

Women and Science Communication for Sustainable Development through Mass Media of N-E India in the Last Decade: An Epistemological Case Study

Ratul Datta (Communicating Author)¹, Prof. (Dr.) Tapati Basu²

¹ Ph.D. Research Scholar, Department of Journalism and Mass Communication, University of Calcutta & Govt Gazetted Officer, Information & Cultural Affairs Department, Govt of West Bengal, Kolkata-700 001, West Bengal, India

² Professor, Department of Journalism and Mass Communication, University of Calcutta, Senate House, 87/1, College Street, Kolkata-700 073, West Bengal, India

Abstract:

In this research, the main objective is to explore the need of the pedagogic study of growing interest in science communication as an area of specialization in India and role of media for sustainable development. Compared to the Indian scenario it is found that, world has already experiencing a widespread diffusion of such activities for sustainable development. In this research, we have given special emphasis given on North-East Indian states viz. Nagaland, Meghalaya, Mizoram, Arunachal Pradesh, Manipur, Assam, Tripura and Sikkim. Here, obviously comes the role of mass media. 8 largest circulated daily newspapers of 8 NER states viz. Arunachal Times from Arunachal Pradesh, Assam Tribune from Assam, Sangai Express from Manipur, Shillong Times from Meghalaya, Nagaland Post from Nagaland, Sikkim Express from

Sikkim, Dainik Sambad from Tripura and The Mizoram Post from Mizoram were taken as sample space from 2001 to 2010. It is found that, overall share of science news on sustainable development in all India level is 3.5 percent whereas, in NER states' media, space share for science news for the upliftment and development of women is too low, less than 1 percent. Local scientific issues in very regional languages are too low in NER states. There should be more local language daily newspapers for science based news and more initiatives to achieve sustainable development.

Keywords: *Pedagogic, Science communication, Media, Sustainable development, Trafficking, Female work participation rate, Infant Mortality Rate among Female.*

Science communication is very much needed. The process of overall development thorough science-based news for information dissemination in India in the last decade could be very pragmatic, realistic, vital and hence crucial in this regard. It is to be kept in mind that, a large gender gap exists in participation as science journalist at the levels of those North-eastern states. In other states of India, this scenario is somehow better.

I. INTRODUCTION

There is no denying the fact that, women and girls represent half of the world's population and therefore also half of its potential. It is disgraceful to say that, as of 2014, 143 countries have guaranteed equality between men and women in their Constitutions but 52 have yet to take this step! Women in the labour market still earn 24 per cent less than men globally. Worldwide, 35 per cent of women have experienced physical and/or sexual intimate partner violence or non-partner sexual violence. An estimated 133 million girls and women have experienced some form of female genital mutilation/cutting in the 29 countries in Africa and the Middle East, where the harmful practice is most common with a high risk of prolonged bleeding, infection (including HIV), childbirth complications, infertility and death. Sustainable development is the organizing principle for sustaining finite resources necessary to provide for the needs of future generations of life on the planet. Here, obviously comes the question of the role of media.

II. DEMOGRAPHY OF NORTH EAST INDIA

North-east India is that bundle that is represented by the seven sister states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. The distinct dissimilarity that is manifested through these border-line states is that each state has to unfold a legend of its own. Indeed, north-eastern India enshrouds within itself the vast unexplored and unknown tracts, some of which are perhaps still to witness the light of day. 'India shining' can no more be better described than through these cluster of states, misty as they are always in environs.

Table1. Demography of N-E Indian States (Latest)

State	Population	Male	Female	Sex Ratio
Arunachal Pradesh	1,383,727	713,912	669,815	938
Assam	31,205,576	15,939,443	15,266,133	958
Manipur	2,570,390	1,290,171	1,280,219	992
Meghalaya	2,966,889	1,491,832	1,475,057	989
Mizoram	1,097,206	555,339	541,867	976
Nagaland	1,978,502	1,024,649	953,853	931
Sikkim	610,577	323,070	287,507	890
Tripura	3,673,917	1,874,376	1,799,541	960

Though much smaller in total square feet area as opposed to their other Indian counterparts, north-eastern states predominate and override in its indigenous tribal population and culture, which comes forth in every style of living - beginning from cooking, approach to eating, dressing, singing, dancing, music, architecture, literature and of course, its ancientness in language.

North-eastern states are practically tribal states. Except Tripura (16.36 per cent) and Assam (7.40 per cent), all other states have a meagre SC population. Except Assam (286/ sq. km.), the density of population is far below than the national average of 274/ sq. Km. It has been noticed that Mizoram, which had the highest literacy rate also, had the lowest infant mortality, birth and death rate, all, which shows positive impact of literacy on these vital events. It is estimated that the population of north-eastern States will rise to about 37.72 million in 2001 and will further rise to 42.73 million in year 2011. The population of age-group 6-11 and 11-14 indicates that it was 4.63 and 2.04 million respectively in the North-eastern states which is 3.97 and 3.85 per cent of the total 116.71 and 53.00 million of the respective age-group population of the country. Assam had the highest population and Mizoram, the least which is true for both 6-11, and 11-14 years and is likely to remain same in the years that follow.

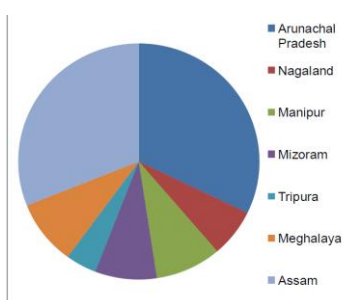


Diagram 1. North-Eastern States Distribution of Area

III. OBJECTIVES OF SUSTAINABLE DEVELOPMENT

- Goal 1:** End poverty in all its forms everywhere
- Goal 2:** End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3:** Ensure healthy lives and promote well-being for all at all ages
- Goal 4:** Ensure inclusive and equitable quality education and promote life-long learning opportunities for all
- Goal 5:** Achieve gender equality and empower all women and girls
- Goal 6:** Ensure availability and sustainable management of water and sanitation for all
- Goal 7:** Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 8:** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 9:** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10:** Reduce inequality within and among countries
- Goal 11:** Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12:** Ensure sustainable consumption and production patterns
- Goal 13:** Take urgent action to combat climate change and its impacts
- Goal 14:** Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15:** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16:** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all Levels
- Goal 17:** Strengthen the means of implementation and revitalize the global partnership for sustainable development

IV. GOALS OF PRESENT STUDY

The present study discovers a range of modes and means of science communication prevalent in these countries and tries to identify some common threads amongst them to make them more interactive and communicative to each other so that they can also share the power of scientific knowledge and scientific wisdom. It emerged that science communication through various media, be it print, broadcast, digital, folk or interactive in developing countries, especially in the states of North-eastern region i.e., Nagaland, Meghalaya, Mizoram, Arunachal Pradesh, Manipur, Assam, Tripura and Sikkim deserves much more serious efforts to be able

to enhance their abysmally low level of scientific literacy, eradicate superstitions, and achieve a baseline public understanding of science for sustainable development. It is to be kept in mind that, English is a minor language and others are major language. But major women have their own tribal language, but are unable to read any major circulated newspaper, published in English.

Name of Newspaper	Language	State
The Echo of Arunachal	English	Arunachal Pradesh
Manipur Chronicle	Manipuri	Manipur
Eastern Chronicle	English	Meghalaya
Highlander	English	Mizoram
The Nagaland Post	English	Nagaland
Sikkim Express	English	Sikkim
Aiker Fariad	Bengali	Tripura
Asomiya Barta	Assamese	Assam

Diagram 2. Major Circulated English Dailies of North-East Indian States

Here, obviously comes the role of mass media. 8 largest circulated daily newspapers of 8 NER states viz. Arunachal Times from Arunachal Pradesh, Assam Tribune from Assam, Sangai Express from Manipur, Shillong Times from Meghalaya, Nagaland Post from Nagaland, Sikkim Express from Sikkim, Dainik Sambad from Tripura and The Mizoram Post from Mizoram were taken for this research work from 2001 to 2010.

V. SCENARIO OF LANGUAGES OF NORTH-EAST INDIA

The dominant language in any State or region eventually develops its ‘lingua franca’. The Eighth Schedule of the Constitution of India recognised 18 Indian languages. There is no provision to protect the minor languages, especially the tribal languages of the North-East. Such minor languages could lose their identity vis-a-vis the dominant language. This is true of Manipur, Assam and Tripura where Manipuri, Assamese and Bengali are commonly used to communicate between the various ethnic groups. But most tribals cannot write in these languages because of the unfamiliar script. The North-East has remarkable linguistic diversity. Bilingualism and sometimes tri-lingualism is common in both rural and urban areas even among the unlettered. Going by and following the 1971 census, there exist approximately 220 languages spoken in the north-east Indian states, belonging basically to three language families, specifically Indo-Aryan, Sino-Tibetan and Austric. The Indo-Aryan language family is represented primarily by Assamese and Bangla;

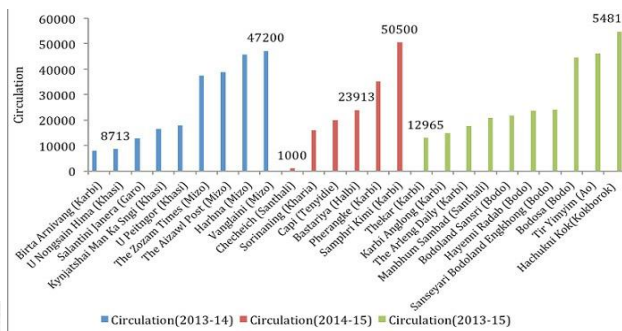


Diagram 3. Circulation of Tribal Language Newspapers (with emphasis to N-E India)

Austro-Asiatic language family is represented chiefly by Khasi and the Sino-Tibetan family of languages is exemplified by the Tibeto-Burman and the Siamese-Chinese sub-families. Besides these, there also exist languages of the Tea-Tribes under the north-east Indian languages configuration. However, the bulk of languages spoken here belong to the former group of language families, while the latter (referring to the language of tea-tribes) is interpreted by a few Thai languages like Khamyang, Khamti, Aiton, Phakyal and Turung.

The North-East presents striking socio-cultural features in terms of ethnicity, linguistic and socio-cultural practices. The hill ranges of the region like the Naga Hills, Patkai Hills, Lushai Hills and Shillong Plateau are inhabited by numerous indigenous tribal communities.

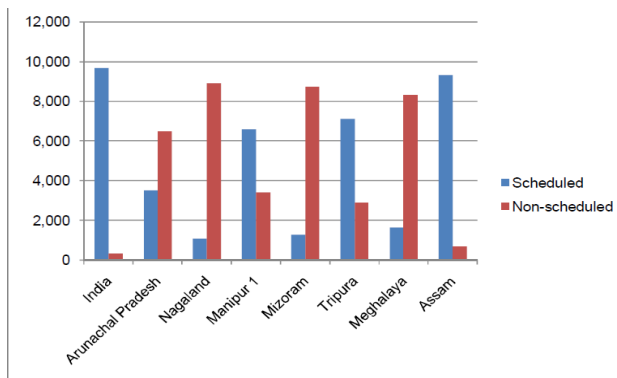


Diagram 4. Proportion of Scheduled-Non Scheduled Language Speaking Population Per 10000 people

Each ethnic group has its own distinctive socio-cultural identity. According to Indian language classification, the region has people of Mongoloid stock, speaking Sino-Tibetan and Austric languages or dialects. The linguistic matrix of the North-East is made up of a number of polyglots. It is not only different languages of a single family but also languages of different families which are spoken in different States of this region as each state in the region is multilingual complex rather than a linguistically homogenous unit.

The region shares a porous border of at least 4,500 km with Myanmar, Bangladesh, Bhutan and parts of China. The rebel outfits have used this

geographical position to the best of their ability. They have set up their camps in the dense forests of Myanmar.

The regional media was cited in a number of national and international research studies to have exhibited serious gender gap in its coverage. Under-representation of women in the region's media industry, save some known faces who have managed to sustain through prolonged struggle against the state and many non-state forces, was also found to be one of the major areas of concern. Studies found that proliferation of media organizations in the country and the NE didn't necessarily result in higher degree of media coverage in the region. Location and proximity have often dealt heavy blow on prioritization of news content. While ownership patterns of large media organizations dramatically changed in the national arena during the recent past, ownership of most mass media organizations in the NE India is still largely in infancy.

The region's media organizations are found entrapped amidst a number of political, security, military and administrative barricades and region-specific policy decisions. The situation resulted in a variety of contrasting interpretations, often bordering on describing the northeast Indian media as playground for generating stereotypes and under-reporting development.

National large media organizations contributed to the situation by creating and maintaining a great information deficit. This inadequate media representation arguably led to extremely contested understanding of the region in the rest of the country and beyond. Quantum of media content on the northeast region was fairly unbalanced; majority of them was decided by size of location specific readership and ethno-political and identity issues.

VI. DIFFERENT TYPES OF VIOLENCE AGAINST WOMEN

A. Drug Related Violence

Alcoholism increases domestic violence against women and interruption takes place in the family. An alcoholic beats his wife and children. There are number of poor incidences has been occurred in the society. Besides husband who used illicit drugs, he also disturbed his family and spends his money without planning and he depends on his wife. Women (who are engaged in different paid works) are not allowed to have at least some money that they can spend as per their wish.

B. Sexual Violence

In most of the cases the victim is branded as a woman of loose morals. Rape is viewed as a crime against the honour of not just the girl who is rape but also her family. Sometimes the nature of rape and the silence that tends to surround it makes it a particularly difficult human rights violation to

investigate. Sexual violence has increasingly been used as a tool of war in the north east region. Hence for a long time, most cases of sexual violence resulting from the armed conflict involved states. Krishna Devi's case (a 30 year old woman lived in Manipur) illustrate the use of sexual violence in armed conflict scenarios in north- east India (report by North- East Network). Men also violate women's human rights through rape, threat of rape, forced prostitution etc.

C. Dowry Related Violence

Past few years, there has been increased dowry related violence in north- east India specially in Assam. For that, death by burning is often punishment for the poor, innocent girls who is unable to satisfy the greed of her husband and family in-laws or take the decision of suicide for dowry related tortures.

D. Domestic Violence

Domestic violence is one of the greatest obstacles to gender equality. It obstructs women to secure their fundamental rights to equal protection under the law and the right to life and liberty. Domestic violence is violence that occurs within the private sphere, generally between individuals who are related through intimacy, blood or law. It can take the form of mental, physical or sexual violence. It reflects the unequal treatment meted out to women in the areas of health, education and income. Due to the patriarchal structure of society, women have been relegated to a subordinate position.

E. Harassment at Work Place

Most of the women are engaged in different manual works and most of them are ill- paid, but do not leave the job due to increasing unemployment. Harassment at work place is all pervasive. Sometime they are not secured at their work place and face new challenges.

F. Women in Arm Conflict Situation

North-east region has been witness to an ongoing low-intensity conflict for a long period of time. While the entire region continues to suffer, women living in such conditions are most vulnerable due to the restrictions on their mobility, the limited access to health services and most importantly, the lack of opportunities for education, employment and even leisure. Women have been, in internal war, the targets of sustained and frequently brutal violence committed by both parties of armed conflict. Both the sides often use violence to punish or dominate women believed to be sympathetic to the opposite side. Women have been threatened, raped and murdered during the conflict. (Human Rights Watch 1998).

During to arm conflict situation, women managed households. Because the earner of the

family have either fled, been killed or joined the ranks of the underground. Thus, women who were till then not allowed to join the formal economic sectors are suddenly left on their own and are forced to eke out a living for themselves and their families. They are however not provided with any kind of support or alternate sources of livelihood. Nor are any avenues of employment made available to them. They have lost their rights such as right to life, right to liberty and security etc. Due to lack of awareness, illiteracy, lack of interaction, unequal access to information and other economic and non- economic resources, women plays triples role, women’s rights can be violated.

VII. WOMEN’S POSITION IN N-E INDIAN STATES

Table 2: Gross Enrolment Ratio In Class I-VIII For General Education

States/UTs	Classes I-VIII (6-13 years)			Classes I-VIII (6-13 years)			
	Girls	Boys	Total	States/UTs	Girls	Boys	Total
Andhra Pradesh	90.11	90.18	90.15	Orissa	104.68	105.62	105.16
Arunachal Pradesh	138.1	146.31	142.26	Punjab	100.6	102.84	101.83
Assam	84.9	82.21	83.54	Rajasthan	98.71	109.97	104.63
Bihar	86.03	100.79	93.72	Sikkim	123.37	118.82	121.08
Goa	86.13	88.75	87.5	Tamil Nadu	114.07	114.32	114.2
Gujarat	106.04	108.88	107.56	Tripura	121.74	123.56	122.66
Haryana	87.58	84.31	85.79	Uttar Pradesh	96.27	94.65	95.42
Himachal Pradesh	109.38	110.37	109.9	West Bengal	110.74	107.16	108.92
Jammu & Kashmir	104.27	104.67	104.48	A&N Islands	73.04	75.62	74.34
Karnataka	97.66	99.81	98.76	Chandigarh	64.71	62.62	63.55
Kerala	97.11	98.58	97.86	D&N Haveli	101.98	105.24	103.69
Madhya Pradesh	130.18	133.32	131.81	Daman & Diu	83.48	72.35	77.1
Maharashtra	96.4	99.82	98.18	Delhi	116.35	116.31	116.33
Manipur	147.73	155.44	151.64	Lakshadweep	75.68	73.99	74.83
Meghalaya	141.86	135.15	138.49	Puducherry	100.39	95.6	97.87
Mizoram	133.58	142.98	138.33	India	101.09	103.75	102.47
Nagaland	83.45	83.2	83.32				

The gross enrolment ratio of the states of NER with the other states of India is presented in the above Table 2. When the enrolment rates of Class I-VIII of Schools for General Education in different states of India are compared, it is seen that the enrolment rates are comparatively higher in NER than some states of the rest of India.

Table 3: Female Work Participation Rate

States/UTs	Rank	FWPR	States/UTs	Rank	FWPR
Chattisgarh	1	62.7	Madhya Pradesh	13	41.1
Himachal Pradesh	2	58.8	Jharkhand	14	39.8
Nagaland	3	56.5	Jammu and Kashmir	15	38.4
Andhra Pradesh	4	52.7	Gujarat	16	37.9
Meghalaya	5	51.4	Orissa	17	37.8
Rajasthan	6	46.2	Uttarkhand	18	36.6
Mizoram	7	45.4	India	19	35.6
Arunachal Pradesh	8	45.1	Manipur	19	31.5
Karnataka	9	43	Kerala	20	27.3
Maharashtra	10	42.9	Punjab	21	26.3
Sikkim	11	41.2	Assam	22	20.8

The female workforce participation rate of the states of NER in comparison with the rest of India is presented in Table 3. The table reveals the fact that female work participation rates (FWPR) are higher in most of the NER states with hilly regions and those inhabited by tribals than other states of rest of India,

even in Kerala. Except Assam, Manipur and Tripura, the FWPR are higher than all India average for many NER states. These are also the states where there are low gender disparities in terms of work participation. Higher FWPR can be partially explained by the fact that community-based organisation of subsistence production requires a high level of women’s labour participation. Some scholars have linked higher participation of women with rice cultivation. Another factor associated with better work participation levels is educational attainment.

Table-4 State-Wise Dropout Rates In Class I-X In 6-16 Years In India

States & UTs	Total	Girls	Rank	States & UTs	Total	Girls	Rank
Sikkim	80.73	79.36	1	India	52.76	51.97	
Assam	77.6	77.82	2	Karnataka	46.62	46.33	17
Meghalaya	77.89	76.46	3	Jammu & Kashmir	44.3	40.63	18
Bihar	77.56	76.06	4	Punjab	40.42	39.45	19
Nagaland	74.86	73.97	5	Goa	34.3	32.63	20
Rajasthan	71.64	73.42	6	Tamil Nadu	34.06	30.28	21
Madhya Pradesh	65.71	71.32	7	Daman & Diu	35.93	29.75	22
West Bengal	71.83	70.7	8	A&N Islands	30.06	27.07	23
Orissa	68.19	65.91	9	Lakshadweep	25.13	22.67	24
Gujarat	62.14	64.41	10	Haryana	19.84	19.46	25
Arunachal Pradesh	64.86	64.7	11	Himachal Pradesh	20.65	18.93	26
D&N Haveli	58.83	63.48	12	Uttar Pradesh	23.83	15.09	27
Tripura	62.9	62.34	13	Delhi	1.97	9.15	28
Mizoram	62.87	60.72	14	Chandigarh	3.78	7.86	29
Manipur	56.79	55.71	15	Puducherry	7.34	1.39	30
Andhra Pradesh	53.36	54.02	16	Kerala	-4.06	-5.2	31

Given low retention at the primary level, very few girls reach middle and secondary school or higher levels of education. Lower literacy also impacts upon women’s awareness levels regarding their own health needs, thereby foreclosing the possibility of improving their access to the available services for their well-being and its reference is in Table 4.

Here, the dropout rate of the states of the NER is compared with the dropout rates of the other states of the country and accordingly ranking is assigned in Table 5. The table shows that the dropout rates of the states of the North East are higher than the all India average for 2010 data.

Anaemia among women in different states of India is presented in Table 6. The majority of women in India are anaemic. Iron deficiency is particularly pronounced among women inhabiting in the eastern and almost all of the NER states (except Manipur).

Generally, male infants are known to be more susceptible to death than females due to biological and genetic reasons. However, in India, the female infant mortality rate surpasses that of males, which reflects socio-cultural influences on mortality. The female infant mortality rate of the states of India is presented and ranking is done in Table 6.

Table-5 Anaemia Among Women

States	Pregnant women age 15-49 who are anaemic (%)	Ranking	States	Pregnant women age 15-49 who are anaemic (%)	Ranking
Assam	72.0	1	Madhya Pradesh	57.9	14
Haryana	69.7	2	Maharashtra	57.8	15
Jharkhand	68.4	3	Tripura	57.6	16
Jammu & Kashmir	68.3	4	Tamil Nadu	54.6	17
Orissa	68.1	5	Arunachal Pradesh	51.8	18
Chhattisgarh	63.1	6	Mizoram	51.7	19
West Bengal	62.6	7	Uttar Pradesh	51.6	20
Sikkim	62.1	8	Uttaranchal	50.8	21
Rajasthan	61.7	9	Punjab	41.6	22
Gujarat	60.8	10	Nagaland	n.a	
Karnataka	60.4	11	Himachal Pradesh	39.2	23
Bihar	60.2	12	Goa	36.9	24
Meghalaya	60.2	12	Manipur	36.4	25
Andhra Pradesh	58.2	13	Kerala	33.8	26
India	57.9		Delhi	29.9	27

Although the position of NER regarding IMRF is improving for some states of NER, the IMR of female is still high in Assam and Meghalaya and is significantly higher than all India average.

Table 6 Infant Mortality Rate Among Female

States	IMRF	Rank	States	IMRF	Rank
Kerala	14	21	Jharkhand	44	11
Goa	15	20	J & K	45	10
Manipur	16	19	Gujarat	47	9
Tamil Nadu	24	18	Andhra Pradesh	47	9
Nagaland	28	17	Himachal Pradesh	47	9
Tripura	29	16	India	49	
Maharashtra	29	16	Haryana	49	8
Delhi	31	15	Bihar	50	7
West Bengal	32	14	Chattisgarh	54	6
Arunachal Pradesh	32	14	Meghalaya	56	5
Sikkim	32	14	Rajasthan	57	4
Punjab	35	13	Assam	60	3
Mizoram	39	12	Orissa	61	2
Karnataka	39	12	Uttar Pradesh	63	1

VIII. METHODOLOGY

8 largest circulated daily newspapers of 8 NER states viz. Arunachal Times from Arunachal Pradesh, Assam Tribune from Assam, Sangai Express from Manipur, Shillong Times from Meghalaya, Nagaland Post from Nagaland, Sikkim Express from Sikkim, Dainik Sambad from Tripura and The Mizoram Post from Mizoram were taken as sample space from 2001 to 2010. Then every 5th day and its multiple i.e. 10th, 15th, 20th, 25th and 30th day was taken as sample for each month of each newspaper and different types of science news were tried to be found according to the space share, specially awareness generating science news. All results are in table 7-12.

The study was conducted in the states of North-eastern India and then compared to other states of India. The fieldwork for the study took place between January 2001 and December 2010. Questionnaires were used them to systemize the sequence of questions for that interviews. For this survey, 200 people from each capital city of 8 North-east Indian states are selected for sampling and interviewed with same questionnaire. Total 1600 samples were collected throughout the states. On the other hand, people of all sectors like scientists, professors or lecturers, readers, editors, advertisers,

journalists, science news reporters, doctors, lawyers, engineers, administrators, industrialists, politicians, police personnel, technical assistants, teacher, students, cultural personality, public relation officers, N.G.O., social worker and obviously common people were chosen for survey. Questionnaire was given through e-mail, post, face-to-face interview, telephonic communication. Every question contains 3 options-Yes/No/Don't know. If yes it will carry 3, if no, it will carry 2 and consecutively the last will carry 1.

IX. RESULTS

- 6 factors, regarding need of more science communication among N-E Indian women were analyzed among selected sample newspapers. The factors are
 - awareness of the knowledge of basic drugs and first-aids, as due to custom and more percentage, women stay more time at residence than men.
 - awareness of violence against women.
 - whether those English morning daily newspapers of 8 states of N-E states cater local scientific news, upto the mark, to aware people, particularly women?
 - whether in the North-east newspapers there are ample no of women as science journalists for more penetration among the tribal women.
 - whether Indian women from other parts of the country come more and more in North-eastern states to cater more scientific news and whether these are published or not.
 - whether there is a need to increase awareness regarding the life and struggle of successful women scientists to be published more in newspapers.

Table-7 A) i)

A P	Assam	Manipur	Meghalaya	Nagaland	Sikkim	Tripura	Mizoram
0.8	2.4	1.3	1.9	1.6	2.0	2.1	1.2

Table-8 ii)

A P	Assam	Manipur	Meghalaya	Nagaland	Sikkim	Tripura	Mizoram
3	8.5	4.5	6	3.5	7	8	2

Table-9 iii)

AP	Assam	Manipur	Meghalaya	Nagaland	Sikkim	Tripura	Mizoram
0.5	1.8	1.1	1.2	0.6	1.6	2.0	0.9

Table-10 iv)

A P	Assam	Manipur	Meghalaya	Nagaland	Sikkim	Tripura	Mizoram
8	13	6	9	4	11	10	9

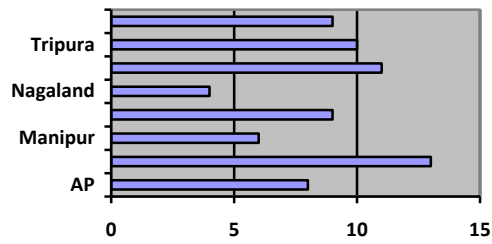


Diagram 8. Bar Diagram of Result of Table 10

Table-11 v)

A P	Assam	Manipur	Meghalaya	Nagaland	Sikkim	Tripura	Mizoram
0	1	0	0.5	0.6	1.4	2.1	0.3

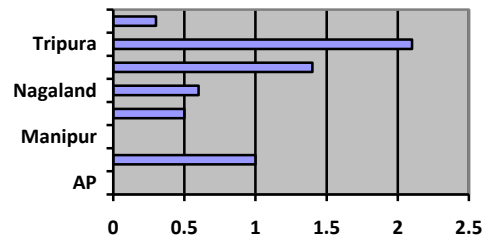


Diagram 9. Bar Diagram of Result of Table 11

Table 12 vi)

A P	Assam	Manipur	Meghalaya	Nagaland	Sikkim	Tripura	Mizoram
0.5	0.8	0.2	0.7	0.3	1.0	1.3	0.3

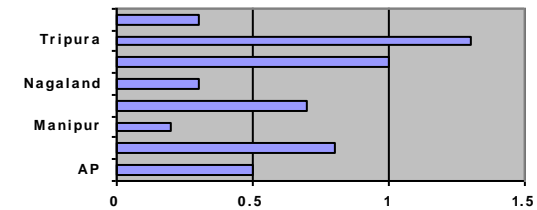


Diagram 10. Bar Diagram Of Result Of Table 12

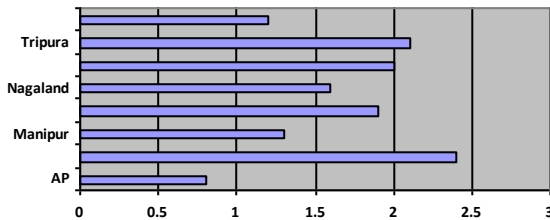


Diagram 5. Bar Diagram of Result of Table 7

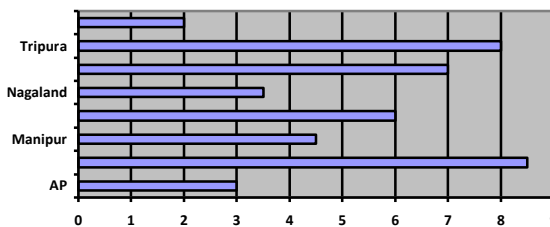


Diagram 6. Bar Diagram Of Result Of Table 8

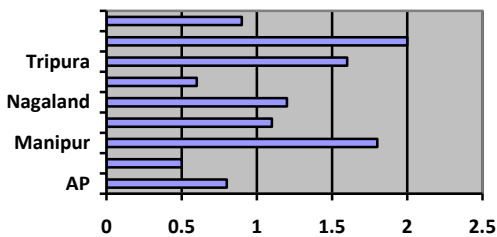


Diagram 7. Bar Diagram of Result Of Table 8

Table-13 Result of Sampling of Questionnaire of 8B

Age	AP	Assam	Manipur	Meghalaya	Nagaland	Sikkim	Tripura	Mizoram	Total	%
15-25	37	38	29	31	34	38	36	29	272	68
25-40	36	34	31	35	36	36	38	28	274	68.5

40-60	25	28	28	26	29	31	30	20	217	54.25
60-80	20	24	23	28	31	30	29	22	207	51.75
Total	118	124	111	120	130	135	133	99	970	60.63

In response to the Question 6 (All questionnaire are written below)--Do you think, North-eastern state Newspapers should publish local scientific issues more than big national news in the front page? (Yes/ No/ Don't know), the chart will show that, several states of several age classification responded accordingly. Interesting to say, age limit of 15-25 and 25-40 responded more 'Yes' than the age limit of 40-60 and 60-80. For this survey, 200 people from each capital city of 8 North-east Indian states are selected for sampling and interviewed with same questionnaire. Total 1600 samples were collected throughout the states. Hence, for each age group, total 400 people were taken for sampling and the percentage was done according to this.

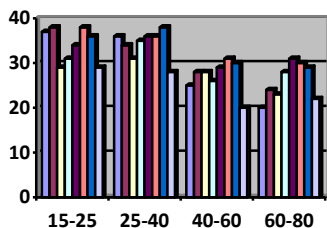


Diagram 11. Bar Diagram of Result of Table 13

X. QUESTIONNAIRE

1. At present do you feel there has been an increase in the instances of Violence Against Women in North-east India? (Yes/ No/ Don't know)
2. Do you feel the main causes of Violence Against Women especially Domestic Violence is low awareness regarding basic science? (Yes/ No/ Don't know)
3. Do you feel there has been an increase of dowry related violence in North-east India over the past few years? (Yes/ No/ Don't know)
4. Do you feel that women belonging to a particular class/community have greater chances of facing violence? (Yes/ No/ Don't know)
5. Do you think, there is a great need of local language newspaper? (Yes/ No/ Don't know)
6. Do you think, North-eastern state Newspapers should publish local scientific issues more than big national news in the front page? (Yes/ No/ Don't know)

7. To stop cases of violence against women, what do you think are the long term/short term measures to be adopted? (Yes/ No/ Don't know)
- 8) Do you think, North-east newspapers should recruit more women as science journalists? (Yes/ No/ Don't know)
- 9) Do you think, other parts of Indian women should come more and more in North-eastern states to cater more scientific news? (Yes/ No/ Don't know)

XI. CONCLUSION

North-East needs attention not only of the ruling regimes but also of the national media. The kind of coverage which they provide to terror prone states like Jammu & Kashmir, the North easterners also expect the same kind of attention. The answer to this question lies in the womb of time. This region is marred by ethnic and cultural clashes. The authorities need to tread their path very cautiously and media, basically science communicators has a crucial role to play. Though the local media are trying its best to cover the news of their backyard but they don't have a presence in mainland India. Unless and until North-East gets the attention of national media its sordid tale will not reach the ears of the high and mighty based in Delhi. The 'Fourth Estate' is expected to voice the grievances of the teeming denizens of North-East. North-East is a part and parcel of India and it certainly can't go unreported.

REFERENCE

- [1] Menon-Sen, Kalyani and Shiva Kumar, A.K, 2001, Women in India How Free? How Equal? Report commissioned by the Office of the United Nations Resident Coordinator in India.
- [2] Socio-Economic Impact of HIV/AIDS on People Living with HIV/AIDS and Their Families., Published by the Delhi Network of Positive People, Manipur Network of People Living with HIV/AIDS, Network of Maharashtra by People Living with HIV/AIDS, PWN+. Supported by: International Labour Office, New Delhi; 2003
- [3] Baruah, Sanjib. (2002). Gulliver's Troubles: State and Militants in North-East India, Economic and Political Weekly, Vol. 37, No. 41 (Oct. 12-18, 2002), pp. 4178-4182.
- [4] Baruah, Sanjib (1999). India against itself: Assam and the Politics of Nationality, University of Pennsylvania Press, Pennsylvania.
- [5] Dutta, Nandana. (2012). Questions of Identity in Assam: Location, Migration, Hybridity, Sage Publications, Delhi.
- [6] O'Sullivan, Chris (2011).The News Media and the Resolution of Ethnic Conflict: Ready for the Next Steps? The Global Review of Ethno politics, Vol. 1, no. 2, p. 54-56.
- [7] Hussain, Monirul. (2008). Interrogating Development: State, Displacement and Popular Resistance in North-East India, Sage Publications.

- [8] Misra, Udayan. (1999). Immigration and Identity Transformation in Assam, Economic and Political Weekly, Vol. 34, No. 21.
- [9] Richardson, J.D. (2005). Framing social identities: The influence of editorial framing on reader attitudes toward affirmative action and African Americans. *Communication research*. 32(4): 503-528. Sage Publications.
- [10] Otojit Kshetrimayum, .Rethinking Women.s Power in Manipur. Unpublished Article
- [11] National Family Health Survey-II, 1998-99, Preliminary Report TNS Mode Private Limited, New Delhi and International Institute For Population Sciences, Mumbai, June 2000