Chapter – 3

STUDY DESIGN FOR

POPULATION AWARENESS
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STUDY DESIGN FOR POPULATION AWARENESS

The research studies on Population Education as has been presented in chapter 2 reveal various aspects of population problems. In order to overcome the problems, population growth, right type of knowledge, attitude and practices relating to population awareness, is to be developed among the people about different aspects of the Population Education give them the direction to adopt different practices so that the problems relating to population growth could be checked.

It is also important to know the impact of different educational interventions being provided by different agencies on the community so that the strategies of imparting knowledge about Population Education may be planned effectively. Thus, as the main objective of the present study, the people of Varanasi District and the impact of educational interventions, the primary structure of design of this study is composed of following elements:

1. Critically analyse the demographic situation of Varanasi District and compare it with state and National levels.
In the political map of Uttar Pradesh, Varansi district has been shown by the no. 3 which is in green colour.
2. Finding the status of knowledge attitude and practices related to population Education.

3. Finding the educational interventions related to Population Education and their impact on people of the community.

The entire procedure has been presented under following sections:

A. Sampling

B. Educational Tools

C. Administration of tools

D. Analysis

A. **Sampling**

The sampling in the present study was done at the following levels:

1. Selection of Blocks
2. Selection of Respondents for KAP Study.
3. Selection of Institutions for impact study.
4. Selection of community people for impact study.

1. **Selection of Blocks**

   It was proposed to find out the population awareness of the people of the five blocks out of eight blocks. To select five blocks criteria of purposive sample was adopted. As per national census 2001, the details of population in eight blocks is given in Table 3.1.
Blocks of district Varansi and their locations in the map.
Table 3.1  
List of Blocks and their Population in Varanasi (2001)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of the Blocks</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>1.</td>
<td>Baragaon</td>
<td>102576</td>
</tr>
<tr>
<td>2.</td>
<td>Pindra</td>
<td>110130</td>
</tr>
<tr>
<td>3.</td>
<td>Cholapur</td>
<td>104527</td>
</tr>
<tr>
<td>4.</td>
<td>Chirayeegaon</td>
<td>117946</td>
</tr>
<tr>
<td>5.</td>
<td>Harhua</td>
<td>107210</td>
</tr>
<tr>
<td>6.</td>
<td>Sevapuri</td>
<td>092614</td>
</tr>
<tr>
<td>7.</td>
<td>Arajiline</td>
<td>134310</td>
</tr>
<tr>
<td>8.</td>
<td>Kashi Vidyapeeth</td>
<td>109020</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>7,78,333</strong></td>
</tr>
</tbody>
</table>

Out of above mentioned eight blocks, five blocks i.e. Baragaon, Cholapur, Chirayeegaon, Arajiline and Kashi Vidyapeeth were selected for the study. These blocks possess the entire characteristics of rural sector and urban sector of the district. Having adequate population, these blocks are located in such a manner that they cover the district from one
corner to other and possess all the characteristics such as Educational Institutions, Government Departments, well developed market etc.

2. **Selection of Respondents for KAP Study**

After selecting the five blocks for the present study, the next step was to select the people (respondents) from these five blocks for KAP study. Earlier it was decided to select 10 percent population of 15 to 45 age group of both the sex through stratified random sampling. The age wise population was available only at district level and not at the level of blocks. Thus the population of 15 to 45 age group of the selected blocks was calculated on the basis of overall age composition trend of the population of the district. These figures have been shown in Table 3.2

**Population of 15 – 45 Age Group**

<table>
<thead>
<tr>
<th>Area</th>
<th>Total Population</th>
<th>Population of 15-45 Age group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baragaon</td>
<td>218043</td>
<td>79267</td>
</tr>
<tr>
<td>Cholapur</td>
<td>221065</td>
<td>77958</td>
</tr>
<tr>
<td>Chirayeegaon</td>
<td>205521</td>
<td>87575</td>
</tr>
<tr>
<td>Arajiline</td>
<td>254616</td>
<td>90306</td>
</tr>
<tr>
<td>Kashi Vidyapeeth</td>
<td>214941</td>
<td>98754</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11,14,187</strong></td>
<td><strong>4,33,560</strong></td>
</tr>
</tbody>
</table>
The table 3.2 shows the number of people of 15-45 age group is quite large and 10 percent of this population is equally large to cover for the present study, it was decided to change the sampling procedure for the present study. To make the study convenient, it was decided to select randomly a sampling of 1000 people as per details given in Table 3.3.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Area</th>
<th>Size of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>1.</td>
<td>Baragaon</td>
<td>100</td>
</tr>
<tr>
<td>2.</td>
<td>Cholapur</td>
<td>100</td>
</tr>
<tr>
<td>3.</td>
<td>Chirayeegaon</td>
<td>100</td>
</tr>
<tr>
<td>4.</td>
<td>Arajiline</td>
<td>100</td>
</tr>
<tr>
<td>5.</td>
<td>Kashi Vidyapeeth</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>7,78,333</td>
<td>500</td>
</tr>
</tbody>
</table>

Thus 600 rural and 400 urban people were selected from every segment of the population of the study area in such a manner that only one person either male or female were selected from one family.

3. **Selection of Institution for Impact Study**

To determine the impact of educational institutions on the community people a total no. of 50 institutional heads of five selected blocks of the district Varanasi were selected randomly who have organized different educational programmes in the community and schools/college to develop population awareness. These heads were principals of schools and colleges,
presidents/secretaries of the non-government organization, incharge of Primary Health Centre and development agencies like blocks, Forest department, Publicity and Information department etc.

A sample of 50 institutions as per details given in Table 3.4

<table>
<thead>
<tr>
<th>Name of Institutions</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter colleges</td>
<td>22</td>
</tr>
<tr>
<td>I.T.I.</td>
<td>01</td>
</tr>
<tr>
<td>Poly Technic</td>
<td>01</td>
</tr>
<tr>
<td>Engg. College</td>
<td>01</td>
</tr>
<tr>
<td>Degree College</td>
<td>02</td>
</tr>
<tr>
<td>University Campus</td>
<td>01</td>
</tr>
<tr>
<td>N.S.S. Unit</td>
<td>01</td>
</tr>
<tr>
<td>Environment Deptt. B.H.U.</td>
<td>01</td>
</tr>
<tr>
<td>NAPPR Deptt. B.H.U.</td>
<td>01</td>
</tr>
<tr>
<td>Forestry Deptt. Ram Nagar</td>
<td>01</td>
</tr>
<tr>
<td>Deptt. Of Adult Education &amp; Extension, B.H.U.</td>
<td>01</td>
</tr>
<tr>
<td>P.H.C.’s</td>
<td>03</td>
</tr>
<tr>
<td>B.D.O. Offices</td>
<td>05</td>
</tr>
<tr>
<td>N.G.O.’s</td>
<td>04</td>
</tr>
<tr>
<td>Distt. Information Deptt.</td>
<td>01</td>
</tr>
</tbody>
</table>
4. Selection of Community People for Impact Study

To find out the impact of Educational Intervention of different educational programmes related to Population Education on the community people, a total no. of 200 people were randomly selected from the five blocks. The bifurcation of these 200 community people is shown in Table 3.5.

Table 3.5
Sampling of Community People for Impact Study

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Area</th>
<th>Size of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>1.</td>
<td>Baragaon</td>
<td>20</td>
</tr>
<tr>
<td>2.</td>
<td>Cholapur</td>
<td>20</td>
</tr>
<tr>
<td>3.</td>
<td>Chirayeeegaon</td>
<td>20</td>
</tr>
<tr>
<td>4.</td>
<td>Arajiline</td>
<td>20</td>
</tr>
<tr>
<td>5.</td>
<td>Kashi Vidyapeeth</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

B. Education Tools
In the present study following educational tools have been used for the collection of data:

1. A schedule to find out statistical data related to population growth is district Varanasi as well as Regional, State and National level.
2. An interview schedule to find out the status of knowledge of the people of Varanasi about different aspects of Population Education.
3. A test to measure attitude of the people of Varanasi towards different aspects of Population Education.
4. An interview cum observation schedule to find out the practices relating to Population Education prevailing in the community.
5. A schedule to find out educational intervention being provided by different institutions.
6. An interview cum observation schedule to find out the impact of educational interventions on the community people.

1. **Schedule for Demographic Profile**

   The purpose of the tool was to collect demographic data at different level i.e. District Varanasi, State (UP) and Nation (India). In order to
collect information about demographic feature of the above mentioned level. A schedule was developed by the investigator with the consultation of supervisor, teachers of the university, and experts having expertise in Population Education.

This schedule consists of following demographic features:

(a) Growth rate
(b) Sex ratio
(c) Density
(d) Male-Female Population
(e) Urban-Rural Population

2. Interview Schedule for Assessing the Status of Knowledge

Through various educational tools are available to assess the status of knowledge, attitude and practices related to different dimensions of Population Education as mentioned in point no. (B), (C) and (D) but these tools are applicable in a situation other than hilly region. The region of Varanasi is different in many aspects with the other part of the country such as demographic features, life style, transport and communication, socio-cultural values economic and professional aspects etc., it certainly
needs such type of schedule which reflects these characteristics of the region.

Thus in order to get an interview schedule for finding the status of knowledge, a test to measure attitude and an interview-cum-observation schedule to find out the practices of the people related to different dimensions of Population Education for this particular region of Varanasi, the investigator have to develop its own tools for the purpose.

(I) **Collection of Dimensions of Population Education**

The interview schedule to find out the status of knowledge of the people was of open ended type to construct the schedule, the investigator personally contacted few teacher of the university and colleges, doctors of the hospitals, social scientist etc. the investigator asked them to comment about the possible dimensions of Population Education, the investigator also consulted the literature of Population Education. As a result of it, the following five dimensions of Population Education were finalized for preparing the interview schedule.

1. Population Situation
2. Environment and Resources
3. Development and Quality of Life
4. Health and Nutrition
5. Family Welfare

(II) **Collection of Items under Each Dimension**
Then, a large number of items related to each of the five dimensions were collected through interview, informal individuals and group discussion with teachers and experts or a person who is some how or other is connected with the field of Population Education. These items were examined very minutely by the investigator and it was decided to put only five important items under each five dimensions as given below:

(1) **Population Situation**
   (a) National population
   (b) State population
   (c) Regional population
   (d) Average age
   (e) Growth of Population

(2) **Environment and Resources**
   (a) Environment movement
   (b) Deforestation
   (c) Non-conventional source of energy
   (d) Polluted water
   (e) Forest

(3) **Development and Quality of Life**
   (a) Small family
   (b) Consumers commodity
   (c) Education and children
(d) Population growth and family income
(e) Unemployment

(4) **Health and Nutrition**
(a) Diseases of children
(b) Immunization for children
(c) Iodine
(d) Drinking water
(e) Diarrhoea

(5) **Family Welfare**
(a) Age at marriage for girl
(b) Spacing between two children
(c) Green card
(d) Use of contraceptive
(e) Gender equality

(III) **Editing and Validating of the Items**

The draft of the schedule consisting of 25 items under five dimensions of Population Education was edited validated with the help of
experts in Population Education, they were requested to observe following precautions while editing and validating the items:

(a) One item contain should on idea
(b) Repetition should be avoided
(c) The idea should be put in most common language

(d) To check whether each item is properly placed under the appropriate dimensions.

In this manner after editing and validating the dimensions and items of the schedule the draft was finalized. To find out the status of knowledge of the people about different aspects of Population Education, the items of the said draft were converted into interrogative form.

(IV) Try Out

The interview schedule so prepared was distributed among 50 people (25 rural and 25 urban) for tryout. These people were requested to suggest if they have any difficulty in understanding the items of the schedule and to give its response/answer.

(V) Final Schedule
After making language corrections in those items in which the people of tryout stage suggested any modification, the schedule was final for administration.

3. **Test of Measure Attitude about Population Problems**

To construct a test for measuring the attitude of the people towards different aspects of population problems, all those five dimensions of Population Education were taken into consideration which were chosen for knowledge schedule. The items under each dimension were some what changed with respect to knowledge Schedule. The respondents were expected to express their opinion about each item of the test on the five point scale as suggested by Likert-Strong Agree, Agree, Undecided, Disagree, Strongly Disagree. In this attitude test 16 items were favourable whereas 09 items were unfavourable towards different aspects of population problems. The attitude test so framed was distributed among 50 people of rural and urban communities for tryout purpose. After appropriate modification in language and content, the test was made ready for final administration.

4. **Interview-cum-observation Schedule to Find out the Practices Related to Population Education**

To construct this schedule the same five dimensions were adopted as in the case of earlier two schedules i.e. knowledge schedule and attitude test. The contents of the items of this schedule were also changed and are
related with practices being adopted in the area of Varanasi. The items present in the schedule are of interrogative form having three alternatives for response i.e. Always, Seldom and Never for each dimensions are 25. The respondents are supposed to tick one of the three alternatives which suit to them.

The test do developed, was distributed to experts in Population Education for editing and validating the items. After necessary modification it was again administered in a small sample of 50 people (25 rural and 25 urban). After eliminating ambiguous or confusing portion of the items and making necessary modification in the language, the test was finalized for application.

5. **Schedule to Find out the Educational Interventions**

In order to collect the information about different educational interventions organized during last three years to create awareness about population Education, a schedule was developed by the investigator with the consultation of different experts. The schedule was aimed to find out following information.

(a) Type of activities such as training, symposia/seminar, exhibition,

Extension Lectures, Poster, Video Film, Street Play, Debate, Essay Writing and Quiz.
(b) Subject of activities – subjects of different activities of Population Education were classified under five dimensions which were finalized earlier in tools no. (2), (3) and (4).

(c) Objectives of activities i.e. whether the activities were related to knowledge, attitude or practice aspect of Population Education.

6. **Schedule to Find out Impact of Educational Intervention**

The last tool of the study was interview-cum-observation schedule. This tool was also developed by the investigator in order to find out impact of education interventions on the community people. An attempt was made to find the following information about participation and impact on community people through educational interventions.

(a) Type of activities in which community people participated.

(b) Programme organizing agency/institution.

(c) Subject to activities under five dimensions as mentioned earlier.

(d) Behaviour-able objectives related to knowledge attitude and practices of Population Education which were through particular activities.

C. **Administration of Educational Tools**

In this study administration of tool was done in the following manner:

(a) The schedule to find out statistical data related to population growth in district Varanasi as well as Regional, State and National level was filled up by the investigator personally. He visited block development
offices for collecting information related to selected development blocks in order to collect the information about demographic features of Varanasi. The investigator visited the district census office at Varanasi. He also collected information about Varanasi region from this office. Statistical data related to State and National level the

researcher consulted the National census of different decades available at university library.

(b) For the administration of educational tools related to knowledge, attitude and practices aspect of Population Education. The researcher visited the five blocks personally and contacted the community people randomly in a group of 10 to 15 people. He briefly introduced the objectives of the study to them and explained the imperative need of correct response to the items. The researcher also contacted the illiterate people individually and personally and explained the purpose of the study. He reads out the questions and statements of all the three knowledge, attitude and practices schedule of Population Education and note down their responses individually.

The subjects were first given knowledge schedule and were asked them to write answers of each question in brief in the space provided in the schedule. The researcher then administered attitude test of Population
Education and instructed them to give their opinion about each of the 25 statements by putting a tick in five point scale.

Lastly the schedule related to practice aspect of Population Education was given to the respondents and they were asked to give their opinion about each of the 25 statements in a three point scale. The average time taken by the community people for providing information against these three educational tools knowledge, attitude and practice were about 45 minutes, 30 minutes and 30 minutes respectively.

(c) The schedule for finding the educational interventions being provided by different institutions of the five selected developments blocks of Varanasi district was administered by post or personally. A request was made with institutional head to response the test properly and quickly. In case where the test was sent by post a stamped address envelope was also sent along with the test by the investigator for the convenience of the responders. Fifty institutions heads responded the test.

(d) The interview-cum-observation schedule to find out the impact of educational interventions on the community people, was administered in a group of about 5 people. The community people so selected were of the areas where the heads of different agencies had responded that they had
organized activities related to Population Education in that particular area. Before administering the tool the community people were informed about the purpose of the test and they were requested to give free and fare responses.

The responses of illiterate people were recorded by investigator in separate schedule.

D. **Statistical Technique for Analysis**

To analyse the responses related to knowledge and attitude aspects of Population Education the following processor was adopted.

In PEK schedule the correct response were provided one mark and zero mark to wrong responses. The marks gained by responders were thus calculated dimension wise and arranged in the form of raw scores. To compare the rural/urban and male/female position of knowledge, the mean value was computed and ‘t’-test was employed.

In case of attitude test the scoring was assigned to Likert scale 5, 4, 3, 2 and 1 mark was assigned to Strongly Agree, Agree, Undecided, Disagree, Strong Disagree responses to favourable statements whereas reverse marking was done in non-favourable statement. In this case also total scores gained by the responders were calculated dimension wise and as a whole. Mean and ‘t’- value was calculated to compare the results of M/F and R/U.
To analyse the results of PEP schedule non-parametric analysis of Chi-square test was used. The responses of the community people were classified in three categories i.e. Always, Seldom and Never. After calculating the expected frequencies the Chi-square value of each item was computed and result were drawn keeping in view the level of degree of freedom.

To study the educational interventions being provided by different institutions and their impact on the community people, the responses of institutional heads and community people were classified in the form of frequencies under each dimension. The frequencies were also arranged objective wise as given in the schedule i.e. knowledge, attitude and practices. The statistic of percentage was employed to get the result.