LIVELIHOOD PATTERN OF WOMEN AND THEIR LEVEL OF EMPOWERMENT: AN EMPIRICAL STUDY OF NAGAON DISTRICT OF ASSAM

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CHAPTER-VI

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

6.1 Summary of the Work

In the present research work, an attempt is made to assess the level of empowerment of women in Nagaon district of Assam. Here the empowerment of women is measured with the help of several indicators representing women's political participation, decision making power, freedom of movement, their exposure to media and control over economic resources. Each of these constituent areas of empowerment is represented by a set of attributes which have literature support. These are quantified in a suitable way for the construction of women empowerment index by applying appropriate techniques of index construction. The rationality of this study is that through this study the present position of women in Nagaon district in the area of empowerment and livelihood can be assessed for initiating corrective measures for the development of women in particular and for economic development of the region in general. The study examines the livelihood status of women – their present livelihood, livelihood options open to them, their livelihood preferences etc. Finally, the study attempts to explore the connection between the empowerment level of women and their current occupation, and the determinants of the empowerment level of women. Thus the study reveals a clear picture of the level of empowerment of women and their livelihood options and pattern in Nagaon district. It is a pioneering work in this area of research in the sense that although there is a plethora of studies on the different aspects of women empowerment, almost none of these attempted to examine the connection between women empowerment and their status of occupation. Therefore the study

shall help the government and the policy makers to formulate and implement proper policies and schemes for the upliftment of the women section of the society of Nagaon district of Assam in particular and in other similar backward areas of the country in general.

The objectives, thus specified in the study for research are, therefore, as follows:

(vi)　To study and examine the livelihood pattern of women and their valued and unvalued works.

(vii)　To assess and examine the women's own interpretations of, priorities for, and abilities for their livelihoods.

(viii)　To estimate and examine the level of empowerment of women by constructing a suitable empowerment index.

(ix)　To find out the empowerment differentials among women having different livelihood patterns and options.

(x)　To assess the impact of livelihood patterns of women on their level of empowerment amidst different personal background characteristics.

The following hypotheses are also tested to provide insight into the problems as outlined by objectives stated above:

(vii)　Work force participation of women has no impact on their empowerment in urban areas.

(viii)　 Women employed in informal sector have higher level of empowerment.

(ix)　Education of women and their place of residence have no impact on the empowerment of women.

As stated above, the geographical area selected for the study is Nagaon district of Assam. The district is selected for the following reasons. It is one of the most backward districts of Assam and is thickly populated having density of population more than 700 per square Km as per 2011 Census. As per HDR of Assam- 2003, the position of Nagaon in HDI ranking is 14 out of 23 districts of the state and its GDI rank is 22 which points towards the prevalence of high gender disparity in the society. Moreover, the female workforce participation rate is only 12.24 percent in 2001 which is the third lowest in Assam. The female literacy rate is 68.07% as per census 2011. Keeping all these aspects in view, a sample size of 400 women belonging to age group of 18-60 years is drawn from the selected rural and urban areas of Nagaon district; 300 from rural and 100 from urban areas. One woman belonging to the age group of 18-60 years is interviewed from each of the 400 selected households. The women interviewed are the respondents whose level of empowerment and livelihood is the concern of the present study. The multistage sampling technique is followed for the selection of sample and the sample units. A structured schedule is used for the collection of primary data from the target group women of 18 -60 years age group through personal interview method.

Women empowerment is a multidimensional concept. Therefore, five important constituent areas of women empowerment are selected which together build up the level of women empowerment. These are: Decision Making Power of Women within the Family, Freedom of Movement of Women outside Home, Political Participation of Women, Women's Control over Economic Resources and Freedom of Women to Enjoy the Exposure to Media. Different sets of attributes (variables) are selected on the basis of an extensive review of literature to represent each of the above mentioned constituent parts of women empowerment. However, same set of values are assigned to quantify different attributes. If woman is found to take decision or act entirely by herself, value assigned to

the attribute is 1; if she acts by taking decision partially by herself, value assigned is 0.5. Lastly, if it is found that the woman has no role to play and her activities are directed by others, the value assigned to the attribute is 0. Here the two extreme situations where value assigned are 1 and 0. Here 1 signifies that the woman has high power to take decision by herself, the power to act independently, her complete freedom in selected dimensions of her life. The value 0 signifies the situation which is exactly opposite to the above and value 0.5 shows her power, freedom etc in between the above two extreme situations.

The information, thus collected, are analyzed by applying different statistical tables and mathematical and econometric tools such as Fuzzy set technique, Factor Analysis, Regression analysis etc.

6.1.1 Results and Discussion

The sample of 400 women is drawn from 400 selected households, one woman from each household. The socio-economic and demographic picture of the households is assessed by constructing statistical tables. The picture thus revealed is as follows.

Socioeconomic and Demographic Features of Households

In rural areas the total number of persons in 300 selected rural households is 1167 out of which males are 587 and females 580. Average family size is 3.89. The total number of women in the age group of 18-60 years (Target group) in rural areas is 484. The dependency ratio and sex ratio in rural areas of Nagaon district are 0.3514 and 988.07 respectively. Besides this, the average number of women in 18-60 years per family is 1.61. From the urban subsample it is seen that the total number of persons is 347 out of which males are 174 and females 173. The average family size is

3.47. The total number of women in the age group of 18-60 years is 149. The dependency ratio and sex ratio in urban areas of Nagaon district are 0.3244 and 994.25 respectively. The average number women in 18-60 years age-group per family is 1.49. The average family size and the dependency ratio are slightly smaller in urban areas and the sex ratio is higher in urban areas in comparison to rural areas. There are also fewer women of 18-60 years per household in urban areas than that in the rural areas. The rural-urban difference is very small in these respects which points towards more or less a similar type of demographic picture prevailing in both the rural and the urban areas of the District. Now if both rural and urban areas are taken together, total number of persons is 1514 out of which males are 761 and females 753. Average family size in Nagaon district is 3.78 and the total number of women in the age group of 18-60 years is 633. The dependency ratio and sex ratio of Nagaon district are 0.3545 and 989.48 respectively and the average number women per family in 18-60 years age-group is 1.58.

From the socio- economic characteristics of sample households, it is found that the family type is overwhelmingly nuclear in both the rural and urban areas of the district. This is indicative of a social change that the District has undergone over the years particularly the rural areas where joint family type was a common feature in the past. The percentage of general category households to total households is 18.33 percent in rural areas, 20 percent in urban areas and 18.75 percent in total areas. The percentages of Hindu and Muslim households to total households are 56.67 percent and 43.33 percent in rural areas, 95 percent and 5 percent in urban areas and 66.25 percent and 33.75 percent in total including both rural and urban areas respectively. Besides these, the percentage of BPL households to total households is 11 percent in rural areas, 0 percent in urban areas and is 8.25 percent in total areas respectively. And the average level of education completed by a person aged

six years and above is 8th standard in rural areas, 11th standard in urban areas and 9th standard in total areas respectively. All these figures also speak well about the socioeconomic features of the District and support the view that the area under study is fast emerging as a developed region of the state of Assam which is one of the most backward states of the country. The following figures also corroborate these facts.

The average annual income of the selected households is Rs.302128.88 in rural areas and Rs.569976.00 in urban areas. In rural-urban combined areas, the average household annual income is Rs.369090.66. The average per capita annual income is Rs.77668.093 in rural areas, Rs.164258.213 in urban areas and in combined areas, it is Rs.97514.05. Besides these, the percentage of households having primary occupation (of Head of Household) in primary sector in rural, urban and in combined areas is 8 percent, 0 and 6 percent respectively. The percentage of households having primary occupation (of HOH) in secondary sector in rural, urban and in combined areas is 32.33 percent, 38 percent and 33.75 percent respectively. The percentage of households having primary occupation (of HOH) in tertiary sector in rural, urban and in combined areas is 53.67 percent, 62 percent and 55.75 percent respectively. Majority of the households are having their primary occupation in the tertiary sector of the economy. The participation of households in the non-remunerative primary sector is very low. This may be one reason responsible for the observed high annual household income in the study area.

In case of the physical infrastructure and assets of the sample households, it is found that out of the selected households, 99.67 percent households in rural areas are living in their own houses. The corresponding percentage for urban areas and combined areas are 67 percent and 91.5

percent respectively. The percentage of households living in pucca houses in rural, urban and combined areas is 51.67 percent, 84 percent and 59.75 percent respectively. Again from the data it is found that the percentage of households having electricity is 98.33 percent in rural areas, 100 percent in urban areas and 98.75 percent in combined areas. The percentage of households using LPG for cooking in rural, urban and in combined areas is 79 percent, 99 percent and 84 percent respectively. The average number of assets owned, out of a selected set of specified assets, by the households is 3.77 (in number) in rural areas, 4.78 (in number) in urban areas and in combined areas, it is 4.025 (in number). The selected specified assets are Television, Bicycle, Mobile Phone, Refrigerator, Two Wheeler, Four Wheeler, Computer and Washing Machine. The percentage of households having sanitary latrine in rural, urban and in combined areas is 74 percent, 97 percent and 79.75 percent respectively. The largest number of households depends on tube well for drinking water in rural areas (89.33 percent). In urban areas the main source of drinking water is supply water from government water supply system (68 percent). There is no household in rural and urban areas which collect drinking water from river and very few households are there who depend on pond. These data indicate that the socioeconomic condition of the study area is much better than the overall picture of the state. However, some economic indicators viz., average household monthly income excluding Respondent's income (Rs.21543.43), average monthly income of the Respondent (Rs.9237.13) and average number of assets owned by a household (4.025, out of 8 specified assets) have very high Standard Deviation value (20444.16, 15911.48 and 1.5232 respectively). These point towards high economic disparity in the area which is a serious malady and a perpetual one in the state of Assam.

Socioeconomic and Demographic Features of Women

 Since the study is focused on target group women of 18-60 years age group, it is imperative to look at the overall socioeconomic condition of those women. The following are some of the important socioeconomic characteristics of the sample women. Education is one of the most important factors that contribute immensely in the process of women empowerment. As found in the study, the average level of education (in completed years) of sample women is very high in urban areas (13th standard), it is also moderately high in rural areas at 9th standard. Percentage of women respondents having education 12th standard and above in rural, urban and in combined areas is 39.33 percent, 72 percent and 47.5 percent respectively.

Marriage is also an important factor which has impact on women empowerment. From the survey it is found that 97 percent respondents are married in rural areas, in urban and in combined areas, the corresponding figures are 95 percent and 96.5 percent respectively. The percentage of married women is marginally lower in urban areas than that in rural areas. This is understandably because of late marriage and a more independent life style of urban women in comparison to their rural counterparts. The average annual income of the sample women respondents in rural, urban and in combined areas are Rs.72058.08, Rs.226008 and Rs.110545.56 respectively. In case of employment, the percentage of women respondents found engaged in primary sector in rural areas is 6.67 percent only. As expected there is no respondent having paid job in the primary sector in the urban sample.

Regarding involvement of respondent women in works, it is found that the percentage of respondent women engaged in valued works in secondary sector is 35 percent in rural areas, 25 percent in

urban and 32.25 percent in the combined areas. Again the percentage of women engaged in tertiary sector for their livelihood is 26 percent in rural, 55 percent in urban and 32.5 percent in the total sample respectively. Majority of women are working in the tertiary sector both in rural and urban areas.

Valued Works of Women: The nature of works done by the respondents is varied in type and nature. It is observed that there are 25 types of works that women are found to be doing as their primary valued job. Majority of women are found to be doing jobs of teaching in schools (23 percent) in Nagaon district. Their average salary per month is Rs. 20885.71. The percentage of women doing this job on regular basis is 98.90 percent. The average distance of workplace from home for these women is 3.88 KM and their average job satisfaction level is 80 percent. Out of these 25 different types of jobs being done by women, the average monthly salary is highest (Rs.80555.56) for women who are working as teachers in colleges on 100 percent regular basis and their job satisfaction level is also found to be the highest (97.67%) among all the working women. The monthly salary of the working women is the lowest (Rs.70) for women who are engaged in Self-Help-Groups. Their job satisfaction level is also low at 51 percent. However, the average job satisfaction level is found to be the lowest (50%) for women who are working as Care taker. In expected line the job satisfaction level is closely connected with salary, higher the salary higher is the stated job satisfaction level. In some exceptional cases, for example, women working as sales women, conducting tuition classes, working in diary business and weaving are found to enjoy high job satisfaction despite their poor wages/salary. The longest distance from home covered by women to attend their place of valued work is 5.78 Km for women who are working in colleges and the shortest distance (0 Km) for women who are working as private tutors, in diary business, writer and

those who are letting home for hire. Nearly 32 percent of women's paid jobs are found to be working in formal sector and the rest are working in the informal sector. The economic conditions of women working in formal sector are much better than the women working in the informal sector.

Unvalued Works of Women: Many women are performing unvalued works. Unvalued works represents those works in return of which women do not receive payments in terms of money. Some particular types of works such as childcare, care giving for the family members, cooking, cleaning etc. have very high moral value but have no money value. These works are still considered as low skilled and they are unvalued in the society.

The study reveals that almost all the women are doing unvalued works like cooking, giving care and washing clothes, home cleaning on regular basis by spending 3-4 hours time every day for which they get no money. The most notable point is that in rural areas 59.33 percent women are doing both valued and unvalued works and in urban areas, the percentage of such women is 70 percent. This shows that although women are working hard both inside and outside home, the monetary return to their work is very poor and much of their works remain unrecognized by the society.

Women's Own Interpretations of, Priorities for, and Abilities for Their Livelihoods: The study further reveals that none of the women belonging to young age group (18-24 years) consider their present livelihood option as 'very good' and 60 percent of them consider it as 'Bad'. On the other hand, majority of the elderly women belonging to age group (45-55) and (55-60) years consider their present livelihood option as 'Very Good'. In the age group of 25-45 years which is economically most productive age, 36.87 percent respondents express their

livelihood option as very good, 42.40 percent respondents express their livelihood option as good and 20.74 percent respondents express their livelihood option as bad. However, none of the women in all age groups consider their livelihood option as 'Very Bad'. This indicates that the older women have no other alternatives and their dependence on their present livelihood option is quite high. On the other hand, the younger women are satisfied with their current livelihood option and they may have a mind to move to other kinds of livelihoods if such opportunities are available.

The study reveals that family income enhancement is the main reason for working women to categorize their livelihood as 'good' or 'very good'. Out of the respondents who consider their livelihood as 'very good', 37.14 percent believe that their livelihood enhances their family income, only 1.43 percent believe that it exposes them to outside world and 3.93 percent state that their livelihood is very good because it permits them to apply their skill and knowledge. Out of the respondents who rate their current livelihood as 'Good', 28.93 percent believe that it enhances their family income which enables them to live a better life; only 2.85 percent consider it as an outlet for having exposure to outside world. Very few respondents rate their current livelihood as 'Bad'. More or less equal percentage of women states 'Undervalued', or 'Strenuous' or 'Absence of Alternatives' as reasons for rating their current livelihood as 'Bad'.

The women have very limited options of livelihood. It is evident from the fact that no respondent could express their fourth priorities for livelihood when asked for. However, 99.5 percent women respondents could state their first priorities for their livelihood. 97.5 percent of

women respondents could state their second priorities for livelihood and 65.75 percent respondents could state the third priorities for their livelihood. Out of the total respondents, 99 percent women respondents have physical ability to engage themselves in livelihood options according to their priorities, 90 percent women respondents have skills to engage livelihood options according to their priorities. But only 5.25 percent women respondents have experience in various livelihood options according to their priorities.

Level of Women Empowerment

Women empowerment is considered as a function of a set of attributes. Each woman of the sample 400 was asked questions to understand her ability to take decision within family, her freedom of movement, her level of political participation, control over economic resources and her freedom to enjoy the exposure to media. The selected attributes as explained in the methodology chapter are quantified as 1 if the respondent is fully empowered, 0.5 if the respondent is partially empowered and 0 if the respondent has no power. The women empowerment level is measured by constructing women empowerment index.

By applying Fuzzy Set Technique of data analysis it is found that the value of Empowerment Index of women of Nagaon district is only 0.5163 in the range of (0,1). In case of percentage-wise contributions of the constituents, it is seen that 'decision making power within the family' (X_1) has the highest contribution towards the level of women empowerment in Nagaon district. But the other constituents do not contribute much (which is less than 20%) to the level of empowerment. In other words, as compared to other constituents women are more empowered in case of decision making within the family i.e. they can take decision more

independently within households. But in case of freedom of movement, political participation, control over economic resources, freedom to enjoy the exposure to media, the level of women empowerment in Nagaon district is very low in relative term.

Women are found engaged in different occupations. Some of them are housewives. The link between women empowerment and occupation is explored in the present study. It is seen that the respondents who are engaged in primary sector for their livelihood have the lowest level of empowerment which is only 34 percent. The reasons for such low level of empowerment are many. Further investigation revealed that the level of educational qualification of these women is low. Besides this, the economic condition of such families is also low. Most of such respondents in the primary sector are living below poverty line. These respondents are less able to participate in household decision making, have limited freedom of movement, less political participation, have little control over economic resources and do not have the facility to enjoy the exposure to media. These respondents live in the rural areas of Nagaon district.

The respondents who are engaged in secondary sector for their livelihood have higher empowerment level at 44 percent than the respondents engaged in primary sector. The reason is that the income and economic condition of respondents engaged in secondary sector is higher than those in primary sector. These respondents are engaged in different types of big, medium or small scale businesses. Moreover, these respondents have higher abilities than the respondents engaged in primary sector in different Constituents of women empowerment.

The respondents who are engaged in tertiary sector have the highest level of empowerment which is 64%. These respondents are engaged in different government sector and

non-government sector services. Most of these women are highly educated and their level of income is also high. They are more conscious about their rights and keep themselves up-to-date in the society. They are able to participate more in all the attributes of empowerment. Therefore their level of empowerment is higher than the other groups.

But it is important to notice that the respondents who are not employed or those who do not earn any money have their empowerment index value as 42% which is higher than the respondents engaged in primary sector and lower than the respondents who are engaged in secondary and tertiary sector. The reason for such variation can be attributed to the fact that though these women are unemployed most of these respondents are educated, therefore they are aware of their rights and they can participate more effectively in different household, political and social activities. Besides this, the economic conditions of these households are better because their household income is comparatively higher than women engaged in primary sector in particular.

From the above discussion it can be concluded that education, status of occupation of women and economic condition of the households have great bearing on women empowerment and there is a clear connection between the occupation of the women and their empowerment level. Higher salaried jobs with higher responsibilities visibly enhance women empowerment level.

The women empowerment level of rural areas of Nagaon district is only 0.4838 in the range of (0, 1) which is lower than the women empowerment level of the district as a whole. The reason for this is that the educational qualification of most of the rural women is very low and they have

less knowledge about the various programmes and schemes of the government. Besides these, rural women get less facility in all aspects than the urban women. It is clear from the study that all the constituents of women empowerment almost equally contribute to the women empowerment level in rural areas. In other words, there is no remarkable difference in case of contribution made by all the constituents of empowerment towards rural women empowerment level. Further in rural areas the women who are engaged in primary sector have the lowest level of empowerment which is only 33%. The respondents who are engaged in secondary sectors for livelihood have higher level of empowerment value than primary sector which is 40%. The reason is that the income and economic condition of respondents engaged in secondary sector is higher than those of primary sector. Similarly, the respondents who are engaged in tertiary sector have the highest level of empowerment which is 63%. These respondents are engaged in different government and non-government sector services. They are able to participate more in all the attributes of empowerment. Therefore their level of empowerment is higher than the other groups. Besides these, the respondents who are not employed or those who do not earn any income have their empowerment value as 42% which is higher than the respondents engaged in primary and secondary sector and lower than the respondents who are engaged in tertiary sector.

The women empowerment level in urban areas of Nagaon district is 0.5949 in the range of (0,1) which is higher than the average empowerment level of the district and also higher than the empowerment level of women in rural areas which is only 0.4838. In urban areas the percentage contribution of the constituents of women empowerment to the women empowerment level are found in an unequal manner. The highest contribution 24.45 percent comes from X_2, i.e., freedom of movement; the lowest contribution 14.75 percent comes from X_5 i.e., freedom to

enjoy the exposure to media. In urban areas women enjoy higher degree of freedom in case of their mobility because urban society is less conservative and there is larger need for women to move out for social as well as economic and cultural reasons. But only 14.75 percent contribution to overall women empowerment level by the constituent X_5 shows women's freedom to enjoy the exposure to media is unexpected in urban areas. It is possible that women in urban areas have less interest for gaining access to media and they have less time for having greater exposure to media because of higher load of their valued and unvalued works as explained before.

Occupation wise classification of data and estimation of women empowerment index value sector-wise reveals that the urban respondents who are engaged in secondary sector for livelihood have empowerment value as 58 percent in the range of (0, 100). From the analysis it is found that in secondary sector, the urban empowerment value is higher than rural empowerment value. The reason for this is that the income and economic condition of respondents engaged in secondary sector in urban areas is higher than those of rural areas of the district. The facilities of different types of businesses are more available in urban areas in comparison to rural areas. Besides this, urban women are highly educated, more conscious than rural women. These respondents are engaged in different types of big, medium or small scale businesses. Moreover, urban respondents can participate more than the rural respondents in different attributes of women empowerment.

The respondents who are engaged in tertiary sector have the highest level of empowerment which is 65%. These respondents are engaged in different government sector and non-government sector services. Most of these women are highly educated and their level of

income is also high even higher than those engaged in secondary sector. They are more conscious about their rights and keep up-to-date themselves in the society. From the study it is seen that in tertiary sector the urban empowerment value and the rural empowerment value are almost the same. It means the urban and rural women engaged in this sector can equally participate in all the attributes of women empowerment. They are able to participate more in terms of all the attributes of empowerment. Therefore their level of empowerment is higher than the other groups.

Moreover, the respondents who are not employed or those who do not have any income have their empowerment value as 46% which is lower than other groups. If the rural and urban empowerment values in this category are compared, it can be said that urban empowerment value is higher than rural empowerment value which is 42%. It indicates that urban women are more empowered than rural women mainly because of their higher level of education.

From the above discussion it can be said that women in the high salaried occupation have higher empowerment. This is probably because of higher prerogatives and position associated with higher occupations that enable a woman to raise her voice in household decision making process, to move around with more freedom and also to participate more actively in political system, to control over economic resources and to enjoy the exposure to media. Moreover, the level of women empowerment is higher in urban areas in comparison to rural areas.

The women empowerment index is also calculated by applying Factor Analysis method. The purpose of applying Factor Analysis (FA) method is mainly to find whether the results obtained match with that obtained by applying Fuzzy Set (FS) technique. Here, the women

empowerment index value estimated for each respondent (400 in total) by applying Fuzzy Set Technique and Factor Analysis method will be treated as dependent variable in the Regression Models for assessing the impact of women's livelihood sector-wise and their background characteristics. The constituent-wise estimated women empowerment values are as follows. WEI$_{FA}$ denotes 'Women Empowerment Index by applying Factor Analysis.

WEI_{FA} (for Decision Making Within Family)=54.36 %

WEI_{FA} (for Freedom of Movement)=45.26%

WEI_{FA} (for Political Participation)=67%

WEI_{FA} (for Women's Control over Economic Resources)=51.85%

WEI_{FA} (for Women's Freedom to Enjoy the Exposure to Media)=55.44%

The results of Factor Analysis method show that the level of women empowerment in Nagaon district is highest in case of political participation and lowest in case of freedom of movement. The level of women empowerment varies from 50 percent to 55 percent for the remaining three constituents. And the overall women empowerment level of Nagaon district, WEI_{FA}=0.5436 in the range of (0,1). In terms of percentage it is 54.36 percent. By applying Fuzzy Set technique, the value of overall women empowerment level of the district is 0.5163 or 51.63 percent in the range of (0,100).

Impact of Livelihood Patterns and Personal background Characteristics of Women on their Level of Empowerment

It is important to point out here that since two different estimation techniques are used for measuring women's empowerment level, viz., Fuzzy Set Technique and Factor Analysis (Principal Component Analysis); two regression equations are actually fitted for facilitating comparison between the two, where in the first model women empowerment index estimated by applying Factor Analysis technique is taken as dependent variable and in the second model, women empowerment index estimated by Fuzzy Set Technique is used as the dependent variable. The set of explanatory variables is the same for both the models for obvious reason. This is also important to point out that the variables taken as explanatory variables for regression analysis are selected on the basis of thorough review of literature and the selected variables have literature support towards their established causal connection with women empowerment.

In regression model-1, women empowerment index for each respondent constructed through Factor Analysis is considered as a function of a set of explanatory variables which explain the variation in the level of women empowerment. The explanatory variables are Respondent's Age (RA), Caste (CASTE, dummy: If GEN -1, otherwise-0), Respondent's educational qualification (REQ), Household's income excluding respondent's income (HIERI), Respondent's income (RI), Place of residence (PR, If dummy: Urban-1, otherwise-0), Household's main occupation (HMO, dummy: If HOH's Occupation in Agriculture-1, otherwise-0), Household's economic status (ES, dummy: APL-1, If otherwise-0), Number of specified assets owned by the household (NSAO), PRIMARY (dummy: If Respondent is

engaged in primary sector- 1, otherwise-0), SECONDART (dummy: If Respondent is engaged in secondary sector – 1, otherwise-0), TERTIARY (dummy: If Respondent is engaged in tertiary sector -1, otherwise-0).

The regression result of Model-1 reveals that eight variables out of twelve have turned up statistically significant. These are RA, REQ, HIERI, RI, HMO, NSAO, SEONDARY and TERTIARY. The variables RA, REQ, RI, NSAO, SECONDARY and TERTIARY have statistically significant positive impact on women empowerment level. The result is on expected line. In case of RA, the result shows that the level of women empowerment increases with the age of the respondents implying that older women have higher level of empowerment. This variable is found to be statistically significant at 1% level. In case of REQ, the result shows that women having higher level of education have higher level of empowerment. This is also found statistically significant at 1 % level. The economic conditions of the respondent and respondent's households have also positive statistically significant impact on women empowerment. RI representing respondent's income has positive statistically significant (at 5% level) impact on respondent's empowerment level. Number of assets owned by the households (NSAO) is a proxy variable that indicates the economic status of the households. This variable has positive statistically significant (at 10% level) impact on women empowerment. In case of the variable SECONDARY, the result shows that the variable is positively significant (at 10 % level) i.e. secondary sector as a livelihood pattern has positive impact on women empowerment. Besides this, the variable TERTIARY has statistically positive significant (at 1% level) impact on women empowerment. It means various regular salaried government and non-government services have

very high impact on women empowerment. The others statistically significant variables namely HIERI and HMO have negative impact on women empowerment.

Surprisingly, the variable HIERI which represents households income excluding respondent's income is found to have statistically significant (at 1% level) negative impact on women empowerment. Keeping results in respect to HIERI and RI in view, this can be inferred that respondent's income appears to be a great component of household income and in case of women empowerment respondent's income (RI) has more importance than HIERI in improving empowerment level of women. This result supports the fact that in the process of building up women empowerment, women's income plays a more important role than women's household income. The result further shows the variable HMO is having statistically significant (at 1% level) negative impact on women empowerment. This implies that women of those households whose have main occupation in agricultural sector are less empowered than the women belonging to households who have primary occupation in other sectors of the economy. This results in the perspective of agricultural backwardness of the regions like Assam, is also on expected line. The *F*-value of the model is found to be statistically significant at 1% level implying that the model is good fit and the value of adjusted R^2 shows that 63% variations in the values of the dependent variable is explained by the set of explanatory variables taken into consideration. The value of the Variance Inflating Factor (VIF) and Tolerance does not point towards the existence of severe multicollinearity in the set of explanatory variables.

The same set of explanatory variables are arrayed against Women Empowerment Index value for each Respondent calculated through Fuzzy Set Technique (WEI_{FS}) which is considered as a dependent variable in Regression model-2.

In this model-2 the set of seven variables namely RA, REQ, HIERI, HMO, NSAO, SECONDARY and TERTIARY have turned out statistically significant and the algebraic signs of these variables are also similar to those found in the results of regression model 1. The only difference observed is in case of variable RI which is found statistically insignificant in regression model-2.

6.2 Important Findings

The following are the important findings of the study.

i) The average family size and the dependency ratio are slightly smaller in urban areas in comparison to rural areas of Nagaon district.

ii) The sex ratio is slightly higher in urban areas than in rural areas.

iii) There are also fewer women of 18-60 years per household in urban areas than those in the rural areas.

iv) The rural-urban difference is very small in these respects which points towards more or less a similar type of demographic picture prevailing in both rural and the urban areas of the district.

v) The family type is overwhelmingly nuclear in both rural and urban areas of the district.

vi) The average level of education completed by a person aged six years and above in rural areas is 8th standard, in urban areas 11th standard and in total 9th standard in completed years of education.

vii)   Some economic indicators viz., average household monthly income excluding Respondent's income (Rs.21543.43), average monthly income of the Respondent (Rs.9237.13) and average number of assets owned by a household (4.025, out of 8 specified assets) indicate good economic condition of the households but very high Standard Deviation values (20444.16, 15911.48 and 1.5232 respectively) of these indicators at the same time point towards high economic disparity in the area which is a serious malady and a perpetual one in the state of Assam.

viii)   In case of the Respondent women belonging to 18-60 years age group, their average level of education (in completed years) is found to be very high in urban areas i.e. 13th standard, it is also moderately high in rural areas i.e. 9th standard. The percentage of women respondents who have completed 12th standard of education and above in rural areas is 39.33 percent. In urban areas it is found to be very high i.e. 72 percent.

ix)   It is found that 97 percent respondent women are married in rural areas, 95 percent in urban areas and in combined areas 96.5 percent.

x)   The average annual income of the sample women respondents in rural, urban and in combined areas are Rs.72058.08, Rs.226008 and Rs.110545.56 respectively. However, where the average monthly income of women respondent is modest, i.e. Rs.9237.13, the standard deviation value of income is as high as 15911.48 which points towards the existence of high degree of income disparity among women respondents.

xi)   Majority of women respondents are working in the tertiary sector both in rural and urban areas.

xii)   Respondent women are found engaged in 25 different types of works that they are doing as their primary valued job.

xiii)   Majority of women are found to be doing jobs of teaching in schools (23 percent) in Nagaon district.

xiv)   Out of these 25 different types of valued jobs being done by women, the average monthly salary is highest (Rs.80555.56) for women who are working as teachers in colleges on 100 percent regular basis and their job satisfaction is also found to the highest (97.67%) among all the working women.

xv)   The monthly salary of the working women is the lowest (Rs.70) for women who are engaged in Self-Help-Groups. Their job satisfaction level is also low at 51percent.

xvi)   The average job satisfaction level is found to be the lowest (50%) for women who are working as Care taker. On expected line the job satisfaction level is closely connected with salary, higher the salary higher is the stated job satisfaction level.

xvii)   The longest distance from home covered by women to attend their places of valued work is 5.78 Km for women who are working in colleges and the shortest distance (0 Km) for women who are working as private tutors, in diary business, writer and those who are letting home for hire.

xviii) Nearly 32 percent of women in paid jobs are found to be working in formal sector and the rest are working in the informal sector. The economic conditions of women working in formal sector are much better than the women working in the informal sector.

xix)   The study reveals that almost all the women are doing unvalued works like cooking, giving care and washing clothes, home cleaning on regular basis by spending 3-4 hours time every day for which they get no money.

xx)   The most notable point is that in rural areas 59.33 percent women are doing both valued and unvalued works and in urban areas, the percentage of such women is 70 percent. This shows that although women are working hard both inside and outside home, the monetary return to their work is very poor and much of their works remain unrecognized by the society.

xxi)   None of the women belonging to young age group (18-24 years) consider their present livelihood as 'very good' and 60 percent of them consider it as 'Bad'. On the other hand, majority of the elderly women belonging to age group (45-55) and (55-60) years consider their present livelihood as 'Very Good'. In the age group of 25-45 years which is economically most productive age, 36.87 percent respondents express their livelihood as very good, 42.40 percent respondents express their livelihood option as good and 20.74 percent respondents express their livelihood option as bad.

xxii)   However, none of the women in all age groups consider their livelihood as 'Very Bad'.

xxiii) The study reveals that family income enhancement is the main reason for working women to categorize their livelihood as 'good' or 'very good'.

xxiv)   Out of the respondents who consider their livelihood as 'very good', 37.14 percent believe that their livelihood enhances their family income, only 1.43 percent believe

that it exposes them to outside world and 3.93 percent state that their livelihood is very good because it permits them to apply their skill and knowledge.

xxv) Out of the respondents who rate their current livelihood as 'Good', 28.93 percent believe that it enhances their family income which enables them to live a better life; only 2.85 percent consider it as an outlet for enjoying exposure to outside world.

xxvi) Very few respondents rate their current livelihood as 'Bad'. More or less equal percentage of women states 'Undervalued', or 'Strenuous' or 'Absence of Alternatives' as reasons for rating their current livelihood as 'Bad'.

xxvii) The women have very limited options of livelihood. It is evident from the fact that no respondent could express their fourth priorities for livelihood when asked for. However, 99.5 percent women respondents could state their first priorities for their livelihood. 97.5 percent of women respondents could state their second priorities for livelihood and 65.75 percent respondents could state the third priorities for their livelihood.

xxviii) Out of the total respondents 99 percent women respondents have physical ability to engage themselves in stated livelihood options according to their priorities, 90 percent women respondents have skills to carry out livelihood options according to their priorities. But only 5.25 percent women respondents have experience in various livelihood options according to their priorities.

xxix) By applying Fuzzy Set Technique of data analysis it is found that the value of empowerment level of women of Nagaon district is only 0.5163 in the range of (0,1). In case of Percentage-wise contribution to empowerment, it is seen that the

Constituent 'decision making power within the family' (X_1) has the highest contribution towards the level of women empowerment in Nagaon district. But the other constituents do not contribute much (which is less than 20%) to the level of empowerment. In other words, as compared to other constituents women are more empowered in case of decision making within the family i.e. they can take decision more independently within households. But in case of freedom of movement, political participation, control over economic resources, freedom to enjoy the exposure to media, the level of women empowerment in Nagaon district is very low in relative term.

xxx) The link between women empowerment and occupation is explored in the present study by applying Fuzzy Set Technique. It is seen that the respondents who are engaged in primary sector for their livelihood have the lowest level of empowerment which is only 34 percent.

xxxi) The fuzzy set analysis reveals that the respondents who are engaged in secondary sector for their livelihood have higher empowerment level at 44 percent than the respondents engaged in primary sector.

xxxii) The Fuzzy Set analysis further reveals that the respondents who are engaged in tertiary sector have the highest level of empowerment which is 64%.

xxxiii) But it is important to note that the respondents who are not employed or those who do not earn any money have their empowerment level value as 42% which is higher than the respondents engaged in primary sector and lower than the respondents who are engaged in secondary and tertiary sectors. The reason for such variation can be

attributed to the fact that though these women are unemployed most of these respondents are educated therefore they are aware of their rights and they can participate more effectively in different household, political and social activities. Besides this, the economic conditions of these households are better because their household income is comparatively higher than women engaged in primary sector in particular.

xxxiv) The women empowerment level of rural areas of Nagaon district is only 0.4838 in the range of (0, 1) which is lower than the women empowerment level of the district as a whole. The women empowerment level in urban areas of Nagaon district is 0.5949 in the range of (0,1) which is higher than the empowerment level of the district and also higher than the empowerment level of women in rural areas which is only 0.4838.

xxxv) The women empowerment index is also calculated by applying Factor Analysis method. The results show that the level of women empowerment in Nagaon district is highest in case of political participation and lowest in case of freedom of movement. The level of women empowerment varies from 50 percent to 55 percent for the remaining three constituents. And the overall women empowerment level of Nagaon district as found out by applying Factor Analysis method, is 0.5436 in the range of (0,1). In terms of percentage it is 54.36 percent. By applying Fuzzy Set analysis, the overall women empowerment level is 0.5163 or 51.63 percent in the range of (0,100).

xxxvi) The level of women empowerment increases with the age of the respondents implying that older women have higher level of empowerment.

xxxvii) Women having higher level of education have higher level of empowerment.

xxxviii) As Respondent's income increases, empowerment of women also increases.

xxxix) Women empowerment increases as number of assets owned by the respondent's household (out of a set of specified assets) increases.

xl)   Women with livelihood in secondary sector have higher level of empowerment.

xli)   Women working in tertiary sector have very high level of empowerment.

xlii) If household's main occupation is in agriculture, women respondent of such households have lower level of empowerment.

6.3 Conclusion

The overall study bears the conclusion that employment of women is positively related with women empowerment. The study mainly represents how different types of livelihood pattern of women impact on their empowerment level in different ways. In other words, if the occupation status changes among women, then the level of empowerment of women also changes. The level of women empowerment cannot be same in a society whether they are from urban or rural areas. There are many factors which have impact on empowerment and govern the possibilities of empowering women. For example- caste, age, education, income of households etc.

The average level of women empowerment of Nagaon district is just above 50 percent which is not satisfactory. The study also examines the level of empowerment of women in rural and urban areas of Nagaon district separately. It has been observed that in rural areas of Nagaon district the level of women empowerment is 48 percent which is very low. The reason for this low level of empowerment can be attributed to the lower level of education of rural women. Moreover, these women have less employment opportunities and they are not

aware about various development programmes and schemes of the government. In urban areas of Nagaon district the level of women empowerment is 60 percent which is comparatively higher than that of women in rural areas and also the average women empowerment level of the district. The reason for this is that the educational qualifications of urban women are much higher. Besides this, the employment opportunities for women are more in urban areas and women keep themselves up-to-date in the society. Therefore the level of women empowerment in urban areas is higher than the level of women empowerment in rural areas of the district.

From the study it is found that employment of women is a key factor for women empowerment. But it is important to note that the occupational distribution of women has a great bearing on women empowerment. Because women who are engaged in primary sector have very low level of empowerment and it is lower than the women engaged in secondary sector and tertiary sector. Thus women engaged in informal sector have lower level of empowerment.

Apart from employment of women, there are some socio-economic factors that have impact on women empowerment. From the regression analysis results, it is observed that women's age, educational qualification, income etc. have positive impact on women empowerment. It is important to note that women's occupation in formal sector has positive significant impact on women empowerment. Along with these, economic condition of the households has positive impact on women empowerment. The present study also examines various types of unvalued works that women are doing in their daily lives. For example-

cooking, care for the family members, cleaning home and many more which have high moral value but have no money value.

To sum up, this study throws revealing lights on the empowerment and livelihood status women of Nagaon district of Assam. It also reveals how different livelihoods pattern of women impact differently on the level of women empowerment. The nature of occupation of women has telling the impact on their level of empowerment apart from other significant socioeconomic variables.

6.4 Recommendations

The Census Report-2011 shows that the size of the population of India has crossed 1200 million marks as against 301 million only 60 years back in 1951. In 2011, the women in India constitute 48.5 percent of its population. Despite of their numerical strength, women are still considered as extremely backward segment of the society in almost all aspects. One major factor that contributes to the backwardness of women is their low level of empowerment.

Empowerment is a multidimensional concept. The main ingredients of empowerment are freedom of decision making and mobility, participation and entitlement of resources. The modern approach to empowerment emphasizes on "the expansion of people's ability to make strategic life choices in the context where this ability was previously denied to them". Therefore "empowered" means "to exercise more power than other women in the same context". A relative study is, therefore, required to understand the empowered women's level of empowerment in comparison to other women and also to identify the factors that make the difference in the level of empowerment of women.

Based on the findings of the present study, the following recommendations are offered for the enhancement of the empowerment level and the livelihoods of the women of Assam.

1. First and the foremost point is that the overall empowerment level of women is found to be low in the study area. Special target group approach should be adopted by the government to increase the empowerment level of women. For that what is required is the elimination of gender bias from the society and formulation of gender neutral budgeting for the development of the state. Vigorous awareness campaign needs to launch to make people in general and women in particular aware about the damaging impact of gender bias in the society.

2. For the same purpose, changes in the overall attitude of parents towards their daughters are to be made so that the process of empowerment starts at the beginning of the life of women. Their participation at decision making process at household level should be encouraged from the early stage of the life of women.

3. Regional imbalances in the level of women empowerment is another area of concern as revealed in the present study. Affirmative steps through regional planning should be taken by the government and other agencies to minimize rural-urban disparity in the level of women empowerment.

4. As per the findings of the study, the nature of job being performed by women has strong impact on the empowerment of women. The primary goods recommended by Prof. John Rawl for achieving Human Development include "powers and prerogatives of offices and position of responsibility". In the present study also a direct link is observed between the type of occupation and the level of empowerment of women. Generation of more jobs in

the secondary and tertiary sector of the economy will definitely add to the empowerment level of women.

5. Although income of women is found to have a conflicting impact on the level of women empowerment, another variable namely number of assets owned by the household is found to have a positive impact of the level of women empowerment. Research on the relevant field finds the above variable as a more reliable indicator of the economic status of a household. Therefore, the overall and sustainable improvement in the economic condition of households will definitely help improving the empowerment level of women of those households. In that way, the primary sector demands special attention for modernization. The government should take special drive to modernize the primary sector of the economy. This will generate more income for women and households working in the primary sector of the economy which will subsequently improve the level of women empowerment.

6. Education of women is found to be the most effective factor in influencing the level of women empowerment in a positive way. Education has many returns and it generally starts from the early stage of life in the parental house of the women. Education is a process through which a student comes in contact with more enlighten people. This broadens her/his intellectual base and the student attains higher level of knowledge as she/he clears grades one after another. This process of education helps students to take decision independently, to act independently in a disciplined manner and to participate in different cultural, scholarly activities. Empowerment is also a process which develops over time in conducive environment. Therefore, there is a direct link between women

education and women empowerment. The parents, the government and other agencies including NGOs should take affirmative steps to spread education among the women of all ages. Special efforts should be made in spreading education among women of rural areas. Adequate infrastructure should be provided for that.

7. Creation of more livelihood options and livelihood diversification is required for empowering women. Special livelihood options should be created for women who are educationally poor. Skill development programme can help women of that category a lot. The central government has recently launched "Skill Development" programme in India. The Assam State government should encourage women to join skill development programme and to participate in skill development training programmes. This will help livelihood diversification and will open up more livelihood options for the women of the state.

8. Good health is very important for a good society. A clean and hygienic environment is an essential factor for good health. In this regard, the role of government is very important in providing the basic requirements like safe drinking water, sanitation facilities, electricity, health and education facilities etc. The study reveals that there exists rural-urban disparity in these areas. Therefore the government should increase the provision of these facilities in the rural areas more which is very important to improve the quality of life of rural women in particular and in building human capabilities in general.

9. Educated and skilled women should be engaged in public and private enterprises under special women development and employment programmes.

10. Rural women have enough potential to engage themselves in some home-based income generating and self-earning activities like poultry farming, tailoring, kitchen gardening, floriculture, sericulture, cane and wooden furniture designing, handloom etc. Various government and non government organizations should take affirmative steps in this regard.

11. Women should be encouraged to participate in social and economic decision making process through organizing economic literacy training, providing access to mass media and new information and communication technologies.

12. Steps should be taken by the government to strengthen the economic and financial governance and promote accountability and equality through the implementation of gender-responsive budget initiatives at the national and local levels.

13. There should be proper allocation and mobilization of domestic resources to support microfinance programmes that provide poor rural women with the necessary credit, knowledge and tools to enhance their economic capacities. Affirmative steps should be taken to promote the establishment of reliable, convenient savings, insurance and remittance facilities that provide the financial needs of women, especially from poor households.

14. Since decision making power of women is an important constituent of women empowerment, therefore, it is necessary to develop or strengthen the mechanism that facilitate women's full and equal involvement in decision-making processes at all levels and in all areas, that affect their life chances, choices and opportunities throughout their life cycle.