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QUESTIONNAIRE TO ELICIT INFORMATION ABOUT ORGANIZATION, TECHNIQUES AND ECONOMICS OF HANDLOOM INDUSTRY IN NAGPUR CITY.

Socioeconomic Status

Name of the weaver: ________________________________
Address: ________________________________
Age: _______

1. Education:
   - Illiterate
   - Upto IV standard
   - S.S.C.
   - S.S.C. and above

2. Occupation: Main / Subsidiary

3. Type of Family: Joint / Nuclear

4. Work Place: Own / Hired

5. Work Place and Residence: Separate / Together
   - If workplace and residence are together
   - Are you willing to shift to a separate place. Yes / No
   - If no Reasons
     - Cannot afford a separate place.
     - Family members cannot cooperate.
     - Difficult to work on separate place.
     - Can not manage household activities.

6. Income:
   - 101 - 300
   - 301 - 500
   - 501 - 700
   - 701 - 900

9. General Information of the Family

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Name of Family</th>
<th>Relation with</th>
<th>Age</th>
<th>Sex</th>
<th>Education</th>
<th>Month</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Members</td>
<td>Head of Family</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td></td>
</tr>
</tbody>
</table>

10. Organization

<table>
<thead>
<tr>
<th>Organizational Structure</th>
<th>Pit Loom</th>
<th>Frame Loom</th>
<th>Any Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual ownership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mahamandals common shed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperative society shed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working as labourer</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
11. Approximately how many hours a day you work on loom? ___________ hrs.

12. How many looms are idle: ___________.

13. Reasons: Low income, Lack of Raw material, Lack of Funds.

14. Are you a member of weavers cooperative society? Yes / No.

15. If no Reasons. Lack of knowledge, Paucity of funds, Others.

16. Who established this business: Self / Ancestral.

17. What are the problems faced in purchasing the handlooms. Lack of funds, Non availability of handlooms, Non availability of skilled carpenters.

18. Are training facilities available. Yes / No.

19. If yes state its nature. Private owners provide facility, Mahamandal has a plan of extending training facility, Through imitation family members learn weaving, No formal training programme.

20. How the weavers are selected. Weavers approach the owner, one weaver recommends other, one owner asks another, Any other.

21. Techniques

<table>
<thead>
<tr>
<th>Sr.</th>
<th>Type of Handloom</th>
<th>Number No. of working</th>
<th>No of Idle Looms</th>
<th>Value at current prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Throw shuttle Loom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Fly shuttle Pit loom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Frame Loom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Any Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

22. Do you feel it necessary to opt for improved type of handloom? Yes/No


24. If you do not want to opt for improved type of handloom, give reasons. No market for handloom, Lack of raw material, Lack of funds, Negligibly less income.

25. Will you like to convert handloom into powerloom. Yes / No.
If yes state benefits.

Production is fast.
Refined production.
Varieties of high quality.
Less laborious.
More market value.

Economics

Give the reasons due to which you have to keep the loom idle for a short period.
No work.
Only Janata Dhoti.
Lack of funds.
No sales.
Scarcity of raw material.

Reasons for not continuing any of the family member in this profession.
Low income.
Insecurity of job.
Lack of funds.
Poor sale.

Have you borrowed money from others.

Relative.
Friends.
Money lenders.
Cooperatives.
banks.
Any other.

Job Satisfaction.

Are you satisfied with the following aspects of this occupation.

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Aspect</th>
<th>Satisfied</th>
<th>Partly Satisfied</th>
<th>Not Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Type of job</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Type of looms available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Wages per month</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Facilities given</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Availability of material</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income Range</td>
<td>No. of Families FAM</td>
<td>No. of Families under shed SHED</td>
<td>No. of Families working in lab LAB</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------</td>
<td>---------------------------------</td>
<td>----------------------------------</td>
<td></td>
</tr>
<tr>
<td>101-300</td>
<td>150</td>
<td>05</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>301-500</td>
<td>100</td>
<td>15</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>501-700</td>
<td>25</td>
<td>20</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>701-900</td>
<td>25</td>
<td>40</td>
<td>02</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
<td><strong>80</strong></td>
<td><strong>50</strong></td>
<td></td>
</tr>
</tbody>
</table>

From the above data average income of the respondents of FAM group will be:

\[ \bar{X} = a + \frac{\Sigma fdx}{n} \times i \]

where \( \bar{X} \) = Average income

\( a \) = Assumed mean

\( n \) = Total no. of respondents.

\( i \) = Class interval

\( \Sigma fdx \) = Sum of product of income and number of respondents.

\( a = 400.5 \)

\( i = 200 \)
<table>
<thead>
<tr>
<th>Income Range</th>
<th>No. of Families</th>
<th>(mid values) M.V.</th>
<th>dx</th>
<th>dx'</th>
<th>fdx'</th>
</tr>
</thead>
<tbody>
<tr>
<td>101-300</td>
<td>150</td>
<td>200.5</td>
<td>-200</td>
<td>-1</td>
<td>-150</td>
</tr>
<tr>
<td>301-500</td>
<td>100</td>
<td>400.5</td>
<td>0</td>
<td>0</td>
<td>00</td>
</tr>
<tr>
<td>501-700</td>
<td>25</td>
<td>600.5</td>
<td>+200</td>
<td>+1</td>
<td>+25</td>
</tr>
<tr>
<td>701-900</td>
<td>25</td>
<td>800.5</td>
<td>+400</td>
<td>+2</td>
<td>+50</td>
</tr>
</tbody>
</table>

Total 300

\[\Sigma fdx' = -150 + 75 = -75\]

Putting the values in above formula

\[
\bar{X} = a + \frac{\Sigma fdx}{n}
\]

\[= 400.5 + \frac{-75}{300} = 400.5 + (-50)\]

\[= 400.5 - 50\]

\[= 350.5\]

Average income is Rs. 350.5/-

Similarly the average income of SHED group will be

\[
\bar{X} = a + \frac{\Sigma fdx'}{n}
\]

\[= 400.5 + \frac{95}{80} = 400.5 + 1900\]

\[= 400.5 + 237.5 = 638/-\]

Average income of group SHED is Rs. 638/-
From the above data average income of group LAB will be

\[ \overline{X} = a + \frac{\sum fx}{n} \]

\[ = 400.5 + \frac{12}{50} \times 200 \]

\[ = 400.5 + 48 \]

\[ = \text{Rs. 448.5/-} \]

The average income of different groups...

FAM = 350.5

SHED = 638

LAB = 448.5

On the basis of test of equal probability hypothesis.

\[ X^2 = \frac{\sum (fo-fe)^2}{fe} \]

<p>| | | | | |</p>
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>fo</td>
<td>fe</td>
<td></td>
<td>(fo-fe)^2</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>----</td>
<td>----</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>350</td>
<td>479</td>
<td>-129</td>
<td>(129)^2</td>
<td>34.74</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>479</td>
<td></td>
</tr>
<tr>
<td>638</td>
<td>479</td>
<td>159</td>
<td>(159)^2</td>
<td>52.70</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>479</td>
<td></td>
</tr>
<tr>
<td>448</td>
<td>479</td>
<td>-31</td>
<td>(-31)^2</td>
<td>2.0</td>
</tr>
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<td></td>
<td></td>
<td>479</td>
<td></td>
</tr>
<tr>
<td>\Sigma fo 1436</td>
<td>\Sigma fe 1437</td>
<td>89.44</td>
<td></td>
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</tr>
</tbody>
</table>
df = (r-1) x (k-1)

= (3-1) x (3-1) = 2 x 2 = 4

The table value of $X^2$ at 4 df at .01 level is 13.277 and at .05 level is 9.488 and obtained value is 89.44.

The result is highly significant at both the levels i.e. .01 percent level and .05 percent level. It is supporting the assumptions.