

## STATE OF WOMEN HEALTH IN ASSAM: A GEOGRAPHICAL ANALYSIS

PRADIP SHARMA, SASWATA SAHARIA & RUPALI PHUKAN BHUYAN

Department of Geography, Cotton University, Guwahati, India

### ABSTRACT

Empowering women is an effective strategy for socioeconomic and political development of the modern society, in which, women's health is one of the basic components. Better health care facilities provided to women have been considered as an important way to empower women in several ways.

The present study focuses on the issues to understand the state of the women's health in Assam. The women in the State belong to various socioeconomic backgrounds. Rural Assam is heterogeneous, where; problems vary depending on the variation in ecological setup. Women from rural areas, by and large experience poorer health and have less access to health care facilities than that of the urban women. Recently, the Government of Assam has decided to implement the 17 Sustainable Development Goals (SDG's), as adopted by the United Nations General Assembly, which will provide greater impact on the health, happiness, prosperity and well being of each and every citizen of Assam. Obviously, the goals cover many of the issues of women health and overall empowerment in the State. Keeping this and related issues of women welfare in mind, a gender atlas of Assam are being prepared within the framework of an ICSSR sponsored research project. Using some preliminary works of the project outcome, the women's health issues has been addressed in the study using a set of maps prepared primarily based on secondary data and critical analysis has been done to highlight the state of women's health in the State.

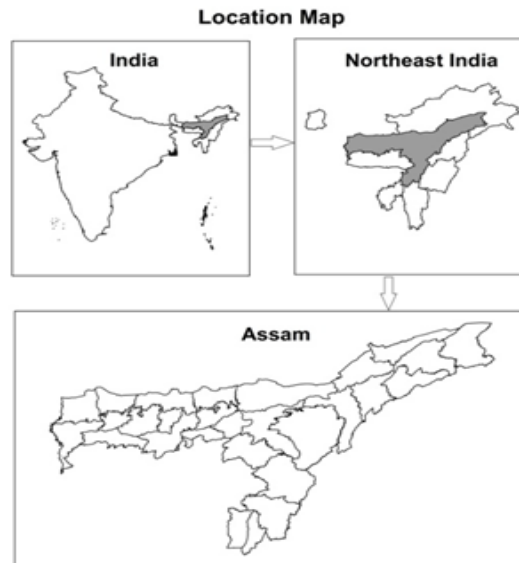
**KEYWORDS:** Women health, Ecological setup, Development goals, Empowerment, ICSSR

### INTRODUCTION

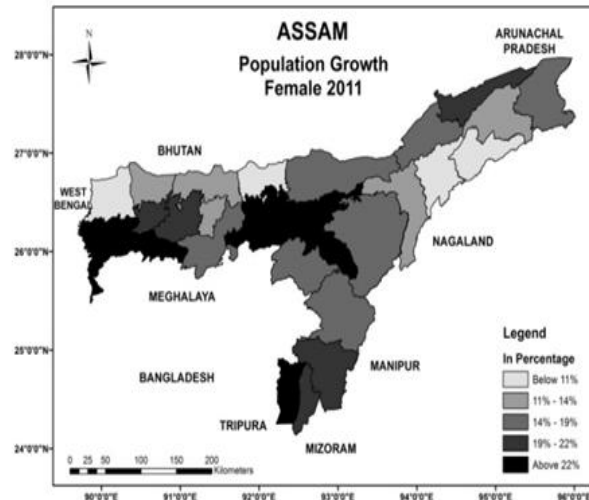
Assam is the most populous state of Northeast India, located in the midst of seven Indian states viz. Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya and West Bengal, and two foreign countries viz. Bhutan and Bangladesh (Fig. 1). The State covers 2.4 percent of the total area of the country and shelter to 2.6 percent of the country's population of which 86 percent live in rural areas. The significant features of the population scenario in Assam are-

- The growth during 1971-2011 was 113.12 percent against the national growth rate of 120.77 percent during the same period.
- The growth rate in different districts varies and is significant in the case of female population growth
- Assam ranks 14<sup>th</sup> in size of population among the states of the country
- The state ranks 15<sup>th</sup> in density among the states of the country

- The state ranks 14<sup>th</sup> in sex-ratio among the states of the country, and
- The state ranks 26<sup>th</sup> in literacy rate among the states of the country.



**Figure 1: Location of Assam**



**Figure 2: Female population growth 2011 over 2001**

As per 2011 census, Assam has in total 31.206 million population of which 15.266 million female maintaining male-female ratio of 958 female against 1000 males. This 958 figure shows a significant increase from 935 per thousand recorded in 2001 (Tab.1). But, it is noteworthy that there is a gradual decrease of the child sex ratio (age-group 0-6 years) from 975 in 1991 to 967 in 2001 and further to 962 in the census 2011.

**Table 1: Sex Ratio in Assam and India**

Year	Sex Ratio (Females/1000 Males)	
	Assam	India
1901	919	972
1911	915	964
1921	896	955
1931	874	950
1941	875	945
1951	868	946
1961	869	941
1971	896	930
1981*	--	934
1991	923	926
2001	935	933
2011	958	943

\* 1981 Census was not held in Assam

On one hand, the population of Assam is increasing at an alarming rate while on the other, the economic growth in the state shows a declining trend as reflected on the following facts. It has been observed in the districts of Dhubri, Goal Para, Kamrup (Metro), Darrang, Karimganj, Morigaon and Nagaon, where growth rate is very high, while it is very low in the districts of Kokrajhar, Udalguri, Jorhat and Sibsagar (Fig.2). The percentage contribution to Gross State Domestic Product (GSDP) at constant (2004-05) prices from the year 2004-05 to 2013-14 show steady decline in all the sectors other than the service sector. The percentage contribution in agriculture and allied activities was at decrease (estimated) from the level of 25.5 percent in 2004-05 to 21.3 percent in 2013-14. Though the agriculture sector is the major contributing sector towards the state, economy has declined steadily and reached the level of 17.8 percent in 2013-14 from 21.7 percent in 2004-05. In industrial sector also the trend is same, which had been falling from 27.54 percent in 2004-05 to 21.27 percent in 2013-14. The state economy, in terms of rupee value of the GSDP in the same period was at Rs 88537.2 crores, as against Rs 84630.2 crores for 2012-13 i.e. a growth of 5.87 percent, which was lower than the estimated growth of 6.06 percent. However, the forestry sector shows a modest growth of 4.56 percent in 2013-14 against the growth of 3.05 percent, experienced in 2012-13. The self service sector, which comprises trade, hotel & restaurants, transport, storage, real estate business, communications, banking and insurance, social and personal services was grown (projected) by 6.95 percent during 2013-14, as compared to 7.81 percent achieved in 2012-13. In case of Net State Domestic Product (NSDP), it remained more or less same 5.86 percent in 2012-13 and 5.88 percent in the year 2013-14. The declining trend almost in all the above sectors has direct impact on the health sector of the people of Assam. The employment scenario of the state also speaks the same. The size of the educated job seekers is growing higher, as per the records of the register of Employment Exchanges, which was 7.54 percent more in 2012 than that of the figure for the year 2011. Altogether, the percentage of the educated job seekers constitutes about 87 percent of the total job-seekers of the state. During the period from July 2012 to June 2013, it reveals that 40.5 percent households of rural Assam are self employed in agriculture, 19.0 percent are self employed in non-agriculture, 21.3 percent are regular wage or salary earners, 8.3 percent are agricultural labour, 8.5 percent are households and labour and 2.4 percent are engaged in other households earning activities. In case of urban areas, the report revealed that 35.6 percent households are self employed, 42.1 percent are

regular wage or salary earners, 15.6 percent households are casual labour and 6.7 percent are other households at all India level, 43.2 percent households are self employed, 42.7 percent are regular wage or salary earners, 9.5 percent households are casual labour and 4.6 percent are other households in the urban areas of Assam [1].

## OBJECTIVES

The main objectives of the study are to

- Analyse the socio-economic condition of the state
- Highlight the issues associated with the women health, and
- Identify the areas for intervention to improve the women health scenario.

## METHODOLOGY

To address the issues mentioned in the objectives, analysis was done on the available data and information generated by different government and other organizations to highlight the gender discrepancies in Assam and its consequences on the women health. The study has been done depending mainly on the secondary sources of data, which have been presented with some maps and figures and incorporating a few data tables for easy understanding. As the study is a part of ‘Gender Atlas of Assam’, a project sponsored by ICSSR, only women health issue has been highlighted here out of many issues covered in the said project.

## FINDINGS

### Health and health care in Assam

Human health remains in a delicate balance. It is influenced by a number of factors, such as adequate food, basic sanitation, housing, healthy lifestyles, protection against environmental hazards and communicable diseases etc. Environmental condition of a region plays an important role on overall human health [2&3]. In case of Assam, hot and humid condition of the Brahmaputra and Cachar plains is not congenial to healthy living [4]. The forested hills and wetlands infested with mosquitoes and other vectors and when an infected individual or the source of infection enters the areas, communicable and parasitic diseases are transmitted rampantly through the population. Such environmental condition and the socio-economic issues highlighted in the introductory part play significant role on health and health care scenario in Assam. “Health care” embraces several of services provided to individuals or communities by various agents of the health services or profession for the purpose of promoting, maintaining and monitoring health of common people [5]. The Indian Constitution has directed health care as a responsibility, largely to the state governments and thus, the state government has to provide health care to all. From the available data, in respect of the health care, Assam has been quite successful in preventing and controlling leprosy and AIDS, but the state has a long way to go in controlling epidemics of malaria, TB and life threatening cancer[6].

The health care delivery system in the country as well as in the Assam could be grouped into 5 categories:

- Public Health Sector which includes Primary Health Care, Hospitals/Health Centers, Health Insurance Schemes and other agencies such as Defense Services and Railways.
- Private Sector
- Indigenous Systems of Medicine such as Ayurveda, Siddha, Unani-Tibbi, Homeopathy and unregistered practitioners.
- Voluntary Health Agencies, and National Health Programmes

The health care mechanism and the overall scenario in Assam could briefly be shown with the Figure-3 and Table-2 & Table-3

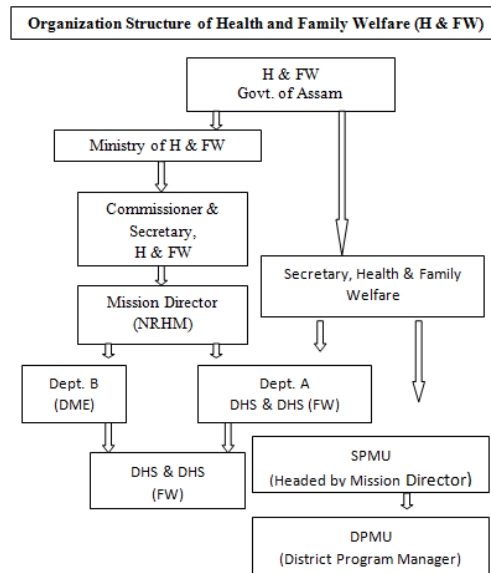


Figure 3: Organization Structure of Health and Family Welfare in Assam

Table 2: Health care Institutions in Assam in 2011-12

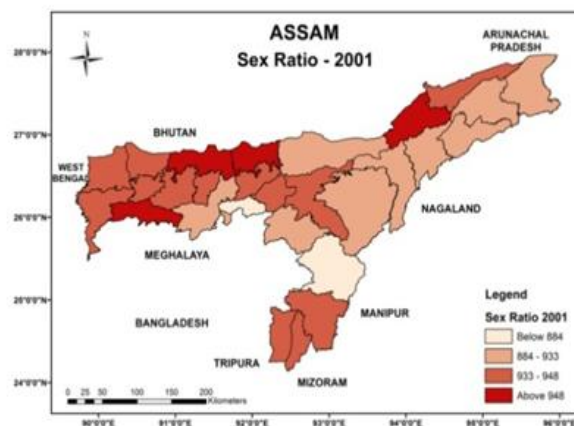
Type	Actual	Independent	Attached With Other HI	Fund Required
DH	28	28	0	25
SDCH	13	13	0	13
CHC	108	108	0	108
BPHC	149	112	37	112
MPHC/SH C/SD/New PHC/ Char PHC	857	852	0	852
Sub-Centre	4592	-	-	-

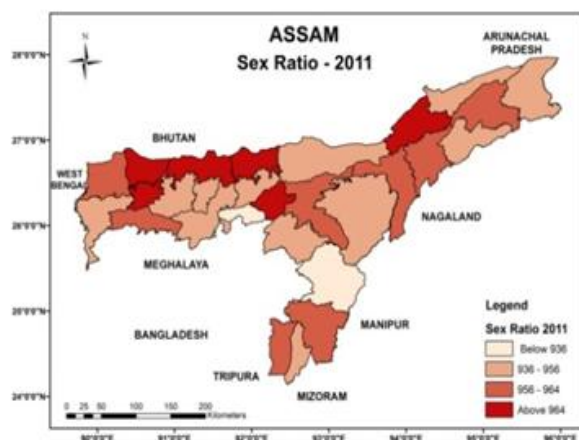
**Table 3: Medical Infrastructure of Assam, 2013**

Category	Number
Government Hospitals	25
Medical Colleges	6
Primary Health Centres	986
Sub Divisional Civil Hospitals	13
Community Health Centre	110
Sub-Centre	4609
Bed Strength	11459
Mental Hospital	1
Dental Hospital	1
Homeopathy Hospital	3
Cancer Hospital	1
MBBS Doctor (Govt. + NRHM)	2453
Specialist Doctor (Govt. + NRHM)	1121

### Women Health Care

In the new development discourse, special attention to gender is an important area of concern. Women along with the men are integral part of national development policies and programmes. The health infrastructure, delivery system, manpower, resources, all has to be strengthened enough so that it can be utilized by the people in a proper way. With a weak preventive, promotive and curative system, it could not be provided proper service to its citizens. In Assam, in the census 2001, the bordering districts of Baksa, Udalguri, Lakhimpur and Goalpara has shown the highest sex ratio above 948, where as the lowest sex ratio has been observed in the districts of Kamrup (Metro) and Dima Hasao districts. In 2011, Bordering districts of Chirang, Baksa, Udalguri, Bongaigaon, Morigaon and Lakhimpur has the highest sex ratio, whereas the lowest sex ratio has been observed in the districts of Kamrup (Metro) and Dima Hasao (Fig. 4 & Fig 5). The children and maternal mortality scenario continues to be worrisome in Assam. Compared to many of the states, the infant mortality in Assam is higher (Tab. 4). As many as 54 out of every 1000 children die before celebrating their first birth day. The number is quite high compared to the national level of 40. Female infant mortality rate is also higher to the India's total (Tab. 5). Further, 73 out of every 1000 children in the state die before completing 5 years, whereas the number is 49 for the country as a whole.

**Figure 4: Sex ratio in Assam, 2001**



**Figure 5: Sex ratio in Assam, 2011**

In Assam, the prevalence of knowledge about family planning is found to be low as compared to many other states. Around 24 percent of girls getting married below the legal age of 18 years and around 41 percent of them have more than three children. In the districts like Barpeta, Goalpara and Morigaon have high percentage of girls being married below 18 years. High concentration of Muslim population and lower literacy level are probably the main reasons for it. Unmet need for family planning is higher in rural areas than in urban areas. The variation is well reflected among the educated and uneducated women. It is higher amongst the illiterate women (18%) as compared to the High school and above educated (11%). Hindu women have lower unmet need as compared to Muslim women. It has been observed that the majority of the Hindu population is located in the upper Assam area, comprising the districts Golaghat, Jorhat, Sibsagar, Dibrugarh, Tinsukia, Dhemaji, and also in Kamrup Metro and Baksa, whereas in lower Assam part of the state comprising of districts Dhubri, Bongaigaon, Goalpara, Barpeta, Darrang, Morigaon, Nagaon and in Barak Valley Karimganj and Hailakandi has the highest percentage of Muslims (Fig.6 & Fig.7). However, it must be mentioned that the all women of the state should be empowered, whether they belong to the Hindu or the Muslim religion or are rich or poor [7].

**Table 4: Infant mortality rate 2011**

State	Female	Total
Assam	56	55
Bihar	49	48
Chhattisgarh	49	46
Jharkhand	37	36
Madhya Pradesh	65	62
Odisha	59	56
Rajasthan	60	55
Uttarakhand	40	40
Uttar Pradesh	69	68

Table 5: Female Infant Mortality Rate in Assam and India

Year	Assam Female	India Female
2001	80	68
2002	71	65
2003	65	64
2004	55	58
2005	69	61
2006	68	59
2007	67	56
2008	65	55
2009	64	52
2010	60	49
2011	56	46
2012	57	44

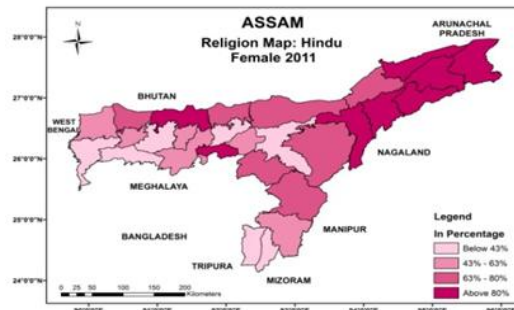


Figure.6: Concentration of Hindu (Female) in Assam

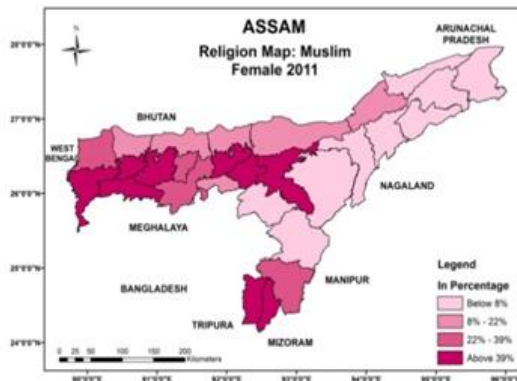


Figure.7: Concentration of Muslim (Female) in Assam

The situation of maternal mortality is also worrisome. In Assam, even after taking care of mother and child, in last fifteen years not less than 300 mothers die while giving birth in every 1 lakh live birth. The figure in the country is just about half i.e. 167, Vision Assam, 2030 [8]. Assam launched the National Rural Health Mission (NRHM) in April 2005, and actively trying to support the Directorate of Health services and extending service to the people of the state. The state government has innovatively undertaken, along with the implementation of the national flagship schemes and programmes. Among these



schemes Janani Suraksha yojana, Mamoni, Mamata etc. under NRHM are noteworthy (Tab. 6). In spite of that the women health scenario in the state is still remain far behind many of the states of the country.

**Table 6: Present status of the Schemes in Assam under NRHM**

Present Schemes	Norms	Benefits	
Mamoni	Pregnant women registered at Govt. health institution.	On 2 <sup>nd</sup> Checkup	Rs 500
		On 3 <sup>rd</sup> Checkup	Rs 500
Janani Suraksha Yojana	Pregnant Women delivered at Govt. health institution.	Rural mother after delivery	Rs 1400
		Urban mother after delivery	Rs 1000
Mamata (For baby)	Delivered at Govt. hospital and minimum 48 hours hospital stay.	Receive a kit for baby with a soap, comb, shampoo, towel, telecom powder and mosquito net.	

**Table 7: Percentage of Population below Poverty Line**

Year	Assam		India	
	Rural	Urban	Rural	Urban
1973-74	52.67	36.92	56.44	49.01
1977-78	59.82	32.71	53.07	45.24
1983	42.60	21.73	45.65	40.79
1987-88	39.35	9.94	39.09	38.20
1993-94	45.04	7.73	37.27	32.36
1999-2000	40.04	7.47	27.09	23.62
2004-05	36.40	21.80	41.80	25.70
2009-10	39.90	26.10	33.80	20.90
2011-12	33.89	20.49	25.70	13.70

Besides targeting child and maternal mortality, improvement of women health and wellbeing in general necessitates to reduce the illness, especially chronic ones. It has been reported that the number of women at age 15-49 per 100,000 have diabetes, asthma or goiter or thyroid disorders. Needless to say that most of the women's health related problems are associated with poverty (Tab. 7), population growth rate, education, religious beliefs, social system and general awareness. Those women, who have 10 or more years of education, they outlined as less number of diseases than the women who have less education. In Assam Kamrup (Metro) has the highest female literates which are above 67 percent, whereas it is very low in the districts of Dhubri, Kokrajhar, Chirang, Barpeta, Udalguri and Darrang. (Tab. 8 and Fig.8 & Fig 9). Age is also playing a significant role in health condition. Therefore, the aged group of women has more diseases in comparison to younger one. It has been seen that urban based women have more decision making, quality compared to her rural counterpart. In the rural set up, husband's decision is quite dominant. However, maximum decisions have been taken with the help of both husband and wife in urban areas. Indeed, the number of rural women who could able to take decision on her own health is less than urban women. Every year a large number of women have to die in non maternal causes. Large number of below poverty line women have been suffering various communicable and non communicable diseases, which needs extra government concern. In the age group of 45-49, the non-maternal death is the highest, while between the age group 25 and 29 maternal mortality rate is relatively higher [9]. Therefore, equal attention to be given to all facets of women's health care in the state with all sincerity.

Table 8: Female Literacy Rate in Assam and India

Year	Female	
	Assam	India
1951*	7.58	8.86
1961	18.62	15.35
1971	22.76	21.97
1981**	--	29.76
1991	43.03	39.29
2001	54.61	53.67
2011	66.27	64.64

\*Excluding Jammu & Kashmir. \*\*Excluding Assam

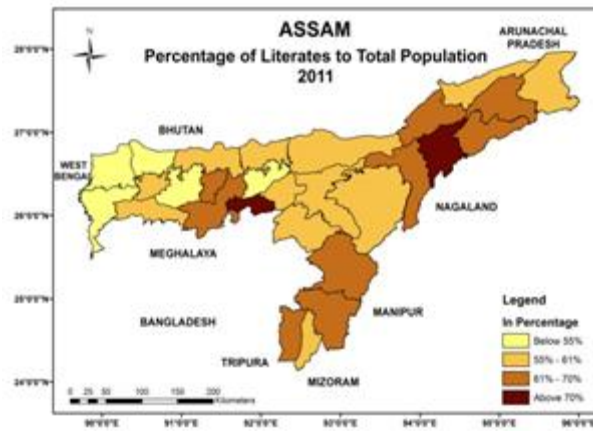


Figure 8: Percentage of literates to total population

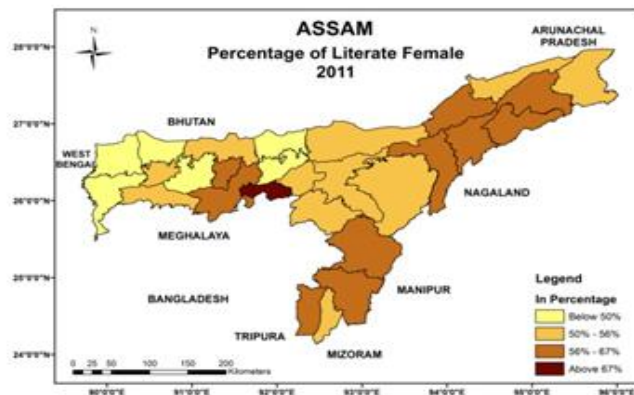


Figure 9: Percentage of Female literates to total population

## CONCLUSIONS

Despite taking some schemes, besides the national schemes for health care in general and women's health in particular in the last couple of years, Assam has not been able to achieve the desired health outcomes. Poor literacy rate, low per capita income which is mainly due to the high density of population, wide urban-rural disparity, improper water and sanitation facilities etc., All have contributed to some extent to the underdeveloped health sector in the state. The gender sensitive issue which has been used in health policies in Assam needs more holistic attention. The policies should effectively touch the socially, economically backward women of Assam. Instead of giving attention towards the reproductive health system, the state government should have given attention to women's other health issues also. Though the state has been quite successful in preventing and controlling leprosy and AIDS, it still has a long way to go in controlling epidemics of malaria, TB and life threatening cancer. The health infrastructure, delivery system, manpower, resources, all has to be strengthened enough so that it could be utilized by the people in a proper way. The national programs that are followed for maternal and reproductive health care attention should equally be given to family planning, with utmost sincerity.

## ACKNOWLEDGEMENTS

The authors acknowledge the ICSSR for supporting the project "Gender Atlas of Assam"

## REFERENCES

1. Govt. of Assam, Economic Survey of Assam (2013-14), Directorate of Economics and Statistics, Assam, 2014, 1-15
2. UmeshKapil and ChudhuryPanna, the National Rural Health Mission (NRHM); Will it make a difference? Indian Pediatrics, Vol 42, 2005, 783-786
3. Radhakrishna R and Ravi C. "Malnutrition in India: Trends and Determinants", Economic and Political Weekly, 39 (9), 2004, 671-76
4. HazraJayati, Health and Development of North East India, Geographical Review of India, Vol. 64, No 1, 2002, 21-32
5. Ray Anamika and DuttaAnkuran, The Scenario of Women's Education in Assam: A Case Study of the Karbi's, Concerns and Voices, Cotton College Women's Forum, Guwahati, 2009, 134-150
6. DuttaIndrani and BawariShailly, Health and Health Care in Assam: A status report, Centre for Enquiry into Health and Allied Themes, Mumbai, 2007, 7-85
7. Seth Mira, Women and Development: The Indian Experience, Saga Pub. New Delhi, 2001, 34
8. Govt of Assam, Vision Assam: 2030, Sustainable Development Goals (Draft), 2016, 3-7
9. BhagawatiPurabi, Gendering Health: An analysis of Women Issues in Assam, International Journal of Research in Engineering, IT & Social Science Vol. 5, Issue 5, 2015, 8-27

