CHAPTER V

RELATIONSHIP BETWEEN RURAL MALE AND FEMALE MAIN WORKERS

Women’s participation in the economic activity is important from their personal advancement and their status in the society. Women in conservative society are forced to choose between family and career. However the women’ participation in economic activity is essential for their personal advancement and their states in society. Marx (Singh M.K., 1987) also states that women’s participation is an important pre-condition for the advancement not only of the women buy the country as well.

In rural areas, women are mainly involved as cultivators and agricultural labourers, while in the urban areas, almost 80 per cent of the women work force is working in unorganised sectors like household industry, petty trades and services and construction activity. Social scientists have become increasingly interested in questions relating to the sexual division of workforce in different societies. Generally low level of participation by woman in the Indian labour force and the highly uneven geographic pattern of this participation has been the object of considerable recent discussion (Raju, 1982).

Although female participation in economic activity in India is one of the lowest in the world, an important feature of the district level data in India is what seems to be the north-south divide in the extant of female participation in economic activity. The southern states in general show a higher rate of female participation than the districts in the northern region. The work participation rate of females in the rural areas of Punjab and Haryana is remarkably low while it is important to note that this region has seen an unprecedented growth in agricultural productivity along with a rapid development of productive forces. Further it is important to know that there are villages having very high participation of female in work. On the other hand, states having very high participation of females (such as Maharashtra) in economic activity are characterised by pockets of villages where the level of participation is just negligible (Nayak and Ahmad, 1984).
Both qualitative and quantitative presence of women in the workforce is important not only for lowering the disproportionate levels of poverty among women, but also for taking a step towards raising household income and encouraging economic development in countries as a whole (World Economic Forum (WEF), 2005). As women tend to be less corrupt than men, societies where women enjoy greater participation in public life have ‘cleaner’ businesses and governments (Dollar et al, 2001, World Bank, 2001).

The economic participation of women—their presence in the workforce in quantitative terms—is important not only for lowering the disproportionate levels of poverty among women, but also as an important step toward raising household income and encouraging economic development in countries as a whole.

Amartya Sen makes a compelling case for the notion that societies need to see women less as passive recipients of help, and more as dynamic promoters of social transformation, a view strongly buttressed by a body of evidence suggesting that the education, employment and ownership rights of women have a powerful influence on their ability to control their environment and contribute to economic development. Economic participation concerns not only the actual numbers of women participating in the labour force, but also their remuneration on an equal basis. Worldwide, outside of the agricultural sector, in both developed and developing countries, women are still averaging slightly less than 78% of the wages given to men for the same work, a gap which refuses to close in even the most developed countries.

**Review of Literature**

Studies on relationship between male and female work participation is not a new field in the geography. Many researchers studied relationship in many ways like Nath, 1970 studied the relationship between female work participation rate and levels of development of States have been studied by calculating the co-efficient of correlation between female work participation rate and the six indicators of development.

Leela Gulati (1975) has attempted to identify the factors underlying interstate variation in female participation rate. She has used simple rank correlation to find out any significant relationship between the female participation rate, on the one hand, and per
capita income, cropping pattern, literacy rate, male participation rate and the sex ratio on the other.

Likely Ramotra (1989) also studied female work participation to analyse the spatial variation in female participation in economic activity in India in general and in Marathwada region of Maharashtra in particular. He found that the per capita income and female participation rate are negatively correlated. The study substantiates the argument that female participation rates are highly correlated to poverty and landlessness in rural India (Nayyar, 1987).

Bagchi at al. (1993) studied the occupational and industrial diversification in the United States. He first tests the significance of the change over the period 1983-1988 of the two employment structures using paired t-tests. Next the association between the indices of diversification is examined using correlation analysis to reveal weakening ties of occupational and industrial structures between 1983 and 1988.

Shafiqullah 2001 examines the workforce, socio-economic development and their relationship over the districts of Uttar Pradesh. He observed that among the fifteen variables, only five found significant at 99 per cent level of confidence in their relationships with the work participation rate.

Raikhy and Mehra (2003) studied the changing structure of female workforce in India and in his view deliberate efforts are needed to create female specific employment opportunities. In the other way Kapoor (2006) also studied female work participation and focused on understanding the factors influencing female work participation decisions measured in different ways.

The female worker in rural India is much lower as compared to the male work participation rate. The study area is a male dominating society therefore it becomes necessary to know that how female workers co-related to male workers in the rural main classification of workers. The present study will be an attempt to analyse the relationship between male and female main working force of rural population by major groups.

**Methodology**

However it is important to know that correlation can help to study the relationship between male and female main workers. It is used to understand:
1. Whether the relationship is positive or negative

The strength of relationship.

Statistical correlation is measured by what is called coefficient of correlation \((r)\). Its numerical value ranges from \(+1.0\) to \(-1.0\). It gives us an indication of the strength of relationship. In general, \(r > 0\) indicates positive relationship, \(r < 0\) indicates negative relationship while \(r = 0\) indicates no relationship (or that the male and female main workers are independent and not related). Here \(r = +1.0\) describes a perfect positive correlation and \(r = -1.0\) describes a perfect negative correlation. Closer the coefficients are to \(+1.0\) and \(-1.0\), greater is the strength of the relationship between the variables.

Significance is a statistical term that tells how sure you are that a difference or relationship exists. To say that a significant difference or relationship exists only tells half the story. We might be very sure that a relationship exists, but is it a strong, moderate, or weak relationship? After finding a significant relationship, it is important to evaluate its strength. Significant relationships can be strong or weak. Significant differences can be large or small. It just depends on your sample size.

The village wise male and female work participation rate have been calculated in per cent in a district and *Karl Pearson co-efficient of correlation \((r)\)* method has been employed to find out the relationship between male and female at district level and further four broad categories of work force i.e. cultivators, agricultural labourers, workers in household industry and other workers. As a rule of thumb, the following guidelines on strength of relationship are used (though many experts would somewhat disagree on the choice of boundaries).

The relationship with reference to strength of co-efficient has been categorised from *very strong relationship to very weak relationship* i.e.

1. Very strong \((r = 0.9 - 1.0)\)
2. Strong \((r = 0.7 - 0.9)\)
3. Moderate \((r = 0.4 - 0.7)\)
4. Weak \((r = 0.2 - 0.4)\)
5. Very weak \((r = 0.0 - 0.2)\)
The same categorization implemented in the ‘r’ values 0 to -1.0 and that denotes negative relationship.

**Relationship between male and female among rural main cultivators**

It is observed while studying relationship on census data 2001 of male and female of rural main cultivators that strongest relationship is found in East Delhi (r = 0.998) followed by West Delhi (r = 0.94), East Sikkim (r = 0.94), Champhai (r = 0.93) of Mizoram, South Goa (r = 0.91) and Ri Bhoi (r = 0.90) of Meghalya. These districts are agglomerated by urban areas and a great proportion of male population occupied by other workers therefore the relationship found very strong in the cultivators.

The strong relationship observed in 178 districts greatly from the north-eastern states and southern half of India. This is also due to the cultural ethics that females are treated equally to males. The Christian missionaries are also played a vital role. The weak relationship is found in 37 districts greatly from the northern half of India. While very weak correlation found in 11 districts in the form of patches. The weakest correlation found in Aizwal (r = 0.003) of Mizoram followed by Karbi Anglong (r = 0.07) of Assam, Dhaulpur (r = 0.08) and Solan (r = 0.08) Of Himachal Pradesh. It is due to the low sex ratio in the northern part of India. However it is interesting to know that cultivators are found great in the northern region while their male-female relationship found weak in the northern region and strong in southern region.

The low literacy rate of males is also responsible for weak relationship. The negative relationship is found in three districts in which Sikkar of Rajasthan and Ranchi of Jharkhand observed in very weak negative relationship while Dantewada of Chhattisgarh found in normal/moderate negative relationship. Only five districts are found in statistical not significant.

**Relationship between male and female among rural main agricultural labourers**

The strongest relationship of male and female main Agricultural Labourers is observed in North, East, and West Delhi (r = 0.99), Champhai (r = 0.99) of Mizoram. The very strong relationship is found in 25 districts greatly from the north-east states. A large number of tea gardens found in Assam valley therefore a large number of females getting
job in the tea gardens in the manner of tea leaf plucking. While strong relationship is found in 185 districts greatly from the southern half of India but small patches are also visible in rest part of India.

It is observed that there is a large part of landless persons in which the strength of females constitutes high and due to the illiteracy they don’t have option other than the agricultural labourers. The weak relationship is found in 21 districts in the form of single units. It is also observed that very weak relationship is found in only five districts namely Rajauri (r = 0.05) of Jammu & Kashmir, Surenderanagar (r = 0.11) of Gujarat, Udhampur (r = 0.12) of Jammu & Kashmir, Lahul & Spiti (r = 0.12) of Himachal Pradesh and Chamoli (r = 0.14) of Uttrakhand. It is observed that all these districts are in remote areas or disturbed political units. It is also important to know that four districts observed negative relationship in which Rewari (r = -0.02), Dausa (r = -0.02) and Jaunpur (r = -0.04) considered in very weak relationship while Chittaurgarh (r = -0.42) found normal/moderate negative relationship, which is also statistical not significant. It is only six districts which considered in statistical not significant at the 0.001 level.

**Relationship between male and female among rural workers in main household industry**

The relationship between male and female of household industry workers is found strongest in Dadra & Nagar Havely (r = 0.96) followed by Diu (r = 0.95) and Alppuza (r = 0.93) of Kerala. The very strong relationship is observed in only seven districts which are found in the form of single units. Likely the weak relationship is found in 175 districts which are observed in the whole study area.

In the same way very weak relationship is found in the 32 districts in the form of small patches. This is the function where females are greatly involved as unpaid worker. The weakest relationship is found in Gorakhpur (r = 0.01) of Uttar Pradesh, Ranchi (r = 0.03) of Jharkhand, Papum Pare (r = 0.05) of Arunachal Pradesh and Punch (r = 0.06) of Jammu & Kashmir. Only Dibang Valley district of Arunachal Pradesh found very weak negative relationship (r = -0.02) which also found statistical not significant at the 0.001 level, while total 11 districts observed not significant.
**Relationship between male and female among rural main other workers**

The Ten districts lie in very strong relationship which is greatly from the south and north-east India. The strongest relationship is observed found in The Nilgiris \( (r = 0.97) \) of Tamilnadu followed by East Sikkim \( (r = 0.93) \), Wayanad \( (r = 0.93) \) and Idukki \( (r = 0.93) \) of Kerala. The strong relationship is found in 126 districts greatly from the north east and south India. However it is more interesting to know that the relationship is strong and significant again in the southern region due to the high sex ratio.

It is observed that weak relationship is found in 65 districts which are greatly found in northern half of India. Likewise very weak relationship is found in nine districts in the form of single units. There are two districts which considered in negative relationship i.e. Nawada \( (r = -0.01) \) of Bihar and Lahul and Spiti \( (r = -0.30) \) of Himachal Pradesh. It is also important to know that only eight districts are found statistical not significant at the 0.001 level out of 584 rural districts.

Finally it is concluded that north-eastern states are observed in strong relationship between male and female work participation rate. The north-east region is a large tea estate of the country with western influence and provides employment in the tea gardens which augments their participation rate. The southern half of India is also observed in strong relationship and significant at the 0.001 level in all the four broad classification of rural main workers. This region is considered in the industrially and economically progressive states of India. The strong relationship is comprehensible that the women enjoy a highly elevated status as compared to the conservative nature of the other part of the study area.

The literacy rate and sex ratio of these areas are also found in high percentile. It is also important to know that north India considered in weak relationship between male and female work participation rate. The greater part of the females involved in unpaid services like cultivators and household industry workers. The village level analysis may unravel the role of economic and cultural factors in a direct and positive way.

**Zone-Wise Relationship**

The relationship studied between male and female among cultivators, it is observed that Western Himalyan zone considered in very weak strength of relationship
and which is non-significant at .01 levels. It is also observed that remaining entire four zones are recorded strong relationship. While, studying on sub-zones, it is observed that Kashmir Himalyan region recorded lowest relationship \((r = .051)\) followed by Kathiaward Region which is recorded very weak negative relationship \((r = -.070)\). It is also observed that most of the sub regions recorded strong relationship among cultivators.

In the same way the agricultural labourers are recorded strong and very strong relationship among most of the sub/micro zones except Kathiaward Region recorded very strong negative relationship \((r = -.94)\).

<table>
<thead>
<tr>
<th>Zone-codes</th>
<th>Cultivators ‘r’ values</th>
<th>Agricultural Labourers ‘r’ values</th>
<th>HHI Workers ‘r’ values</th>
<th>Other Workers ‘r’ values</th>
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Source: Compiled by Author.
The workers in household industry are recorded weak to moderate relationship in most of the micro zones. However the Island region recorded perfect positive relationship among workers in household industries. The other workers are recorded weak relationship in northern region while it is strong to perfect relationship (Island region) found in southern region. It clearly indicates that the status of women found high in southern and north-east region while it is low in northern region.

REFERENCES


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