compulsory education age group and adult education age group, it has been found that the minimum difference in percentage of primary education attained females is recorded in the west (Sirsa), central west (Fatehabad) and southeast of Haryana (Gurgaon, Faridabad). Among sub age-groups, females of compulsory education age group also, the difference in percentage of attainment of primary education level is small. Earlier studies have shown that the drop out rate has been more in these districts.

Rural - Urban

Interestingly, in eight districts, educational attainment among females of 15-34 years is found lower in urban areas than in rural areas (Map 3.20 and Map 3.21). But in 9-11 years age group, primary level females educational attainment is noticed.
Higher in urban areas than in rural areas. Thus, the reverse is true in younger age group.

Like literacy level, educational attainment finding, higher percentage of primary level education attained females is found in 12-14 years age group. Hisar, Rohtak and Sonepat districts are distinct from general regional character in urban areas.

The task of Universal Primary Education through DPEP(District Primary Education Programme) seems to be far to be completed in Haryana. In rural areas
$\frac{1}{3}$rd to $\frac{1}{2}$ proportion of females could complete primary education in the 12 to 14 years age group. In 15 to 44 years age-groups (adult education age group), completion of task seems to be remote possibility.

3.2.1.4 Middle Education

In 15-34 years age group, eleven districts situated in the northeast (Panchkula), southeast, central west to central east show less than 15% females in Haryana as middle passed. Only in Rewari district, $\frac{1}{5}$th females (19.9%) are found to have attained middle education. The trend of attaining middle education within 14 years of age is weak in the districts wherein 15-34 years age group has less percentage of middle educated females such as in case of Fatehabad, Jind, Kaithal and Gurgaon district.

Nonetheless, middle education has intruded from south towards central and in the north towards further north of Haryana in the age group of 12-14years.

Rural – Urban disparities

In rural areas, noticeable inter-district disparities are recorded in 12-14 years as well as 15-34 years age-rous. Faridabad district shows half middle passed females (6.4%) to that of Ambala district (17.4%) Map3.24. In 15-34 years age-groups, Fatehabad district shows half middle passed females (10.0%) to that of Rewari district (20.7%)Map 3.24 and 3.25.

In urban areas, particularly in Panchkula (5.9%), less percentage of middle passed females have been observed in 15-34 years age group. This compels, to think for a reason to find out, as in urban areas, females have more facilities within reach to attain at least compulsory education. One explanation for this is that females continue their education even after middle level for higher education. Census records show 18.4 % to 24.4% females have attained middle level education in 15 to 34 years age groups in urban areas of Haryana. In 12-14 years age group, every fourth girl is found to have attained middle education level in 13 districts. However, females of Kaithal, Panipat and Faridabad districts have lower percentages of middle passed females, i.e. less than even 20 %.
AGE-SPECIFIC MIDDLE EDUCATION ATTAINED FEMALES IN HARYANA

Data by Districts (2001)

TOTAL

MAP: 2.22

Age-Group 12-14

MAP: 2.23

Age-Group 15-34

RURAL

MAP: 2.24

Age-Group 12-14

MAP: 2.25

Age-Group 15-34

URBAN

MAP: 2.26

Age-Group 12-14

MAP: 2.27

Age-Group 15-34

Females in Percent

<10  10-14.9  15-19.9  20-24.9  25-29.9  30 and above

Source of Data: Census of India, 2001

Percentages were calculated within the age-group.
3.2.1.4 Matric/Secondary/Diploma level

At secondary education level, inter-district disparity is still wider. Except in three districts, Rohtak, Jhajjar and Sonepat, all districts showed secondary passed females less than fifty percent in 25-34 years age group. Among the remaining sixteen districts, ten districts revealed less than ten percent. These districts form a region on the western side joining towards east in the center and southeast Map 2.28 and 2.29.

In urban areas, inter-districts variations are not wide. Lowest percentage was recorded in Faridabad (13.1%) and the highest in Ambala (20.4%). In 25-34 years age group. Inter-district disparities have reduced further in 15 to 24 years age group. The lowest percentage was recorded in Faridabad (23.1%) and the highest in Ambala (27.7%). Rural-Urban disparities are marginal in Rewari, Jhajjar, Rohtak, Sonepat and Ambala districts. Of course, Gurgaon and Faridabad, the neighbouring districts show wider rural - urban imbalances.

Among rural areas, inter-district disparities are more. Faridabad (7.4%) and Fatehabad (7.7%) districts recorded low percentages of secondary level educated females among females in rural areas. Jhajjar (21.2%) recorded thrice the percentage of secondary level females to that of Faridabad. By comparing Maps (3.29-3.35), (3.31-3.37) and (3.33-3.39), it becomes clear that 50 % females go for senior secondary education after completing their secondary level education.

3.2.1.5 Senior Secondary

On the basis of percentage of senior secondary level of education attained females among females in the age group of 18-24 years and 25-34 years, Haryana can be divided into two parts (Map 3.34 and 3.35).

1 Western districts 2 Eastern districts

In Western districts, percentage of senior secondary education level attained females is less. In Fatehabad district, it is less than even 10%. In eastern districts, in the age
AGE-SPECIFIC SECONDARY EDUCATION ATTAINED FEMALES IN HARYANA

Data by Districts (2001)

TOTAL

MAP: 2.28

Age-Group 15-24

RURAL

MAP: 2.30

Age-Group 15-24

URBAN

MAP: 2.32

Age-Group 15-24

Source of Data: Census of India, 2001

Percentages were calculated within the age-group.
group of 18-24 years along G.T road except in Karnal and Gurgaon districts percentage of senior secondary education level attained females have been noticed medium to high. There are two pockets of high percentage of senior secondary level education attained females - (1) Panchkula in the northeast (2) Rohtak in the center in the age group of 18 to 24 years. Both the pockets are situated where university level education facility is available. Inter-district gap of senior secondary passed females is more than double in Jind district and Rohtak in 18-24 years age group and 25-34 years age group.

Figure 3.3


Percentage of senior secondary education attained females is found to be two to four times more in 15-24 years age-groups than 25-34 years age-groups. Figure 3.3. Yamunanagar, Kurukshetra, Jind, Sirsa, Kaithal and Fatehabad district reveal four times more percentage in 15-24 years age group than 25-34 years age group.

Rural-urban gap was recorded more in all the districts in late adult age group i.e. 25-35 years (Map 3.37). It is observed that more than double rural-urban gap exists in districts where percentage of senior secondary attained females is recorded low.
certain districts like Faridabad, Fatehabad, Kaithal and Sirsa, rural-urban gap is four to six times (Table-3.4).

Evidence from Table 3.4 and Figure 3.4 and 3.5 show that in urban areas of Fatehabad, Sirsa, Faridabad and Kaithal, percentage of senior secondary education level attained females is found to be two to three times more in the age group of 18-24

Rural-Urban gap among Senior Secondary education attained females in selected districts of Haryana 2001


years than in the age group of 25-34 years whereas in rural areas, it is four to five times more. This manifests that though percentage of senior secondary passed females have increased more in percentage in rural as well as urban areas, yet the rural-urban gap is reducing in these districts. In Fatehabad and Sirsa, rural-urban gap in the age-groups of 25 – 34 years is six times, but in 18-24 years age group, it is four and 4.3 times respectively. In Faridabad and Kaithal districts, the gap has reduced from five times to 4.7 and 3.7 times respectively.
Table 3.4 Rural-Urban Gap Among Senior Secondary Education Attained Females in Selected Districts of Haryana, Age Group 25-34 Years, 2001

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Districts</th>
<th>Rural %</th>
<th>Urban%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fatehabad</td>
<td>1.2</td>
<td>7.8</td>
</tr>
<tr>
<td>2</td>
<td>Sirsa</td>
<td>1.3</td>
<td>7.7</td>
</tr>
<tr>
<td>3</td>
<td>Faridabad</td>
<td>1.6</td>
<td>8.4</td>
</tr>
<tr>
<td>4</td>
<td>Kaithal</td>
<td>1.4</td>
<td>6.8</td>
</tr>
</tbody>
</table>


Looking at inter-district variations among rural areas, districts situated in the northeast, Sonepat in the east, Rohtak, Jhajjar in the center, and Rewari in the south recorded high percentage of senior secondary passed females among rural females (Map 3.46). In late adult age-groups (25-34 years), only Sonepat district showed 10-14.9 percent senior secondary education level attained females Map 3.37.

Table 3.5 Rural-Urban Gap among Senior Secondary Education attained females in selected districts of Haryana, Age Group 18-24 Years, 2001

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Districts</th>
<th>Rural %</th>
<th>Urban%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fatehabad</td>
<td>5.6</td>
<td>25.4</td>
</tr>
<tr>
<td>2</td>
<td>Sirsa</td>
<td>5.7</td>
<td>24.7</td>
</tr>
<tr>
<td>3</td>
<td>Faridabad</td>
<td>4.9</td>
<td>23.6</td>
</tr>
<tr>
<td>4</td>
<td>Kaithal</td>
<td>6.5</td>
<td>24.7</td>
</tr>
</tbody>
</table>


In early adult age groups (18-24 years), rural areas of Rohtak and Sonepat districts have been found more progressive than Jind district (3.2%). This revealed that at this stage of education, Rohtak district had less penetrating effect towards Jind, Hisar and Bhiwani districts in terms of female education. Similarly, Yamunanagar district is more progressive than Kurukshehta and Karnal. It was interesting to see that Gurgaon and Faridabad, despite proximity to national capital, did not grow in education of females.
AGE-SPECIFIC SENIOR SECONDARY EDUCATION ATTAINED FEMALES IN HARYANA

Data by Districts (2001)

TOTAL

MAP: 2.34
Age-Group 18-24

RURAL

MAP: 2.36
Age-Group 18-24

URBAN

MAP: 2.38
Age-Group 18-24

Females in Percent

<5  5-9.9  10-14.9  15-19.9  20-24.9  25 and above

Source of Data: Census of India, 2001
Percentages were calculated within the age-group
In urban areas, progress in educational attainment of females at senior secondary level is more noteworthy than in the rural areas. In northeast, central and eastern Haryana, 5.9% - 9.9% females are senior. Secondary passed in 25-34 years age group. In 18-24 years age groups, more than 25% females are senior. Secondary passed.

3.2.1.6 Higher Education / Graduate and above

Map 3.40 and 3.41 shows attainment of higher education among females of Haryana is discouraging in 20-24 years age groups as well as in 25-34 years age-group. Only Panchkula district recorded more than 45% females as 'graduate and above'. Interestingly, Rohtak district emerged as an island of higher education center among females followed by Panchkula and Ambala in 20 to 24 years age groups. Of course, females of Faridabad and Gurgaon district are also stepping towards higher percentage in education due to impact of national capital.

Rural-urban gap appeared more than six times in all the districts. In rural areas, females of Ambala district were ahead in graduate and above education. Rural-urban gap was found higher in 20 to 24 years age group than 25 to 34 years age groups in the districts of Haryana (3.43 and 3.45). Comparison of Table 3.6 and 3.7 reveal that rural-urban gap in females of 20-24 years age groups is less than females of 25-34 years age-groups. 25-34 years age group is indeed over the age group for Graduate and above education level, when majority of population stops pursuing education. To sum up regional variations are more in attainment of female education at higher education level.
### AGE-SPECIFIC HIGHER EDUCATION ATTAINED FEMALES IN HARYANA

**Data by Districts (2001)**

#### TOTAL

<table>
<thead>
<tr>
<th>Age-Group</th>
<th>&lt;5</th>
<th>5-8.9</th>
<th>10-14.9</th>
<th>15-19.9</th>
<th>20-24</th>
<th>25 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-24</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45 and above</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source of Data:** Census of India, 2001

**Map Notes:**
- **MAP 2.40**
  - Total females in percent for Age-Group 20-24.
  - Map showing distribution by districts.
- **MAP 2.41**
  - Total females in percent for Age-Group 25-34.
  - Map showing distribution by districts.
- **MAP 2.42**
  - RURAL females in percent for Age-Group 20-24.
  - Map showing distribution by districts.
- **MAP 2.43**
  - RURAL females in percent for Age-Group 25-34.
  - Map showing distribution by districts.
- **MAP 2.44**
  - URBAN females in percent for Age-Group 20-24.
  - Map showing distribution by districts.
- **MAP 2.45**
  - URBAN females in percent for Age-Group 25-34.
  - Map showing distribution by districts.

**Legend:**
- Females in Percent
  - <5
  - 5-9.9
  - 10-14.9
  - 15-19.9
  - 20-24
  - 25 and above

**Note:** Percentages were calculated within the age-group.
Figure 3.5 RURAL URBAN GAP AMONG FEMALES IN SELECTED DISTRICTS OF HARYANA AT HIGHER EDUCATION LEVEL (2001) AGE GROUP 18-24 YEARS

Figure 3.6 RURAL URBAN GAP AMONG FEMALES IN SELECTED DISTRICTS OF HARYANA AT HIGHER EDUCATION LEVEL (2001) AGE GROUP 25-34 YEARS
Table 3.6 Rural-Urban Gap Among Females in Selected Districts of Haryana at Higher Education Level, Age Group 25-34 Years, 2001

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Districts</th>
<th>Rural %</th>
<th>Urban%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Faridabad</td>
<td>1.0</td>
<td>19.4</td>
</tr>
<tr>
<td>2</td>
<td>Jind</td>
<td>0.7</td>
<td>11.4</td>
</tr>
<tr>
<td>3</td>
<td>Sirsa</td>
<td>1.0</td>
<td>14.2</td>
</tr>
<tr>
<td>4</td>
<td>Kurukshetra</td>
<td>1.8</td>
<td>21.7</td>
</tr>
<tr>
<td>5</td>
<td>Hissar</td>
<td>1.4</td>
<td>15.2</td>
</tr>
<tr>
<td>6</td>
<td>Kaithal</td>
<td>1.0</td>
<td>11.7</td>
</tr>
<tr>
<td>7</td>
<td>Fatehabad</td>
<td>1.0</td>
<td>12.1</td>
</tr>
<tr>
<td>8</td>
<td>Yamunanagar</td>
<td>1.7</td>
<td>19.7</td>
</tr>
</tbody>
</table>


Table 3.7 Rural-Urban Gap Among Females in Selected Districts of Haryana at Higher Education Level, Age Group 18-24 Years, 2001

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Districts</th>
<th>Rural %</th>
<th>Urban%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Faridabad</td>
<td>1.4</td>
<td>17.4</td>
</tr>
<tr>
<td>2</td>
<td>Jind</td>
<td>1.4</td>
<td>14.1</td>
</tr>
<tr>
<td>3</td>
<td>Sirsa</td>
<td>1.7</td>
<td>16.5</td>
</tr>
<tr>
<td>4</td>
<td>Kurukshetra</td>
<td>2.9</td>
<td>28.7</td>
</tr>
<tr>
<td>5</td>
<td>Hissar</td>
<td>1.8</td>
<td>19.5</td>
</tr>
<tr>
<td>6</td>
<td>Kaithal</td>
<td>1.8</td>
<td>15.4</td>
</tr>
<tr>
<td>7</td>
<td>Fatehabad</td>
<td>1.8</td>
<td>15.7</td>
</tr>
<tr>
<td>8</td>
<td>Yamunanagar</td>
<td>4.2</td>
<td>20.7</td>
</tr>
</tbody>
</table>


Summary

The trend of attainment of literacy among females is picking up in the younger generation. In 15-34 years age groups, 51.1% to 78.4% literacy rate range was found amongst females at the district level. In compulsory education age-groups (7-14 years), 72.5% to 92.4% females were found literate. Gurgaon district showed minimum percentage of literate females followed by Faridabad, Sirsa, Fatehabad and Hisar. In rural areas, range of literacy rate among females was found wider in rural areas than in urban areas.
The female literacy intruding impact is found more towards western and northern districts of Haryana. In younger age group females, regional gap with respect to literacy rate gap is found abridging, rural areas of north and south Haryana. In female literacy, most remarkable progress has been observed in urban areas of Mahendergarh district. Here, 75.8% females are literate in 15-34 years age-groups, 82.4% females are literate in 7-8 years age-groups, 92.6% females are literate in 9-11 years age groups, 94.8% females are literate in 12-14 years age-groups. Despite adult education programme or implementation of NPE1986, every fourth female is illiterate even in urban areas in 15-34 years age groups Map 3.4, 3.6, 3.9, 3.12. Regarding attainment of primary education level, it has been found that the females have progressed in Haryana. The highest progress is assessed in Panchkula. Here, in 15-34 years age groups, 14.5% females are observed as primary educated. In 9-11 years age groups, 22.2% females are recorded as primary educated. In 12-14 years age groups, 54.4% females are recorded as primary educated. The highest percentage of primary level educated females is recorded in the north (Kurukshetra, Ambala and Yamunanagar) and south (Mahendergarh) of Haryana in the age group of 15-34 years (Map 3.19). There is large homogeneity in the regional surface wherein 10% - 19.9% of the females attain primary education in the age group of 9-11 years. Only females of two small pockets (five districts) situated in the northeast (Panchkula, Ambala, Yamunanagar) and central -south (Rewari and Jhajjar) have attained primary education from 20% – 29.9 % of females in the age groups of 9-11 years. Uniformly more than 50% females have attained primary education level in the age of 12-14 years (Map 3.16).

On comparison of compulsory education age group and adult education age group, it has been found that the minimum difference in percentage of primary education attained females is recorded in the west (Sirsa), central west (Fatehabad) and southeast of Haryana (Gurgaon, Faridabad). Like literacy level educational attainment finding, higher percentage of primary level education attained females is found in 12-14 years age groups. Hisar, Rohtak and Sonepat districts are distinct from general regional character in urban areas.
In 15-34 years age-groups, eleven districts situated in the northeast (Panchkula), south-east, central-west to central-east show less than 15% females in Haryana as middle passed. The trend of attaining middle education within 14 years of age is weak in the districts wherein 15-34 years age groups has less percentage of middle educated females such as in case of Fatehabad, Jind, Kaithal and Gurgaon district. In rural areas, noticeable inter-district disparities are recorded in 12-14 years as well as 15-34 years age-group. Faridabad district shows half middle passed females (8.4%) to that of Ambala district (17.4%) Map3.24. In 15-34 years age-groups, Fatehabad district shows half middle passed females (10.0%) to that of Rewari district (20.7%)Map 3.24 and 3.25. On the basis of percentage of secondary level of education-attained females among females in the age group of 18-24years and 25-34 years, Haryana can be divided into two parts (Map 3.34 and 3.35).

1 Western districts 2 Eastern districts

In Western districts, percentage of senior secondary education level attained females is less. In Fatehabad district, it is less than even 10%. In eastern districts, in the age group of 18-24 years along Grand Trunk road, except in Karnal and Gurgaon districts, percentage of senior secondary education level attained females have been noticed medium to high. Evidence from Table 3.4 and Figure 3.4 and 3.5 show that in urban areas of Fatehabad, Sirsa, Faridabad and Kaithal, percentage of senior secondary education level attained females is found to be two to three times more in the age group of 18-24 years than in the age group of 25-34 years whereas in rural areas, it is four to five times more. Looking at inter-district variations among rural areas, districts situated in the northeast, Sonepat in the east, Rohtak- Jhajjar in the center and Rewari in the south recorded high percentage of senior secondary passed females among rural females (Map 3.46). It was interesting to see that Gurgaon and Faridabad districts despite proximity to National Capital did not grow in education of females. Map 3.40 and 3.41 shows attainment of higher education among females of Haryana is discouraging in 20 -24 years age groups as well as in 25 -34 years age groups. Interestingly, Rohtak district emerged as an island of higher education center among females followed by Panchkula and Ambala in 20 to 24 years age-groups. Of
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Rural-urban gap appeared more than six times in all the districts. In rural areas, females of Ambala district were ahead in graduate and above education. Rural-urban gap was found higher in 20 to 24 years age-groups than 25 to 34 years age-groups in the districts of Haryana (3.43 and 3.45).