



Status of Women in Assam : A district wise analysis

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Abstract :

Gender is determined by various factors including social, cultural, religious, political beliefs, norms, rules and laws of a society. Hence the concept of gender differs from society to society and even within a society the concept changes according to the change in time. Depending on the beliefs and norms of a society the differences and inequality are set between male and female. This inequality between male and female if persists for long, leads to the deprivation of women rights in a society. As a result, the status of women in society deteriorates gradually and to regain the rights women have to fight with their circumstances. This, in turns, develops the concept of women empowerment. In order to examine the status of women, social status, educational attainment, economic, political participation and health status of women works as fundamental factors. This is the reason why, in this paper, these factors are taken into account to understand the status of women in Assam. The paper seeks to calculate the inter district variation in the status of women in Assam and tries to identify the districts with highest women status and lowest women status in Assam. A self constructed index has been developed to measure the status of women in Assam. For the purpose of constructing the index a total of twelve indicators have been selected. After calculating the normalized value for each indicator, weights are calculated by applying Factor Loadings and Eigen Values from Principal Component Analysis (PCA). It is observed from the index value that only five districts of Assam have crossed the value 0.5. Hence these five districts have medium level of women status. Other districts have low status of women as the index value is below 0.5. Hence there prevails inter district variations of women status in Assam. Results of this cross-sectional study of the district wise data of Assam depicts that the status of women in the society is not high. It indicates a serious need to do further research on how to increase women engagement in the democratic decentralization process beginning from the community level in Assam, thereby, finding routes for higher women participation and women empowerment in the state.

Keywords: *Women, Status, Indicator.*



Introduction :

Sex makes the physical difference between male and female at the time of birth. But the gender is determined by various factors including social, cultural, religious, political beliefs, norms, rules and laws of a society. Hence the concept of gender differs from society to society and even within a society the concept changes according to the change in time. Depending on the beliefs and norms of a society the differences and inequality are set between male and female. This inequality between male and female if persists for long, leads to the deprivation of women rights in a society. As a result, the status of women in society deteriorates gradually and to regain the rights women have to fight with their circumstances. This, in turns, develops the concept of women empowerment.

Most of the countries of the world have promised to celebrate equality and justice for the status of women. In 1979 United Nations approved Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (UNDP, 1995). UNDP mentioned that development is impossible without gender equality. Gender equality and women empowerment became the fifth goal of Millennium Development Goals. The government of India too promises equality of women in its constitution itself. In this regard article 14, 15, 15 (3), 16, 39 (a), 39 (b), 39 (c) and 42 can be mentioned. In order to examine the status of women, social status, educational attainment, economic, political participation and health status of women works as fundamental factors. This is the reason why, in this paper, these factors are taken into

account to understand the status of women in Assam.

Conceptual Framework :

Social Status :

Most of the East Asian countries where higher level of female education, greater economic participation of women exist, they are also facing low sex ratio of female against male. To reduce inequality in the society the government of India is adopting various schemes in five year plans to guarantee the equality of right of each and every person irrespective of their sex, caste and religion. The sixth five year plan is a milestone in this regard which has shifted the concept of development of women to the welfare of women. The Constitution of India along with ensuring the equal right of women as men provides additional power to states to implement law in favor of women discrimination (Seth, 2001). Article 15 (3) can be mentioned in this regard. The government is adopting girl specific schemes to empower the girl child in the country. Some of these are Sable, Scheme for Adolescent girl, Integrated Child Development services (1975), District primary education Programme (1994), National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme, 1995), Reproductive and Child Health Programme (1996), Balika Samriddhi Yojana (1997), Jan Shikshan Sansthan (1998), Sarba Shiksha Abhiyan (2002), Integrated Child Protection Scheme (2009) (Report, MosPI, n.d.). These provisions aim at protection and development of girl child, advancement, development and empowerment of women and also the reservation of political seats of women by thirty three percent.



The World Health Organization (WHO) estimates that more than one third of women worldwide (some 35 percent) experience gender based violence over the course of their lives. This ranges from about 37 percent in women in the WHO African, Eastern Mediterranean, and South East Asia regions to 23 percent in the high income region and 25 percent in the European and Western Pacific Region (Executive Summary, 2015).

Educational Status :

Education is a milestone of women empowerment (Channawar, 2016). But most of the girls are deprived of attaining schools and are forced to do household works. In India the literacy rate for women has increased from 8.86% in 1951 to 64.63% in 2011 against 72.98% male literacy in 2011 (Census, 2011). As educating a girl is associated with more opportunity cost of care taking their household work so the poor parents withdraw their girl child from schools and are unable to attain the secondary schools (Rihani, n.d).

Economic Status :

Women become the most deprived section of the society in spite of their significant contribution to the society. Women do more hours of work per day in comparison with their male counterpart. But most of their work is unpaid or underpaid as they are engaged mostly in non marketed household caretaking work (Donahoe, 1999). As a result the share of women worker in the formal labour force is very low. In the year 2011 only 25.5% of women were in the labour force against 53.3% male labour force (MoSPI, 2012). If the women in the society are

properly paid then their contribution to the economy will be more than men in the society. To increase the economic growth rate women participation should be encouraged by reducing gender discrimination (Esteve-Volart, 2004). Women participation in employment reduces gender inequality and increase decision making power by promoting women empowerment (Desai and Jain, 1994).

Political Status :

Women can become a part of the decision making process if they participate on voting process, become member of political parties, can take active part in the political meetings, can contest in the election and become a political leader. Political participation involves the right to vote, the right to compete, the right to stand for candidacy, and their position as campaigners and the members of the legislature (Varghese, 2020).

Health Status :

Health of women is a vital issue. Maternal mortality rate (MMR) and infant mortality rate (IMR) of girl child are becoming rising concerns in India in recent years. Among all the Indian states except Tripura for all other states the female IMR is more than male.

Objectives of the Study :

The study seeks to,

1. Calculate the inter district variation in the status of women in Assam.
2. Identify the districts with highest women status and lowest women status in Assam.

Materials and Methods :

The study is based on the inter district variation in the status of women in Assam. Data



has been collected from secondary sources including Human Development Report (Assam, 2013), Election Commission and others. Assam has a total of thirty three districts. Some of the districts are newly created; hence relevant data are not available for these districts. Hence data relating to different issues of women have been collected for 27 districts of Assam for the year 2013 and election data for the year 2016.

A self constructed index has been developed to measure the status of women in Assam. For the purpose of constructing the index a total of twelve indicators have been selected. The indicators are sex ratio, child sex ratio (0-6 years), percentage of married women in the districts, crime rate against women, female literacy rate, percentage of female with above secondary schooling, female share of wage, labour force participation rate, female voting outturn, elected number of female member in assembly election of Assam for the year 2016, IMR among female and MMR. The crime against women is the total of crime of rape, kidnapping and abduction, dowry deaths, assault with intent to outrage modesty cruelty by husband and his relatives throughout the period concern,

The indicators have been further regrouped into five indicators namely social status (SS=sex ratio, child sex ratio (0-6 years), percentage of married women in the districts, crime rate against women), education status (EDS=female literacy rate, percentage of female with above secondary schooling), economic status (ECS=female share of wage, labour force participation rate), political status (PS=Female

voting outturn, elected number of female member in assembly election of Assam), health status (HS=IMR among female, MMR). After that, best and worst values for all the indicators have been calculated. Out of all the indicators some are positive indicators and some are negative indicators. For example crime rate against women, IMR among female, MMR are negative indicators and rest are positive indicators. For the negative indicators higher value means lower status of women in a society. As there are some positive and some negative indicators for the index, hence normalisation of value is required for further calculation purpose. For normalisation purpose following formula is,

$$NVi = 1 - \left[\frac{\{Best\ Xi - Observed\ Xi\}}{\{Best\ Xi - Worst\ Xi\}} \right]$$

Where,

NVi = Normalized Value for the 'ith' district

Best Xi = Best value among the values of the indicator concerned

Worst Xi = Worst value among the values of the indicator concerned

Observed Xi = Particular value of the indicator for which normalized value is constructed

After calculating the normalized value for each indicator, weights are calculated by applying Factor Loadings and Eigen Values from Principal Component Analysis (PCA).

Results and Discussion :

The result (Annexure-I) depicts that only for three districts like Cachar (1013), Sonitpur (1000) and Tinsukia (1012) the sex ratio is in favour of women. For other districts the number of female per thousand of male is less. For



twelve states the child sex ratio in favour of the female child and for rest of the districts it is against female child. The child sex ratio is even less than the sex ratio for that time period. It means that the sex ratio of these districts will become even low for these districts in near future. Again the child sex ratio is as low as 500 in the district Baksa. It is not a good sign for the status of women in the society. While the percentage of married women in the society is low in most of the districts of the states, the crime rate against women is very high. The reported case of crime against women is the highest in Nagaon district (1654) and lowest in Baksa district (18) for a single year. The reported crime against women is more than hundred for all other districts of the state in a single year. In addition to this various unreported cases are against women in the society that it decreases the status of women in the society.

In case of educational attainment the percentage of literate women is very less in most of the districts of the State. Even half of the female

population of the state are unable to attain their education up to the secondary levels of schooling. Only for the Kamrup metro district the female literacy rate is 85.97%. The labour force participation rate of women is also very low in each of the districts. Only for two districts like Goalpara and Dibrugarh the labour force participation rate of women has crossed twenty five percent.

The number of female participating in the active politics in India is very less. Assam got her first female elected assembly member as Late Usha Borthakur in the first election of 1952. In 2016 Assembly election the number increases to six. The number of elected women for the state assembly is highest (14) in the year 2011.

The IMR is highest in Kokrajhar and Darrang (71) and lowest in Barpeta. Again MMR is highest in Udalguri (597) and lowest in Karbi Anglong district (53). Other districts have values in between. The following table represents the component matrix and Eigen values by using PCA.

Table: Results for indicators by using PCA

1. Social Status Indicator	Eigen Value = 1.44 Eigen Value = 1.172			
Component Matrix(a)	Component		Component x Eigen Value	
	1	2	1	2
Sex Ratio	-0.015	0.787	0.0216	0.922364
Child Sex Ratio	0.25	-0.687	0.36	0.80516
% of Married Women	0.844	-0.057	1.21536	0.05977



Crime Against Women	0.815	0.278	1.1736	0.325816
Extraction Method : Principal Component Analysis			$\Sigma = 4.88367$	
1. Component extracted.				
2. Education status indicators	Eigen Value = 1.338			
Component Matrix(a)	Component	Component x Eigen Value		
	1			
Female Literacy Rate	0.818	1.094484		
% of Female with above Secondary School	0.818	1.094484		
Extraction Method : Principal Component Analysis			$\Sigma = 2.188968$	
1. Component extracted				
3. Economic status Indicator	Eigen Value = 1.732			
Component Matrix(a)	Component	Component x Eigen Value		
	1			
Female share of Wage	0.931	1.612492		
Labour force participation of Women	0.931	1.612492		
Extraction Method : Principal Component Analysis			$\Sigma = 3.224984$	
1. Component extracted				
4. Political status Indicator	Eigen Value = 1.102			
Component Matrix(a)	Component	Component x Eigen Value		
	1			
Female voting outturn	0.742	0.817684		
Female representative in Assembly	0.742	0.817684		
Extraction Method : Principal Component Analysis			$\Sigma = 1.635368$	



1 Component extracted				
5. Health status Indicator	Eigen Value = 1.276			
Component Matrix(a)	Component		Component x Eigen Value	
	1			
Infant Mortality Rate	0.799		1.019524	
Maternal Mortality Rate	0.799		1.019524	
Extraction Method : Principal Component Analysis			$\Sigma = 2.039048$	
1 Component extracted				
Final Index	Eigen Value = 1.662 Eigen Value = 1.265			
Component Matrix(a)	Component		Component X Eigen Value	
	1	2	3	4
Social Status Indicator	-0.368	0.559	0.61162	0.707155
Education Status Indicator	0.76	0.397	0.46483	0.280733
Economic Status Indicator	0.735	-0.189	0.34165	0.05306
Political Status Indicator	-0.205	0.801	0.070038	0.0425
Health Status Indicator	-0.606	-0.343	0.94244	0.014577
Extraction Method : Principal Component Analysis			$\Sigma = 2.628583$	

The weights have been determined by following the procedure as the Eigen Value of the health status indicator (2.039048) is multiplied with the extracted component column (0.799 and 0.799). These multiplied values have been considered as weights for each variable (such as IMR = 1.019524, MMR = 1.019524). These weights are then multiplied with each normalized values of the concerned columns. For the social status indicator which has two Eigen value of more than one first Eigen value has been multiplied with the first column of component matrix and the second

Eigen value has been multiplied with the second column of component matrix, after that the final weight is the sum of all the individual weights.

For calculating the index value of individual indicators such as social status indicator, education status indicator, economic status indicator, political status indicator and health status indicator the following formula has been used.

$$I = \frac{\sum_{i=1}^n X_i \left[\sum_{j=1}^n |L_{ij}| \cdot E_j \right]}{\sum_{i=1}^n \left[\sum_{j=1}^n |L_{ij}| \cdot E_j \right]}$$



Where,

I = Index,

X_i = the i^{th} Indicator;

L_{ij} = the factor loading value of the i^{th} variable on the j^{th} factor;

E_j = the Eigen value of the j^{th} factor

For example, by using the above formula for the first district i.e. Baksa the health status indicator has been constructed as follows.

$$\text{Health Status Indicator} = (0.756757 \times 1.019524 + 0.284926471 \times 1.019524 + 1.966672) / 2.039048 = 0.520842$$

Like that for each value of the indicators all the individual five indicators have been constructed. After constructing the individual indicators in the next step these indicators are considered as variables. The PCA has been run on these data thereafter. Then the ultimate index has been created for each of the districts. The results are presented in the annexure. Index value < 0.5 means low status of women status, $0.5 < \text{Index value} < 0.8$ means medium level of women status and Index value > 0.8 means high level of women status.

It is observed from the index value that Nagaon district occupies the first rank in case of status of women with highest index value of 0.591587. The second district is Kamrup Metro

(0.568915). Baksa district occupies the last position in the index rank (0.249838). It is observed that only five districts of Assam have crossed the index value 0.5. Hence these five districts have medium level of women status. Other districts have low status of women as the index value is below 0.5. Hence inter-district variations in the status of women in Assam are observed in this study.

Conclusion :

The empirical evidence shows that the women are lagging behind men in every sphere of life. It starts from the differences in the sex ratio at birth, continues to the attainment of education, differences in economic right, leading to the political right and decision making power. Hence there is need to study the status of women in Assam to understand their right in different aspects of life including attainment of social, educational, political and economic status. Results of this cross-sectional study of the district wise data of Assam depicts that the status of women in the society is not high. It indicates a serious need to do further research on how to increase women engagement in the democratic decentralization process beginning from the community level in Assam, thereby, finding routes for higher women participation and women empowerment in the state.

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