

ISSN NO. 0972-9445



Emerging Trends in Development Research

Vol. 16

No. 1 & 2

2009

CONTENTS

Articles

- | | |
|--|----|
| Education, Communication and Modernity among the Dimasa of North Cachar Hills in Assam
<i>Virendra P. Singh and Phirmi Bodo</i> | 1 |
| Values in Science and Science Education
<i>Roopa Rani T. S.</i> | 19 |
| The Structure and Role of All Gauhati Students' Union
<i>Pranjal Sarma and Protim Sharma</i> | 37 |
| Female Foeticide in India: A Serious Challenge for the Society
<i>Rumi Dhar</i> | 44 |
| Insurgency, Peace and Quest for Identity: A Study of Contemporary Writing in English from India's Northeast
<i>Debashis Baruah</i> | 54 |
| Globalization and Gandhian Ideology
<i>Pankaj Kumar Singh</i> | 59 |
| Media Exposure and HIV/AIDS Awareness among the College Students in Churachandpur District of Manipur
<i>G. P. Pandey and Meenakumari Angom</i> | 66 |
| <i>Book Review</i>
Bhattacharjee J.B., 2009: Development Strategies for Barak Valley (Assam)
<i>G. P. Pandey and Charu Joshi</i> | 74 |

EMERGING TRENDS IN DEVELOPMENT RESEARCH

Editor : Virendra P. Singh
Associate Editor : Manju Singh

Editorial Advisory Board

Late Brij Raj Chauhan
Udaipur (India) (1995-2009)

Jeffery Henderson
Manchester (UK)

Kerstin Bohm
Stockholm (Sweden)

Dharam Ghail
Geneva

K. L. Sharma
Gurgaon (India)

Edward J. Jay
Oakland (USA)

Heinerich Beck
Bamberg (Germany)

S. L. Sharma
Panchkula (India)

Arvind Chauhan
Bhopal (India)

Seema Gahlaut
Athens (USA)

G. P. Pandey
Silchar (India)

Sirpa Tenhunen
Helenski (Finland)

A. Satyanarayana
Allahabad (India)

Rajesh Misra
Lucknow (India)

Parvez A. Abbasi
Surat (India)

R. Shankar
Tiruchirapalli (India)

Abha Chauhan
Jammu (India)

Prahlad Mishra
Jabalpur (India)

Book Review Editor : Roopa Rani T. S.

© 2009 Emerging Trends in Development Research

All rights reserved. No part of this publication may be reproduced, stored, transmitted or disseminated, in any form or by any means, without prior written permission from the publisher, to whom all request to reproduce copy right matters should be directed in advance. The views expressed by the authors in the articles are of their own. The ETDR bears no responsibility for the statement and opinions advanced by contributors.

Education, Communication and Modernity among the Dimasa of North Cachar Hills in Assam

**V. P. Singh
Phirmi Bodo**

Communication and education are considered important variables as they are related to the process of social change in a developing society. Communication is the process by which two or more people exchange ideas, facts, feelings or impressions in ways that each gains a common understanding of the meaning, intent and use of messages (Leagans 1961). Interpersonal communications have been striking feature of traditional communication system in tribal societies. The media of communication have accelerated the rate of growth and cultural diffusion of modernization. At both the macro and micro levels, communication is viewed as a product and reinforce of modernization. At the macro level, communication scholars aligned with this support global and national policies that facilitate “free flows” of media and information technology, content and hardware. At the micro level, they support persuasive marketing campaigns as the most efficient means to transform traditional individual and societies. Education is an institution by which society transmit its cultural traits and socialized its member for different roles. In developing societies like India education has been one of the most influential instruments of modernization (Singh 2002). The education system has contributed to modernization by the growth of new forms of rationally organized structures in the shape of schools and university, which serve cultural networks for the diffusion of knowledge and cultural categories which are modern in ethos (Singh 1986:106). In a tribal society which is passing through the process of transformation, secular education acts as an agent of modernization. Therefore, the expansion of education in tribal society can be taken as an indicator of social change. Similarly, the growth of mass media communication may also play an important role in the modernization of these societies. The, present study is an attempt to examine the interplay between education, communication and modernity in context of a tribal community of the North-East India, namely Dimasas at Maibang Town of North Cachar Hills in Assam.

The Study Area

The present study was conducted at Maibang town, the sub-division headquarter of North Cachar Hills District, Assam. Assam is the land of undulated blue hills, green forestry and mighty snow while river Brahmaputra with its innumerable tributaries situated between 90°-96° east longitude and 24°-26° north latitude, it is comparatively developed economy of North-East India. It is bounded by Arunachal Pradesh on the East and West Bengal on the West. While the North side is flanked

V. P. Singh is Professor of Sociology, Assam University, Silchar-788011, INDIA.

Phirmi Bodo is Research Scolar, Department of Sociology, Assam Univedrsity, Silchar-788011, INDIA

by Bhutan and Arunachal Pradesh and southern side there is Nagaland, Manipur, Tripura, and Meghalaya. The southernmost side is flanked by Mizoram.

The North Cachar Hills in one of the two hill district of Assam with its headquarter at Haflong situate on the Borail Hill range at an attitude of about 960 meters. Historically, North Cachar Hills was part of the Dimasa Kingdom with capital at Maibang during 16th century. The British annexed N.C.Hills in 1854. Reminiscences of the glorious past of the Dimasa King can be seen at Maibang. The district was the part of Cachar district till the formation of the united Mikir and North Cachar Hills district in 1951. In 1970 North Cachar Hills was separated and made into a fully fledged district. The North Cachar Hills is an Autonomous district under Sixth Schedule of the Indian Constitution. The district is surrounded by Manipur and part of Nagaland in the east, Meghalaya and part of Karbi Anglong district in the West, Karbi Anglong and part of the Nowgaon district in the North and Cachar district in the South. Total geographical area is 4890 Sq. K.M. Average mean maximum temperature is 24C to 26C and Average means minimum temperature is 14C to 10C. Number of villages in this district is 539. The longest river in the district is Diyung which has a total length of 170 K.M. from its source at Borail Hills down to its confluence with Kopili at Diyungmukh or Diyungbra. The source of all other rivers and rivulets like Jatinga, Jeenam, Mahur, and Langting is the Borail Hills.

North Cachar Hills District is the homeland of heterogeneous tribes and races. Besides the Dimasas, other tribes such as Hmars, Kukis, Zemi Nagas, Karbis, khasis, Jayantias, Hrangkhoh, Khelmas etc. constitute the population of North Cachar. According to the 1991 Census, Tribe-wise the population break up was Dimasas- 49,667, Zeme- 11, 469, Hmars-10,882, Kuki- 5,896, and Karbi- 6,517. According to 2001 Census, Male population constitute 98,899 and Female population is 87,290 and the total population of the district is 1,86,189. Total literature percentage in the district is 57.56%.

The people with we are primarily concerned in our present study are the Dimasas, who are the dominant tribe in North Cachar Hills. They are also found in the present Nagaon, Karbi Anglong, Dhansiri region of Nagaland and Sonitpur district of Assam. It may be stated that in the district of Cachar although they are known as 'Barman', their neighbours, call them 'Kachari' referred to as 'Dimasas', and the plains Kachari as 'Bodo' or 'Boro'. According to Sir Edward Gait, the 'Kacharis' are the aborigines, or earliest known as inhabitants of the Brahmaputra valley. He further says that in this valley, the Kacharis call themselves "Bodo" or 'Bodo-Fisa' (sons of Bodo); in the North Cachar Hills "Dimasa", a corruption of "Dima-Fisa" (sons of Big River) which was known to the Ahoms as "Timisa"

The Dimasa rulers had their capitals at Dimapur, then at Maibang, Khaspur and lastly at Haritkar in Cachar. After the assassination of the last ruler Govindachandra, his kingdom was annexed by the British in 1832. But the territory held by the Dimasa General Tularam (Tulshichandra) continued to be ruled by him till his death in 1851. However, denying the right of succession to his natural heirs Tularam's territories too were resumed by the British in 1854 and with this the last vestige of the great Dimasa kingdom came to an end.

Maibang is one of the sub-headquarter of North Cachar Hills District of Assam. Nested in the midst of the lofty hills and situated beside the turbulent Mahur River. It is 53 k.m from Haflong and is known for the remains in its vicinity of the ancient capital of the bygone Dimasa Kingdom. The region is vastly populated by the Dimasa tribe along with the other non-tribal such as Bengali, Assamese, Manipuri and Nepali. Stone House and temple of Kachari King and other ruins of the Kingdom are the main attraction of the place.

As far as education is concerned, North Cachar Hills has a good in literacy which is 68.59% out of which is 76.59% are female and the rest is male. Although, they have a good position but the school drop is phenomenal i.e. 24% warrants needs of research. There are

many educational institutions in the district. Number of primary schools are 680, Number of M.E. schools is 180, Number of High schools is 78, Number of Higher secondary is 6, Number of Colleges is 4.

Levels of Modernity

In the present study certain variables have been chosen to judge the modernity of an individual. A modern person according to the concept used in the present study, is the one who exposes himself to mass media, believes in science and technology and modern education for the well being of the mankind, believes in proper planning, and does not depend on fate, takes interest in events not only of his locality but of the world at large, is secular in outlook and tolerant towards stranger, is a member of modern social institutions and finally approves of the small family norm (Doshi, J.K 1984 : 29). In order to measure the level of modernity among the respondents over all modernity scale develops by Inkeles and Smith (1974), on the basis of their work in six developing countries was used. While retaining most of the basic scale we adapt to meet the local requirements. The scale include the following items: a) reading newspapers b) concern about public issues c) use of modern technology d) educational aspiration for the son e) qualities for holding high office f) most important thing for the progress of country g) interests in types of news. h) Whether and atheist can be a good man. i) Membership of voluntary organization j) awareness of problems facing the country k) continuity of bride price in the family.

The first items are related to the habit of reading Newspapers. Newspaper have played tremendous role in bringing about change in social outlook of the masses. The first Newspaper to be published in India was the Bengal Gazette published by an Englishman, in 1780. Newspapers have played in post independence period remarkable role taking up the issues of socio-economic importance. For the analysis of the tendency of reading Newspaper it was divided into five category: (i) Very High (Regular), (ii) High (2-3 times in a week), (iii) Medium (on holidays), (iv) Low (rarely) (v) Very low (Never). The data shows that about one third of the respondents (32%) do not spent time reading Newspaper. Whereas, one fourth (24%) of the respondents are found to be regular in reading Newspaper again a little less than one fourth (22%) of the respondents rarely read Newspaper and little more than one tenth (14%) of the respondents read Newspaper on holidays only. Thus, these findings suggest that most of the respondents have a very low degree of reading Newspaper.

In order to analyze the reading habit of Magazine by the family members of the respondents The data shows that one fifth (40%) of the respondents read Magazine by the family members of the respondents while little more than one fourth (27%) of the respondents do not read Magazine.

The second item relates to concern about public issues such as roads, price hike terrorism etc. The data reveals that half of the (56%) of the respondents are aware of the national problems while, little less than half (44%) of the respondents are not aware about national problem and do not think in this matter. For the analysis of the frequency of thinking national problems the responses were asked whether they think quite often or not. The data reveals that most of the respondents (42%) do not think about any form of national problems, while, one third (33%) of the respondents think about national problems but not so often, only one fourth (25%) of the respondents think about national problems regularly.

The third issue related to the use of modern technology for raising income rather than depending on age-old technology. There are two alternative answers to this questions, (i) If they view that some technological device can be used for the increase of production then it is considered as a modern attitude and (ii) If they viewed that the best way of production is only traditionalistic method and there is no intelligence in wasting time, than it is considered as a traditional attitude.

The data reveals that most of the respondents (67%) prefer to use modern technological device for the increase of production which is in fact a modern attitude. However, one third (33%) of the respondents think it is just wasting of time and there is no alternative but to have a traditional method for the production. Thus, it shows that most of the respondents have modern attitude towards the use of modern technology.

To analyze the attitude of the respondents about education for their children, it was asked whether they were ready to give full scope for the education. If the answer was affirmative, it is considered as modern attitude and if the answer was negative i.e., they were not ready to provide full scope for the education of their children then it is considered as traditional attitude. The data reveals that more than one third (36%) of the respondents wanted their children to educate as much as they can so that they can achieved their goal and prefer higher education. Whereas, little more than one tenth (13%) of the respondents wants their children to educate till graduation only and less than one tenth (8%) of the respondents for job purpose only. And few (7%) of the respondents want to give professional oriented courses to their children. These findings suggests that most of their parents are willing to give education at their best and do not want to set any limitation for their children in the matter of education which is in fact a modern attitude.

The fifth question was related to certain qualities which are desirable in a person to hold a high rank in office. The respondents were to decide between high educator and skill and attributes such as family background, respect for elders and popularity. Here, higher education was treated as desirable and other less desirable answers. The data shows that most of the respondents (58%) have shown modern attitude on this item that is for holding a high office a person should be highly qualified or possess some extra knowledge, while more than one third (38%) of the respondents have traditional attitude and wanted the person to be traditionalistic or well disciplined for holding a high office. And a few (1%) of the respondents wanted the person to be famous to be a high rank in office.

The sixth question was about, what was most important for the progress of a country? The alternatives were hard work by the people, good government plans, God's help and good fate. In this case, hard work and good plans of government were taken as desirable and other less desirable. The data reveals that all the respondents have modern attitude towards the progress of the country. Thus, these findings show that all the respondents have modern attitude towards the development of a country.

To show the attitude of the respondents towards the family planning whether they approve the idea of family planning or not, they were classified into two categories: (i) If the respondents is agreed with the opinion that every couple follow the rules of the family planning and keep their family small, so that they can bring up their children in a better way, then it is considered as a modern attitude and (ii) If he agrees with alternative opinion that they should not keep their family intentionally small, then it is considered as a traditional attitude. The data reveals that most of the respondents (77%) have shown modern attitude and showed an affirmative response towards the practicing family planning, while less than one fourth (23%) of the respondents have disapproved the practicing of family planning. It indicates that most of the respondents approve small family norm.

The types of news in which the respondents is interested are classified into five categories: (i) International affairs; (ii) National affairs; (iii) Only news of district and state affairs; (iv) Sports; (v) News of different festival or regional festival. In this question interest in world events and national events were taken as most desirable and rest as less desirable. The data reveals that all the respondents (100%) were greatly interested in the news of their district, while more than half (54%) of the respondents were interested in National affairs, while one fourth (25%) of the

respondents were interested in International news, and little more than one tenth (12%) of the respondents were interested in sports news and a few (7%) of the respondents were interested in news of different regional festival. Thus these findings suggest that most of the respondents have a traditional attitude and have interested in the news of their district only.

On this item the question was asked to know the opinion on an atheist, whether they considered them as a good person or not. The data reveals that most of the respondents (79%) do not considered an atheist who does not believe in the existence of god are a good person which is rather not rational attitude and is a pattern of traditional attitude, less than one fifth (17%) of the respondents have not given any comment to this point and a few (4%) of the respondents have given view that a person who does not believe in god can considered as a good person which is a modern and rational outlook. The finding suggests that most of the respondents have a traditional attitude.

In this category the respondents were asked whether they are member of any institution or club .If the respondent was the member of any voluntary association, he was considered modern. If he was not member of any voluntary association his attitude was considered as traditional. The data reveals that near to one fifth (16%) of the respondents are member of education institution, one tenth (10%) of the respondents are member of an N.G.O., less than one tenth (7%) of the respondents are member of political institution and a few (5%) of the respondents are from religious institution. Thus, it shows that most of the respondents are the member from education institution. Then the respondents were asked whether they hold any particular position in the institution or club. The data reveals that majority of the respondents (91%) of the respondents are found to be only holding a membership and a few (9%) of the respondents are found to be hold position.

To analyze the awareness of problems of the country by the respondents the responses of the subjects were divided into five categories: (i) Problems of Unemployment and Terrorism, (ii) Problem of Population and Environment pollution, (iii) Problem of Corruption and Education, (iv) Problem of Transportation, (v) Problem of inadequate Infrastructure. The data reveals that most of the respondents more or less have awareness relating to the problems of the country. The findings showed an average response relating to the various problems made by the respondents.

Marriages among the Dimasa is settled in the form of negotiation. As soon as the marriage is settled, every Dimasa girl is entitled to *Kalti*-the Bride Price in the form of rupees. Here, rupees must always be in coins and not in paper notes. It is the traditional custom which saves the clan system of their own because, if *Kalti* is not given or not accepted by the bride's party, it implies non-inclusion in the forty *Sengphong* and forty-two *Julus*. Therefore, acceptance of *Kalti* is justifies as right. The Bride price is varies from Rs. 300-500, depending upon the economic capacity of the bridegroom and also the quality of the bride. Along with the expenditure in kind such as pigs, goats, fowls, rice beer etc., will have to be offered from the groom's side for the marriage feast to be solemnized at the bride's place. However, the payment *Kalti* is now days disfavored by the educated section of the people. Speaking about the uniqueness of the system of *Kalti*, one writer has rightly observed that the problem of dowry has become a national social evil in our country, but in Dimasa society, the bride is paid a price to which is entitled to. This item on the scale was whether the Bride Price is still continuing in respondent's family, which is core feature of traditional attitude. The data reveals that all the respondent is still practiced the custom of Bride Price in the family. Thus, it indicates that all the respondents have traditional attitude towards the practicing of any custom.

To analyze the opinion on different academic problems the respondents were asked whether they find it useful or harmful. The data reveals that less than half of the respondents

(42%) found the discussion on various academic problems useful to some extent, while about one third (34%) of the respondents cannot say anything on this and more than one fifth (22%) of the respondents found such discussion very useful.

To analyze the knowledge of different parts of the world the responses were asked whether they know about Mexico country. The data indicates that most of the respondents (77%) of the respondents are not aware of other parts of the country whereas, less than one fourth (23%) of the respondents are aware of it.

Education, Mass Media Exposure and Modernity: Score on O.M. Scale

The score of the respondents on O.M. scale leads to their categorization into different level of modernity as discussed above in this paper.

Table No. 1 : Score on O.M.Scale

Level of Modernity	Frequency			Percentage
	Male	Female	Total	
Nil (0)	-	-	-	-
Very Low (1-11)	8	7	15	15.00
Low (12-22)	12	14	26	26.00
Medium (22-33)	27	25	52	52.00
High (34-44)	3	4	7	7.00
Very High (45-55)	-	-	-	-
Total	50	50	100	100.00

The data reveal that more than half of the respondents (52.00) have average level of modernity, while, little more than one fifth of the respondents (26%) have low level of modernity, about one eighth of the respondents (15%) have a low level of modernity and less than one tenth (7%) have only high level of modernity. Whereas as it was observed that no respondents were in the very low degree of modernity level. Thus, it indicates that most of the respondents have the average level of modernity. As far as the sex wise level of modernity is concerned , most of the female respondents have (52%) average level of modernity and high(42.8%) level of modernity, while, most of the male respondents (42.8%) and high (57.1%) level of modernity. Thus, it suggests that female have more average level of modernity, while male respondents have scored more high level of modernity.

Mass Media Exposure and Modernity

On the basis of mass media exposure they are classified into five categories: (i) Nil level of media exposure; (ii) Low media exposure; (iii) Medium level of exposure; (iv) High level of

media exposure. Similarly, the respondents are categorized into five level of modernity by using O.M. scale. The distribution of the respondents is shown in the table no: 2

Table No. 2 : Mass Media Exposure and Level of Modernity

Mass Media Exposure	Level of Modernity						Total
	Null	Very Low	Low	Average	High	Very High	
Null	10	5	-	-	-	-	15
Low	5	10	12	2	-	-	19
Medium	-	-	9	40	4	-	53
High	-	-	-	10	3	-	13
Total	15	15	21	52	7	-	100

The data reveals that most of the respondents i.e. more than half of the respondents (77%) have who have high mass media exposure have scored average level of modernity, while more than three fifth of the respondents (75.5%) have scored average level of modernity. Among more than half of the respondents (63.1%) who have low mass media exposure have scored low level of modernity only one-tenth of the respondents (10.5%) have scored average level of modernity and a little more than one fourth of the respondents (26.3%) have scored very low level of modernity. Among the respondents who have no mass media exposure majority of the respondents (66.7%) have scored very low level of modernity and only about one third of the respondents (33.3%) low level of modernity. Thus, it suggests that there is a positive relationship between level of mass media exposure and the level of modernity.

However, it was observed that most of the respondents have perpetuated at the average level of modernity as among the medium and high level of mass media exposure (75.5% and 77% respectively). In fact at the high level of mass media exposure only little more than one fifth of the respondents (23.1%) have high level of modernity. However, no respondents could have reach to the level of very high level of modernity. It seems that in spite of having high mass media exposure, respondents could not reach to the high or very high level of modernity, there are other factors which restrained individual to reach to that level of modernity which required proper investigation.

Education and Mass Media Exposure

In order to analyze the mass media exposure and its relation to mass media exposure, the respondents has been categorized into eight categories: (i) Illiterate; (ii) Primary; (iii)

Secondary; (iv) Higher Education, and the levels of mass media exposure is categorized into four categories: (i) Nil; (ii) Low (iii) Medium (iv) High. The distribution of the respondents is shown in the table no: 3.

Table No 3 : Education and Mass Media Exposure

Respondents Education	Level of Mass Media Exposure				Total
	Nil	Low	Medium	High	
Illiterate	14	11	-	-	25
Primary	1	7	16	1	25
Secondary	-	-	20	5	25
Graduate	-	1	16	4	21
Post-Graduate	-	-	1	3	4
Total	15	19	53	13	100

The data reveals that most of the respondents (80%) of the secondary level of education have medium level of mass media exposure and one fifth of the respondents (20%) have scored high level of mass media exposure. Among the post-graduate level of education, majority of the respondents (75%) have scored high level of modernity and one fourth of the respondents (25%) have scored medium level of modernity. Among the graduate level of education, most of the respondents (76.2%) have scored medium level of mass media exposure, near about one fifth of the respondents (19%) have scored high level of modernity and a few of the respondents (4.8%) have scored low level of mass media exposure. Among the illiterate respondents, more than half of the respondents (56%) have scored zero i.e. they do not have any mass media exposure, while the rest of the respondents (44%) have scored low level of mass media exposure. Among the primary level of education, more than half of the respondents (64%) have scored medium level of mass media exposure, a little more than one fourth of the respondents (28%) have scored low level of mass media exposure and a few of the respondents each (4%) have scored zero and high level of mass media exposure.

Thus, it suggests that there is a positive relationship between education level and the level of mass media exposure of a respondent. Those who have zero level of education have reached to low level of mass media exposure only as among the illiterate respondents, again among the post-graduated respondents have scored the most (75%) high level of mass media exposure. However, most of the level of mass media exposure is perpetuated at the medium level of mass media exposure as among the primary, secondary, and graduate respondents (64%, 80%, and 76.2% respectively). Only about one fifth of the respondents (20%) having secondary level of education and less than one fifth of the respondents (19%) have high level of mass media exposure. Only, in case of high educated respondents majority of the respondents (75%) have scored high level of mass media exposure.

Education and Modernity

Education is considered as an agent of modernization. Therefore, the relationship between the education of the respondents may throw some light on the determinants of modernity. To analyze the level of modernity it has been categorized into six categories: (i) Nil (ii) Very Low (iii)

Low (iv) Average (v) High (vi) Very High. On the basis of the respondents' education level, the categorization has been made in the following way: (i) Illiterate (ii) Primary (iii) Secondary (iv) Higher Education. The distribution of the respondents is shown in the table no. 4.

Table No 4 : Education and Modernity

Respondents' Education	Level of Modernity						Total
	Nil	Very Low	Low	Average	High	Very High	
Illiterate	-	15	10	-	-	-	25
Primary	-	-	10	15	-	-	25
Secondary	-	-	5	19	1	-	25
Graduate	-	-	1	17	3	-	21
Post-Graduate	-	-	-	1	3	-	4
Total	-	15	26	52	7	-	100

The data indicate that majority of the respondents (81%) having graduate level of education, have scored average level of modernity level, more than one tenth of the respondents (14.3%) have scored high level of modernity and a few (4.8%) have scored low level of modernity. Among the secondary level of education, most respondents (76%) have scored average level of modernity, one fifth of the respondents (20%) have scored low level of modernity and only some of the respondents (4%) have scored high level of modernity. Among the primary educated respondents more than half of the respondents (60%) have scored average level of modernity and the rest of the respondents (40%) have scored low level of modernity. Among the post-graduate level of respondents most of the respondents (75%) have scored high level of modernity and one fourth of the respondents (25%) have scored average level of modernity. However, among the illiterate respondents, more than half (60%) have scored very low level of modernity and the rest of the respondents (40%) have scored low level of modernity, nobody could have reach to average or high level of modernity.

Thus, it suggests that there is a positive relationship between education level and modernity level of an individual. Although, it has indicated that with rise in the level of education there is a probability of rising the level of modernity level but the level of modernity in most of the cases perpetuated at the medium level of modernity as among the primary, secondary, and graduate (60%,76%,81% respectively). Only few of the respondents (4%) at the secondary level and little more than one tenth of the respondents (14.3%) at the graduate level have scored high level of modernity. It suggests that although education helps to lift up the modernity level of an individual but it is not solely responsible to bring the high level of modernity .It seems there are other factors which retrained to reach up to the level of modernity which required further investigation.

Occupation and Mass Media Exposure:

In order to analyze the relationship between occupation and modernity, the respondent's occupation is categorized into six categories: (i) Housewife; (ii) Student; (iii) Unemployed person; (iv) Agriculturists/skilled worker/unskilled worker (v) Semi Professional/White Collar/Petty Businessman; and (vi); Government officer/Professional; and the level of mass media exposure is classified into four categories: i) Nill (ii) Low (iii) Medium (iv) High. The distribution of the respondents is shown in the table no. 5

Table No 5: Occupations and Mass Media Exposure

Respondent's Occupation	Level of Mass Media exposure				Total
	Nil	Low	Medium	High	
Housewife	7	7	1	-	15
Unemployed	1-	1			
Student	-	2	20	5	27
Agriculturists	5	2	-	-	7
skilled worker	-	1	3	-	4
unskilled worker	-	2	2	-	4
Semi Professional	-	-	-	-	-
White Collar	1	4	20	4	30
Petty Businessman	1	1	4	1	7
Government officer	-	-	3	-	3
Professional	-	-	2	-	2
Total	15	19	53	13	100

The data indicate that the respondents who are a government scored the most (100%) medium level of mass media exposure, among the respondents who are student more than three- fifth of the respondents (74%) have scored the medium level of mass media exposure, near to one- fifth of the respondents (18.5%) have scored high level of mass media exposure and less than one- tenth of the respondents (7.4%) have scored low level of mass media exposure. Among the white collar respondents most of the respondents (70%) have scored medium level of mass media exposure, while more than one tenth of the respondents (16.7%) have scored high level of modernity and a little more than one tenth of the respondents (13.3%) have scored low level of mass media exposure. Among the petty businessman respondents more than half of the respondents (57.1%) have scored medium level of mass media exposure and each more than one tenth of the respondents have scored zero, low and high level of mass media exposure. Among, the skilled worker respondents each half of the respondents (50%) have scored low and medium level of mass media exposure, while among the unskilled worker respondents each one-fourth of the respondents (25%) have scored zero and low level of mass media exposure and half of the respondents (50%) have scored medium level of mass media exposure. Among the housewife more than two-fifth of the respondents (46.7%) have scored nill and low level of mass media exposure and only less than one tenth of the respondents (6.7%) have scored medium level of mass media exposure. Among the agriculturist respondents, most of the respondents (71.4%) have scored zero at the level of mass media exposure and only a little more than one fourth of the respondents (28.6%) have scored low level of mass media exposure.

However, among the professional all the respondents (100%) have scored high level of mass media exposure. Thus, it suggests that there is a positive relationship between occupation and the level of modernity.

But most of the respondents have scored the medium level of mass media exposure as among the student, unskilled worker, white collar, petty businessman and government officer (74%, 50%, 70%, 57.1% and 100% respectively). Among students, only less than one-fifth of the respondents (18.5%), among white collar little more than one tenth of respondents (16.7%) and among petty businessman a little more than one tenth of the respondents (14.3%) have scored high level of mass media exposure. However, the professional respondents have high level of mass media exposure. So, it was observed that the level of mass media exposure is perpetuated mostly it seems there are more other factors to be investigated.

Occupation and Modernity

In order to analyze the relationship between occupation and modernity, the respondent's occupation is categorized into six categories: (i) Housewife; (ii) Student; (iii) Unemployed person; (iv) Agriculturists/skilled worker/unskilled worker; (v) Semi Professional/White Collar/Petty Businessman; and (vi) Government officer/Professional; and the level of modernity is classified into six categories: (i) Nil (ii) Very Low (iii) Low . (iv) Average (v) High (vi) Very High. The distribution of the respondents is shown in the table no: 6

Table No. 6: Occupations and Modernity

Respondents' Occupation	Level of Modernity						Total
	Nil	Very Low	Low	Average	High	Very High	
Housewife	-	9	5	1	-	-	15
Unemployed	-	-	1	-	-	-	1
Student	-	-	5	20	2	-	27
Agriculturists	-	5	2	-	-	-	7
skilled worker	-	1	1	2	-	-	4
unskilled worker	-	-	2	2	-	-	4
White Collar	-	-	8	20	2	-	30
Petty Businessman	-	-	2	5	-	-	7
Government officer	-	-	-	1	2	-	3
Professional	-	-	-	1	1	-	2
Total	-	15	26	52	7	-	100

The data indicate that most of the respondents (74.1%) who are student have scored medium level of mass media exposure, while near about one fifth of the respondents (18.5%) have scored low level of modernity and only less than one tenth of the respondents (7.4%) have scored high level of modernity. Among the petty businessman most of the respondents (71.4%) have scored average level of modernity, while, the rest of the respondents (28.6%) have scored low level of modernity. Among the white collar more than three fifth of the respondents (66.7%) have scored average level of modernity, while little more than one fourth of the respondent (26.7%) have scored low level of modernity and a few of them (6.7%) have scored high level of

modernity. Among the skilled worker each one fourth of the respondents (25%) have scored very low and low level of modernity and half of respondents (50%) have scored average level of modernity, while each half of skilled worker have scored very low and low level of modernity. among the professionals each half of the respondents (50%) have scored average and high level of modernity. Most of government officer respondents (66.7%) have scored high level of modernity and one third of the respondents (33.3) have scored average level of modernity. Most of the respondents among agriculturist (71.4%) have scored very low level of modernity and a little more than one fourth of the respondents have scored low level of modernity. Among housewife three fifth of the respondents (60%) have scored very low level of modernity, about one third of the respondents (33.3%) have scored low level of modernity and a few (6.7%) have scored average level of modernity. Among unemployed the respondents have scored 1% low level of modernity.

Thus, it suggests that most of the respondents have perpetuated at the average level of modernity as among the student (74.1%), petty businessman (71.4%), professional (50%), skilled worker (50%) and unskilled worker (50%) and no respondents could have reach to the level of modernity. Only a few of students (7.4%), white collar (6.7%) have scored high level of modernity but among the government officer more than half of respondents (66.7%) and professionals half of respondents (50%) could have scored high level of modernity which indicate a positive relationship between respondent's occupation and the level of modernity but it is not the sole factor which could bring the all around modernity of an individual as none of the respondents have reached to the very high level of modernity which required further investigation.

Father's Education and Mass Media Exposure

To analyses the relationship between the father's occupation of the respondents and the level of mass media exposure; the mass media exposure is categorized into four categories: (i) Nil; (ii) Low (iii) Medium; (iv) High and the level of father's occupation is categorized into four categories: (i) Illiterate (ii) Primary (iii) Secondary (iv) Higher Education. The distribution of the respondents is shown in the table no: 7.

Table No: 7 Father's Education and Mass Media Exposure

Father's Education	Level of Mass Media exposure				Total
	Nil	Low	Medium	High	
Illiterate	15	12	2	-	29
Primary	-	6	33	6	45
Secondary	-	1	13	5	19
Graduate	-	1	3	1	4
Post-Graduate	-	-	1	1	2
Total	15	19	52	13	100

The data indicates that most of the respondents (73.3%) whose father have primary level of education have scored medium level of mass medium exposure and each more than one tenth of the respondents (13.3%) have scored high and low level of mass media exposure; at the secondary level educated father, more than half of the respondents (68.4%) have scored medium level of mass media exposure, while little more than one fourth of the respondents (26.3%) have scored high level and a few of the respondents (5.3%) have scored low level of mass media exposure. Among the respondents whose father is a graduate, three fifth of the respondents (60%) have scored medium level of mass media exposure and each one fifth of the respondents have scored high and low level of mass media exposure. Among the post-graduate father, each half of the respondents (50%) have scored low and high level of mass media exposure.

Among the illiterate father, most of the respondents (51.7%) have scored zero while less than half of the respondents (41.4%) have scored low level of mass media exposure and a few of the respondents (6.9%) have scored medium level of mass media exposure.

From the data it suggests that there is a positive relationship between father's education and the level of mass media exposure as among the illiterate father, only a few respondents could have reach to the medium level only of mass media exposure, whereas, among the respondents whose father is a post-graduation have not scored below medium level of mass media exposure. But most of the respondents have perpetuated at the medium level of mass media exposure as among the respondents whose father have primary, secondary and graduation and post-graduate level of education (73.3%,68.4%,60% ,50% respectively). Only little more than one fourth of respondent's father (26.3%) at secondary level, then one fourth of the respondent's father (20%) at the graduate level and little more than one tenth of respondents (13.3%) has high level of mass media exposure. However, among the high educated father, the respondents have scored half of high level of mass media exposure. Although father's education background is helps to raise the level of modernity but this is not the only sole factor t bring the all around modernity of an individual it needs some other factor which require further investigation to find out.

Father's Education and Modernity

Education is considered as an agent of modernization. Therefore, the relationship between the educations of the respondents' father may throw some light on the determinants of modernity. To analyze the level of modernity it has been categorized into six categories: (i) Nil (ii) Very Low (iii) Low (iv) Average (v) High (vi) Very High. On the basis of the respondents' father education level, the categorization has been made in the following way: (i) Illiterate (ii) Primary (iii) Secondary (iv) Higher Education. The distribution of the respondents is shown in the table no: 8

Table No: 8 Father's Education and Modernity

Respondents Education	Level of Modernity						Total
	Nil	Very Low	Low	Average	High	Very High	
Illiterate	-	15	12	2	-	-	29
Primary	-	-	8	33	4	-	45
Secondary	-	-	5	13	1	-	19
Graduate	-	-	1	3	1	-	5
Post-Graduate	-	-	-	1	1	-	2
Total	-	15	26	52	7	-	100

The data reveals that most of the respondents (73.3%) whose father have primary education have scored medium level of modernity, then near to one fifth of the respondents (17.8%) have scored low level of modernity and less than one tenth of the respondents (8.9%) have scored high level of modernity. Among the respondents whose father have secondary level of education more than half of the respondents (68.4%) medium level of modernity, more than one fourth of the respondents (26.3%) low level of modernity and a few of the respondents (5.3%) high level of modernity. Among the respondents whose father have graduate, three fifth of the respondents (60%) have scored medium level of modernity, while each one fifth of the respondents (20%) have scored high and low level of modernity. Among the post-graduate father each half of the respondents

have scored (50%) high and medium level of modernity. Among the illiterate, nobody have high level of modernity, but most of the respondents (51.7%) have very low level of modernity, while less than half of the respondents (41.4%) have medium level of modernity and a few (6.9%) have medium level of modernity.

Thus, it suggests that there is a positive relationship between father's education level and the level of modernity, as among the illiterate, only a few (2.6%) could have reach up to average level of modernity while among the most educated father, the half of respondents have scored high level of modernity. But still most of the respondents have perpetuated at the medium level of modernity only, as among the primary, secondary and graduate (73.3%, 68.4%, and 60% respectively) level of education. In fact among the post- graduate half of the respondents also have scored medium level of modernity it needs a further investigation. There are other factor required besides education to bring the high modernity level of an individual. No respondents have able to reach to the level of very high level of modernity.

Father's Occupation and Mass Media Exposure

In order to analyze the relationship between occupation and the level of mass media exposure, the respondent's father occupation is categorized into four categories: (i) Agriculturists/skilled worker/unskilled worker; (ii) Semi Professional/White Collar/Petty Businessman ; (iii) Government officer/Professional and (iv) Retired Person; (iv) Agriculturists/skilled worker/unskilled worker; and the level of mass media exposure is classified into four categories: i) Nil (ii) Low (iii) Medium (iv) High. The distribution of the respondents is shown in the table no. 9.

Table No. 9: Father's Occupation and Mass Media Exposure

R's Father's Occupation	Level of Mass Media Exposure				Total
	Nil	Low	Medium	High	
Agriculturists	15	14	22	2	53
Skilled worker	-	1	1	-	2
Unskilled worker	-	1	-	-	1
Semi Professional	-	-	2	-	2
White Collar	-	13	7	-	20
Petty Businessman	-	-	9	2	11
Government officer	-	-	1	-	1
Professional	-	-	2	-	2
Retired Person	-	3	3	2	8
Total	15	19	53	13	100

The data indicate that most of the respondents whose father are government officer, professional and semi-professional they have scored maximum level (100%) of mass media exposure .Among the petty businessman father most of the respondents have scored (81.8%) medium level of mass media exposure and more than one tenth of the respondents (18.1%) have scored high level of mass media exposure. Among the white collar respondents more than three fifth of the respondents (65%) have scored medium level of mass media exposure and more than one third of the respondents (35%) have scored high level of mass media exposure. Among the skilled worker each half of the respondents (50%) have scored low and medium level

of mass media exposure and among skilled worker scored low level of mass media exposure. Among the retired father, each more than one third of the respondents (37.5%) have scored low and medium level of mass media exposure and one fourth of the respondents (25%) have scored high level of mass media exposure. Among the agriculturist father most of the respondents (41.5%) have scored medium level of mass media exposure, while each more than one fourth of the respondents (26.4%) have scored nil and low level of mass media exposure, only a few (3.7%) have scored high level of modernity. Thus, it suggests that there is a positive relationship between the father's occupation and level of mass media exposure.

From the above data it was observed that most of the level of mass media exposure is perpetuated at the medium level only as among the government officer (100%), professional (100%), semi-professionals (100%), agriculturists (41.4%), white collar (65%) and petty businessman (81.8%). However, each more than one third of the respondents whose father are retired have low and medium level of modernity. There are other factors which restrained an individual to lift up to the level of mass media exposure. Besides, occupation of father there are others more factors to investigate further.

Father's Occupation and Modernity

In order to analyze the relationship between occupation and modernity, the respondent's father occupation is categorized into four categories: (i) Agriculturists/skilled worker/unskilled worker; (ii) Semi Professional/White Collar/Petty Businessman; (iii) Government officer/Professional Retired Person; (iv) Agriculturists/skilled worker/unskilled worker; and the level of modernity is categorized into six categories: (i) Nil (ii) Very Low (iii) Low (iv) Average (v) High (vi) Very. The distribution of the respondents is shown in the table no. 10

Table No. 10: Father's Occupation and Modernity

R's Occupation	Level of Modernity						Total
	Nil	Very Low	Low	Average	High	Very High	
Agriculturists	-	15	16	20	2	-	53
Skilled worker	-	-	1	1	-	-	2
Unskilled worker	-	-	1	-	-	-	1
White Collar	-	-	3	15	2	-	20
Petty Businessman	-	-	2	8	1	-	11
Government officer	-	-	-	1	-	-	1
Professional	-	-	-	2	-	-	2
Retired person	-	-	3	3	2	-	8
Total	-	15	26	52	7	-	100

The data indicate that most of the respondents whose father are government officer, professional and semi-professional they have scored maximum level (100%) high modernity. Most of the respondents (75%) whose father are white collar have scored medium level of modernity, more than one tenth of the respondents (15%) have scored low level of modernity and one tenth of the respondents (10%) have scored high level of modernity. Most of respondents whose father are petty businessman (72.7%) have scored medium level of modernity, near about one fifth of the respondents (18.1%) have scored low level of modernity and less than one tenth of respondents (9.1%) have scored high level of modernity. Most of the respondents whose

father is skilled worker each half of the respondents (50%) have scored low and medium level of modernity. Among the respondents whose father is agriculturists, each more than one third of the respondents (37.7%) have scored average level of modernity, more than one fourth of the respondents (30.1%) have scored low level of modernity, more than one fifth of the respondents (28.3%) have scored very low level of modernity. among the retired father more than one third of the respondents (37.5%) have scored low and average level of modernity and one fourth of the respondents (25%) have scored high level of modernity.

Thus, it suggests that most of the respondents have perpetuated at the average level of modernity only, as among the agriculturists (37.7%), White Collar (75%), Petty Businessman (72.7%), Government officer (100%), Professional (100%), Semi Professional (100%) and Skilled Worker (50%) have scored average level of modernity. only a little of the respondents (3.7%) among the agriculturist father, one tenth of the respondents (10%) among the white collar father less than one tenth of the respondents (9.1%) among the Petty Businessman father and one fourth of the respondents (25%) among the retired father, have scored high level of modernity. however, no respondents have able to reach to the level of very high modernity level. It indicates that most of the respondents have restricted to medium level of modernity, it seems there are other factors which have restricted to raise the level of modernity which require further investigation.

Sex and Mass Media Exposure

In order to analyses the relationship between sex r and the level of mass media exposure, the gender is categorized into two categories: (i) Male; (ii) Female; and the mass media exposure has been categorized into four categories: i) Nill (ii) Low (iii) Medium (iv) High. The distribution of the respondents is shown in the table no. 11.

Table No 11: Sex and Mass Media Exposure

Sex	Level of Mass Media Exposure				Total
	Nil	Low	Medium	High	
Male	7	8	29	6	50
Female	8	11	24	7	50
Total	15	19	53	13	100

The data reveals that among the male respondents majority of the respondents (54%) have scored medium level of mass media exposure, near to one fifth of the respondents have scored low level of mass media exposure, more than one tenth of the respondents (14%) have scored zero level of mass media exposure. Among female respondents majority of the respondents (52%) have scored medium level of mass media exposure, more than one fifth of the respondents (22%) have scored low level of mass media exposure, then, near to one fifth of the respondents have scored zero level of mass media exposure and more than one tenth of the respondents (14%) have scored high level of mass media exposure. Thus, it seems that majority of the respondents whether male or female have scored medium level of exposure. Only a few have scored high level of mass media exposure (male 12%, female 14%), there is no any discrimination found in the distribution of mass media exposure of the respondents. But, most of the respondents have perpetuated at the medium

level of mass media exposure only, as among male (54%) and female (52%). In this situation it needs further investigation.

Sex and Modernity

In order to analyse the relationship between sex and the level of modernity, the gender is categorized into two categories: (i) Male; (ii) Female; and the modernity has been categorized into six categories: (i) Nil (ii) Very Low (iii) Low (iv) Average (v) High (vi) Very. The distribution of the respondents is shown in the table no. 12

Table No. 12: Sex and Modernity

Sex	Level of Modernity						Total
	Nil	Very Low	Low	Medium	High	Very High	
Male	-	7	14	25	4	-	50
Female	-	8	12	27	3	-	50
Total	-	15	26	52	7	-	100

The data reveal that among the male respondents majority of the respondents (50%) have scored medium level of mass media exposure, more than one fourth of the respondents (28%) have scored low level of mass media exposure, and more than one tenth of the respondents (14%) have scored very low level of mass media exposure and a few (8%) of the respondents have scored high level of modernity. Among female respondents majority of the respondents (54%) have scored medium level of mass media exposure, more than one fifth of the respondents (24%) have scored low level of mass media exposure, then, near to one fifth of the respondents (16%) have scored very low level of mass media exposure and a few (6%) of the respondents have scored high level of modernity. Thus, it seems that majority of the respondents whether male or female have scored medium level of exposure. Only a few have scored high level of mass media exposure (male 8%, female 6%), there is no any discrimination found in the distribution of mass media exposure of the respondents. But, most of the respondents have perpetuated at the medium level of mass media exposure only, as among male (50%) and female (54%). In this situation it needs further investigation.

The relationship between education, mass media communication and modernity may now be summarized. As far as the relationship between mass media communication and modernity is concerned there is a positive relationship at the medium level, more than half of the respondents (77%) have who have high mass media exposure scored average level of modernity, while more than three fifth of the respondents (75.5%) who have medium level of mass media exposure scored average level of modernity. As far as relationship between education and mass media exposure is concerned more than half of the illiterate respondents do not have any mass media exposure, while the rest of the respondents have only low level of mass media exposure. In case of high educated respondents (Post-Graduate) majority of the respondents have high level of mass media exposure. In the modernity level also most of the respondents have perpetuated at the medium level of modernity as among the primary, secondary and graduate level of education. As far as relationship between occupation of respondents and mass media exposure is concerned, most of the respondents have scored the medium level of mass media exposure as among the student, unskilled worker, white collar, petty businessman and government officer (74%, 50%, 70%, 57.1% and 100% respectively). Among students, only less than one fifth of the respondents (18.5%), among white collar little more than one tenth of respondents (16.7%) and among petty businessman a little more than one tenth of the respondents (14.3%) have scored high level of

mass media exposure. However, the professional respondents have high level of mass media exposure. There is a positive relationship between occupation of respondents and modernity level as most of the respondents have perpetuated at the average level of modernity as among the student (74.1%), petty businessman (71.4%), professional (50%), skilled worker (50%) and unskilled worker (50%). Only a few of students (7.4%), white collar (6.7%) have scored high level of modernity but among the government officer more than half of respondents (66.7%) and among professionals half of respondents (50%) have scored high level of modernity but it is not the sole factor which could bring the all around modernity of an individual as none of the respondents have reached to the very high level of modernity which required further investigation.

As far as occupation of father and level of mass media exposure of individual is concerned, there is a positive relationship between father's education and the level of mass media exposure as among the illiterate father, only a few respondents could have reach to the medium level only of mass media exposure, whereas, among the respondents whose father is a post-graduation have not scored below medium level of mass media exposure. It has also indicates that there is positive relationship between father's occupation and modernity level of respondents most of the level of mass media exposure is perpetuated at the medium level only as among the government officer (100%), professional (100%), semi-professionals (100%), agriculturists (41.4%), white collar (65%) and petty businessman (81.8%). But most of the respondents have perpetuated at the medium level of modernity as among the respondents whose father have primary, secondary and graduation and post-graduate level of education. As far as relationship between sex and mass media exposure and the relationship between sex and modernity is concerned, majority of the respondents whether male or female have scored medium level of exposure. Only a few have scored high level of mass media exposure there is no any discrimination found in the distribution of mass media exposure of the respondents. But, most of the respondents have perpetuated at the medium level of mass media exposure only. Although there seems to be a positive relationship between education, mass media communication and modernity, but modernity perpetuate more at the medium level. The others factors like level of education, father's education, occupation, and father's occupation have significance on the level of modernity of a person. However, it indicates that there are more others factors to be investigated. No doubt, education has always plays an important factor in not only in modernization but in the mass media exposure also however, it has shows its limitation also.

References

- Doshi, J. K. 1984: 'Communication and National Integration: A study of Hindu Muslim Relationship', *Communicator*, July and October, pp. 24-31.
- Inkeles, Alex and David M. Smith 1974: *Becoming Modern*, Cambridge Mass : Harvard University Press
- Leagans, J.P. 1961: "The communication Process", in *Extension Education in Community Development*. Directorate of Extension, Minst. Food and Agriculture, Govt. of India, pp. 362 -391
- Singh, V. P 2002: Mass Media Communication, Modernity and Social Structure, *Emerging Trends in Development Research*, vol. 9, No. 1&2, pp.3-28.
- Singh, Yogendra 1986: *Modernization of Indian Tradition*, Jaipur: Rawat Publication.

Values in Science and Science Education

Roopa Rani T. S.

Moral development theories clearly indicate the importance of focusing on values through education. The assertions made with regard to the nature of science as value-laden makes the case for value focus in science and science education at all levels. However, studies with regard to values in general, value education, values in different subject areas and values in science education are found to be limited. Educational research in values in science and science education has been both relatively recent and scarce. Nevertheless, In order to make a case for the current study and substantiate the relevance of the same, a very systematic analysis of the previous researches conducted becomes necessary. A review of related literature provides a deeper understanding of the nature, scope, and significance of the study. Keeping this in view, the present paper throws light upon the researches conducted in the area of values, value education, values in various subjects, and values in science and science education. The critical examination of the available literature in this area is presented in the form of various sections.

Traditional and New Approaches to the Study of Values

The concept of 'values' in the social sciences is often used rather loosely. It can have different meanings in different disciplines. The RCEP² (1998) report titled, 'Setting Environmental Standards' has explored a range of methods for articulating values, including recent approaches to incorporating values into decision-making procedures. The range of terms in use to describe 'values' in a general sense includes opinion, belief, attitude, value and worldview, the first three being biased towards interviewees' knowledge and understanding of '*what is*' and the last two being focused more on the moral and ethical dimension, '*what ought to be*'.

In practice, correlation of values, attitudes or norms with behaviour has generally been found to be rather weak (see for example Rundmo 1998). However, it is common to find strong correlations among related attitude and value concepts. For example, a survey was conducted (Buss & Craik 1983) to assess attitudes to changes in industrial societies (including environmental quality) and to examine implications for risk perception and societal decision-making. Attitudes and beliefs were related in predictable ways to: (i) the perceived risk associated with selected technologies, (ii) preferences for the manner in which societal decisions should be made, and (iii) a coherent set of psychological variables. Research with a focus on values alone is much less common than studies of values in the context of opinions, beliefs, and/or norms. Machamer and Douglas (1998) introduced the concept of values and explored the role they might play in science. The paper discusses the different types of value relevant to science and proposes that we need better ways to express the concept. Dealing effectively with the issue of values, including those relevant to science is seen to demand a multidisciplinary approach along with rigorous training in relevant disciplines.

The term value is said to be an enduring belief, which guides one's actions, one's attitudes and one's judgments beyond immediate goals to more ultimate goals. According to Devi (2004), a value is said to attain three levels of manifestations. Firstly it manifests as professed value of what we believe in, an operational value of what we practice and a dynamic value of what we learn from our experiences. In the current study the researcher focused only on the first manifestation of value of the teachers and their respective students. Such values, as we have seen in the previous chapter have been defined in various ways by various educationists as well as philosophers. They have also been classified differently using different criteria.

Scholars have tried to make various classifications of values as personal, social and spiritual values, though there is no unanimity with respect to boundaries between each. Personal values consist of the qualities with primary reference to oneself. Social values have a direct bearing on the human unity and togetherness. Spiritual values add a new dimension to the social and personal values. On the other hand, Mascarenhas and Justa (1989) classified values as professed values, operational values and dynamic values. They explained professed values as those, which people publicly uphold. Operational values are defined to include values, which people actually practice. They defined dynamic values as those that people learn from experience in order to adopt and renew. In yet another study Shetty (1997) identified four types of values namely, human, social, cultural and institutional values to be introduced into the educational system. In another study Bansal, (1981) listed some values that can be sought in the curriculum like Instrumental Vs. Consummatory; Immediate Vs. Deferred; Cultural Vs. Vocational; Personal Vs. Social and Child Vs. Adult.

On the basis of the available literature, a number of values can be identified which can be conveyed through the process of education. These values like spiritual, personal, social, ethical, moral, human, cultural, scientific, aesthetic, democratic, secular, political, economic, national etc. are said to have their own specific descriptions manifesting themselves in some form or context in the history of humanity. Government of India in its National Educational Policy (1986) developed a comprehensive classification of values to be conveyed through the curriculum. National Educational Policy (1986) classified all the values into three main categories namely Personal values, Social values and National values, which are mutually exclusive and all-inclusive. National Educational Policy (1986) highlighted these three as the essential and fundamental values for the purpose of education, especially at the school level.

With regard to science, it is found that science does express a wealth of *epistemic values* and inevitably incorporates *cultural values*. *Epistemic values* include controlled observation, interventive experiments, confirmation of predictions, repeatability and, statistical analysis. While the pursuit of scientific knowledge implies a certain set of characteristically "scientific" values, the relevance of other values in the practice of science are not thereby eclipsed. Moreover, science is not exempt from other social values and ethics. A person's scientific contributions will be shaped by the domain of his or her resources or values. The possibly paradoxical conclusion is that one should not eliminate personal or social values from science.

Research on Value Development

Value development or moral development is a long-term process beginning from childhood and continues through adolescent stage to the adulthood. Main developmental years of children in their moral domain, is of the school years, i.e. during the adolescent stage (Piaget, 1965; Kohlberg, 1964), therefore the schools atmosphere should be conducive to moral development. In addition, the curriculum should cater the needs of the children for their effective moral development. Some studies reveal that the school curricula that are in balance with the various

stages of moral development have positive effects on the effective moral development of the children.

In a study on 'Understanding the Adolescent' by the Mavericks learning center at Memorial Middle School based in the United States of America, researchers observed the physical, social, emotional, moral, and intellectual development of the sixth grade class. Recognizing that there is a wide range of development within a class, the study provided some basic information about adolescent development. They also presented the observations of adolescents at Memorial, and strategies for effectively teaching adolescents. Their observations with regard to moral development reveal that the adolescent goes through numerous changes during these years of transformation. They want to be independent and yet, they still have a need for guidance and a place of nurturing and acceptance. Teacher and other adults need to realize and try to understand the changes that are occurring among children of this age. Young adolescents require freedom; however they need to be assured of a sense of security in their lives. With regard to moral development in particular, this age group is beginning to develop their own views on matters of value and morality. They are slowly developing their own judgments and not relying on those of their parents or other adult figures. It is important that we realize the changes these students are going through.

The research at Memorial school posed the question "If you could change anything you want, what would it be?" to some of the students on the team. Almost all of their answers fit somewhere within stage 2 or 3. Although many of the things they'd change would benefit them, there seemed to be some "popular ideas" that would benefit or be liked by other students as well.

The analysis of their study revealed that the Maverick's curriculum balances between the concrete operational stage and the formal operations stage as propounded by Piaget. While math and science tend to weigh heavily on the first stage, language arts, reading, and social studies require abstract reasoning. Aspects of the formal operations stage were evident throughout Memorial. For example, emphasis on serving creates a socio-centrism that helps students mature. Other characteristics, considered more negative, are evident in the students who verbally rebel against authority and those who act "stupid" in order to conform.

The Kohlberg "moral development" theory holds that several levels of moral development exist in mankind in all cultures (Kohlberg, 1973). A student's response to a teacher's questions indicates the student's level of moral development. The teacher then constructs and presents to the student dilemmas that should lead the student to a higher level. This demands a complicated teaching strategy in order to be effective and seems to lend itself to smaller classes with young students, who may be more ready to move from one moral developmental stage to another. Beyer (1976) has provided an enriching description of how to use the Kohlberg hierarchy. Although the experiences relate to the elementary school, the basic approach and the classroom organization seem adaptable to a university classroom. A convincing example of how to use it with an environmental problem was presented by Miles (1976). However, Piburn (1976) suggested that incorporating values education in biology classroom may have major obstacles: only 10% of adults operate at the highest moral level. Piburn's informal studies have shown that science students reason morally at lower levels than students in the humanities. He has also discussed the application of Kohlberg's thinking in developing values education in the classroom adapted from the social sciences, while Lockwood (1978) reviewed the effects of moral development curricula and value clarification on students.

It can be observed that one of the persistent legacies from 1960s is a concern with values and ethics. Though the literature is available on the successes and failures, hopes and dreams of teaching about values and valuing, this concern is manifest in elementary schools, is present to a lesser extent in secondary schools (Collie 1979), and is almost absent in the

universities and colleges. Review reveals similar observations also at the secondary level of school education, both in India and abroad. There is a dire need to address this gap.

Studies on Value Education

The literature on values or value education, in India or elsewhere is very limited. Moreover, literature on value aspect in education is limited to subjects like languages, social sciences etc. However, the importance of values in education and value education has not been undermined anywhere in the world. Many studies have been conducted on different aspects of “values/ value education” in India, since independence. Venkataiah and Sandhya (2002) cited a study by Pandya, who studied the place of philosophical and practical values in education. He suggested for a reorganization of the system of education with certain basic values for restoring harmony and poise into human life and society. Seshadri (1984) concluded, “In its full range of meaning, value education includes developing the appropriate sensibilities like moral, aesthetic, cultural and spiritual. The ability to make proper judgments and choose among the competing values, internalize values and realize them in one’s life. It thus spans the entire domain of learning – the cognitive, affective and the psychomotor and includes knowledge, understanding and appreciation of our cultural, moral, aesthetic and spiritual values, education of the emotions and the training of the heart and the development of the character”.

Gupta (2000) explains that the value education is wider, practicable and adaptable than religious education or moral education, as no specific faith or religion is reflected through ethical, moral, social, cultural or spiritual values. This would mean that value education is instruction in the entire realm of values – physical, emotional, intellectual, imaginative, aesthetic, and democratic, scientific, social, moral and spiritual for any individual. Bhat (1996) elaborated the concept of value education relevant to elementary, secondary, college and university levels, with an objective of the development of an individual, character-building and upholding the human dignity and self-respect.

In India, few studies were conducted with regard to the various aspects of values of the curriculum and relevant syllabi for schools, colleges and teacher education. Various textbooks have been analysed for the presence or absence of value components. These studies have made suggestions to incorporate more of value components in all school subjects.

Studies on textbook analysis for the presence of value components have been conducted on various subjects like languages and social sciences during the past few decades. Haq (1973), in his analysis of Hindi, History, Civics and English textbooks found neither a systematic pattern nor any consistency in the presentation of values. The mental maturity of the students was not taken into account. He also found that the language textbooks of IX, X and XI classes were written entirely from a literary point of view and value components did not find sufficient place. Chaudhari (1985) and Chaudhari (1986) analysed Hindi textbooks of the primary classes. They found that values like scientific outlook, justice, simple living and duty consciousness were given the least importance in the textbooks upto VII standard. While comparing the NCERT textbooks and the books published by the State Corporation in this area, they found that values like courage and adventure were emphasized in NCERT books. Patriotism was significantly represented in the other textbooks. In another textbook analysis, Rajagopal (1989), studied value awareness and value orientation of XII standard students in Tamil textbooks. He compared the value awareness of government school students with management and missionary school students. He found that the former stood better in value awareness than the latter. He also found that value awareness of the students was greater in poetry than in the prose portion of the textbook. In a similar study on value perceptions of students, Bhargavi (1990) found that IX standard boys

identified more democratic values than girls in English prose. Girls identified more social values than boys. Boys and girls both identified religious, personal and aesthetic values equally well level in English prose.

The review of the studies on textbook analysis in the area of values reveals that insignificant consideration is given to looking at value aspects in science. There are few studies on science textbook analysis in India. Many of these studies have been conducted by NCERT. Studies where students identified relevant values in science or science textbooks are almost absent.

Some studies focused on the orientation of teachers as it has a significant impact on the way they set out to impart value education. In addition, the responsibility to develop right value systems to the students necessitates on the part of the teachers to use various teaching strategies that facilitate the process of value development. As the values of the students are affected deeply through the relationship with the teachers, they should embody the requisite values and serve as models whose qualities inspire emulation to the students. Joshi (1983) points out that the secret of teaching values is to inspire and kindle the quest among the students by means of one's own example of character and mastery of knowledge. It is by embodying the values within ourselves that we can really radiate values to our students. Teachers are continually placed in the position of decision-making, sometimes split-second, sometimes pre-planned- about a particular class. These concern, for example, with the content to be taught, the pedagogical strategies employed, the disciplinary organization of the class, and so on (Bishop, 2000). He contends that more knowledge teachers of science, mathematics or any other subject for that matter have about the values they are teaching, the better informed will be their judgments. Sandhya (1999) conducted an evaluative study on value education provided at the tenth standard level in Mysore district on a sample of 191 teachers teaching tenth standard. The study found that theoretical, social and economic values are predominant among the teachers in that order, followed by political, aesthetic and moral values. The theoretical value occupies the highest place among the values maintained by the teachers. Secondly, comparison between men and women revealed that they did not significantly differ in all the above-mentioned value categories. In other words, gender has no influence on the values maintained by the teachers. Thirdly, the urban and the rural schoolteachers differed significantly in their moral and economic values. The urban schoolteachers are having higher moral and economic values than the rural schoolteachers. Hence, the location of the schools influences teachers' values. Fourthly, the type of management, private and government influences teachers' values especially their social and theoretical values. The study also revealed that the teachers of boys' school were having higher moral, theoretical, political and economic values. The co-education schoolteachers were having lower religious, theoretical and economic values than the teachers of boy's schools. Hence the type of schools influences teachers' values. The level of education of the teachers had no influence on their values. The values of teachers were not influenced by their length of teaching experience. This study provides a lead for further research in terms of teachers' values and categorization of values.

Usha Sri (1995) presents details of series of studies taken up by her in teaching value education to B. Ed trainees. The activities included, teacher trainees' perceptions of their values system, their self-concept in relation to their values, trainees identifying the values that would be inculcated through various co-curricular activities, participation in seminars, analysis of subject textbooks to identify values depicted through the lessons, etc. It can be seen that the studies conducted on values in education varies widely in its focus from value inculcation among children, teaching experiences to teachers' perception of values. But, the aims of education and value inculcation can be realised only when they are reflected in each and every subject discipline that

forms the part of the school curriculum. Whenever inculcating values through school subjects becomes a topic of discussion, the subjects those mainly come to one's mind probably are languages and social sciences. These are considered to be appropriate platforms to focus on values through the teaching-learning process of the same. The conventional views about mathematics and science being value-free and not forming right platform for the focus on values have now subsided. Recent researches conducted all over the world have now shifted focus on looking at values in mathematics and science education. However, review confirms that the attempts made to study the value aspect of mathematics and science education is limited. Moreover, in the field of science education is negligible.

Values in Mathematics Education

Mathematics is considered to be closely related to Science. It was also viewed as a value-free subject very similar to science. This relationship compels one to examine the studies conducted in the area of values in mathematics education. Despite that mathematics has been viewed to be neutral and value-free, and that mathematics in school should likewise be taught in a neutral way, a number of authors like Bishop (1988) and Ernest (1991), have remarked on the significance of values in mathematics curriculum.

The recent developments in research on enculturation Bishop's (1988), research with aboriginal students by Harris's (1991), and researches on ethnomathematics by Powell and Frankenstein's (1997) have brought the issue of values into greater focus. Number of studies have been recently conducted in the area of values in mathematics education, recognizing the importance of different sets of values that are found to be portrayed in mathematics classrooms, textbooks etc. This is mainly because school mathematics is intimately linked to the society in which it is taught. Whether we are preparing students for meaningful life in the society or for productive contribution in the workplace, relevant societal values are involved. In the book on enculturation by Bishop (1988), there is a chapter on the values underlying western mathematics. In another study Clarkson (1991) discussed issues of values embedded in different cultures and their implications for mathematics learning.

Though the notion of school mathematics as value-laden was increasingly recognized, a comprehensive review of the affective research literature by McLeod (1992) failed to find any research focussed on values. The tone of his discussion however made it clear that ideas about both beliefs and attitudes towards mathematics do relate to the deeply held values of both teachers and students.

However, Seah and Bishop (2002) showed that there is little explicit discussion with respect values in the classroom. They further found minimal effort by teachers in relating values, mathematics and society. Further they suggest how connections amongst values, mathematics and society may be made. This relationship amongst values, mathematics and society has also been found to be the source of cognitive dissonance amongst immigrant teachers of mathematics in Victoria (Seah, 2002). Even though (or perhaps because) the immigrant teachers were experienced teachers of mathematics in their respective home countries, their respective socialisation experiences in the Australian mathematics classroom are not short of value differences. Although the mathematical aspect of the teaching content is similar across the home countries and Australia, these teachers encounter value differences which are grounded in the ways with which mathematics as a discipline is perceived in Australia, and with which pedagogies differ (e.g. teacher-centred versus student-centred teaching). The role of the society in shaping these different perceptions of values and practice is evident.

In course of exploring values in mathematics, Bishop (1996) identified three categories of values of interest – the general educational, mathematical, and specifically mathematics educational. He found that together, these values were portrayed through the operating functions of teachers, textbooks, syllabi, etc. Beyond mathematics classrooms, values are said to be situated

in increasingly higher contexts of personal, institutional, epistemological, and societal values. These are usually accompanied by a range of (more implicit) peripheral values, which include the implicit message portrayed by for example, the teachers' dressing (Neuman, 1997), textbooks' physical design etc. Beyond mathematics classroom, values are situated in increasingly larger contexts of personal, institutional, epistemological and societal values. Eckermann (1994) in his study has attributed similar factors to influence the teachers' teaching philosophies. Similar categories of values have been discussed with reference to science education variously as 'epistemological and supporting values' (Tan, 1997) and 'Values of science and research ethics' (Allchin, 1999).

In the area of textbook analysis for values, Fauvel's (1991) analysis reveals that values were consciously and actively built into the text through skillful incorporation of such techniques as teaching through dialogue, adopting a didactic catechism style, and reflecting on the links between the historical past and the current methods and instruments. A study conducted by Seah and Bishop (2000) revealed that, mathematical and mathematics educational values are viewed as being influenced by and acting on different socio-cultural levels of values. The data compiled from the content analysis revealed an unbalanced portrayal of various values.

While some learning outcomes on values are explicitly taught by teachers or represented in textbooks, (e.g. valuing mathematics as an important school subject, or appreciating logical reasoning and proof as a specific kind of argumentation) other values are only implicitly taught and remain rather hidden, imbedded in classroom practices. It is obvious that, students learn different values from different teachers' practices and that these values impact on students' engagement with school mathematics and with their mathematical activities. Though, values were not the focus of the Learner's Perspective Study by Keitel, (2003), but during data collection, it emerged in some of the interviews in which students commented on the video of the past lesson. The results of this study showed that the explication of values, however, could contribute to the interpretation of classroom practices and outcomes. Values were gained by side-remarks that some students either started with when commenting on the lesson or deliberately used to interrupt their other comments. These parts of interviews reveal personal and collective values developed in classroom practice. In particular, they show a common, but diverse struggle to make sense of mathematics and relate mathematics to problems of assessment and achievement. They demonstrate that the "same" teacher's script is very differently understood and experienced by students, and that there are also commonalities and differences in inventing ways for living with their struggles.

As a part of the Values and Mathematics Project (VAMP), in order to find out whether mathematics teachers are able to actually focus on values explicitly in the mathematics classrooms, Clarkson, Seah, Bishop and FitzSimons (2000) collected data from classroom observations emphasizing on working with eight volunteer teachers to clarify the relationships between their intended and implemented values. Throughout the process the teachers were encouraged to identify the role that values teaching plays in their classrooms, and how they were implementing those. Data were collected through videotapes, field notes taken by the researcher during the classroom observation and a follow-up interview conducted with each teacher. In analyzing as case studies the teaching of eight teachers, they categorized whether teachers did, or did not, nominate the values that were subsequently observed (or sometimes not observed). Where teachers were observed to teach the nominated values, a conscious decision by the teacher could have been made to address them explicitly (e. g., "today we are going to focus on co-operation..."), or implicitly (e. g., by rewarding co-operative behaviour without mentioning it explicitly). More interesting finding from the study was that values were not nominated by teachers but subsequently observed. Transcript of the data revealed that sometimes teachers

were aware of the underlying values but, to the extent that they had internalized them, they had not considered them worthy of mention.

Researches on Values in Science and Science Education

Values in Science and Technology

Many traditional scientists and researchers consider scientific study a "value-free" practice of investigating fact through objective measurement and impartial use of scientific method. Our educational systems are largely to blame for this feeling of science, and with most scientists not seeking a public voice, they themselves don't give public a chance to better understand the values and social impact of science. Science, too, like all other subjects is a value system, perhaps a more extensive one than scientists themselves acknowledge.

In *Science and Human Values*, Bronowski (1956) shows the values foundations from which science grows, and describes its essential quest to help humanity. In a statement appearing to contradict a humanist position, he asserts science has succeeded because "man masters nature not by force but by understanding." The values of science derive not from its thoughtful members or from tradition, but from its very practice, which is the "creation of concepts and their exploration in the facts."

Bronowski identifies several key values constructs found throughout science in history and practice. In particular he identified truth, honesty, respect for human dignity, trust, creativity, independence, sharing, and love of natural beauty and order as values apparent in scientific practice. Underlying this practice, he claims "first, comes independence in observation and then in thought, independence, originality, and then dissent."

Values, Moral Issues and Social Issues in Science Education

Science educators have not addressed adequately the issue of values in science in the past. Poole (1995) made one of the huge contributions to the knowledge on values in science. However, there were few studies conducted, which focused on some aspects of values in science.

Zeidler and Schafer (1984) examined how science content knowledge, moral reasoning ability, attitudes, and past experiences mediate the formation of moral judgments on environmental dilemmas. The study was conducted on environmental science majors and non-science majors of college age. It showed that science majors did not reason at higher levels than non-science majors on a scale called the general measure of moral reasoning (DIT³), and therefore likely did not possess superior moral reasoning abilities. They however, did exhibit higher levels of moral reasoning than non-science majors in responding to non-technical environmental issues (EIT⁴). Associated with those higher reasoning levels, science majors exhibited more positive attitudes towards the environment and a greater commitment to and comprehension of ecology than did the non-science majors. The results suggested that the reasoning used in resolving science-oriented moral dilemmas depends not only on general reasoning ability but also on attitudes, commitments, and comprehension. The researchers suggest that the Science teachers therefore should endeavor not only to help students to acquire a meaningful understanding of subject matter, but should also strive to help them to develop positive attitudes, a care and concern for science-oriented social issues, and a commitment to the resolution of actual issues.

Any concern with values in the classroom is not a substitution for facts and concepts or scholarly orientation towards a subject. Unfortunately, some educators concerned with values at elementary and secondary levels have fallen victim to the indefensible stance of emphasizing valuing and teaching of values at the expense of teaching a subject. In fact, at least one study involving valuing (Dispoto, 1977) at the university level clearly indicated that students better

informed about environmental problems are more likely to be environmentally more active. Humanities majors and science majors are equally concerned about the environment, but science majors do know more about it and do more about the problem. Environmental knowledge is the most powerful predictor of environmental activity and hence of valuing because action demands choice.

Values, Moral Issues and Social Issues in Science Curriculum

Science education continues to undergo a critical examination in all the aspects. Science education has, traditionally, been associated with a formal academic type of schooling, with an intention to produce future scientists, a number of articles and reviews have critically questioned whether this is sufficient for the needs of both society and the citizens who are part of that society (Millar & Osborne, 1998).

A report in England and Wales, *Beyond 2000: Science Education for the Future* (Millar & Osborne, 1998), concluded that the National Curriculum for England and Wales had failed to meet the needs of contemporary society, much less anticipated the needs of future society. The authors acknowledged that 'the changing curricular position of science has not been accompanied by corresponding change in the *content* of the science curriculum . . . This has remained fundamentally unaltered and is, essentially, a diluted form of the previous curriculum of 1960'. The report goes on to give ten recommendations, which include that there should be more emphasis on technology and the applications of science; greater attention should be given to the social processes used to generate, test and scrutinize knowledge claims; teachers should employ a wider range of teaching and learning approaches, including the use of case studies of historical and current issues; new and broader approaches to assessment should be devised and implemented in order to focus attention on the more important aspects of learning. However, as Hodson (2003) points out, "Throughout the document, the case for the importance of scientific literacy (largely defined in terms of conceptual and methodological knowledge, with some socio-cultural dimensions) is strongly and repeatedly made, thus reinforcing the view of some critics that this is yet another attempt to rescue a conventional science education in crisis rather than a commitment to radically reshape the nature and purpose of the curriculum."

Hodson (2003) examining the science curriculum from a Canadian perspective, with an objective of dealing with issues of global concern, stated, referring to a Canadian curriculum report in largely positive terms, "it is interesting and extremely disappointing that a document purporting to be action-oriented does not include preparation for sociopolitical action by students in its definition of scientific capability". Hodson suggested necessary changes to the science curriculum in terms of gearing it to the socio-political action, which equips "students with the capacity and commitment to take appropriate, responsible and effective action on matters of social, economic, environmental and moral-ethical concern". This view is also shared by researchers like Roth and Desautels (2002). Finally Hudsons comments that traditionally, science education has dealt with established and secure knowledge, while contested knowledge, multiple solutions, controversy values and ethics have been excluded.

Aikenhead (2003), in his review of research on humanistic perspectives in science curricula, concludes that students do positively respond to and can learn usefully from humanistic science curricula but appropriate contexts and atmosphere has to be generated for this to happen. He observes that relevant contexts alone do not ensure more learning of science but more explicit value instructions and the assessment regarding humanistic content, the better the learning, but the greater the challenge to teachers and teaching. In his discussion of the implications of the research, he remains concerned over the fundamental dilemma whether science courses should serve humanistic ends or whether they should continue to focus more

on the knowledge aspects of science. Aikenhead suggests an amalgamation of the educational and scientific goals (focus on both values and content of science) to ensure that real progress.

On the one hand there is a debate about the future purpose of science education and whether it should be viewed largely in terms of creating a suitably trained workforce, or a critical thinking citizen. On the other hand, there is a continuing examination of what learning and teaching strategies are considered to be effective. However, while there appears to be some common themes relating to pedagogy emerging from the literature, it is important to recognise that classrooms and schools are complex environments each of which can be very different, in terms of social mix, general ability, teacher understanding, attitude and values, school ethos etc. The unique combination of these factors can make use of prescriptive pedagogies unreliable. The approach adopted has to be appropriate to the unique environment of each classroom and the aptitudes of the teachers and students in that classroom. It is also the case that the pedagogies employed will be largely determined by the nature of the curriculum proposed.

Values, Moral Issues and Social Issues in Science Textbooks

A number of leading scientists and science educators have identified a need for greater emphasis on social issues and for greater social awareness in high school science. The textbook has been identified as 'the curriculum' in science courses (Stake & Easley, 1978), so it is primarily to the textbooks that we must look for indicators of change. In America, the reform curricula of the late 1950s and the early 1960s, represented in biology by the Biological Sciences Curriculum Study (BSCS), have been criticized for failing to increase student interest in science (Welch, 1979), for giving too little attention to personal and social issues (Hurd, Bybee, Kahle, & Yager, 1980), and for omitting interdisciplinary and transdisciplinary problems (Dede & Hardin, 1973).

Analysing six state-adopted high school biology textbooks for the presence of twenty-five bioethical issues, Boshmann, Hendrix, and Mertens (1978) found that, the issues that are treated most often by all textbooks are those that have been with us for some time. Among those are population, food and famine, pollution, and energy. The newer, more controversial issues such as abortion, family planning, genetic screening and counseling, and recombinant DNA, which represent more complex ethical and moral questions for all. But most of the textbook authors have shied away from these issues. They found that the text books did not sufficiently focus on moral and ethical issues in biology that are very necessary for the students to learn and understand.

In another study, Levin and Lindbeck (1979) analysed the treatment of eleven moral and social issues in five biology textbooks. The specific criteria included under each issue or problem were identified in the literature of science and science education and validated as to appropriateness by several college biology teachers from different institutions. They concluded that, "textbooks differ considerably in their treatment of controversial issues and problems". Consequently, teachers cannot depend solely on textbooks as sources for the study of social issues, but must enrich the curriculum in this area on their own initiative.

In a similar but elaborate work of Rosenthal (1984), she analysed twenty biology textbooks published over twenty years before 1984, for twelve categories of social and moral issues in the textbooks. She found that although increasing attention has been given in recent years to bioethical issues and to the importance of bringing these issues into high school biology (Kieffer, 1979, Stahl, 1979), in these biology textbooks, ethical questions have been raised or implied in connection with only a few topics (destruction of wildlife, control of human genetics, racial superiority, care of terminally ill, distribution of food, and control of human behaviour). Even the most recent textbooks gave little recognition of the ethical implications of biological problems and discoveries. It was found that even when the textbooks did include material related to social

and moral issues, almost no explicit recognition was given to the controversial nature. Similar observations were found in some studies on primary school biology textbooks conducted by NCERT (1996, 1999).

Some biologists argue that they already have incorporated value education in biology course. Franke (1980) opines that the teaching and learning allegedly accomplished in the name of values education are inadequate. Merely mentioning in the classroom contemporary issues in the textbooks does not serve the purpose. The classrooms that are vaguely related to basic biological facts and concepts don't lead the student into valuing experience related to the facts and concepts. Franke (1980) analysed some of the introductory biology textbooks of New York schools on such issues. He found that the 1979-edition biology textbooks stress biology as an objective study, that at best produces fast approximating truth thus forcing the introductory biology student to learn that biology is not necessarily value-oriented. Accordingly, out of the seven textbooks reviewed, except two textbooks (*Contemporary Biology* by Clark, 1979 and *Biology* by Curtis, 1979), which contain several chapters that could be adapted to value discussions, all other textbooks lend little support to the teacher attempting to use the written material in the classroom in teaching of values. Example, *Inquiry into Life* by Mader, (1979), and *Biology* by Arms and Camp, (1979), touches value issues and valuing only in one chapter each, which deals with contemporary environmental problems. Only a skillful teacher could use these areas in both books in a value-oriented session in the classroom. It can be seen that the failure of many biology textbooks to deal with values efficiently is in a stark contrast to the opinions of Harmin, Kirschenbaum, and Simon (1970). They stated, "We have argued for an approach to science teaching that would focus upon values. We have witnessed scientists with too little sense of responsibility for their art and craft too long. It seems incomprehensible to us that science teaching should remain so stubbornly value-free. Just the opposite is needed if science is to help us survive! We need science with responsibility. We need science with a willingness to grapple with the complexities of social issues. Science cannot afford the luxury of business as usual in this day and age". Although the quality of treatment of moral and social values varies from place to place and textbook to textbook, in general the treatment of science and society in high school biology textbooks minimizes the controversial aspects, avoids questions of ethics and values, lacks a global perspective, and neglects the interdisciplinary nature of problems.

As seen above, most of the studies conducted on the issue of values mainly cover biology portion of science. Studies looking at values in other branches of science like physics and chemistry are almost negligible. However, there are a few studies concerning the values manifested in the goals and objectives of science curriculum (not demarcated as physics, chemistry, biology etc) in general and textbooks in particular. In fact, as Harms and Yager (1981) put it, 'science textbooks are widely used in science courses, thus they convey a great deal of the scientific information that the students receive. They also influence how students perceive the scientific enterprise'. Hence, it is necessary that the science textbooks are effectively evaluated and analysed. Few studies, which attempted to analyse the textbooks in science, did not include the value dimension. For example, Mukhopadhyay (1983) on the basis of the content analysis of science textbooks developed an achievement test to measure students' achievement at the primary level. The analysis did not take into account the value aspects of science.

Ramanathan and Siddique (1994) analysed NCERT science textbooks of upper primary level for their representation of scientific concepts and found that the textbooks gave maximum importance to facts and little or no emphasis to the thought process that operate in science or interaction of science, technology and society. NCERT (2000a) content analyzed Class IX and X science textbooks. It concluded that the textbooks for both the classes were 'heavily loaded with the knowledge aspect which makes the student develop conception of science as a body of

facts and truths which are immutable and absolute, as against tentative, probabilistic, humanistic and holistic nature of science'. Such studies hardly go beyond the content to look into values as embedded in the science education.

There are two relevant studies on curriculum and textbooks, conducted by NCERT. The first is on Fundamental Duties and Value Orientation in NCERT Curriculum and Textbooks (NCERT, 1999). It is a detailed study of NCERT's curriculum and textbooks in science, social studies (history, civics and geography), environmental studies (social studies and science) and hindi on coverage of fundamental duties. The report mentioned that the contents of the books were directly related to the Article 51A (h) of the Constitution of India, which deals with development of scientific temper, humanism, etc., and Article 51A (g), which deals with development of sense of protection and improvement of natural environment including forests, lakes, rivers, wild life and to have compassion for living creatures etc. It also found that the science textbooks provided coverage to the above values. The second study is by Joneja (2001), a project on Education in Human Values: An Analysis of Science Textbooks. This study was aimed at analysing the upper primary science textbooks to determine the values emphasized in them. The results indicated that the science textbooks prepared by NCERT for the upper primary stage reflected the values expected to be represented in the textbooks according to the National Curriculum for Elementary and Secondary Education – A Framework (1988). These values include, *curiosity, creativity, objectivity, honesty, equality of sexes*, etc. It was also found that the emphasis on different values varied and it depended upon the nature of the content and topic. There have not been many attempts in analysing science textbooks in other countries. Many other studies have been done involving analysis of school level science texts but they are rarely focused on value aspects of science education.

Values, Moral Issues and Social Issues in Science Classrooms and Science Teaching-Learning Process

As said earlier, a commonly held view, of science as amoral in nature, explains the paucity of studies exploring the role of values in science education, whereas, there exists a vast body of literature on the role of values in social sciences and language. But these studies do not have much bearing on the present field of inquiry. At best the studies on mathematics can be helpful in ascertaining the role of values in science education. However, a few studies have been undertaken on some of the related fields on values in science education. Though not directly related, is seen to have some indirect bearing on the present study are reviewed below.

Some scholars have attempted to identify the values present in science. Abruscato (1972) identified seven values as *truth, freedom, skepticism and originality, order and communication*. In an attempt to locate the values in science and deliberating on the liberal education values of science, Kline (1975) used one word '*rationalism*' to stand for all values such as *critical attitude; independence of mind; open-mindedness, a reasoned approach to problems; willingness to look at the facts either as a test of beliefs or as support for beliefs; and a sympathy for strange ideas*. According to Fox (1966), the values that categorize the enterprise of science are: *Longing to know and understand; Questioning of things; Search for data and their meaning; Demand for verification; Respect for logic; Consideration of premises; and Consideration of consequences*. According to Brown and Brown (1972) "*scientific values*" may be perceived in terms of the norms of the society, or in terms of certain characteristics of the persons involved. However, it was found that they are perceived or expressed, explicitly in the doctrines of scientific method or implicitly in the everyday behaviour of men of science; scientific values, as such are deeply rooted and therefore, profoundly influential in an individual's decisions on both small and grand scales. Such studies show that the science as

a subject is not value free. Bronowski (1956) takes a romantic view of the discipline, arguing that the values of science are pure and desirable, and should be transmitted to the general public.

In fact the people involved in science like scientists, science teachers and others are said to possess their own personal value structures related to science, which get directly or indirectly transmitted to the people they work with. Handley and Bledsoe (1968), found that while science-apt students acquire the values of scientists, the teachers whom they identify as influential have values different from other teachers and from the students themselves. Rothman (1973), through his study reported that student achievement is more closely related to the personalities and the value systems of Harvard Project physics teachers than any other key factor, such as teacher's knowledge, education, or experience.

There are also a few attempts to study the personalities of persons involved in science with regard to the values they have acquired and in order to understand values in science. With a view to delineate of scientists' personal value structures, Brown and Brown (1972) prepared a 'scientific values semantic differential instrument' which included a set of ten value concepts selected as relevant to the domain of science. For this, scientists with various specializations were interviewed on their value-perceptions, responses were analysed to derive common value concepts. These value concepts were *cause and effect, commitment and persistent, creativity, curiosity, experimental verification, integrity, intellectual and personal honesty, objectivity, open-mindedness and skepticism*. In a study on scientists, Roe (1961) pointed out some distinctive values, which the scientists possess like, independence, self-sufficiency, high autonomy and dominance, preference to resolve disorder, high tolerance for ambiguity, strong egos, valuing interpersonal relationships, ungregarious, asocial, disliking emotionality, valuing risks involving nature but not people etc. The profile of scientific personality presented in Roe's (1961) study gets support from the findings of Rokeach's (1973) survey on values of science teachers as compared to the general public. Terminal values of science teachers reported in the study were an exciting life, a sense of accomplishment, world of beauty, freedom, inner harmony, nature love, self-respect and wisdom. The instrumental values included capability, imaginativeness, independence, intellect and logic. Welch (1973) reported similar results on values of science teachers. According to Vaidya and McIntyre (1998), the human dimension of science might be best understood by a study of men and women in science, whose lives exemplified qualities that contributed to their special role in scientific enterprise. They also emphasise the role of teachers in imparting such values to the children. These studies insist that the teachers need to develop in their students an awareness of safety issues in the science classroom, the laboratory and fieldwork. Equipment and chemicals must be managed safely and confidently for students to conduct science investigations. Teachers need to raise issues of ethics and values related to the care of animals, resources and the environment, so that their students become responsible practitioners of science.

Though the studies of these kinds are very interesting they are mostly theoretical analyses with little empirical support. There is evidence that students do acquire the values of scientists and science teachers but there are no studies on what values the teachers intend to transmit and what are actually acquired by the students (Handley & Bledsoe, 1968; Rothman, 1973).

Emphasizing the need to orient pre-service teachers regarding how values can be transmitted during the teaching-learning process, Vanaja (2003) conducted a study on 65 student-teachers, who opted for physical sciences as one of their methods of teaching, in order to assess the extent to which the student-teachers were oriented towards imparting values through science education. Student-teachers were first exposed to a comprehensive orientation to value-based education and were also provided with a list of values and sample lessons. Assessment was

done on the basis of their internship lessons. It was found that student-teachers, as a result of such orientation, incorporated values in at least three lessons during their internship, started showing interest in value-based education, expressed their willingness to implement value-based teaching in other subjects and even to propagate the concept of value-based education. This study shows the importance of orienting the student-teachers towards imparting value to their students in the process of teaching and how this could be done in science education. Teachers so oriented are more likely to focus on imparting values to their students in the process of teaching learning. An important aspect to be noted here when we talk of imparting values is that values teaching is not an inculcation of an instructor's values in his or her students. Because it involves constructing situations in which students are led to see alternatives more clearly and are allowed to make choices based on a rationale, most traditional approaches to teaching values may not be very useful. Such approaches include inspiration by a moving or emotional demonstration, suggestions that certain rules and regulations are the criteria to be followed because they are right, presentation of cultural or religious dogma as unquestionably wise, or appealing to the conscience through guilt (Raths et al., 1966). It is therefore necessary to check what kind of methodology any teacher is using to transmit values to the students and also whether that is a suitable one, though may not be the focus of the current study.

Very little research work has been done with regard to transmitting values through science and science education. It is also seen that if at all values are transmitted through science education, it is mostly done implicitly. Explicit focus on values by science teachers is seen to be rare. A very recent study by Ratcliffe (2007) explored the difficulties many teachers have in explicitly discussing values within their classrooms. He makes a case for the need for a shift in pedagogy from one that focuses on content to one that examines processes like decision-making etc. Such a shift in pedagogy would necessitate a shift in suitable 'measures' for demonstrating student achievements as both the dominance of summative assessments and their reliance on written forms. This means that the nuances of students' abilities to reason, argue and defend values judgments are rarely captured. Ratcliffe suggests that more explicit discussion of values in science classrooms may be assisted through the use of consistent framework for summative and formative assessments as well as classroom tasks.

As seen from the review above, it can be said that at all the levels (elementary, secondary, or university), attempted value education seems to have been incorporated into the teaching of social sciences and literature. It has seldom been a significant concern in the teaching of science. Such a lack of interest or activity in teaching about value questions in teaching about value questions in science classrooms seems especially remiss in an age when some of the most pressing social questions are to be related both to the present knowledge and to the research frontiers in science.

Key Issues

Culture is "an organised system of values which are transmitted to its members both formally and informally" (McConatha & Schnell, 1995). It is reasonable, then, to postulate that despite similar, canonical form of school science being taught in different educational systems around the world today, its nature and content in any one culture actually reflect that particular culture's outlook towards, and interpretation of, life events (Nunes, 1992). In other words, like many other school subjects, school science is value-laden, as shown through various studies.

There is generally acknowledged to be a close relationship between values and attitudes, with values occupying a more central and deeply held position than attitudes. These are often considered to be reflected in our patterns of response to particular situations (Rokeach, 1973; Seligman, Olson & Zanna, 1996). However, it appears that research in the area of affective

dimension in general, and values in particular, have been both relatively recent and scarce. This is due in part to rather fuzzy understandings of, agreement with, and distinction among the various affective variables such as attitudes, beliefs and values (McLeod, 1992). To make matters worse, related terminology has also been used interchangeably. The word 'value' itself also has several different meanings (Seah, 1999; Swadener & Soedjadi, 1988). Another contributing factor is that the reliability of affective studies has generally been questionable in the academic field (Southwell, 1995).

The affective dimension, however, is but one of the components of educational outcomes, the other components being the cognitive and psychomotor dimensions (Krathwohl, Bloom & Masia, 1964). There have been some science and mathematics educational studies on what Raths, Harmin and Simon (1987) call value indicators, such as interests, attitudes and beliefs. However, a number of such studies have exposed inconsistencies between value indicators and subsequent teacher decisions and actions (Thompson, 1992). This then brings into focus a greater need to examine values, which represent a more influential affective force.

The affective dimension of the Bloom's taxonomy views values as representing the internalisation of value indicators through the valuing process. Values in science education, then, are the deep affective qualities which education fosters through the school subject of science. They represent an individual's internalisation and 'cognitisation' of affective variables (such as beliefs and attitudes) in the context of the culture of the community in which the individual finds himself/herself. They are inculcated through the nature of science and through the individual's experience in the science classroom. These values equip the individual with cognitive and affective lenses that shape and modify his/her way of perceiving and interpreting the world, and guide his/her choice of course of action. Previous research by Buxton (1981) and Fasheh (1982), indicate this in relation to mathematics teaching practices, while Martin (1988/1997) shows how values can enter into the mathematical modelling process. But such observations in case of science teaching are missing due to the clear absence of studies related to values in science and science education.

However, just the realisation that science teaching is as value-laden a school subject as any other has not meant that there are any clear ideas about how such values are taught. In fact it can be stated categorically that there is dearth of empirical research on values teaching in science. There is a clear absence of studies focusing values in science education, science curriculum and the entire teaching learning process.

Specifically, among subjects offered in schools, science and mathematics have not enjoyed as much attention of researchers in affective issues as some other subjects, such as the languages, literature studies, physical education (Aplin & Saunders, 1996). It may be that these other subjects deal with aspects of life experiences more directly and more explicitly, so that values can be easily associated and/or discussed within them. Science, on the other hand, often deals with abstract entities and ideas, and with how these are applied to real-life situations. Values in science, then, are a relatively more implicit conception. Do values exist only implicitly or are they transmitted explicitly or both? Only studies intended towards finding the place of values in science and studies on whether the value focus in science education occurs implicitly or explicitly can clarify the confusions surrounding the nature of value focus in science education.

While there is a growing recognition of the need to address the moral and ethical issues which people are confronted with as a result of scientific progress, evidence suggests that many science teachers do not feel comfortable, nor equipped to deal with such moral and ethical issues (Levinson & Turner, 2001; Bryce & Gray, 2004). Knowing how to handle discussion and debate in the class is an area, which needs to be developed in the science classroom. Research points out the importance of teaching science in real contexts in order to engage students' interest,

to increase the relevance of science to students' lives, and to help students develop better understandings in science and about science (Jones & Baker, 2005). Carter (2005) and Hodson, (2003) recognize the importance of the local and global implications of science issues related to the moral, ethical and social aspects of science as being important for the development of scientific literacy and citizenship skills. They provide real-life contexts for the study of scientific knowledge as well as providing relevance and motivation for the students engaged in their study.

Science is values-laden and perhaps the best thing to be hoped for is a balanced class in which variety of opinions are considered. The social, scientific, and technological problems we face cannot be solved by knowledge alone, as if the values issues they contain had absolute answers. Science classrooms must suggest the consequences of certain choices, and to do that it must consider values. To ignore values questions means that they will be dealt with elsewhere, in a setting where science's input is absent. Hence studies on various aspects related to values in science and science education are an immediate requirement.

It is seen that the values occupy a very primary interest of several researchers. As evident from the review, values educators encourage children to express themselves freely so that they may come to understand their own values as well as those of others, thereby developing more mature forms of moral reasoning. They point out that values are pervasive; that science teachers, too, represent a special value system, which is transmitted implicitly or explicitly, to their students. Most of the findings of the studies mentioned in the review are shown to have yielded positive results endorsing the beneficial and developmental role played by values in education by teachers at different levels of education, in various subject areas, etc., formally or informally. But, there is a clear absence of studies that could answer questions like - what kinds of values are focused upon in the science curriculum; are they effectively transmitted to the students though the curriculum and teachers; if they are transmitted how they are done.

The studies with respect to teachers' and students' understanding of values in science are almost absent. Much of the literature suggests that many teachers' understanding of the nature of science is implicit rather than explicit, sometimes naive and at odds with established wisdom and understanding. Thus it is seen that the way in which science is portrayed to school students focuses very much on science as a body of "facts" and a methodological approach and very often fails to address the tentative nature of science, uncertainty and unpredictability in science and the way in which values, attitudes and cultural perspectives can influence both the practice and interpretation of scientific activity. Therefore preliminary studies that reflect on the teachers' as well as students' understanding of values in science are necessary so that relevant curriculum, policies and training methodologies for value inculcation through science education can be developed.

References

- Abruscato, J. (1972) : 'Search for Values', *The Science Teacher*, 39 (2), 20-24
- Aikenhead (2003): Review of Research on Humanistic Perspectives in Science Curricula, Paper Presented at the European Science Education Research Association, 2003 Conference, Noordwijkerhout, The Netherlands, August 19-23, 2003.
- Allchin, D. (1999): 'Values in Science : An Educational Perspective'. *Science and Education*, Vol.8, 1-12
- Aplin, N., & Saunders, J. (1996, 1997, March 14) : Values and Value Priorities of Singaporean and Australian Swimmers [Online]. Australian Association for Research in Education. Retrieved on May 20, 2001, from <http://www.swin.edu.au/aare/conf96/APLIN96.422>.
- Arms, K. & Camp, P.S. (1979): *Biology*. Holt, Rinehart and Winston, New York.
- Beyer, B.K. (1967): 'Conducting Moral Discussions in the Classroom', *Social Education*, Vol 40, 194-2-2.
- Bhargavi (1990): 'Value Identification in IX Standard English Prose and Value Orientation of IX Standard Students', Unpublished M.Ed Dissertation, University News, Oct. 21, 9-10.

- Bishop, A.J. (1998) : *Mathematical Enculturation-a Cultural Perspective on Mathematics Education* Kluwer Academic Publisher, Netherlands.
- Bishop, A.J. (1996): How Should Mathematics Teaching in Modern Societies Relate to Cultural Values-Some Preliminary Questions, Paper presented at the Seventh Southeast Asian Conference on Mathematics Education, Hanoi, Vietnam, June 3-7. Retrieved on April 2, 2006 from http://192.211.105.80/Archives/Conferences/ArcConf_Int_without Abstract.html.
- Bishop, A.J., FitzSimons G.E., & Seah W.T. (2000) : Do Teachers implement their intended values in mathematics classrooms?' The Values and Mathematics Project, Monash University. Retrieved on July 20, 2005 from <http://www.education.monash.edu.au/projects/vamp>
- Brown, S.B. and L.B. Brown (1972) : 'A Sematic Differential Approach to the Delineation of Scientific Values Professed by Professors of Science and Humanities, *Journal of Research in Science Teaching*, Vol 9, No 4, 345-351.
- Bryce, T.G.K & Gray, D. (2004): Tough Acts to Follow: The Challenges to Science Teachers Presented by Biotechnological Progress, in *International Journal of Science Education*, Vol. 26, No. 6, 717-733
- Buxton L. (1981) : *Do You Panic About Maths?* Heinemann, London.
- Cambridge International Dictionary of English (1996) : University of Cambridge.
- Chaudhuri, U.S. (1985) : 'Values in Testbooks: A Research Perspective', *University News*, Vol. 23, No. 9, March 1.
- Chaudhury (1986) : *Values in Science Textbooks, Issues and Advances in Education*, Ajanta Publications, New Delhi.
- Clark, M. (1979), *Contemporary Biology*, W.E. Saunders Co., Philadelphia, P.A.
- Collie, W.E. (1979) : *The Institutionalization of Values Education in Elementary and Secondary Public Education. Counseling and Values*. Vol. 23, 68ff.
- Dede, C., & J. Hardin (1973): Reforms, Revisions, Reexaminations: Secondary Science Education since World War II, *Science Education*, Vol. 57, No. 4, 485-491.
- Dispoto, R.G. (1977): Moral Valuing and Environmental Variables, *Journal of Research in Science Teaching*. Vol. 14, 273-280.
- Ernest, P. (1991): *The Philosophy of Mathematics Education*, The Falmer Press, London.
- Fasheh, M. (1982): Mathematics, Culture and Authority in For the Learning of Mathematics, Vol. 3, No. 2, 2-8.
- Fauvle, J. (1991) : Tone and the Teacher: Instruction and Complicity in Mathematics Textbooks, in D. Pimm & E. Love (Eds), *Teaching and Learning School Mathematics* Hodder & Stoughton, London.
- FitzSimons, G.E., Bishop A.J., Seah W.T & Clarkson P.C. (2000) : What might be Learned from Researching Values in mathematics Education in T. Nakahara & m. koyama (Eds.), *Proceedings of the 24th Conference of the International Group for the Psychology of Mathematics Education* (Vol. 1), (p. 153). Hiroshima: Hiroshima University.
- Fox Fred, W. (1966) : Education and the Spirit of Science- The New Challenge. *The Science Teacher*, Vol. 33, No. 11, 58-59.
- Franke, R. (1980): The Biologist and Values Education. *BioScience*, Vol. 30, No. 2, 96-99.
- Gupta, N.L. (2000) : *Human Values in Education*, Concept Publishing Company, New Delhi.
- Handley, H.M. & Bledsoe, J.C. (1968). The Personality Profiles of Influential Science Teachers, Regular Science Teachers, and Science Resource Students. *Journal of Research in Science Teaching*, Vol. 5, 95-103.
- Haq, E. (1973) : Educational and Political Modernisation: An Analysis of School Textbooks in Delhi, *NIE Journal*, Vol. 7, No. 5, 19-25.
- Harms, N.C. and R.E. Yager (1981): What Research Says to the Science Teacher, *National Science Teachers Association Journal*, Vol. #, No 471-476.
- Hodson, D. (2003) : Time for Action: Science Education for an Alternative Future, *International Journal of Science Education*, 25, 645-670.
- Joshi, K. (1983) : *Education for Human Values*, Compiled by Asha Sharma and Ahluwalia, S.P: *Journal of Education for Allied Sciences*, New Delhi.
- Kohlberg, L. (1973): The Child as a moral Philosopher, in B.I. Chazan and J.R. Soltis, eds. *Moral Education. Teachers College Press. Columbia University. New York*, Pp. 131-143.
- Krathwohl, D.R. Bloom, b.S. & Masia, B.B. (1964) : *Taxonomy of Educational Objectives: The Classification of Educational Goals-Handbook II: Affective Domain*, David McKay, New York.
- Levin and Lindbeck (1979) : Analysis of Selected Biology Textbooks for the Treatment of Controversial Issues and Bio-Social Problems, *Journal of Research in Science Teaching*, No. 16, 119-204.
- Levinson, R. and S. Turner (2001): Teaching and the Social and Ethical issues in the Curriculum arising from Developments in Biomedical Research, Final report for the Wellcome Trust on <http://www.wellcome.ac.uk/doc%5Fwtd003435.html>, 2001.
- Lockwood, A.L. (1978) : The Effects of Values Clarification and Moral Development Curricula on School Age Subjects: A Critical Review of Recent Research, *Review of Educational Research*, Vol. 48, No. 3, 325-364.
- Mader, S. (1979): *Inquiry into Life*, Brown Co., Dubuque, IA.
- Martin, B. (1988/1997): Mathematics and Social Interests, in A.B. Powell, & M. Frankenstein (Eds) *Ethnomathematics: Challenging Eurocentrism in Mathematics Education* (pp. 155-171). Albany, NY: State University of New York. (Reprinted

from Search, 19(4), 1988, 209-214).

- Mascarenhas, M. & Justa, H.R. (1989): Value Education in Schools and Other Essays. Delhi: Konark Publishers Pvt. Ltd.
- McConatha, J.T. & Schnell, F. (1995): The Confluence of Values: Implications for Educational Research and Policy, Educational Practice and Theory, Vol. 17, No. 2, 79-83.
- McLeod, D.B. (1992): Research on Affect in Mathematics Education: A Reconceptualisation in D.A. Grouws (Eds), Handbook of Research on Mathematics Teaching and Learning. National Council of Teachers of Mathematics, Reston, VA. 575-596.
- Miles, J.C. (1976): The Study of Values in Environmental Education, Journal of Environmental Education. Vol. 9, 5-17.
- Millar, R. and J.F. Osborne (Eds) (1998): Beyond 2000: Science Education for the Future, London Kings College London.
- Neuman, W.L. (1977): Social Research Methods: Qualitative and Quantitative Approaches. (3rd ed). Allyn & Bacon, Boston, M.A.
- Nunes, T. (1992): Ethnomathematics and Everyday Cognition, in D.A. Grouws (Eds). Handbook of Research on Mathematics Teaching and Learning, Macmillan, NY, New York.
- Oxford's Dictionary (2000): Hornby, A.S. Oxford University Press.
- Piburn, D. Michael (1976): Values Education: Insights from the Social Sciences. Science Teaching, Vol. 43, 18-20.
- Piburn, M.D. (1976): Values Education: Insights from the Social Sciences. Science Teaching, Vol. 43, 18-20.
- Poole, M. (1995): Beliefs and values in Science Education, Open University Press, Buckingham, UK.
- Ratcliffe, Mary (2007): Values in the Science Classroom-the Enacted Curriculum, in, Corrigan, Deobarh, Dillon, Justin and Gunston, Richard (eds). The Re-emergence of Values in Science Education, Sense Publishers, Rotterdam, Netherlands, 119-132.
- Raths, L.W., M. Harmin, and S.B. Simon, (1996): Values and Teaching, Charles E. Merrill Publishing Co., Columbus, OH
- Roe, a. (1961): Psychology of the Scientist, Science, Vol 134, 456-459
- Rokeach, M. (1973): The Nature of Human Values. Free Press, New York
- Rosenthal, D.B. (1984): Social Issues in High School Biology Textbook: 1963-1983, Journal of Research in Science Teaching, No. 21, 819-831.
- Rotheman, A.I. (1973): Teacher Characteristics and Student Learning. Journal of Research in Science Teaching. Vol. 6, 340-348.
- Sandhya, N. (1999): An Evaluative Study of Value Education Provided at the S.S.L.C. Level in Mysore District Unpublished PhD Thesis, Education, University of Mysore, Mysore.
- Seah, W.T. (1999): The Potrayal and Relativ Emphasis of Mathematical and Mathematics Educational Values in Victoria and Singapore Lower Secondary Mathematics Textbooks: A Preliminary Study. Unpublished Masters of Education project, Monash University, Melbourne.
- Sheshadri, C. (1984): Teachers and Value Education, New Frontiers in Education, Vol XIV, No. 1, Jan-March, 31-37.
- Shetty, A. (1997): Valuing Values, University News, Vol. 35, No. 52, December, Association of Indian Universities, New Delhi.
- Southwell, B. (1995): Towards a Theoretical Framework or Research in Beliefs and Values in Mathematics Education, Paper presented at the 18th Annual Conference of the Mathematics Education Research Group of Australasia, MERGA 18, Northern Territory University, Darwin.
- Swadener, M., & Soedjadi, R. (1988): Values, Mathematics Education and the task of developing pupils personalities: An Indonesian Perspective. In A. J. Bishop (Ed), Mathematics Education and Culture, Kluwer Academic Publishers, Dordrecht, The Netherlands.
- Tan, S.K. (1997). Moral Values and Science Teaching: A Malaysian School Curriculum Initiative, Science and Education, 6, 555-572.
- Thompson, A.G. (1992): Teachers Beliefs and Conceptions: A Synthesis of the Research, in D. Grouws (Eds), Handbook of Research on Mathematics Teaching and Learning, Macmillan, New York.
- Usha Sri, V. (1995): Reconstructing Teacher Education for Value Orientation, Journal of Higher Education, Vol. 16(4), 601-609.
- Vaidya, N. and McIntyre (1998): How to Think Scientifically, Deep and Deep Publications, New Delhi.
- Vanaja, M. (2003): Value-based Physical Science Teaching in Secondary School Teacher Education Programme: A Study; Paper Presented at Innovative Experiments and Practices in School Education and Teacher Education-Secondary Level, April 4-5, 2003, Department of Teacher Education & Extension, NCERT, New Delhi.
- Venkataiah, N. and N. Sandhya (2002): Research in Value Education, APH Publishing Corporation, New Delhi.
- Welch, W. (1973): Review of Research and Evaluation Programme of Harvard Project Physics, Journal of Research in Science Teaching, Vol 10, No. 4, 365-378.
- Zeidler, D.L. and Schafer, L.E. (1984): Identifying mediating factors of moral reasoning in science education, Journal of Research in Science Teaching, Vol. 21, No. 1, 1-15

The Structure and Role of All Gauhati Students' Union

Pranjal Sarma
Protim Sharma

The All Gauhati Students' Union is one of the oldest student bodies of Assam which was established in 1957. This parent organization of the All Assam Students' Union was initially formed as a common platform of the student bodies of the educational institutions of Guwahati. Constitutionally, the AGSU is an Anchalik or Regional Unit of All Assam Students' Union, under All Guwahati Sub-division Students' Union and All Kamrup District Students' Union. But as it is based in the capital city of Guwahati, the AGSU enjoys a unique and advantageous position among all the other Anchalik units across the state of Assam. As per provision made in the AASU Constitution during the Barpeta Convention on February 10, 1999, the AGSU today enjoys the special status of having two executive members in the central executive of the AASU, which had hitherto been the privilege of a district unit only. It was during the early period of Assam Agitation in 1980 that the AGSU formed its first unit at Noonmati to carry out its agitation programme like oil blockade at Noonmati Refinery. The AGSU has now become a full-fledged organization with four units and 29 sub-units spreading all over the city of Guwahati. The member base of the AGSU is some 36 schools and 17 colleges in Guwahati including the Assam Engineering College, Gauhati Law College, J.B. Law College, Nursing College and Ayurvedic College as well as the Gauhati University. There is an All Guwahati School Students' Union under the AGSU with one executive member each from the 36 schools. The AGSU has its Head Quarters at Cotton College, but for operational convenience it has another office at Swahid Nyas, near Latasil playground.

Objectives of the Study

The following objectives have been formulated to carry out the Study:

- I. To examine the organizational structure of AGSU
- II. To examine the role of AGSU in Assamese society in general and Guwahati city in particular.

Methodology

Both primary and secondary data have been used for the present study. Primary data have been collected from respondents and secondary data have been collected from various sources such as records of the said organization, memoranda and resolutions of AASU, and other sources such as books, journals, periodicals, publications et cetera.

Dr. Pranjal Sarma is Reader, Department of Sociology, Dibrugarh University, Dibrugarh, INDIA
Protim Sharma is Research Scholar, Department of Sociology, Dibrugarh University, Dibrugarh, INDIA

The universe of the study is the city of Guwahati, and the respondents have been chosen from two different categories – executive members of the AGSU and general members of the AGSU. To collect primary data from the respondents, interview as well as observation method have been used. The respondents have been chosen by the method of purposive sampling. A total of 100 respondents were chosen, out of whom 30 are executive members and the other 70 are general members from all the units and sub-units of the AGSU. Of the 30 executive members five are AGSU advisors who also happen to be past office bearers of the AGSU.

The Organisational Structure

Ahuja (1978; 1990) is of the opinion that organizational structure is important for the success of an organization. According to him organizational structure is “a group of people working together to attain the desired objectives. People in an organization do not start working together automatically unless they are provided with some mechanism of co-ordination and control. One of the mechanisms is the organization structure. It reveals who has authority over whom in the organization. It provides an invisible framework to integrate all the people working together towards a common goal. Organization structure is essential for exercising leadership. Organization structure provides an indispensable sort of co-ordination in an organization”.

The All Gauhati Students' Union does not have a separate Constitution; it follows the AASU Constitution. The AGSU is an Anchalik or Regional Unit, the fourth in the hierarchy from the top under All Guwahati Sub-divisional Students' Union, All Kamrup District Students' Union and All Assam Students' Union. According to the Constitution, the Anchalik unit comprises the primary units of a particular region. The jurisdiction of an Anchalik unit is decided by the State executive committee in consultation with the sub-divisional and district students' units. The executive committee members of the local units decide on the executive committee of the Anchalik unit, which is named after the region (AASU Constitution). As mentioned above, the AGSU has four local or primary units. They are (a) South Guwahati Students' Union, (b) East Guwahati Students' Union, (c) West Guwahati Students' Union and (d) Central Guwahati Students' Union. The four units of the AGSU are further divided into several sub-units. They are mentioned below:

- (a) South Guwahati Students' Union: Khanapara Students' Union, Beltola Students' Union, Betkuchi Students' Union, Kahilipara Students' Union, Dispur Students' Union [with Hatigaon-Sijubari sub-unit], Hengerabari Students' Union, Christian Basti Students' Union, Lutuma Students' Union [now defunct], Zoo Road Students' Union [now defunct].
- (b) East Guwahati Students' Union: Satgaon Students Union, Narengi Students Union, Zoo-Narengi Students Union, Noonmati Students Union, Bamunimaidam Students Union, Chandmari Students Union.
- (c) West Guwahati Students' Union : Azara Students' Union, Dharapur Students' Union, Maligaon Students' Union, 1 No. West Guwahati Students' Union [including University and Garigaon], Lower Kamakhya Students' Union, Shantipur-Bharalu Students' Union, 11 No. West Guwahati Students' Union
- (d) Central Guwahati Students' Union: Ulubari Students' Union, Panbazar Students' Union, Athgaon Students' Union, Madhya-Pub(Central-East) Students' Union, Uzan Bazar Students' Union, South Sarania Students' Union, 1 No. Central Guwahati Students' Union [Birubari area].

During our study it was found out that all of the 30 executive body members of the AGSU are aware that there are four units and several sub-units of the AGSU, whereas only 47(67%) of the general members are aware of such organizational divisions. All of them believe that such division is necessary for the administrative and operational convenience of the organization. It is interesting to note that the area defined for each sub-unit is fixed and one sub-unit cannot infringe upon

another sub-unit's jurisdiction while carrying out their activities. All the activities of the units and sub-units are carried out in consultation with the All Gauhati Students' Union. The total strength of the executive body of the AGSU is 47. The portfolio break-up of the executive body is same as the central executive or the sub-divisional or district units, which is: one President, three Vice Presidents, one General Secretary, three Assistant General Secretaries, one secretary each in the portfolios of Education, Culture, Information and Publicity, Finance, Organising and twenty nine Executive members from the primary units. There are six advisors of the AGSU. The AGSU sends one member as representative to the executive body of the All Kamrup District Students' Union, two members to the executive body of the Guwahati Sub-Division Students' Union and two members to the central executive committee of the All Assam Students' Union. It was also found that there are four women members in the executive body of AGSU, and one of them is the cultural secretary. There is one All Guwahati School Students' Union under the aegis of the AGSU, which serves as a sister organization for the school students of Guwahati.

The AGSU holds its annual conference where people for different portfolios are selected. The AGSU also holds a Representatives' Meet annually where the Presidents and Secretaries of each unit and sub-unit along with minimum of five members are present. Disciplinary actions and other relevant issues regarding the members of the AGSU are discussed and resolved in the Representative Meet. The AGSU executive body meetings are also held at regular intervals, usually every month, to discuss various issues and activities of the organization. All the decisions of the AGSU are to be passed in the Executive body meeting. 'Workers' meet' is also organized from time to time for orientation and motivation of the general members of the AGSU. For our convenience we shall discuss the organization of AGSU under several headings.

Decision-making process

Normally one third quorum is required for any decision of the AGSU to be passed in the executive committee meeting. A decision, which is taken in the executive committee meeting, is forwarded to the four main units of the AGSU, viz. (a) South Guwahati Students' Union, (b) East Guwahati Students' Union, (c) West Guwahati Students' Union and (d) Central Guwahati Students' Union. The Units in turn ask their respective sub-units to take necessary steps for proper implementation of the decision. Word-of-mouth is the most popular method of disseminating information and decision to the units and sub-units, according to the majority of the executive body members and general members, that is, 18(60%) and 44 (64%) respectively, which is followed by telephone (according to 33% of executive members and 34% of general members). 22(73%) of the 30 executive members and 50(71%) of the general members interviewed agree that telephone is a convenient means of communication for the purpose of information dissemination. The general members were asked about their opinion regarding the decisions taken from time to time by the executive body. All of the general members are satisfied with the decisions of the AGSU regarding various activities. 45(64%) of the 70 general members are of the opinion that they get sufficient time to prepare for an activity; while 21(30%) think that sometimes more time is required for preparation of the same. 6% of the general members chose 'can't say' on this issue. The AGSU members (both present and past), it is found, are satisfied with the overall communication process within the organizational hierarchy. They also think that AASU is a democratic organization with a democratic way of decision making process and a time-tested management system with proper grievance settlement procedure.

Commitment to the Organization

All the respondents, both from the executive member and general member category say that they are 'fully committed' to the AGSU. All the 30 executive members and the general members

are proud for the special status enjoyed by the AGSU and they feel privileged to be associated with the organization. All of them will also advise others to join the student organization. All the respondents believe that the levels of commitment of the members help fully realize the aims and objectives of the organization.

Efficiency

As far as efficiency is concerned, 20(66%) of the 30 executive members and 38(54%) of the 70 general members think that leadership quality is the most important quality for becoming a President or Secretary of the AASU, which is followed by commitment (23% of executive members; 26% of general members) and honesty (11% of executive members; 20% of general members). All of the 30 executive members say that the present batch of AASU leaders are 'highly efficient', while 48(67%) of the 70 general members think so. The other 33% of the general members consider the AASU leaders just 'efficient'.

All the respondents believe that sound leadership leads to smooth functioning of any organization. The overall planning and management of the AASU is 'highly effective' according to a staggering 28(93%) of the 30 executive members, and 54(77%) of the 70 general members. There are no response in respect of 'Less effective' and 'Not at all effective'.

Finance

Regarding source of finance majority of the executive members and general members, that is, 24 (80%) and 46 (66%) respectively, say that major portion of the finance come from 'well-wishers' in terms of cash donation and help in kind. Companies working in Guwahati and traders are also approached for such donation or help. The general membership fee of Rs. 5.00 per student, which is taken during admission into various educational institutions of Guwahati, and a corpus fund of the AGSU also help in organizing of various activities. The AGSU has a joint account at The Assam Co-Operative Apex Bank Limited, Guwahati branch, with the AGSU President, General Secretary and the Finance Secretary as joint signatories.

A transparent audit mechanism is followed by the organization as in the AASU. The appointed auditors verify all documents regarding income and expenditure of the organization during a year, which is presented in the annual convention for general approval. It is found that all the executive body members and 62 (89%) of the general members are satisfied with the audit mechanism of AGSU.

Grievance Settlement Procedure

Grievances about the general members of a sub-unit or unit are amicably and informally resolved within the organisational unit. Interestingly all the 30 executive members and a majority of the general members, that is, 52 (74%) are satisfied with the grievance settlement procedure. The other general members are clueless about the procedure. When there is complaint about the President, Secretary or any other important members of the executive, the issue is referred to the next level in the hierarchy, that is, the grievance about the leaders of a sub-unit is referred to the unit under which the sub-unit falls. If the concerned unit fails to redress the grievance, then the matter is taken up by the executive body of the AGSU for redress. In an extreme case, however, the AGSU executive committee may refer the matter to their two representatives at the central executive, who can consult the AASU President or General Secretary for necessary disciplinary action.

Role and Activities of the AGSU

According to the 'Dictionary of Social Sciences' (Ed. Craig Calhoun, OUP, 2002), "*The word 'role' is used mainly to refer to the typical expectations, rather than individual enactments.*" In

simple terms, behaviour or patterns of actions expected of a person or organization is called 'roles'. Scholars like Ralph Linton (1981) and Talcott Parsons (1991) focus on roles as relatively fixed bundles of expectations, responsibilities, and relationships that indicate one's place in the social structure. To quote 'The Concise Oxford Dictionary of Sociology (Ed. Gordon Marshall, OUP, 1994) 'role' is *"a key concept in Sociological theory. It highlights the social expectations attached to particular statuses or social positions and analyses the workings of such expectations."* According to Gerth and Mills (1954) 'role' is a key term in our definition of institution, and *"just as role is the unit with which we build our conception of institution, so institution is the unit with which we build the conception of social structure."*

As a pioneering student body the AGSU takes up important activities from time to time in the city of Guwahati. The four units and the sub-units help it carry out these activities smoothly; agree all the 30 executive members interviewed. The activities are carried out taking in view the aims and objectives of the AASU, and all the 30 executive members and 44 (62%) of the 70 general members are aware of the AASU aims and objectives. All the 100 respondents are satisfied with the social, political, economic or educational issues the AGSU takes up from time to time. Some of the important activities of the All Gauhati Students' Union round the year are as follows:

Silpi Divas on January 17, Amulya Kakoty Memorial Award in February, Late General Secretary of AASU Bhrigu Kumar Phukan's death anniversary on March 20, Central Bihu celebration at Latasil playground, Student Integration Day on June 10, Rabha Divas on June 20, Summer Camps for school students in the month of July, Martyrs' Day on December 10, Folk singer Pratima Pandey Memorial programme on December 27 and ending with 'Ashar Asom' — a programme during the last three days of the year where the members discuss the positive aspects of politics, education, sports, economy, culture and literature during the year to end it in a positive note. Apart from these regular activities, the AGSU organizes career camps and free computer courses for the students of Guwahati.

During our interview, the executive members reveal that during major crises or extraordinary situations, the President, General Secretary and the Advisors decide about the action-plan; but this has to be passed in the next executive meeting. The AGSU executive body meeting is held at regular intervals. The GS mentions about the activities during the interim period between two such meetings in his speech. One third quorum has to be there for a decision to be passed in executive meeting. When asked about their involvement in the local issues, all the AGSU executive members (100%) and 48(69%) of the general members say that the AGSU always give prominence to the local issues of the Guwahati city. 12 (40%) of the 30 executive members say that recruitment of the local educated youth in various organizations and companies is on the top of their agenda. For other issues they cited examples of the recent incident at the Gurukool Grammar School where a girl student was punished for not speaking in English, the AGSU took up the issue and made the school authority apologize; as they did for the October 30, 2008 Guwahati serial blasts, where they organized rally and blood donation camp. The AGSU also has a Student-Artist-Litterateur Welfare Trust for the benefit of the needy.

Summery and Findings

1. During our study it was found out that all of the 30 executive body members of the AGSU are aware that there are four units and several sub-units of the AGSU, whereas only 47 (67%) of the general members are aware of such organizational divisions. All of them believe that such division is necessary for the administrative and operational convenience of the organization. It is interesting to note that the area defined for each sub-unit is fixed and one sub-unit cannot infringe upon another sub-unit's jurisdiction while carrying out

- their activities. All the activities of the units and sub-units are carried out in consultation with the All Gauhati Students' Union.
2. The AGSU sends one member as representative to the executive body of the All Kamrup District Students' Union, two members to the executive body of the Guwahati Sub-Division Students' Union and two members to the central executive committee of the All Assam Students' Union.
 3. It was found that there are four women members in the executive body of AGSU, and one of them is the cultural secretary.
 4. Normally one third quorum is required for any decision of the AGSU to be passed in the executive committee meeting. A decision, which is taken in the executive committee meeting, is forwarded to the four main units of the AGSU, viz. (a) South Guwahati Students' Union, (b) East Guwahati Students' Union, (c) West Guwahati Students' Union and (d) Central Guwahati Students' Union. The Units in turn ask their respective sub-units to take necessary steps for proper implementation of the decision.
 5. All of the general members are satisfied with the decisions of the AGSU regarding various activities.
 6. The AGSU members (both present and past), it is found, are satisfied with the overall communication process within the organizational hierarchy.
 7. All the executive members and the general members are proud for the special status enjoyed by the AGSU and they feel privileged to be associated with the organization.
 8. 20 (66%) of the 30 executive members and 38 (54%) of the 70 general members think that leadership quality is the most important quality for becoming a President or Secretary of the AASU, which is followed by commitment (23% of executive members; 26% of general members) and honesty (11% of executive members; 20% of general members).
 9. Regarding source of finance majority of the executive members 24 (80%) and general members 46(67%) say that major portion of the finance come from 'well-wishers' in terms of cash donation and help in kind. A transparent audit mechanism is followed by the organization as in the AASU. The appointed auditors verify all documents regarding income and expenditure of the organization during a year, which is presented in the annual convention for general approval.
 10. Grievances about the general members of a sub-unit or unit are amicably and informally resolved within the organisational unit. A majority of the general members, that is, 52 (74%) are satisfied with the grievance settlement procedure.
 11. During major crises or extraordinary situations, the President, General Secretary and the Advisors decide about the action-plan; but this has to be passed in the executive meeting.
 12. All the 100 respondents are satisfied with the social, political, economic or educational issues the AGSU takes up from time to time. Apart from taking up regular activities and emergency local issues, the AGSU organizes career camps and free computer courses for the students of Guwahati.

Conclusion

In this study we have tried to cover certain aspects of the organization of the AGSU and the role this old and prestigious student organisation has been playing in Guwahati in particular and Assam in general. It is hoped that the study will lead to more substantial research in the area.

References

- AASU Constitution, 1999, All Assam Students' Union, Guwahati.
- Ahuja K. K. 1990: *Organisational Behaviour*, New Delhi: Kalyani Publishers.
- Ahuja K. K. 1978: *Personnel Management*, Ludhiana : Kalyani Publishers.
- Baishya, D. P. 1983: *Truths Unfolded*, AASU Publicaton,
- Baishya, D. P. 1980: *The Foreigners' Problems: Why Solution is Still Elusive*, AASU Publication,
- Calhoun, Craig (ed.) 2002: 'Role', *The dictionary of Social Sciences*, New Delhi: OUP.
- Gerth A. H. and C. W. Mills 1954: *Character and Social Structure: The Psychology of Social Institution*, London: Routleg and Kegan Paul.
- Linton, Ralph 1981: *The Cultural Background of Personality*, Greenwood Press.
- Marshal, Gordon (ed.) 1994: 'Role', *The Concise oxford Deictionary of Sociology*, New Delhi: OUP.
- Mitchel, G. Duncan (ed.) 1979: *A New Dictionary of Sociology*, London: Routledge and Kegan Paul
- Parsons, Talcott. 1991: *The Social System*, London: Routledge.

Female Foeticide in India: A Serious Challenge for the Society

Rumi Dhar

History of mankind highlights the paradox of an unchanging and unequal position of woman in society. Marriage and family are products of relationship between man and woman. The oriental jurisprudence highlights the pitiable condition of women in Indian subcontinent. The historical developments have considered women nothing more than child producing machines. They had no means of subsistence. The keeping of wives actually depend on the physical strength and economic status of the husbands. Of course, there were also cases of women who enjoyed substantial liberty and respectable status in society but such cases were very few and exceptional. For a long time state machinery and state policy used to be controlled by the priestly class who constantly exalted the men and denigrated the women. Gradually came in the separation between state and religion. Steadily and systematically the state started taking increased social responsibilities. Today the concept of welfare state regulates every aspect of life of its citizens. The state felt it necessary to remove the servile condition of women and to provide for them certain protections against masculine tirade.

Since the world's inception, the male-female combination has proved to be the foremost necessity for propagating and developing global views. One of the best ways to understand the spirit of a Civilization and to appreciate its excellence and realize its limitation is to study the position and status of women. Civilization without women is impossible. A Women is an important organ of the family which is the basic unit of society. The family includes members belonging to different age groups, sex and generations. One determining factor of status in the Indian family is sex. Women members often are subordinate due to various factors. The authority of a woman depends upon the husbands status.

In the late eighteenth century, infanticide was initially documented by British officials who recorded it in their dairies during their travels. The scope of the problem of infanticide became clear in 1871, in the setting of India's first census survey. At that time it was noted that there was a significantly abnormal sex ratio of 940 women to 1000 men. This prompted the British to pass The Infanticide Act in 1870, making it illegal. But the Infanticide Act was difficult to enforce in a country where most birth took place in the home and where vital registration was not commonly done. Even in twenty first century, where globalization and information technology are being supported as the creeds of the millennium, liberalization is happening fast, there are villages and towns where girls are killed even before their cries leave their throats. Some are even killed in their mother's womb, unseen and unheard.

Rumi Dhar is Teaching Assistant in Department of Law, Assam University, Silchar, Assam, India .

By going through history in the context of women's position, it may be mentioned that particularly after establishment of class society and the trend to accumulate private property in the post vedic period, women's position in society hit patriarchal values. A woman during this period not only occupied an inferior position but was made to feel that her position was subordinate to men in society. Middle class educated women, particularly in large urban areas who are working and moving freely now, give an impression that Indian women's status has substantially improved. She is now politically powerful but in small towns, rural areas or city slums, she still suffers social and economic oppression. The Constitution of India has provided equal rights to her, but still she has to face injustice in her life. Violence against women in the form of rape, prostitution, dowry deaths, sexual harassment, female infanticide and female foeticide is widely prevalent in society. There is a growing feeling that women suffer from discrimination and disabilities in more subtle and covert ways. Thus the dual existence of women in high positions and yet undergoing various types of sufferings continues.

Gender Discrimination

Gender inequities throughout the world are among the most all-pervasive forms of inequality. Gender equality concerns each and every member of the society and forms the very basis of a just society and hence, the issue of 'gender justice' is of enormous magnitude and of mammoth ramification engulfing an all-embracing and illimitable canvas.

"Sex is creation of God and sexual differences are essential for procreation, but gender is not God's creation. It is creation of patriarchy and serves the male flair for domination."

In India, "the dice is heavily loaded against women. Female oppression continues from womb to tomb" In particular, discrimination occurs within the family, where norms regarding women's secondary status are reinforced in children from birth. Son preference is one of the key aspects underlining social values that view girls as burdens. Choice for son preference enhances the practice of foeticide. Girls are taken as burden since birth. They are kept under serious restrictions as regards their mobility. This is specially so in the rural areas. They also lack health and nutrition care in comparison to men. Besides, certain regional and cultural factors also contribute a lot to their pathetic condition. According to Manu, a man has to be reborn as a man to attain moksha (redemption). A man cannot attain moksha unless he has a son to light his funeral pyre. Also, it says a woman who gives birth to only daughters may be left in the eleventh year of marriage. Obviously, it shows the gender bias in our male-dominated society. The age old preference for sons is motivated by economic, religious, social and emotional desires and norms that favor males and make females less desirable. Parents expect sons- but not daughters- to provide financial and emotional care, especially in their old age; sons add to family wealth and property while daughters drain it through dowries; sons continue the family lineage while daughters are married away to another household; sons perform important religious roles; and sons defend or exercise the family's power while daughters have to be defended and protected, creating a perceived burden on the household. This stereo-type notion of women as "burden" is one of the main reasons behind female foeticide and infanticide.

Gender justice is taking the shape of violence against women. A concept of violence of human rights against women may suggest an act of illegal, criminal use of force but it also includes exploitation, discrimination, upholding of an unequal economic and social structure, creation of an atmosphere of terror, a situation of threat, reprisal and other forms of political violence. Women activists regard specificity of violence against oppressed classes. The forms of control and coercion exercised in the case of Women are gender specific and arise out of a hierarchical gender relationship. Where men are dominant and women are subordinate. Women are instruments through which the social system reproduces itself and through which systematic

inequality is maintained. This inequality is further strengthened and maintained overtime by the socialization process. She believes it to be true. She accepts whatever is given to her as her fate. She is not aware of her constitutional and human rights.

Violence against women is also a manifestation of class oppression. Domestic violence, battering, dowry, rape, suicide are the manifestations of gender inequalities within the family system. Women do not own the land, the house. Her wages are not equal if she is working. Her earnings are not considered important for family sustenance. Since women are not given rights to the family property and assets, dowry is legitimized as her share in property. Women's exclusion from the ownership of land is largely the basis of their subordination and dependence on men.

Female Infanticide and Female Foeticide

Female Infanticide means killing of a girl child after her birth by an act of omission or commission.

Female Foeticide: It is elimination of a female foetus at any stage of pregnancy, after determining its sex. It is also defined as killing of female foetus through induced abortion.

The practice of killing the female child after her birth has been prevailing in our society for many years. But foeticide is the legacy and contribution of the progress made by the medical science. Amniocentesis was introduced in 1975 to detect foetal abnormalities but it soon began to be used for determining the sex of the baby. Ultrasound scanning, being a non-invasive technique, quickly gained popularity and is now available in some of the most remote rural areas. Both techniques are now being used for sex determination with the intention of abortion if the foetus turns out to be female.

With the advent of privatization and commercialization, the use of pre-natal diagnostic technologies is growing into a thriving business in India. This is primarily for the purpose of sex-determination selective abortion of the female foetus. The misuse of technology simply reinforces the secondary status given to girl children in such a way that they are culled out even before they are born. Compared to infanticide, foeticide is probably a more acceptable means of disposing off the unwanted girl children. Infanticide can be an overtly barbaric and inhuman practice while foeticide that is carried out by skilled professionals is a medical practice that uses scientific techniques and skills and reduces the guilt factor associated with the entire exercise.

The census 2001 and the recent news reports data indicate a grim demographic picture of declining female to male ratios. Surprisingly the most affected states are progressive states like Punjab, Haryana, Delhi and Gujarat. According to UN norms, male-female ratio in the world is usually 1050 females for 1000 males. But in India, this ratio is dropping down to nearly 850 per thousand. In Human Development survey Report also, India is placed in 124th position among 173 countries. It is a fact that our country is much behind compared to other countries in respect of education, health and gender discrimination.

Table 1 : Indicators of Sex Preference in India

SI. No.	Indicator	Number / Percentage
1	<i>Mean ideal number of :</i>	
	Sons	1.4
	Daughters	1.0
2	Percentage who want more sons than daughters	33.2
3	Percentage who want more daughters than sons	2.2
4	Percentage who want at least one son	85.1
5	Percentage who want at least one daughter	80.1

Source : National Family Household Survey (NFHS) 1998-1999.

Table 2 : The Trend of sex ratios in the age group of 0-6 years all over India

Years	Sex Ratio
1961	976
1971	964
1981	962
1991	945
2001	933

Source Census, 2001

Firstly, National Crime Records Bureau (NCRB) in its "Crime in India" (2000), has published data on both the incidence (total number of FIRs registered) and percentage (percent of crime reported in the state in relation to All-india figure) of foeticide and Infanticide for all the states and Union Territories. No separate breakup for FIF has been provided. But if we assume (which is quite realistic) that for all states, the present of foeticide/ infanticide cases to All-India total is the same for both boys and girls, we can immediately rank top five states in terms of percentage of female foeticide as shown below in table 3:

Table 3 : States Showing High Foeticide Percentage

State	Female Foeticide (percent to All India)
Maharashtra	45.1
Madhya Pradesh	15.4
Haryana	14.3
Rajasthan	9.9
Andhra Pradesh	8.8

The top five states in terms of percentages of female infanticide are shown in table 4 :

Table 4 : States Showing High Infanticide Percentage

States	Female Infanticide (percent to All India)
Madhya Pradesh	29.8
Maharashtra	19.2
Andhra Pradesh	7.7
Punjab	5.8
Rajasthan	4.8

It can be noticed from the above table 3 & 4 that Maharashtra, Punjab and Haryana, three richest states in India, suffer from highest rates of FIF. In fact, another statistics provided by NCRB, i.e. crime related to exposure and abandonment of children shows that Maharashtra, being one of the richest states in India, shows the highest incidence(40.2%) among all states.

Another indicator of FIF may be the number of female babies who do not survive the first year of birth. The top five states in terms of this number per thousand of population are, according to 1999 Sample Registration System (SRS) data, as follows:

Table 5 : States Showing Low Survival Rates of Females

States	No. of Female Babies who do not Survive the First year (per 1000 of Births)
Orissa	96
Madhya Pradesh	89.5
Rajasthan	83.9
Uttar Pradesh	83.5
Haryana	78.4

In the table 5 above, it is seen that even in an economically highly prosperous state like Haryana, the figure for female survival rate is one of the lowest.

However, comparison on the basis of female survival rates may only reflect differences in postnatal health care delivery systems across the states, rather than any gender discrimination. Therefore, another and perhaps a more reliable indicator can be the “gender gap” in infant mortality rates. If babies die due to poor health care, natural calamities or for general poverty of the families, then boys and girls should die at the same rate or boys at a faster rate than girls should, as girls are expected to be biologically stronger at birth. But if society practices gender discrimination and there is widespread female infanticide, then female mortality rates (between 0 and 6 yr.) will be much higher than that of boys. This difference, called the “gender gap”, can be used as an estimate of female infanticide. According to SRS (Sample Registration System) data provided by the Census authorities for the year 1999, we can rank the top five states, in terms of high “gender gap”, as follows:

Table 6 : States Showing High Gender Gap in Female Mortality

States	Gender Gap in Female Mortality
Haryana	19.3
Punjab	5.9
Rajasthan	5
Tamil Nadu	4.2
Gujarat	3.1

From the above table 6, it is again seen that states belonging to the richest category in terms of per head income and wealth and low BPL (Below Poverty Line) population are guilty of practicing high gender discrimination and FIF.

Legal Framework

Many voluntary organizations, academicians, professionals and volunteers dedicated to the cause of protecting the rights of the girl child and women have initiated a campaign to curb female foeticide and create mass awareness on the issue. Public meetings and demonstrations against female foeticide by voluntary organizations and institutes have led to an increased mass awareness on the issue.

To arrest this evil, the Forum against Sex Determination and Sex Pre selection (FASDSP), a broad forum of feminist and human rights groups, was formed in 1984, and it has been lobbying for legislation to ban the practice. In 1988, the state of Maharashtra passed an Act banning pre natal diagnostic practices. In September 20,1994 the Parliament had enacted the Pre-Natal

Diagnostic Techniques (Regulation & Prevention of Misuse) Act, which came into force from January 1996. later, the Act was amended with effect from February 14 2003 and was renamed the Pre- Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) Act, 1994 (PCPNDT Act). The law chiefly provides for the following :

- Prohibition of sex selection, before and after conception.
- Regulation of prenatal diagnostic techniques (e.g. aminocentesis and ultrasonography)
- for detection of genetic abnormalities, by restricting their use to registered institutions.
- The Act allows the use of these techniques only at a registered institutions .The Act allows the use of these techniques only at a registered place for a specified purpose and by a qualified person, registered for this purpose.
- Prevention of misuse of such techniques for sex selection before or after conception.
- Prohibition of advertisement of any technique for sex selection as well as sex determination.
- Prohibition on sale of ultrasound machines to persons not registered under this Act.
- Punishment for violations of the Act.

The Supreme Court in the case of “*Centre for Enquiry into Health and Allied Themes (CHEAT) and others v. Union of India*” which was filed under section 32 of the Constitution of India under PIL issued directions to Central Supervisory Board, all State Governments and Union Territories for proper and effective implementation of the PCPNDT Act – which mandates that sex selection by any person, by any means, before or after conception, is prohibited.

The question is how far is it ethical and legal to undergo the test only for determining the sex of a child. Does this amount to culpable homicide? It has been medically established that an unborn child has a life and body of its own. Section 312 of the Indian penal code prescribes punishment for such an act. Another relevant section is 316 which states that whoever does any act causing death of a person, he would be guilty of culpable homicide. Those guilty of such acts, including death of an unborn child, are liable to be punished with 10 years imprisonment.

The Medical Termination of Pregnancy Act, 1971 was the another law which provides for limited and restricted right to terminate the pregnancy, when the life of the mother is at stake or there is a substantial risk to the life of the child.

Thus, there seems to be no unanimity in the extent of protection to the life of the foetus internationally. Constitutions have either failed to protect the life of foetus expressly or the judiciary has from time to time come up with ingenious ways to provide protection.

Ground Reality

The ban on the Government hospitals and clinics at the centre and in the states, making use of pre-natal sex determination for the purpose of abortion- a penal offence- led to the commercialization of the technology; private clinics providing sex determination tests through amniocentesis multiplied rapidly and widely. These tests are made available in areas that do not even have potable water, with marginal farmers willing to take loans at 25 percent interest to have the test. People are encouraged to abort their female fetuses through advertisements in order to save the future cost of dowry. The portable ultrasound machine has facilitated doctors to go from house to house in towns and villages. Despite the law being there, due to lack of proper

implementation, very few cases are registered. Under the two main laws Medical Termination of Pregnancy (MTP) Act 1971 and the Pre- Natal Diagnostic Techniques (PNDT) Act 1994, the Indian Government has conceded that abortion may be carried out if there is—

- (a) danger to the life of the mother in child birth,
- (b) if the child is at risk of being born handicapped, or
- (c) if the women has conceived the child as a result of rape.

Women are also allowed the right to abortion if they wish to do so in the interest of keeping the family small. PNDT Act only focuses on regulation and control is techniques of pre-natal sex determination, not the access to abortion in any form. That is, the Act does not itself with selective abortion of female fetuses as such, but rather, with medical procedures to detect the sex of the foetus, which can lead to foeticide. However, it is often seen that the decision of abortion is taken after the detection that the unborn child is female, especially if it is the second or third female child. It must be mentioned here that abortion has entered the lexicon of feminist struggle through a very different trajectory from that followed in the West. Here, the 'right' to abortion has never been at the centre of much debate since it is seen as a measure to control population growth. Since poverty is seen as a by- product of rising population, for developing countries like India, population control measures has been a central focus of Government programmes for economic development. The Medical Termination Act was passed in 1971 amidst Parliamentary rhetoric of choice and women's rights, but it was clearly intended as a population measure, as several MPs pointed out during the debate on the bill. Here, it is worth mentioning that a vocal and influential school of thought still justifies the selective abortion of female fetuses as a form of population control. Their argument is that to permit abortion of female fetuses would stop couples from continuing to have children until the desired son was produced. Abortion became an issue for Indian feminists for quite a different dynamic as from the 1980s amniocentesis has been used to determine the sex of fetuses in order to abort female fetuses and from then on women's movement in India has taken female foeticide as a very serious issue.

Measures to Prevent Female Foeticide

Female Foeticide is one extreme manifestation of violence against women. People both in rural as well as in urban areas have to be made aware about the need of a female child in the social milieu as that of a son. A Progressive legislation alone can not solve social problems. The people must be aware of the progressive legislation which has certain deterrent facts. Many women are compelled to undergo tests and seek abortion on acceptable as well as unacceptable grounds under compulsion. A new spirit has to be imbibed propagating that a female child is not a curse. It is not a liability. It is not an instrument through which dowry has to be given. A feeling has to be nurtured that she is the daughter, she is the mother and she is the life partner.

Given this situation and a growing evidence of the practice of Femicide (this includes sex selection of embryos, sex selective abortions and female infanticide and all other methods of averting the natural formation of a female foetus) especially reflected in the fast declining sex ratios has made it necessary to bring back this issue on the national agenda. Centre and state governments should take steps for vigorous implementation of the Act and should not merely treat it with their usual complacency. Registration of ultrasound clinics, nursing homes and laboratories should be made mandatory, facility of amniocentesis and CVS should be restricted to government hospitals only, where it can be easily regulated whereas ultrasonography, which is used for a host of other purposes can be allowed in private hospitals and nursing homes because by ultrasonography sex of the foetus can be determined only between 28th and 36th week and abortion is not allowed by law after 20th week.

After this has been done, the government ought to establish a more effective and democratic system of vigilance. Structure should be created for the implementation of the Act at the district level. Volunteers have to be actively mobilized to monitor registration and functioning of sex determination clinics in different districts. The Act should also be amended to automatically cover latest technologies that could be misused for sex determination as and when they get into the market, specially those techniques which use preconception or during conception sex selection. Besides, all ultrasound clinics should display boards mentioning that they do not conduct sex determination tests on foetus.

Among other things, The Medical Termination of Pregnancy Act, 1971 and other similar laws that have a direct bearing on the issue of sex ratio should also be reviewed in order to bring coherence among anti-foeticide laws. As we know that mere enactment of law cannot cause a whole scale change in the psyche of people obsessed with sons, for this we need a sustained social movement against this crime. We need to expose the collusion of unethical medical practitioners with the patriarchal society, to fight against the increasing epidemic of female foeticide. Non-government organizations, women's group, health groups, the academia, the media, all important medical professionals, individuals with different priorities and ideological beliefs should come forward to battle powerful patriarchal forces operating within institutions of the family, government and civil society. A transformation of our gendered society is necessary for the elimination of female foeticide.

A campaign may also be launched to create public awareness about the dangers being posed to the fabric of the society and to the physical and mental health of women, because of the continuing preference for male child. Social status of women should also be raised by educating and empowering them, through meaningful economic and political participation and by mass mobilization through media. Thus, our challenge today is to initiate a vibrant and effective campaign against female foeticide, in order to eradicate this evil from the face of the society forever.

Modern Indian Women-Present Status

One very hopeful development which has taken place during the past ten years is the emergence of a women's movement wherein women have started raising their voice against inequality, patriarchal values and unjust social structure. The need is to adopt more positive steps to raise the status of women so that more Indira Gandhi's, Vijayalakshmi Pundit's, Kiran Bedi's and Najma Heptullah's can take birth and govern the nation like our present President of India Her Excellence Mrs. PRATIBHA DEVI SINGH PATIL.

Today, every law favours women. The recent Amendment to Section 6 of the Hindu Succession Act, 1956, which gives equal right in coparcenary property to daughters, is a clear-cut example. Moreover, Articles 14 and 15 of the constitution providing equal status to women and special laws for women, the Hindu Marriage Act, 1955, allowing her to take divorce under section 13(1) (A) on any of the grounds available under this provision and Section 13(2) giving four special grounds to take divorce exclusively to the wife; the Hindu Minority and Guardianship Act, 1956; the Hindu Adoption and Maintenance Act, 1956; the Dowry Prohibition Act; and Section 498-A of the Indian Penal Code, 1860, specifically relating to punishment for cruelty against wife by her husband and relatives, all favour women. There are a number of social organizations and commissions working against exploitation of women at home and workplaces.

Women are also aware of these laws and rights and are fighting for their rights. Unfortunately, she has lost her right to take birth in society, her right to life. The growing inhuman act of female foeticide is a glaring example of violation of her right to life. This is a picture of modern Indian women. Henry has rightly said: "woman was taken out of man, not out of his head

to rule over him, nor out of his side to be equal to him, but from under his arm to protect her and from near his heart to love her." But she is still waiting for this position.

Conclusion and Suggestions

India is growing dynamically in every fields. Today, the boom in economy, innovative technologies and improved infrastructure has become nation's pride. The country has witnessed advancements in all fields but bias against a girl child is still prevailing in the country. Days are not so far, when there may be emergence of the situation where brides will not be available for the marriage of the sons to maintain lineage and continue the human race of even those people who believe on long standing tradition of son preference, that "only sons can offer Pyre Pindadana, Mukhagni and not the daughters." Therefore it is felt that the mindsets of the people should be changed right from now towards the importance of the girl child in the family.

There is an urgent need to alter the demographic composition of India's population and to tackle this brutal form of violence against women. The enactment of any law is not sufficient, laws must be adhered to and applied rigorously, before any change in the status of women can take place. In spite of the Pre-natal Diagnostic Techniques (Prohibition of sex selection) Act umpteen incidences of female foeticide are taking place in India. There is still utmost controversy as to who will serve as the watchdog to control the misuse of the practices of female foeticide. Promoting gender balanced society involves targeting behavioural changes in society which in turn involves a long term community based intervention, awareness programmes, programmes to promote girl children's rights, addressing myths related to sons/ daughters and concerted efforts to change the mindset of people. Sensitization of medical practitioners, enforcing a system of ethics in the medical profession and monitoring of medical services available to people is an urgent need. It is indeed time to energize efforts to put genders equality at the top of development agenda and contribute in whatever way we can to give opportunities to girl children to bloom and shine. Apart from the above, a feeling has to be inculcated in the minds of the people that "**SAVE THE GIRL CHILD**".

References

1. Female foeticide: A Frightful Reality by Dr. Supinder Kaur, Central law publication, 2009
2. Patel, Rita, "The Practice of Sex Selective Abortion in India: may you Be the Mother of Hundred Sons", source: www.ucis.unc.edu/resources/pubs/carolina/abortion.pdf
3. Law Review 1999-2000 & 2000-2001 vol. 21& 22.
4. Quoted in Rajni Lamba- Ignorance and Fallacy: Gender Idioms in population planning, by Iqbal Kaur. Man and Development, Sept. 1997, Vol. XIX
5. Indira Kulshresthe 'Noopur'. Women's Studies in school Education : A New perspective, (1989) p. 8.
6. Sharma chetan and Jain Divya, Technology and its impact on female feticide in India, May 2005, Source: <http://www.govtech.net/digitalcommunities/story>
7. Pande Rohini and Malhotra Anju, "Son Preference and daughter Neglect in India. What happens to living Girls", ICRW, 2006, Source: www.icrw.org/docs/2006
8. Constitutional Law of India – Dr. J.N. Pandey 2005
9. Modi's Medical Jurisprudence
10. Meenu Anand, "Indian Legal Framework to Arrest Female Foeticide" Legal News & Views, September 2005.
11. Amita Nikore, "Need for Social Action to Curb Female Foeticide" Legal News & Views, Vol. 19, July, 2005
12. 2001 5 SCC 577
13. Medical Termination of Pregnancy Act, 1971 Section 3(2): - subject to the provisions of sub-section (4) a pregnancy may be terminated by a registered medical practitioner. (a) Where the length of the pregnancy does not exceed 12 weeks, if such medical practitioner, or (b) Where the length of the pregnancy exceeds 12 weeks, if not less than two registered medical practitioner are of the opinion, formed in good faith, that – 1. the condition of the pregnancy would involve a risk to the life of the pregnant woman or of grave injury to her mental health; or 2. there is substantial risk that if the child were born, it would suffer from such physical or mental abnormalities as to be seriously handicapped.
14. Sharma Chetan and Jain Divya, Technology and its impact on female foeticide in India, May 2005, Source: <http://www.govtech.net/digitalcommunities/story>

15. Menon, Nivedita, "Recovering Subversion Feminist Politics Beyond the Law" Permanent Black, 2004
16. Menon, Nivedita " Rights, Bodies and the Menon (eds), Gender and politics in India, OUP, 1999.
17. Kala Arvind, ' Banning Sex Tests, Unfair, Unworkable', Times of India, 25 January 1991, p 8
18. Justice Dipak Mishra " Female Foeticide- A social Menace, Nyaya Deep, official Journal of NALSA Vol. VIII, issue-2, April 2007
19. Female Foeticide: A violation of Human Right by Preeti Misra, Law Review 1999-2000 & 2000-2001

Insurgency, Peace and Quest for Identity: A Study of Contemporary Writing in English from India's Northeast

Debashis Baruah

A splendid archive of some rare species of flora and fauna, multi-ethnic people with their varied tradition and culture, and of a rich biodiversity, the Northeast India comprises eight states: Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. This region, with its hills, rivers, valleys, people, myths, legends, rites and rituals is blessed with a unique ecology.

Poetry in English from Northeast as a discourse of self-expression took shape casually in the eighties and nineties of the last century. The writers, especially the poets, writing in English from this region at present are the first generation of writers. They have attained a legitimized as well as a powerful voice by articulating their senses and sentiments and by focusing on some core issues of the region.

Identity crisis, a sense of alienation are some of the dominant features of contemporary politics in the Northeast. Racial autonomy, cultural and linguistic conflicts, the problem of insurgency have been ravaging the region. All these find artistic expression in the works of the writers writing in English from this region. There is a conscious urge, in their works, of going back to their roots and it is used as a means of asserting an identity of their own.

More than half a century of bloodshed has marked the history of the Naga people. Their struggle for an independent Nagaland and their continuing search for identity provide the backdrop of quite a number of literary works in English from this state. Dr. Temsula Ao, a novelist, short-story writer, poetess, and a professor in English is one of the representative contemporary Naga writers. Her short story collection *These Hills Called Home* is the saga of the ordinary people in an atmosphere of violence and bloodshed. Here she talks about children, old men and women, housewives, militants, and a young woman who is raped, the nasty side of the so-called counter - insurgency operations that are going on in Northeast India. Dr. Ao believes that in such a war zone "There are no winners, only victims and the results can be measured only in human terms." (ibidem X). Monalisa Changkija, another notable poetess from that state seems to be confused of the so called progress and development of her land as repeatedly shouted by a number of agencies while the basic amenities of the common people are not fulfilled. The following lines from her poem "Of People Unanswered" has a hint of the agony of the people of Northeast India in general:

Debashis Baruah is Senior Lecturer, Department of English, Furkating College, Furkating, Golaghat, Assam, INDIA

You tell me we are advancing rapidly / into the 21st century / and never fail to mention that you brought / progress to our tribes. But I wonder why you remain silent / when I say we are hungry. (Changkija 2003)

Monalisa is very much critical of the militant also who wants to dictate terms at gun point:

Don't waste your time laying down diktats and guidelines on how to conduct my life on matters personal and political / you may not know / for you do not know / beyond the AK-47. (Changkija 2003)

Here is the voice of the peace-loving common people who want an end to the gun culture in the name of an armed revolution, a revolution which has somehow got re-written into one of disappointment and disillusionment as it has seemed to become the very thing it sought to overcome.

Assam also has been experiencing an atmosphere of terror, violence and insurgency for the last three decades. Literature in English from Assam has multi-faceted reflection of these issues. Mitra Phukan's novel "*A Collector's Wife*" is a touching story of all these turbulent years in Assam's history. She speaks of the students' agitation of 1970's and 1980's and the gradual development towards a full blown insurgency. She also speaks of the threat and the sense of insecurity among the local people posed by the illegal migration from across the border, one of the major issues in Assam's contemporary politics.

Sanjoy Hazarika, the journalist associated with quite a number of reputed international newspapers, delves deep into the problem of insurgency in Northeast India in his book "*Strangers of the Mist*". He looks into the problem from the historical perspective, analyzes its causes and forwards his views. The objectivity of his study of the problem unfolds some issues which have been left in the dark. Apart from being a geographical entity, the Northeast has also an entity in the psychological level. It remains in the mindset. A not-so-friendly attitude from the central Government, right from the partition of India, has aggravated this 'othering' of the region. This has been largely responsible in creating a sense of insecurity and alienation among the people of Northeast from the 'mainstream' which has added fuel to the fire of insurgency in the land. Hazarika's book is a story of neglect, apathy, subversiveness and the social inequilibrium. Mr. Hazarika thought provokingly opines: "..... ULFA appears to be fading away although the core issues behind its growth remains unresolved. Since these factors remain untouched, a revival of the cycle of militancy cannot be ruled out" (Hazarika 1994: 236). This comment bears significance especially at this point in time when talks with ULFA is the buzzing word in every corner.

An urge of going back .to the roots is seen in the works of the writers in English from Arunachal Pradesh. Mamang Dai, who resigned her position as an IAS officer to become a full time journalist is a writer and a poetess of national repute. She deals elaborately with nature in her poetry. Her poetry reveals life in Arunachal Pradesh, its natural beauty, tradition and culture of different tribes and so on. She believes that their rich heritage and maintenance of that can save the tribal communities from the humdrum of modernization and urbanization under the burden of which their age-old faith and identity seem to be gradually fading away. Yumlam Tana, another poet from Arunachal Pradesh also voices such sentiments in his poetry. A search for identity is one of his dominant themes.

Robin S. Ngangon, R.K. Madhubir, R.K. Bhubonsana are some of the leading poets of Manipur, who, with a powerful poetic voice, have made their presence felt in the scenario of Indian poetry in English. A quest for identity, exploring through the tradition of his native community, is a dominant feature of Robin's poetry. The myths and legends of Manipur, Mizoram and

Meghalaya are some of his recurring themes. He is haunted by the ugly face of insurgency and wants those good old days of peace and tranquility come back. He says in his anthology of poems "*Words and the Silence*":

*I hear a wicked war is now waged / on our soil and gory bodies / dragged
unceremoniously / through our rice-fields. The newly rich are ruling our homes. I hear that freedom
comes there, only/if escorted by armed men. (Ngangom 1998:10-11)*

Ratan Thiyam of Manipur, who is one of Asia's most composite theatre personalities and formerly Director of the National School of Drama, re-invents in his plays, the Manipuri tradition, culture, folklore and music by bestowing upon them a contemporary meaning. In his dramatic treatment these become the metaphor of the life in turmoil of the present world in general and in his homeland Manipur in particular. He asserts his identity as a Manipuri, as an Indian and at the same time, as a citizen of the world. In one of his interviews with Kavita Nagpal and Geeti Sen, he says that even sitting in Manipur he thinks about Indo-Pak relationship, about the Gaza Strip, about Israel, Palestine, Afghanistan or about a bomb blast in Bali. This attitude reiterates the fact that sticking to one's native tradition does not deter him/her from being a citizen of the world.

Speaking on the importance of tradition, Thiyam says in that interview, "*it is by the use of tradition that you try to drive away the evil factors.*" (Sen: 230).

The poets and writers from Meghalaya also have been dealing with the myths, legends, folklores and rich tradition of their land in their works. In the works of the writers like D.L. Kharmawphalang, Kynpham Sing Nongkynrih, Dr. Ananya S. Guha, Anjum Hasan and Paul Lyngdoh the natural beauty of Meghalaya is explored to the deepest extent. Significantly, there has been a conscious use of the ecology of their land as a means of asserting an identity. Therefore, they believe that the ecological degradation by deforestation or uranium mining, which is being done in Meghalaya, is a threat not only to the environment alone but also to their very identity. How nature is exploited for some futile purposes can be marked in the following lines by Kynpham Sing Nongkynrih on the occasion of the then Prime Minister of India I.K. Gujral's visit to Meghalaya. The underlying note of irony may also be an interpretation of the psyche of the Northeast:

*When Prime Minister Gujral/planned a visit to the city / bamboos sprang
up from pavements / like a welcoming committee
Only the bamboos watched in silence/too used to the antics of men.
(Sen 2003 : 159)*

The desire of going back to the roots is also common in the works of the writers like Mona Zote and H. Ramdinthari of Mizoram, Rajendra Bhandari of Sikkim and Bhaskar Roy Barman, Sefali Debbarma, Niranjana Chakma etc. of Tripura. All of them explore through their tradition and culture, and their works of art employ their rich tradition as a means of attaining a self-identity. Bhaskar Roy Barman speaks of his beautiful native land Tripura and also about the local tribal people who have been driven out by the refugees of Bangladesh. Niranjana Chakma is hopeful that someday the local people would arise and would demand their rights with a united voice:

*But, someday / Their unspoken words / will be uttered boldly / when all their voices / will simultaneously
turn / into an overwhelming rage / against their enemies. (Sen 2003: 2004)*

This can also be seen as a collective voice of the people of the Northeast who have been experiencing, from the time of Partition itself, a sense of exploitation, neglect and alienation, who have a feeling, and which has been gradually growing deeper and deeper, that the 'centre is too far from the 'periphery'.

In an interview with Sanjoy Hazarika and Geeti Sen, Indira Goswami, the Jnanpeeth Award winner litterateur from Assam, popularly known as Mamoni Raichom Goswami, while speaking of

the reasons why the people of this part of India feel neglected, refers to the bias ever in writing history:

In (NCERT) books prescribed for history. I have grown up reading about the Richard the Lion Heart, the Vijaynagar Kingdom, the Kalinga War, the French Revolution, the downfall of the Mughal Empire. All on British history and Indian history — but there is nothing about Assam or the 600- year- old Ahom rule, the same dynasty ruling a huge state for 600 years. Even a major uprising like the revolution of common people against the Ahom monarchy where, it is said, one lakh people died in the “Moamoria Revolution” is not mentioned. ‘ (Sen : 295.)

The same can be said also about U. Tirot Sing, the Khasi martyr who fought against the British aggressors for the freedom of his native land and died for that cause. But he also fails to find a place in “Indian” History. Apart from apathy in the political level all these have contributed in increasing the gap between the centre and the margin. Interestingly, in some of the literary works, insurgency is seen as an answer to all these apathy and depravation. Nongthombam Kunjamohan Singh’s “*Ine Leipaklei*” is the interesting tale of the transformation of a simple, meek lady into a rebel conditioned by the forces in an unequal society. (Zama: 2004).

For decades, the Northeast have been experiencing violence in its ugliest form. Bombings, kidnappings, extortion, insurgency and counter-insurgency operations have become a regular part of news from this region. But the common people of the land, irrespective of caste, creed and community want an end to all these. They want peace coming back to this beautiful land. This craving for peace also has a reflection in the literature of this part.

But what kind of peace people of this part want? This issue definitely bears significance. As Sanjay Hazarika puts it, “peace with honour, peace with justice, peace with dignity.” (Sen-294-95). Peace apparently means absence of war. But war always does not necessarily mean fighting with arms. It can also be in the mental as well as in the psychological level. A person from Nagaland or Mizoram, while checking into a hotel in Delhi is asked to show his/her passport at the reception counter because of the physical features **S/he** shares with the people of China, Japan or Thailand. The experiences of the students from ‘Northeast India, studying in Delhi or Mumbai are, most of the times humiliating. The girls are often referred to as ‘Chinki’ because of the shape of their eyes and the high cheek bones, and the boys as ‘Chapta’ because of their flat nose. A Naga student resided in Pune once commented that he became “half Naga and half Indian” after coming to Pune, while he was “a complete Indian” before. (Baruah 2006: 169). Another student: from Manipur said about his experiences in Mumbai that he was treated as a foreigner” and when he told that he was from Manipur, people asked where this place was and whether it was really in India. In order to avoid those kind of embarrassing situations he started saying that he was from Thailand, because “it was more convenient” (Baruah 2006:169).

Are these not wars? Definitely yes! These are also brutal, nasty, ugly wars that left a scar in the mind or in the psyche. The people of this part of the country unusually find themselves in situation where they have to confront with such wars in their day--to-day affairs with the mainland. While talking about peace in Northeast India, apart from bringing an end to the insurgency and counter - insurgency operations, these wars must also be kept in mind. In a meeting in Mumbai, a minister of Arunachal Pradesh said with all his agony and pain, that in a vast country like India a few Indian people may even look Chinese, Japanese or Thais and the rest of the people should accept this fact. He invited people from other parts of India to Arunachal Pradesh to see how they would be greeted with ‘Jai Hind’ **by** the local people of this northeastern state bordering China. (iBaruah 2006:175).

The minister here is voicing the sentiment of the people of Northeast in general. They are as much Indian as any other Indian and they are not in an enemy territory conspiring against the Indian state. The sooner the Indian state realizes this, the better for the entire nation. Contemporary writing in English from India’s Northeast is also a celebration of this spirit.

References

- Ao, Temsula 2006: *These Hills Called Home*. New Delhi : Penguin,
- Baruah, Sanjib 2006: "A New Politics of Race: India and its North-east": in Geeti Sen (ed.) *The Northeast: Where the Sun Rises When Shadows Fall*, New Delhi: India International Centre.
- Chakma, Nirajan. 2003: "The Words Will be Uttered Boldly". in edited. K.S. Nongkynrih & Robin S. Ngangom (ed.) *Anthology of Contemporary Poetry from North-East*. Shillong: NEHU, pp. 240-41.
- Chankija, Monalisa. 2003: "Of a People Unanswered". in edited. K.S. Nongkynrih & Robin S. Ngangom (ed.) *Anthology of Contemporary Poetry from North-East*. Shillong: NEHU.
- Hazarika, Sanjoy. 1994: *Strangers of the Mist*. New Delhi: Penguin.
- Ngangom, Robin S. 1998: *Words and the Silence*. Calcutta: Writers Workshop.
- Nongkynrih, K.S. 2003. "When the Prime Minister Visits Shillong the Bamboos Watch in Silence". in edited. K.S. Nongkynrih & Robin S. Ngangom (ed.) *Anthology of Contemporary Poetry from North-East*. Shillong: NEHU, pp.159-60.
- Phukan, Mitra.2005: *The Collector's Wife*. New Delhi : Penguin. .
- Sen, Geeti (ed.) 2006: *Where the Sun Rises When Shadows Fall: The Northeast*. New Delhi: India International Centre, .
- Zama, Margaret C.2004: *The Heart of the Matter*. New Delhi: Katha.

Globalization and Gandhian Ideology

Pankaj Kumar Singh

The ideological thrust of Gandhian way is mainly based on three related concepts namely, *Sat*, *Ahimsa* and *Tapasya*. 1. *Sat* – Which implies openness, honesty and fairness: truth 2. *Ahimsa* – Refusal to inflict injury on others. 3. *Tapasya* – Willingness for self-sacrifice. These concepts are main part of his ideology. Ideology is a set of values, beliefs, norms etc. There are three aspects of globalization - *Economic globalization, Political globalization and Cultural globalization*

In this paper main concern is given to the cultural globalization. Ideology is a component of cultural globalization. The concept of *Ahimsa* is a global concept. In the time of Gandhi the use of ICT in the limited manner but now a days the use of ICT in large level. Because of ICT *Ahimsa* and *Stayagrah* became global. After Gandhi the use of these concept by Nelson Mandela and Yong Song Sukee and some countries like Tunisia, Arab countries etc. Gandhi's philosophy of nonviolent, assertive resistance, *Satyagraha*, was practiced for one-half century, in one form or another, by Leo Tolstoy and by Dr. Martin Luther King, Jr., by the Student Nonviolent Coordinating Committee, by the Community for Creative Nonviolence, and by others who desired change in the direction of Truth and fairness, yet were unwilling to make respect for their opponent or for the law the first victim of their protest. Anyone who used violent means to gain a social good practices something other than *Satyagraha*. In India the ideology of Gandhi is adopted by Vinoba and J.P. in Bhudan and Gramdan movement. In recent example of this Gandhian ideology against corruption reflected in India by Anna Hazare movement.

The six elements of Anna's ideology are influenced by Gandhi are *Suddh Achaar, Suddh Vichaar, Niskalank jivan, Tyagmai jivan, Sachchai ke marg par chalna, and Apmaan sahne ke chamta* and three slogans taken by Anna from Indian national movement are *Vande Matram, Bhart Mata Ki Jai* and *Inklab Zindabad*.

Based on these concepts in Gandhian way of social life. Gandhi had great faith in *satya*. Throughout his life he experimented with truth in various forms. For the understanding of Gandhian ideology and its relevance in the contemporary society one has to understand these concepts. Gandhian philosophy has always been a topic of discussion especially in this contemporary world where his ideas appear redundant amidst the pragmatism and materialism which prevails.... still to discard the relevance of his thought is akin to removing the element of humanity from man as his philosophies like "*satya*" and "*Ahimsa*" emanate basic human principles of love, compassion and tolerance. His philosophy of "*satyagrah*" which according to him meant "*the force which is born of truth or violence*" is required more in the contemporary world scenario where accumulation of

nuclear weapon has become the means to attain supremacy. Despite the efforts of various peace keeping force the threat of nuclear war persists in the sub consciousness of world and the only method which has the potential to remove this “ever lingering fear” is satyagrah. But his pragmatic ideas are still relevant in contemporary globalization world. The present paper is an attempt to point out the contemporary relevance of Gandhian ideology as reflected in this ideas of Anna for India against corruption in Indian society particularly in this context of globalization taking place in contemporary world.

GANDHI.....a single word that echoed the dreams of millions of people ...a single entity who bore the burden of a whole nation.....an idea that reincarnates every time it's assassinated.....an intangible realitya beacon of hope to millions of Indian who were bowed under the weight of years of slavery.....a person who was in the vanguard of India's freedom struggle.....an enigma that still fails not to awe us.....he was the man “*who could talk with crowds and still keep his virtue.....or walk with kings and not lose the common touch*”.

In this fast globalizing world where capitalism is gradually becoming the word of the day, Gandhi's concept of decentralization of means and resources and his model of economic development which talked of developing villages as an independent production and administrative unit has become more relevant in order to save us from various economic, social, ethical and emotional hazards which are the consequence of this large scale industrialization and have become silent killers of the human race.

Gandhi too talked of globalization but in a positive manner. His uniqueness did not lie in the fact that he was extraordinary but in his being extraordinarily ordinary and this simplicity of his was reflected in his thoughts too. His idea of swadeshi which talks of “production for neighbors” if applied to the world at large with his theory of “*antyodaya*” or “*the last man*” which speaks of providing every individual with the basic necessities can negate the effects of globalization by ensuring everyone fruits of developmental process.

Corruption in India

Corruption “deepens poverty, it debases human rights, it degrades the environment, it derails development, including private sector development, it can drive conflict in and between nations; and it destroys confidence in democracy and the legitimacy of governments. It debases human dignity and is universally condemned by the world's major faiths.” In other words, as per the definition given by the World Bank in 2000, corruption is the “abuse of public office for unauthorised private gain” (Yadav, 2011). Quite disappointingly, such trends are widely practiced in India, irrespective of successive attempts made by the various governments that have been formed since Independence, to eradicate corruption. In fact, the dynamics of corruption in Indian democracy are multi-faceted. Corruption has destabilised the effectiveness of all institutions of governance in India thereby debilitating the rule of law and access to justice (Raj Kumar, 2011). In fact, the roots of corruption in post-Independence India lay in its economic policies that continued to operate till the late 1980s. Over-regulation, protectionism, and government ownership of industries led to slow economic growth, high unemployment, and widespread poverty. This system of bureaucratic control by the government has in course of time generated endemic corruption in the country. The absence of political will and sincerity has also been instrumental in the flourishing of corruption in India.

Corruption has taken the shape of a fundamental problem affecting the social fabric as well as the political framework of Indian society. Hence, it can be found both on a large scale undermining fairness in governance and also at the micro level affecting the lives of every common citizen on a day to day basis. “it is a well-known fact that without paying bribes, it is difficult to get anything done in any office or institution. In a study of petty corruption, India prominently figures

among the thirty most corrupt nations in the world.” (Raj Kumar, 2011; pp. 97) In a way, corruption in India has led to lack of transparency and accountability so far as public institutions are considered, thereby leading to an empowered bureaucracy and deep-rooted abuse of power. Hence, it is not surprising to hear of the controversies related to the 2G spectrum allocation or the Commonwealth Games in India. Against such a backdrop, the outbreak of the Anti-Corruption Movement in 2011 was extremely relevant and in no time, it captivated the imagination of the masses and spread like wildfire.

Anna and anti-corruption movement

The anti-corruption movement, led by Kisan Baburao Hazare, more popularly known as Anna Hazare, was designed to highlight the issue of corruption, a reigning phenomenon in post-Independence India as mentioned above. Before discussing the objectives and trajectory of the movement, some light should be thrown on the life and history of its primary protagonist Anna Hazare, his peoplecentred and people-controlled perspectives as reflected in Ralegaon Siddhi, his long-drawn anticorruption agitations against the political society of Maharashtra and his adopting of ‘Gandhian’ methods of protest. It is Hazare’s philosophy and principles that gave the initial push to this citizens’ eruption, which later became a country-wide call for a corruption-free India. “His fast unto death became the rallying point for a nationwide movement and forced the government to form a joint committee to draft the Lokpal Bill.”

Thus, Anna Hazare through his peaceful struggle, using the non-violent weapon of fasting, succeeded in getting some revolutionary laws legislated in Maharashtra. In fact, his choice of non-violent methods of protest has given him the tag of being a ‘Gandhian’. He believes that “The dream of India as a strong nation will not be realised without self-reliant, self-sufficient villages, this can be achieved only through social commitment and involvement of the common man. Building concrete jungles does not mean development as Gandhiji had rightly said. Surely, one needs to live for oneself and the family but simultaneously one owes something to your neighbour, your village and your nation too.” In his personal life also, he has maintained simplicity throughout and has dedicated himself towards social service/ eradication of injustice, discrimination and corruption. Quite logically, his endeavours against corruption, in the course of time, have been up-scaled from the state level (Maharashtra) to the national level targeting the central government and its ministers, some of whose involvement in huge corruption scams have actually helped create an apt platform for the nation- wide anti-corruption movement that was launched in 2011

August 2011 events

Following Anna’s hunger strike and the nation-wide ripples of remonstrations, a debate on the Jan Lokpal Bill was held in Parliament on 27 August 2011. With Hazare demanding three principles, (i) citizens’ charter, (ii) lower bureaucracy to be under Lokpal through an appropriate mechanism and (iii) establishment of Lokayuktas in the states, both houses of Parliament agreed to the principles. “Winding up the day-long debate, (Pranab) Mukherjee said while a ‘respected’ Gandhian with ‘massive support’ was on agitation, it was not always necessary to move in conventional straight jacket way”. This finally marked the end of the fast, though Anna made it very clear that he was only suspending his fast for the time being and would end it only after a strong Lokpal Bill was passed by the Indian Parliament. “Parliament has spoken....the will of Parliament is the will of people,” said Prime Minister commenting on the development... In the Lok Sabha, leader of the opposition Sushma Swaraj said, “History has given us an opportunity, which we should not miss. Let us not get into technicalities. We should give this country an effective, strong, free and impartial Lokpal.”

After these arguments and counter arguments, the government finally withdrew the Lokpal Bill introduced in August 2011 and reintroduced 'The Lokpal and Lokayukta's Bill 2011' along with the 116th Constitutional Amendment Bill, which also included reservation for minorities and 50 per cent reservation for Scheduled Castes, Scheduled Tribes, Other Backward Classes and women. "Hitting out at the government on the 'useless' Lokpal Bill, Anna Hazare challenged Congress chief Sonia Gandhi to a public debate on it to convince people that the proposed legislation is strong... Hazare said the new Bill is of no use if the anti-corruption ombudsman does not have control over CBI and the lower bureaucracy is not brought under its direct control. He said he would go on a three-day hunger strike from December 27-29 and would launch "jail bhara" struggle. "My jail bhara protest will be outside the residence of Sonia Gandhi and Rahul Gandhi," the 74-year-old activist said."

"The government was repeatedly telling us that by proceeding with protests while Parliament was considering the Bill, we were showing contempt for parliamentary democracy. We had responded by pointing out that by overlooking the wishes of the people as expressed in numerous polls, surveys and referendums, all of which showed that more than 80 per cent of the people favoured the Jan Lokpal Bill, the government was showing contempt for the people. The drama in the Rajya Sabha showed that the government was not even willing to go by the will of Parliament. This gives rise to fundamental questions about the functioning of Indian democracy. Is this form of representative democracy allowing the will of the people to be reflected in policy and law-making, or is it being held hostage to parties and their leaderships to be determined by their own whims or corrupt considerations? Has the time come for us to rethink and deepen our democracy by putting in place systems where laws and policies would be decided by decisive inputs of the people (through referendums and gaon sabhas, or village councils) rather than only by such "elected representatives"? We hope that this fundamental issue would bring about an even broader public engagement than what has been witnessed during this Lokpal campaign." (See Bhushan, P., *The Saga of the Lokpal Bill*, (The Hindu, January 2, 2012)³¹ On December 27, 2011 Sushma Swaraj again "punched holes in the government's Lokpal Bill saying it was anything but a strong and effective law to deal with corruption in the country. It is patently unconstitutional (bill)... deeply flawed and tampers with the basics of our Constitution," The debate resulted in the Lokpal Bill being passed to the Upper House of Parliament (Rajya Sabha) but the Lokpal was not given Constitutional status as expected. It failed as the government did not manage the two-thirds majority of the members present and voting. Later, the Bill was passed by the President of India as per constitutional norms. However, as the government prepared itself for a tough tussle in the Rajya Sabha, the focal point of its concern was a key partner, Mamata Banerjee, Chief Minister of West Bengal (from Trinamool Congress party). She wanted 14 pages of the Bill to be dropped (which deal with Lokayuktas or anti-corruption agencies at the state level and would violate the autonomy of the states). Meanwhile, Anna Hazare again began his fast demanding a stronger version of the Lokpal Bill at MMRDA ground in Mumbai. However, "smarting under poor response and bad health, Anna Hazare, called off his fast a day ahead of schedule and repeated his threat to campaign against Congress in the five poll-bound states for not bringing a strong Lokpal." Proceedings in Parliament were also stalled and reached a deadlock as the Bill got stuck in the Rajya Sabha and was not passed during the winter session of Parliament.

Anna vs Gandhi

The name Anna Hazare in today's Indian scenario has become synonyms with "initiator of India's freedom from corruption". The movement started by him against corruption has moved the whole nation. Millions of people wearing "I am Anna" headgears are supporting his stand against corruption and stormed each and every lane of country with protests and demonstrations. People view Anna Hazare as Gandhi of the modern time who has started another freedom struggle for freeing India from menace of corruption by demanding a strong Jan Lokpal Bill. Anna is being compared to Mahatma Gandhi for borrowing some aspects of his ideology into his movement like his method of agitation of fast unto death, his appearance his believe in sayings of Gandhi and his method of non-violence. Viewing from a superficial level it will appear that Anna is Gandhi of modern era but only after a detailed lookup we can know the difference between "Anna and Gandhi".

Anna says that "*Sirf topi Pahnane se Anna nahi ban jate*" (you don't become an Anna Hazare if you wear his cap). Not many youth who are protesting with Annaji pay attention to what important he says. He says that if anybody wants to become like him has to follow 5 easy fundamentals of life. And he says this is especially for the youth of India (who blindly follow the west everytime). His vichars are: *Shuddha Vichar* (Pure Thoughts) - Our thoughts should be shuddha, i.e. pure. We should think pure. By pure I guess Annaji means that we should not think bad about others. *Shuddha Aacharan* (Pure Karma) - Our work or karma should be pure, it should be always good. *Nishkalank Jeevan* (Unblemished Life) - We should not have a blemish of a bad past deed on our life. We should lead a life doing good things. One must have a good character. *Tyaag* (Sacrifice) - If we want to achieve something, we ought to sacrifice something (be it for a while although). *Kuch paane ke liye kuch khona padta hai. Apaman sahne ki shakti* (Power to face insult). We must have the power to gulp down insult. If we gulp down insult we have the power to face anything.

Gandhi's 10 Fundamentals for Changing the World. The following is a list of his 10 fundamentals for changing the world, with a brief description of each by Gandhi himself.

1. Change Yourself "You must be the change you want to see in the world."
2. You are in Control "Nobody can hurt me without my permission."
3. Forgive and let it go "An eye for eye only ends up making the whole world blind."
4. Without action you aren't going anywhere "An ounce of practice is worth more than tons of preaching."
5. Take care of this moment "I do not want to foresee the future. I am concerned with taking care of the present. God has given me no control over the moment following."
6. Everyone is human "It is unwise to be too sure of one's own wisdom. It is healthy to be reminded that the strongest might weaken and the wisest might err."
7. Persist "First they ignore you, then they laugh at you, then they fight you, then you win."
8. See the good in people and help them "I look only to the good qualities of men. Not being faultless myself, I won't presume to probe into the faults of others." "Man becomes great exactly in the degree in which he works for the welfare of his fellow-men."
9. Be congruent, be authentic, be your true self. "Happiness is when what you think, what you say, and what you do are in harmony."
10. Continue to grow and evolve. "Constant development is the law of life, and a man who always tries to maintain his dogmas in order to appear consistent drives himself into a false position."

The very fact which distinguishes Anna's ideology from that of Gandhi is that method of fast unto death resorted by Anna is unconstitutional. What sort of method is that in which the fundamental and supreme pillar of Indian democracy, Parliament, is kind of blackmailed and brought on a hold and asked to pass a law till this date otherwise I will end my life. Anna appears like a baby forcing its parents to buy a thing by crying and displaying anger. It should be realized by members of civil society that Indian Constitution provides ample opportunities and means for

demands in national favour in form of discussion and lobbying in Parliament, Parliamentary Standing Committee, judiciary, group of ministers etc. Team Anna is comparing this movement against corruption similar to that take by Gandhiji in freedom struggle. But there is a striking difference between these two movements. Gandhiji's movement was against an autocratic foreign rule to achieve democracy and it was not targeted against a single person or organization. Rather at times he stood against persons who took way of nonviolence and unethical means to gain freedom. On the other hand, Anna has made this agitation a one to one combat between him and UPA government. The agitation launched by him is a threat to democracy, constitutional mechanisms and institutions. Team Anna has made statements saying our ministers are incapable, voters are high when they are voting and like that. But it is worth mentioning here that Indian Democracy despite some shortcomings have managed to remain intergrated as world largest democracy bonding together fibres of social, cultural, economical and political aspects of India. Gandhi ji would not have supported such coercive and unconstitutional measures which would pose as a threat to democracy which we have achieved after so much effort. Gandhi's personality, charisma, leadership skills, his motives, methods mesmerized the whole country and people from all classes were behind him in his noble cause. Despite coming from a high class family Gandhiji gathered support from even lowest class of society whereas Anna's wave has swaped only urban middle class. Dalits, harijans and lower class people have begun to exprees their concern over implications of Jan Lokpal Bill. In a society where the anti-caste spirit and prejudices are present in abundance, they feel that given its proposed wideranging powers, it may be misused. It is not that Anna has not done anything or neglected the lower class people. In his village *Ralegaon Siddhi* he helped Dalits in a number of ways including by paying loans taken by them with help of villagers. . Thus a former village *sarpanch* of the region states: 'Whatever Anna says, we do. The whole village follows his words. Anna's orders work like the army.' For another villager, 'Annajee is like God.' The absolute recognition of an authority locally works in several internalised ways. Yet those people are still living in a secluded corner of the village and Anna could not bring brotherhood with them. The thing is that Team Anna has not put enough efforts to remove suspensions from minds of lower class and to bring them in themovement against corruption.

Though Anna's cause is noble and has managed to awaken the whole country against this menace of corruption. But at times Anna only seems to be cashing on image of Gandhi not his ideas, his thoughts. At surface level we may find similarities between Gandhi and Anna but one does not become a Gandhian just by wearing khadi or Gandhi cap. You have to deeply understand Gandhi's views, feelings, his thoughts and more importantly follow and implement them. In Gandhi's words "*truth and untruth often co exist, good and evil are often found together*", however when two lies wage a war against each other it's the bigger lie that wins...the greater violence that takes away the booty.....the more intense hatred that becomes the victorbut ultimately its untruth that prevails, violence that persists and hatred that is glorified.....the vedantic philosophy of "*asto ma sadgamay*" subjugates to the engulfing darkness. It's here when Gandhi's Weapon of "*satya*", "*ahimsa*" and "*compassion*" come into play and helps in restoring the light to the darkening world. Its true that a vast difference has come in the approach and mindset of Indians in these 60 years of independence, thus its imperative that people will look askance at individuals who try to propogate Gandhian principle but despite this it is impossible to deny his relevance the only change that can be made is to serve the same cuisine on a different platter to remove the spiritual veil which covered it and modify his philosophy so that it appeals to the scientific mind of todays generation. Nevertheless lam sure that Anna and his team will avoid such coercive measures in future and continue to fight against disparities prevailing in India.

References

- Bannerjee Sumanta, (September 3, 2011) '*Anna Hazare, Civil Society and the State*', Economic & Political Weekly
- Bannerjee, S., (2002), '*Naxalbari and the Left Movement*' in Shah, G. (ed.) *Social Movements and the State*
- Judge Paramjit S, (November 12, 2011), '*An Ambiguous Actor: People in the Movements*', Economic and Political Weekly, pp: 19
- Judith Vidal-Hall, (2006), 'Naxalites', in *Index on Censorship*, Volume 35, No. 4, pp. 73-75
- Khan Azeez Mehdi, (1997), *Shaping Policy: DO NGOs matter? Lessons from India*, PRIA, New Delhi
- Mathews, Rohan D, (2011), *The Koel-Karo People's Movement in Eastern India*, <http://base.d-ph.info/fr/fiches/dph/fiche-dph-8885.html>
- Mohanty Manoranjan, (September 17, 2011) '*People's Movements and the Anna Upsurge*' Economic & Political Weekly
- Oommen T.K., (Ed.) (2010), *Social Movements I & II, Issues of Identity*, Oxford University Press, New Delhi
- Raj Kumar C, (2011), *Corruption and Human Rights in India: Comparative Perspectives on Transparency and Good Governance*, Oxford University Press, New Delhi
- Sangvai Sanjay, (December 15, 2007), *The New People's Movements in India*, Economic & Political Weekly.
- Shah Ghanshyam, (1990), *Social Movements in India, A Review of Literature*, Sage Publications, New Delhi
- Shah Ghanshyam (Ed.) (2002), *Social Movements and the State*, Sage Publications, New Delhi
- Sitapati Vinay, (July 23, 2011) '*What Anna Hazare's Movement and India's New Middle Classes Say about Each Other*' Economic & Political Weekly
- Tandon Rajesh, (2003), '*The Civil Society-Governance Initiative: An Indian Perspective*', Rajesh Tandon and Ranjita Mohanty (ed.), *"Does Civil Society Matter? Governance in Contemporary India"*, Sage Publication India, New Delhi
- Tilly, Charles (2004), *Social Movements 1768-2004*, Paradigm Publishers, London
- Yadav Vineeta, (2011), *Political Parties, Business Groups, and Corruption in Developing Countries*, Oxford University Press, New York

Media Exposure and HIV/AIDS Awareness among the College Students in Churachandpur District of Manipur

G. P. Pandey

Meenakumari Angom

The Human Immuno Deficiency Virus (HIV), which causes Acquired Immuno Deficiency Syndrome (AIDS), is the leading infections cause to adult in the world. Given the scale of the epidemic, HIV/AIDS is now considered not only a health problem, but also a developmental and security thread. Even if a cure is found tomorrow, the toll of death and suffering by 2010 will be far exceed any other recorded human catastrophe, and other previous epidemic, natural disaster, war, or incident of genocide violence (Javed M. Iqbal, 2008).

Throughout the world the number of people living with HIV/AIDS (PLWHA) continues to grow with an estimation of 33.4 million people were living with HIV/AIDS by 2008 (UNAIDS 2008). All the countries of the world have been touched by the epidemic. India is also one of the worsely HIV/AIDS effected country.

In India approximately 2.5 (2- 3.1 million) people were living with HIV/AIDS (NACO, 2008). 65 percent of the country's HIV/AIDS cases were contributed by Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra and Manipur. NACO classified these states as country's HIV/AIDS high prevalence states. Among these states Manipur has recorded the highest adult HIV/AIDS prevalence rate with 1.13 percent, which is against the national adult HIV/AIDS prevalence rate of 0.36 percent. Manipur, a small land-locked state located in the periphery of north-eastern region of the country contributes hardly 0.2 percent (22.9 lakhs) of country's population is contributing nearly 8 percent of the country's total HIV/AIDS cases (MACS, 2007 & Manipur statistical report, 2007). The first case of HIV positive in the state was reported in February 1990 from the blood sample collected in October 1984 among a cluster of six injecting drug users (IDU) (MACS, 2006). Though HIV was appeared like a mere smoke signal among the IDU's, it is now no longer confined to them but it has been spreading like a wild fire from urban to rural areas, from valley to hill areas, from male to females and from vulnerable population to the general population. By May 2008, there were 29,602 people living with HIV/AIDS in the state.

NACO classified all the districts in the country into three categories A, B and C based on the prevalence of HIV/AIDS cases. All the nine districts of Manipur, Imphal East, Imphal West, Bishnupur,

G. P. Pandey is Professor of Mass Communication at Deptt. Of Mass Communication, Assam University, Silchar

Meena Kumari Angom is Research Scholar at Deptt. of Mass Communication, Assam University, Silchar

Chandel, Ukhrul, Senapati, Thoubal, Tamanglong and Churachandpur, comes under A category (NACO, 2006). According to MACS report majority (44.24 percent) of the state's HIV/AIDS cases were found under the age of 30 years. At global scenario also among the new HIV infection each year more than 50 percent occur in 15 and 24 age group, of which only a fraction know they are infected (UNAIDS, 2004). Considering this fact the importance of focusing on young people has been recognised at global level by the 2001 UN General Assembly Special session on HIV/AIDS, which endorsed a number of goals for young people including "By 2005, ensure that at least 90 percent and by 2010 at least 95 percent of young men and women have access to the information, education, including peer education and youth specific education and service necessary to develop the life skills required to reduce their vulnerability of HIV infection; in full partnership with youth, parents, families, educators and health care provider" (WHO, 2000).

With an effort to achieve the said objectives various media being used throughout the world in disseminating HIV/AIDS related messages to promote responsible behaviour and to educate about the prevention and protection from HIV/AIDS with special emphasis given on youth.

Over the last two decades evaluation of HIV/AIDS awareness level and the role of media in prevention and control of HIV/AIDS have attracted the attention of the various social scientists. A study on AIDS related knowledge and attitude among college students in Aurangabad shows that majority of the students obtained the knowledge about AIDS from radio and newspaper (Hiramani, 1992). In India, Africa and Latin America, popular soap operas that includes plot about family planning and HIV/AIDS prevention have reportedly increased clinic visits and change health behaviour (Johns Hopkins centre for Communication programme, 1995; Ketende Bessinger, Gupta, Knight & Lettenmaier, 2000 ; Rogers et al, 1999 ; Singhal & Roger, 1999 ; Vaughan & Rogers, 2002).

A cross section research in Ghana shows that mass media effect on AIDS related knowledge and behaviour were larger than those of interpersonally bases communicative channels (Benefo and Takyi's, 2003).

In Iran, HIV/AIDS knowledge among college students shown that mass media have succeeded in raising AIDS awareness, but have produced little effect in changing student attitude towards those with HIV/AIDS (Dadkha, B. , Mohammadi, M.A. & Mazafari, N. , 2008).

The above review shows that mass media play an important role in generating HIV/AIDS awareness and in promoting responsible behavior to protect oneself from the epidemic in develop societies as well as in case of developing society like India.

However in respect of Manipur context no specific study has been carried out in this regard. The present study access the HIV/AIDS awareness level and exposure to HIV/AIDS related messages appears in different media among the college going youth's in Churachandpur district of Manipur. It is particularly appropriate to choose the Churachandpur district for the present study as the district is one of the woersely HIV/AIDS effected district in the state. In terms of HIV/AIDS prevalence the district stands third position with 16.70 percent, which is against the state average of 12.16 percent. Again in terms of population it contributes 9.93 percent of the state's total population. While in terms of HIV/AIDS cases it contributes 8.77 percent of the state's total HIV/AIDS cases (MACS, 2008 & Manipur Statisal Report, 2007). In May 2008 out of 12440 bloods sample screened about 2078 were found HIV positive and majority (44.24 %) of them belongs to under age of 30 years.

The specific objectives of the study are: 1) To understand the social background of the college going youth in the district; 2) To find out the media habits of the college going youth in the district; 3) To assess the knowledge status about HIV/AIDS among college going youth in the district; 4) To assess the exposure of HIV/AIDS awareness messages disseminated through different media on the college going youth in the district.

Methodology

Keeping in view of the objectives of the study, the present study adopted survey method. The study was conducted with 130 college students. They were selected randomly from those students who admitted in academic session 2007-2008 in Churachandpur Government College and Rayburn College Churachandpur. Primary data were collected by administering a highly structured schedule. The schedule consists of three sections. The first section related to general information about the social background of the respondents. The second section related to media habits of the respondents and their exposure to HIV/AIDS related messages appears in different media. And the third section deals with assessing of HIV/AIDS awareness level of the respondents.

Media used in HIV/AIDS awareness Campaign in the state

In Manipur as a part of IEC programme of National AIDS Control Programme, the Manipur State AIDS Control Society (MACS) has been using various media in HIV/AIDS awareness campaign. In the past five years (2002 - 2007), 1110 Sumang Leela (a traditional folk theatre of Manipur) based on HIV/AIDS were exhibited throughout the state in seven different dialects, 1519 different news items on the issue were published in different local dailies, 2207 different programmes based on the epidemic were broadcast on AIR, Imphal, 434 different programme based on HIV/AIDS were telecast on Doodarshan Kendra Imphal & local cable channel, and 400 Wall Writing, 253 Hoardings, 3000 Banners which have HIV/AIDS messages displayed at roadsides and public places. 2500 Puppet shows and 120 Street Play were shown throughout the state. 38, 88100 Poster + Folders + Leaflets were distributed. And one feature film was also produced (MACS Annual report, 2004 – 2005, 2005 – 2006 and 2006 - 2007).

Social Background of the Respondents

Majority (67.70%) of respondents belongs to under the age of 20 years group. Most (92.31 %) of them belongs to ST and professed Christianity and it is obvious as the study area is dominated by tribal communities. The respondents belong to 13 different communities and the Paite (46.68 %) represent the largest community. Cent percent of them knew three to four languages and English and Manipuri are common to all. Majority (fathers' with 98.47 % and mothers' with 95.39 %) of the respondents' parents are literate and common educational qualification is up to Higher Secondary (fathers' 45.40 % and mothers' 44.63 %). Most (56.94 %) of the respondents' fathers are agriculturalist and mothers are housewives (96.16 %). On an average most of them (78.47 %) have medium size and nuclear families (83.84 %). Most (43.08%) of the respondents' household consumption pattern belongs to average. Their major source of drinking water is well (52.33 %). They mainly depend on bus (29.24 %) and sumo (30.76 %) service for travelling. For medical treatment majority (90.79) of them used to go to the District Hospital.

Media Habits

Majority of respondents (82.24 %) have subscribed newspaper and The Sangai Express (English local daily) is the most popular newspaper among the respondents. 68.48 % of them read newspaper regularly and the most preferred news items are Employment News (46.15 %), Current Affairs (46.15 %), sports (31.53 %) and Editorial (26.15 %).

Magazine reading habits among the respondents appears to be very high as 80.70 % used to read magazines. Generally they spent 1 – 2 hours on reading magazines. The most popular magazines among the respondents are Tongluang (dialect magazine) with 26.92 % followed by competition success review with 13.07 % and India Today with 10.76 %.

More than three-fifth (65.38 %) of respondents owned radio but only 28.46 % used to listened radio regularly and most (19.23 %) of them used to spend less than one hour on listening radio in

a day. The most popular programmes among the respondents are news (20.76 %) and film songs (20 %). The most preferred radio station is AIR, Imphal with 19.23 %.

More than three-fourth (78.46 %) of respondents owned TV and most of them (57.70 %) used to watch TV daily/regularly. Normally they used to spend 1 – 2 hours on watching TV in a day. The most preferred timing for watching TV is evening. The most popular programme among them are music (60.76 %), feature films (43.07 %) and news (40.76 %). The popularity of DD Channels appears to be low as only 37.69 % used to watch the channels.

Cinema going habits among the respondents appears to be very high as cent percent of respondents have the habits of film watching. Most of them (76.94 %) used to watch films at their homes and they preferred romantic films (56.17 %). Regarding languages of the film, English film (86.92 %) emerged as the most preferred one followed by Hindi (20.76 %), Manipuri (6.92 %) and Korean films (5.38 %).

Internet using habits among the respondents appears to be considerably low as only 23.08 % used to surf internet and most of them (17.69 %) used it very rarely or occasionally. In terms of traditional media majority (65.39 %) of respondents' families have associated with one or other form of indigenous form of folk/ traditional media. But the popularity of Street Play, Puppet Show, and Sumang Leela (a traditional form of theatre) which are being used extensively by various organizations for various social causes are significantly low as most of the respondents have hardly given attention on these media. And the popularity of Outdoor Media which displayed at Fair, Roadsides and Public Places are considerably low as only 26.16 % have given attention on Outdoor media.

HIV/AIDS Awareness

The term of HIV and AIDS is well verse among the respondents as almost cent % (96.16 %) of respondents' are familiar with the term. But from the table 1 it is observed that only a little more than two-fifth (42.30 %) have clear concept about AIDS. 59.25 % have perceived clear concept about HIV. Regarding the difference between HIV and AIDS, three-fourth (75.38 %) of respondents' have realized that there is difference between the two, however, only 44.61 % could identify the actual difference between the HIV and AIDS. Majority of them (53.85 %) realized that HIV contacts AIDS. Awareness about preventive vaccine from HIV/AIDS is considerably low as only 21.54 % realized that there is no preventive vaccine from HIV/AIDS. 43.08 % realized that HIV/AIDS is not a hereditary.

Table 1- Respondents Knowledge Status about HIV and AIDS

S. N.	Knowledge Status about HIV and AIDS	Number	Percentage
01	Concept about AIDS	55	42.30
02	Concept about HIV	77	59.25
03	Difference between HIV and AIDS	58	44.61
04	A person having HIV contact AIDS	70	53.85
05	There is no vaccine for prevention of AIDS	28	21.54
06	AIDS is hereditary	56	43.08
07	Anyone can get HIV/AIDS through casual contact with PLWH	67	51.55
08	Anyone can get HIV/AIDS by blood transfusion with PLWH*	119	91.55

09	HIV/AIDS can be transmitted by sneezing and coughing of PLWH*	67	51.55
10	Having only one sex partner reduces the chances of getting HIV/AIDS	94	72.30
11	Types of precaution to be taken up while taking injection	71	54.61
12	Blood should be check for HIV+ before transfusion	119	91.55
13	Main sources of transmission of HIV/AIDS	106	81.59
14	Method use for detecting AIDS	100	76.95
15	Symptom of AIDS	13	10
16	Preventive measures from AIDS	18	13.84
*PLWH: People Living With HIV/AIDS			

Most (51.55 %) of respondents understood that sneezing or coughing and any form of casual contact with PLWHA doesn't spread HIV virus. And maximum (91.55 %) of them aware that blood transfusion with PLWHA spread HIV virus. 72.30 % understood that having only one sexual partner reduces from the risk of getting HIV/AIDS. 54.61 % aware well about the right precaution to be taken up while taking injection. 91.55 % would like to check blood for HIV positive before transfusion. 81.59 % aware well about all main sources of transmission of HIV/AIDS. 76.95 % knew the method used in detecting HIV positive.

Awareness level about the symptom of AIDS is significantly low as only 10 % acquired adequate knowledge about the symptoms of AIDS. Regarding awareness about preventive measures only a few (13.84 %) of respondents is acquainted with all short of preventive measures from HIV/AIDS.

It is clearly observed from the table 2 that among the mass media newspaper has emerge as the most powerful medium as 50.76 % have given it as their main source of HIV/AIDS related information followed by TV (44.62 %) and radio (40.76 %). 43.07 % depend on NGO. Seminars (33.07 %) also served as good source of HIV/AIDS related information among the respondents'. 27.64 % have depended on magazines. But only few depend on drama (20 %), friends (14.61 %), street play (11.53 %), leaflet (1.53 %), and banners (6.15 %) as their main source of HIV/AIDS related information.

Table 2- Main Sources of HIV/AIDS Related Information

Sl. No.	Media	Percentage
01	Radio	40.76
02	Newspaper	50.76
03	Television	44.62
04	Wall Poster	34.61
05	NGO	43.07
06	Magazine	27.64
07	Drama	20.00
08	Seminars	33.07
09	Friends	14.61
10	Street play	11.53

11	Leaflet	01.53
12	Banners	06.15

HIV/AIDS Awareness and Media

The study made an attempt to collect qualitative opinion from the respondents on the coverage of HIV/AIDS and the health related information in media, and from their responses it has found that 30.76 % of respondents stated that media provides adequate information on the issue, 19.23 % have the opinion that no due coverage is given on the matter, 16.92 % expressed that media give more emphasis on commercial aspect and 33.07 % have not given any specific opinion on the matter.

Table 3 -Respondents Media Habits and their Exposure to HIV/AIDS Related Messages Appears in Different Media

S.N.	Types of Media	Media assess profile the Respondents	Respondent's Exposure to HIV/AIDS Related Messages Appears in Media
01	Newspaper	96.16	50.76
02	Magazine	87.70	23.08
03	Radio	28.46	19.23
04	Television	95.39	44.62
05	Film	93.00	05.38
06	Internet	23.08	03.87
07	Outdoor media*	26.16	26.16
08	Traditional Media:		
	a) Street Play	24.62	01.53
	b) Sumang Leela**	06.15	02.30
	c) Meetings	56.92	23.08
	d) Speech	53.84	25.38

* Outdoor Media: Wall Writing/Hoarding/Banner.
 **Sumang Leela: A popular form of traditional form of folk theatre of Manipur.

From the table 3 it is observed that out of 96.16 % used to read newspaper 50.76 % used to read the news item related with HIV/AIDS appears in newspaper and could recall the messages. Out of 87.70 % respondents having the habit of magazine reading only 23.08 % used to read HIV/AIDS related items on Magazines and could recall the messages.

As for electronic media, out of 28.46 % used to listen radio regularly 19.23 % have given due attention to HIV/AIDS related programme broadcast on Radio. Out of 95.39 % used to watch TV regularly 44.62 % used to watch the programmes based on HIV/AIDS and could recall the messages.

Almost cent percent (93.08 %) of respondents have the habit of watching films but only a few (5.38 %) have interest on the films which have HIV/AIDS theme.

Regarding outdoor media cent percent (26.16 %) of respondents' used to give attention on wall writings/ hoardings/banners and given equal importance to these media which displayed HIV/AIDS related messages.

Among the different form of traditional media used by concern agency on HIV/AIDS awareness campaign only a few have expose to these media and they hardly given attention on these media which have HIV/AIDS related messages meeting with 23.08, and speech with 25.58 % , Sumang Leela with 2.30 % and Street Play with 1.53 %.

Conclusion

The present study evaluate the knowledge level of HIV/AIDS awareness, media habit and exposure to HIV/AIDS related messages appears in different media among college going youth in Churachandpur district of Manipur.

The HIV/AIDS awareness profile revealed that the term of HIV and AIDS seems to be universal among the respondents. However, majority (57.70 %) didn't have the clear concept about the AIDS. Significant number (79.46 %) thought that a vaccine could prevent HIV/AIDS and Very few (10 %) aware about the symptom of AIDS.

It has become a mandatory for one and all to have the knowledge about the sources of transmission and preventive measures of HIV/AIDS for insuring to protect oneself from the epidemic. In the present study very few (13.84 %) aware about the preventive measures from the epidemic. Lack of awareness about the preventive measure is one of the risk factors for contracting the disease among the youth, above this only 10 % aware about the symptom. So, it is clear that despite the present study sample being college students, their knowledge of HIV/AIDS information found to be surprisingly poor on certain important aspect related with the epidemic. This finding is not unique to the present study. Other studies with British and Iranish have found similarly disturbing gap in knowledge among the well educated young people (Boyle et al., 1989 and Dadkha et al. B., 2008).

Generally people felt shy to discuss openly about HIV/AIDS as it being associated with sex, disease and unwanted behaviour that are forbidden or taboo. But a free and frank discussion about the epidemic with parents and teachers is very much required to aware about the epidemic and prevent oneself from the epidemic. The present study found that majority (65.58 %) used to discuss with different persons but only few (father 3.07 % and mother 1.53 %) used to discuss with their parents and none of them used to discuss about the epidemic with their teachers. This suggests the importance of involving parents, teachers and students in AIDS education programme. The stimulation of interested in parent and teacher concerning HIV/AIDS may help them to educate themselves and their children/students (Maswanya et al., 2003).

Due to lack of awareness, people living with HIV/AIDS (PLWHA) are being stigmatized in the society. It is necessary to eliminate the social stigma meted out to the PLWHA to uproot the epidemic. The present study reveals a very encouraging data in this respect as significant (60 %) of respondents have positive attitude towards PLWHA as they have given that PLWHA should socially be accepted without any discrimination.

The media access profile shows that majority of respondents subscribed newspaper, owned TV and Radio. Film medium is very popular as almost cent percent used to watch films. This implies that there is a lot of scope for this media to use it potential with the target audience.

The popularity of new media and outdoor media appears to be very much lagging behind in comparison with print and electronic media.

Significant number of respondents' families associated with one or other form of folk/traditional media. So this medium should be exploited. Many of folk media formats are flexible, thus facilitating the incorporation of development-oriented message in their themes. This makes them useful and credible channel for promoting planned change. Additionally, they are relatively inexpensive and, in almost all culture, command rich and inexhaustible verity both in form and theme. The timeless

traditional media, therefore, present inexhaustible alternative for experimentation in development communication (Ranganath, 1980).

Exposure to HIV/AIDS related messages appears in different media shows that Sumang Leela and Street play which are extensively used by Manipur AIDS Control Society (MACS) and Song and Drama Division seems to be losing ground as a channel of communication in disseminating HIV/AIDS related messages among the college going youth as very few have given attestation on these media.

As for mass media the overall percentage of those who didn't expose are outnumbered as compared with those who exposed to HIV/AIDS related messages appears on newspaper, radio and TV. This shows that to endorse mass media effectively in HIV/AIDS prevention programme there is need for well pre-planned to hit the target audience at the maximum. Effective use of mass media requires careful planning, audience research, message development, pre-testing dissemination strategy, evaluation, coordination with existing services and linking mass media with interpersonal communication (Brown, W.J., Singhal, A., Rogers, E. M., 1989). *Until and unless there is no medication for HIV/AIDS, prevention is the only panacea.*

References

- Benefo, K.D. and B. Takyi (2002). Mass Media Effects on AIDS Knowledge and Sexual Behaviour in Africa with Special Reference to Ghana, *International Journal of Sociology and Social Policy*, 22 (4/5/6): 77-999.
- Boyle, M.E., Pitts, M.K., Phillips, K.C, White, D.G., Clifford, B.R. and Woollett, E.A.(1989). Knowledge Attitude and Belief about AIDS: The Value of Focussing Group Discussion *Health Education Journal*, in Press.
- Brown, W.J., Singhal, A., Rogers, E.M., (1989). Predevelopment Soap Operas, *Media Development*, 4: 43-47.
- Dadkha, B., Mahammad, M.A. and Mozafari, N. (2008). Knowledge and Attitude Towards HIV/AIDS among College students in Ardabil, Iran, *research Journal of Biological sciences*, 3(1): 28-31.
- Haramani, A.B (1992). Knowledge and Attitude of College Students towards AIDs Control Programme. *Intt. Conf. AIDS 1992*, 19-24
- Javed, M., Iqbal (2008). NACO and HIV/AIDS in India, *The Sangai Express* 25th January, 2008.
- John Hopkins Centre for Communication Programmes (1995). *Reaching Young People Worldwide: Lesions Learned from communication Project, 1986-1995* (working paper No. 2). Baltimore, MD: John Hopkins Centre for Communication.
- Katende, C., bessinger, R., Gupta, N., Knight, R. & Lettenmaier, C. (2000). Uganda delivery of Improving services for Health (DISH) Evaluation Surveys 1999, Chapel Hill, NC: MEASURE evaluation.
- MACS (2008). *Epidemiological Analysis of HIV/AIDS in Manipur, 2008.*
- MACS (2004-2005). *Status Report, National AIDS Control Programme Manipur.*
- MACS (2005-2006). *Status Report, National AIDS Control Programme Manipur.*
- MACS (2006-2007). *Status Report, National AIDS Control Programme Manipur.*
- Mayswanya, E., K. Moji, I. Horiguchi, K. Nagata, K. Aoyagi, S. Honda and T. Takemoto, (2004). Knowledge, Risk Perception of AIDS and Reported Sexual Behaviour among Students and Secondary school and College in Tanzania. *Hlth. Edu. Res*, 14: 185-195.
- NACO (2006). *Hiv Sentinal Surveillance and HIV Estimation 2006.*
- NACO (2008). *HIV Epidemic in India 2008.* www.unaids.org.in.
- Ranganath, H.K (1980). *Folk Media and Communication*. Bangalore, India: Chintana Prakashana Publisher.
- Roger, E.M., Vaughan, P.W., Swalehe, R.M.m, Rao, N., svenkerud, P. & Sood, S (1999). Effects of an entertainment –education Radio Soap Opera on family planning Behavior in Tanzania, *studies in Family Planning*,30, 193-211.
- Singhal, A., & Rogeres, E.M (1999). *Entertainment education : A Communication Strategy for Social Change*, Mahwwd, N.J : Lawrence Erlbaum Association.
- Statistical Abstract Manipur (2007). Directorate of Economics & Statistics Government of Manipur, Imphal.
- UNAIDS (2004). *2004 Report on the Global AIDs Epidemic*, Geneva : Joint United National Programme of HIV/AIDS.
- UNAIDS (2008). *Global Summary of AIDs Epidemic 2008* : www.UNAIDS.org.in
- WHO (2000). *HIV/AIDS and Adolescents* . retrived on july 27,2005, from http://www.who.int/child-adolescent-health/HIV/AIDS_adolescents.html

Book Review

Bhattacharjee J.B., 2009: Development Strategies for Barak Valley (Assam), New Delhi: Akansha Publication House, pp. 315, Price: 1050.

The book under view is an attempt to introduce and explain the basics of development strategies for remote area like Barak Valley of Assam. The book has 14 articles which deal with various dimensions and dynamics of the development. The book has emerged from brain storming sessions of a national seminar on Development Strategies for Barak valley: Constraints & Prospects organised by the Institute of Northeast India Studies, Kolkata in collaboration with the Department of Economics, Assam University, Silchar on 29th April 2008.

In the paper entitled "Colonial continuity in history of Barak Valley" Sanjib Deb Laskar gives a clear picture and historical background of the valley from the Dimasa and Coch regimes to the independence. It gives comprehensive information about the regimes and dynasty of various rulers of the valley such as Dimasa, Coch. The eighty years of dimasa rule in Barak valley experienced a new system of administration and dimasa rule was a very important period in its economy and socio-cultural life. The introduction of tea plantation in Cachar during the colonial regime (in the year 1856) is a unique phenomenon in the region. The author deals with silent features of the valley in terms of language, tea plantation and about the inhabitation and customs of the tribals.

In the paper "Constraints of Development of Barak valley", Girban Biswas focuses on traditional paradigms of constraints for development. He is of the view that typology of the valley, then geographical features and isolation, ineffective leadership, internal contradictions within the local society, composite ethnic character, poor infrastructure in terms of power, communication, agriculture, industries are major constraints in the process of development of the valley.

In the paper "Post-colonial Economy of the Barak Valley" Suparna Roy highlights the entire scenario of the land economy of the Barak valley. Land problems and policy including revenue policy is the core issue of the paper by dealing geographical and social settings, pre-colonial land systems such as 'Khel' and agricultural guild collectively managed by the inheritance, colonial land tenure, namely Mirasdari tenure of Stewart's settlement, the grants under the old Assam rule's, the grants under free sample rule, the lease of waste land under the old and new Mirasdari rules, the revenue free tenures such as Baksha and Lakhiraj, post-colonial land reform measures. She describes the major changes, notably evolution of Zamindari in the form of the condition of tenants through legislation and increase in the cultivation, consolidation of holdings and adoption of mechanised cultivation and also gives an account of various land reforms measures adopted by the government of Assam.

In his paper, "Disparities in Economic Development: A District Level Study of Assam with special reference to Barak Valley" Sumanash Dutta gives a comprehensive outlook along with an authentic information regarding disparities in economic development. He critically examines

the issue of regional disparities which has been well researched both theoretically and empirically and demands for a concerted efforts involving all sections of the population to achieve faster economic development. Niranjana Roy, however, explores the economy of Barak Valley for development strategy and points out that the prospect of economic development of the valley depends to a great extent on utilization and exploitation of growth, potential of agriculture in the region.

The status of tea industry as one of the most important factor for economic development in the valley is explored by Alok Sen. He gives comparative figures regarding price, production and product and highlights that the performance of 'Cachar tea' was remarkable by holding a dominant position among the manufacturing region, before independence. But in spite of tremendous potential to progress still the tea industry in the valley is in bad shape. Giving the statistics regarding six tea estates of the valley, the chapter determines the causes for such deterioration of tea industry in Barak valley. The paper also suggests some corrective measures on account of pragmatic development model, based on natural endowment, entrepreneurship, capital investment and infrastructure inadequacy.

In the paper, "Role of Banking in the Development of Agriculture in Barak Valley" Sudipa Rakshat analyses the loopholes and demerits of banking and credit system to the farmer and give impetus to organise awareness program by the banks to motivate, sensitise and convince the farmers for the sake of agriculture development.

Women participation in the economic development process is discussed by Ruma Paul. The role and function of women is still gendered and governed by the patriarchal powers and that is the reason women have not been able to catch up with men in terms of employment, share of wages, time devoted to work in spite of their efficiency, productivity and capability. She provides a clearcut picture of increasing awareness of the people for employment.

Hiranmoy Roy reveals development prospective in terms of social sector refers to education, health and nutrition. He conceptualises two main approaches related to development. The first approach focuses on investment in education, health and nutrition as a means to augment the quality of human capital defined as the 'the stock of skills and productive knowledge embodied in people'. On the other hand, human development approach has been defined by UNDP as the process of enlarging people's choices. The author argues that social sectors may be defined as those providing social security or the protection which the society provides for its member to a series of measures, like the provision of medical care and provision of subsidies for families with children, against the social and economic distress that otherwise would be caused by substantial reduction in earnings returning from sickness, maternity, employment injuries, unemployment in heredity, old age and death. The author also exposes the drawbacks regarding social security and suggests some measures by making sound strategy, suitable policies and programs for different sectors of the society as per their requirement.

Ramanuj Chakravorty discusses about border trade and economy of Barak valley and gives a clear cut picture about an excellent opportunity for re-construction of the economy of the Barak Valley while Jayati Bhattacharje discusses about the human resources for sustainable development of the Valley which is need of the hour and determines the main indicator for the backwardness of the region. The problem of educated unemployment is solely responsible for promoting militancy and insurgency in other parts of the northeast. The common feeling in the northeast is that in the absence of industry and private sector, the unemployment ratio of educated youth produced by several central universities is increasing. Therefore if the human resource of the valley is being utilised properly then not only many problems can be solved but also the valley can be prosperous. Therefore the valley deserves special attention for its all round development.

The question of sustainability in the development of Barak Valley is examined by Abhik Gupta by giving brief historical, geographical prospective of resources of the valley. He deals in detail with the geographical, ecological perspective and typography of the valley. Deforestation, declamation of natural resources due of lack of proper policy regarding protection and conservation of wild life, to check the devastating flood, tourism etc are some of the perennial factors. However, Bibhash Ranjan Choudhury deals and suggests to find out concrete strategy for the development of the valley in spite of rich resources, manpower etc due to inadequate attention and wrong policies of policy makers.

Tarun Das demands and drafts special attention of the government for the constitution of Barak Economic Development Council for the solution of the existing problems of the valley and also for the development of infrastructure in terms of communication, transport, promotion and revival of tea and cottage industries as well as agriculture sector in the valley.

The interactions that took place during the course of seminar based on a discourse on development strategies for Barak Valley are recorded by Sarbani Bhattacharjee. Many issues and paradigms related to development were discussed as an essence of the book. The book in the appendix part gives sufficient reason for the constitution of economic development council for the valley in the form of memorandum.

The book provides deep insights to the reader of diverse paradigms of the development by giving equal amount of information regarding the valley in terms of historical and geographical perspective. This book may be immensely useful for the students, researcher and policy maker as a valuable document and a treasure of knowledge. Printing and getup of the book is good one. However, the price of the book is little bit high for the students and individual readers. The reviewers expect the book to be useful to all the country men involved in development process in general and northeast in particular.

G. P. Pandey
Charu Joshi
Deptt. Of Mass Communication
Assam University, Silchar

New Life Subscribers

The following persons were admitted as life subscribers of the ETDR by December 31, 2009 :

LM-131 Y. Priyambada Devi D/O Y. Manibabu Singh, Hunoubok Awang Leikai, P. O. Nambol, Pin-795134, Bishnupur, Manipur.

LM-132 Panmei Gungapou Rongmei, C/O Thiuluat Panmei, V. Kaimai, P. O. Gularthol-795115, Tamenglong, Manipur.

LM-133 Kanchan Gogoi, Research Scholar, Assam University, Silchar 788001

LM-134 Manushi Chakraborty, Nutan Patty, P. O. Silchar-788001.

LM-135 Ramkrishna Dhar, Srikona, P.O. Srikona, Silchar-788001

LM-136 Navneet Arora PU Chandigarh.

LM-137 Keya Choudhury, Silchar Medical college, Silchar-788014

LM-138 Susmita Bhattacharjee C/O Probin Bhattacharjee, Link Road, Lane No. 3, Silchar-788006

LM-139 Meenaxi Roy, Radha Madhab road, R. C. Das Lane, Silchar

LM-140 Sonali Deb, C/O Santosh Deb, Subhash nagar, Silchar-788005

LM-141 Shankar Kumar Bhattacharjee, C/o S. B. Bhattacharjee, Tarapur, Sibbari, Ramkrishna Lane, Silchar

LM-142 Moutishi Bhattacharjee, Durgapalli, P. O. SMC, Silchar-788014, Cachar, Assam

LMI-143 Uma Dev, C/O Shankar Ranjan Dev, Netaji School Road, Rangirkhari, Silchar-788005,

LMI-144 Sweety Singh, C/O Samarendra Singh, P.O. Sarupathar, Dist. Golaghat, Assam

LMI-145 Srabani Das D/O Rathindra Kr. Das, Sonai Road, Janata lane, Silchar, 788005

LMI-146 Alpana Choudhury C/O P. Nath Mazumdar, Prerona Complex, Ukilpatti, Silchar-788001, Assam

LMI-147 Amulya Kumar Borah, "Ashroy", Old Amolapatty, (Near Mouzadar Office), Golaghat, Assam

LMI-148 Sanjoy Paul, C-6, Fogland, Kali Chatterjee Avenue, P.O. Garia, Kolkata-84

LMI-149 Dr. Anoop Kumar Singh, Sr. Lecturer, Department of Sociology, DAV, College, Kanpur-208002

LMI-150 Meena Kumari Angom, Singjamei Makha Kakwa Asem Leikai, Opposite to Ibochou Oil Pump, P.O. Singjamei, Imphal, 795008, Manipur.

LMI-151 Dinmani Gogoi, Research Scholar, department of Sociology, Assam University, Silchar.

LMI-152 Pankoj Borouh, Research Scholar, department of Sociology, Assam University, Silchar.

Form 'B'

Editor's Name, Nationality and Address	Dr. V. P. Singh Indian C-28, Phase I, Pallavpuram, Meerut-250110
Publisher's Name, Nationality and Address	Dr. V. P. Singh Indian C-28, Phase I, Pallavpuram, Meerut-250110
Periodicity	Half yearly
Place of Publication and Address	C-28, Phase I, Pallavpuram, Meerut-250110
Owner's Name, Nationality and Address	Dr. V. P. Singh Indian C-28, Phase I, Pallavpuram, Meerut-250110
Laser typeset by	ETDR Computers, C-28, Phase I, Pallavpuram, Meerut-250110
Printed at	Sahil Print Media, 260, New Mohanpuri, Meerut

EMERGING TRENDS IN DEVELOPMENT RESEARCH

Editor : Virendra P. Singh
Associate Editor : Manju Singh

The "Emerging Trends in Development Research" (ETDR) is a half yearly interdisciplinary peer reviewed research journal brought into being with an aim to provide a forum for disseminating of the findings of on-going researches and exchange of views between different scientific disciplines, policy-makers and planners concerned with various dimensions of the development process.

The Emerging Trends in Development Research welcomes articles of academic interest representing original and analytical work based on review of existing literature and fresh empirical research studies conducted on various dimensions of development with special reference to the problems of the "Third World" countries. **The ETDR has been rated as A1 Refreed Journal by International Evaluation of Research and Doctoral Training at the University of Halinski in RC-Specific Tuhat Compilations of Publications Data 2005-2010.**

Contributors are requested not to submit papers exceeding 10 printed pages (5000 words). The papers are reviewed by the eminent scholars before accepting for publication. If papers are accepted for publication, contributors will be required to send floppy disks containing the full text of the paper including notes, references, tables, charts, and maps, if any and an amount of Rs. 1500 (US Dollar 150 in case of foreign author) towards the processing charges. The manuscripts must be in English. The articles are accepted with an understanding that they are not being submitted for publication elsewhere. The contributors are entitled to receive only one copy of the journal free of cost. The editor reserves the right to publish the articles accepted for publication in the ETDR in a separate edited book simultaneously or afterwards. An author whose paper is accepted for publication has to become life subscribers of the ETDR. In case of failure to these conditions the ETDR reserves the right not to publish papers of such authors.

The current subscription rates of the ETDR are as follows:

		One year	Two Years	Three Years	Five Years
Inland	Institutional	Rs. 400	Rs. 750	Rs. 1050	Rs. 1800
	Individual	Rs. 200	Rs. 375	Rs. 525	Rs. 900
Foreign (Airmail)	Institutional	US \$ 100	US \$ 150	US \$ 250	US \$ 400
	Individual	US \$ 50	US \$ 75	US \$ 125	US \$ 200

Individual Life Subscription for students: Rs. 2000 (US\$ 300)

Individual Life Subscription for all others: Rs. 4000 (US\$ 500)

The subscription should be sent through *online transfer in favour of "Prof. Virendra Pal Singh" Account no. 14621000001117 (IFSC code: HDFC0001462 (used for RTGS, IMPS and NEFT transactions), MICR Code: 250240900)*. All communications should be addressed to the Editor, Emerging Trends in Development Research, C-28, PALLAVPURAM MEERUT 250110, INDIA, e-mail: etdrvps@hotmail.com; etdrvps@gmail.com; Mobile: 9235608187.