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Chief Editor
Prof. Braj Gopal
Honoured with Prestigious Bhartendu Harishchand Award
profbrajgopal@gmail.com

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Rewa : Page 12.

- **Review System:** Every research paper will be reviewed by two members of peer review committee. The criteria used for acceptance of research papers are contemporary relevance, contribution to knowledge, clear and logical analysis, fairly good English or Hindi and sound methodology of research papers. The Editor reserves the right to reject any manuscript as unsuitable in topic, style or form without requesting external review.

Editorial

The 12 years of publication of the Center for Research Studies' Main Research Journal of Social and Life Sciences have been completed. In these 12 years 24 half-yearly volumes of the English / Hindi edition of this journal have been published in collaboration with you all. It has been decided that for the 13th year, the publication of this journal will be done quarterly instead of half yearly. Now this journal will be published every year as March, June, September, December issue. The first quarterly issue of 13th year is being published as September 2018 as English and Hindi versions as six monthly volumes of this have been published earlier. This achievement can be achieved only with the blessing and support of God,University Grants Commission, NISCARE, central and state universities and higher education institutions, research centers, scholars, teachers, professors and researchers. It is a matter of great pride for us that we have been receiving the opportunity to publish research papers of all the Provinces, Union Territories of the country, for the last 12 years. The research papers related to contemporary flaming topics have always been published in this research journal. In the context of Indian politics, there is a need for research contemplation on many topics. The elections of central and provincial legislatures, Lok Sabha and provincial assemblies will be simultaneously at one time, as is being done in the beginning, this will reduce the expenditure in the election, as well as the working days of the government will be the same. The Election Commission, Indian Parliament, various mass forums should discuss in this issue. Similarly, the legislatures have not been run properly, the role of the Opposition requires discussion and this creates a natural question whether it is time to discuss the political issues at the media and other external places rather than the legislative bodies and if so, in India now the need of a Presidential system in place of the parliamentary system of governance has come. The way in which the accused of serious crimes are elected in the legislative bodies, is it right for Indian democracy? It can be said that a rock should be imposed on it, this task is to be done by the Election Commission, the Parliament and the people, and this requires awareness and consultation. Similarly, governments should follow the judgments and guidelines of the Supreme Court. The recent step taken by the Central Government to make an important decision of the Supreme Court meaningless? This is a questionable question. Before making any such decision, there should be debate between the public and the Parliament and only then a few steps should be taken. The question of reservation also requires discussion, how long will caste reservation? Will religious reservation (as some political parties want) be appropriate? Whether the reservation is also appropriate in the promotion after the appointment? Public service is not a private affair of politicians, how long will it continue to ignore excellence? These questions need serious discussions. Reservation is proper according to

the original spirit of the constitution makers, but now the time has come to reconsider the rules, methods and make appropriate amendments that we have made for the diagnosis of social problems. Hope, in the coming issues, we will get the opportunity to publish research papers on these topics. We will continue to receive your cooperation and guidance as usual.

We assure you that as per guidelines of the Government of India, University Grants Commission, we will continue publication of your research papers in the next issues of the journal.

Professor Akhilesh Shukla
Editor

Professor Braj Gopal
Cheif Editor
Rewa, Gandhi Jayanti, 02
October 2018

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Caste system among gorkhas: with especial reference to martial race theory

* Dipak Bajgain

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Abstract- Among Gorkhas, Khas were the first people who were completely hindulized by the migrants Hindu of Indian plain. Thereafter, the process of hindulisation of other tribes started, latter on the process of hindulisation becomes synonym of Khasalisation(among Gorkhas). Different tribes like Rais, Limbus, Gurungs, Magars, Tamangs, Khas etc are jointly known as Gorkhas. All these tribes have their own dress, culture, language, social norms and religious Gurus (teacher) etc. After all it can be said that these tribes are complete among them and can be regarded as separate tribes. But the appointment of Upadhyaya as religious teacher in every Gorkha regiment greatly reduced the importance of religious gurus of respective tribes and it helps in the speedy Khaslisation of these tribes in both traditional and new home (where they settled newly, especially around their regimental headquarter). The growing importance of Khas Brahmanas led to the expansion of Khas culture and language (Nepali) among other Gorkha tribes or caste. On the other hand languages and culture of Gorkha tribes other than Khas lost their importance. At last it can be said that the caste base theory of Martial race for Gorkha Recruitment has greatly encourage caste orthodoxy among Gorkhas. As only a person belongs to a pure martial caste got recruited as soldiers in Gorkha regiment, they try their best to maintain caste purity, which led to the caste base conservatism among Gorkhas.

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Key words: Caste system, Migrants Hindu, Hindulisation

Gorkhas are people of Himalayan region including Nepal, Bhutan, India (Sikkim, Darjeeling, Himachal, Dehradun North East India etc). On the other hand it can be said that Gorkhas are the inhabitant of erstwhile Gorkha kingdom, which included present day Nepal and territory merged with British India according to the treaty of Segauly of 1816. Regarding origin of Gurkhas Gokul Sinha mentioned:

The tendency to refer to themselves as Gurkha is rooted in the reputation for valour the community earned, initially in overrunning the whole of the Sub Himalayan region. For the military man, it is a pride to be called a Gurkha. "Gurkha" thus gained ground as a martial term and remains so even today. The word Gurkha itself, some say, has its origin in the name of Gorakhnath, an Indian mystic of yore. "Gorakhnath ki Jai" was once the

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*   **Research Scholar, Gauhati University**

battle cry of the Gurkhas. Another explanation is that they are the protectors of the cow—gorakasa[1].

Oxford dictionary define Gurkha as A member of any of several peoples of Nepal noted for their military prowess. According to Oxford Dictionary, the word 'Gurkha' comes from the name of a locality, from Sanskrit *Gorakcha* 'cowherd' (from *go* 'cow' + *rakc-* 'protect'), used as an epithet of their patron deity. On the other hand, Collins English Dictionary defines the word Gurkha in two ways as mentioned below: (1) (People) a member of the Hindu, descended from Brahmins and Rajput, living chiefly in Nepal, where they achieved dominance after being drive away from India by the Muslim.(2) (Military) a member of this people serving as a soldier in the Indian or British army.

Gorkhas were in service of British Indian Army and help the Colonial Govt to consolidate their empire in India. After the Anglo Gorkha War of 1814-1816 AD, one after another Gorkha regiment were formed by the colonial government, which were instrumental in consolidating British Empire not only in Indian subcontinent but also in other parts of world. The process of Gorkha recruitment was very complicated, which was based on "Martial Race" theory. According to the theory of martial race only some particular groups of people has military quality. Accordingly Gorkhas from some particular caste like *Gurung, Magar, Rai Limbu, Khas (Chetry)* were recruited in the army. Gorkha castes selected as martial races by the British are belong to middle rank of caste system of Gorkha. The recruiting machinery was designed systematically so that no other than the people from above mentioned caste can get recruited in the army.

The Gorkha caste system, like the Indian caste system, is highly complex and continues the traditional system of social stratification among Gorkhas. The caste system defines social classes by a number of hierarchical endogamous groups often termed as *Jât*. This custom is found in both the Hindu and Buddhist communities among Gorkhas. The caste system was 'the steel frame of Hinduism'. It was more ancient than the Vedas which recorded its existence at that time.   .However, among Gorkha people sometimes erroneously use word Caste to mean their race or ethnicity. The ethnic groups (physically Mongoloid, e.g.*Rai, Magar*) are a different race from Hill Indo-Aryans (*Khas*), who are themselves distinct from Plains Indo-Aryans (Madhesis). The Caste system has traditionally existed in the latter two races i.e.*Khas* and Madhesis. Junga Bahadur however, included Indigenous ethnic groups in his *Muluki Ain* as *Matwalis* (alcohol drinker). *Matwali* group of people are as follows: *Gurung, Magar, Rai, Limbu, Tamang, Serpa , Lepcha* etc. Among these *Matwali* groups *Gurung, Magar, Rai, Limbu and Tamang* were regarded as Martial Races along with Gorkhas by the British. This paper deals with the caste system among Gorkhas and relates it with the martial race theory to justify how caste system was radicalized by

the martial race theory of military recruitment.

Rational of the topic:

Topic of this paper has great importance, if we take all the tribes who were residing in the erstwhile Gorkha kingdom as Gorkha. Otherwise there is no caste system among other Gorkha people except Khas and Newar. In this paper tribes like Limbu, Gurung, Magar, Tamang Rai etc are regarded as Jat or caste on the basis of Muluki Ain of 1854 AD. Caste system among Gorkhas of India, especially in Assam is least debated topic in public. But it does not meant that caste system is absent among Gorkhas. Lots of Gorkhas of Assam (of lower category) are still facing the humiliation of caste system in day to day life. This paper will help us to trace the origin of caste system among Gorkhas and role of martial race theory in radicalisation of caste system among Gorkhas.

Brief notes on Current Literature:

Lots of books have been written on caste system and martial race theory. Maximum numbers of books on martial race theory are written by retired officers of British army; some of them are written for military purposes. On the other hand books on caste system among Gorkhas are written by both British and Gorkhas (Nepali Citizens) scholars, but no such books are written in India on caste system among Gorkhas. *Social History of Nepal* by T R Vaidya, Tri Ratna Manandhar and Shankar Lal Joshi is one of the important books on caste system in Nepal or Gorkha. This book deals with caste system among Gorkhas from origin to the commencement of *Muluki Ain* of 1854. No book is written till now on the impact of martial race theory on caste system or how it radicalise caste system among Gorkha except unpublished thesis of Mritra Pariyar, *"Overseas Caste among Military Migrants :The Migration and Settlement of Nepalese Gurkhas in Britain"*. It can be said that no research has been done in India till now on this topic. The book named "*Lahureko Katha*" (Story of Soldier) by Basanta Thapa and Mohan Mainali contains interview of some *Lahure*(s) of Gorkha Regiment in which importance of caste is greatly highlighted by some of them.

Caste (*Jat*) System among Gorkha: The caste system of Gorkhas is similar with that of other Hindu community and a symbol of Hindulisation of tribal people (in case of Gorkhas). Origin of caste system can be traced in Vedic literature. It entered in Nepal or region inhabited by Gorkha from India through three regions:

Bagmati Upatyaka: Around 170-200AD (before this there were *Kiratas* and probably no caste system), Lichavi attacked *kirata* and established Lichavi kingdom and they introduced 4 varna 18 jat. In 879 Mallas entered Nepal valley and after defeating Lichavis established Malla Kindom, Jaysthiti Mall introduced 64 Jat system in around 1300 (with the help of north Indian Brahmanas).

Tarrai: Caste system in tarrai region of Nepal (some portion of which was

already merged with India in 1816) entered with the emergence of Hindus from India in search of fertile land (some hindus entered in Nepal before 1000 years ago). Systematic registration of caste started in Nepal in 1032 AD through Panjikadhikari. Earliest example of caste system in Terrai of Nepal is the *Brahma Sabha* called by Janaka of *Ramayana*.

Western Nepal: Emergence of high caste hindus from India with the advent of Muslim power in India started the process of forceful hindulisation of *Khasa* people, who came to Himalayan region before 1st century AD. In the process of hindulisation some *Khasa* people became *Bahun, Chetry , Kami Damai* etc . Those who refuse to accept Hinduism came to known as *Matwali khasa²*. In this way caste system entered in the region inhabited by Gorkhas through three regions in three different periods.

During the reign of Saha dynasty, the nature of caste system in Gorkha Kingdom (later known as Nepal after the establishment of capital in Kathmandu, which was known as Nepal valley at that time) was changed and it became state sponsored. As mentioned above state sponsorship of caste system started during the reign of Lichhavi king Jayastithi Malla. But after the unification of Baisi and choubis kingdom, caste system was systematically imposed on Gorkhas in 1854. The credit for imposing inhuman caste system among Gorkhas went to dictatorial Prime Minister Jang Bahadur. In 1854, Rana introduced the civil code known as *Muluki Ain*, in which he incorporated all hill citizens including Muslims, Christian and other religionist into a single caste hierarchy³. The structure of caste system mentioned in *Muluki Ain* is mentioned below:

Hierarchy status	Category	Social group
1	Wearers of holy cord or *janoi*	Bahun, Chhetry, Newar Brahman, Terrai Brahman, Newar Hindu
2	Nonenslavable alcohol drinker	Gurung, Magar, Sunuwar, Newar and similar groups (that consider themselves Janajatis or ethnic groups)
3	Enslavable alcohol drinker	Bhote, Chepang Kumal, hayu, Tharu, Gharti and other janajati groups
4	Impure but touchable	Muslim, Christain, low-caste newar
5	Impure and untouchable	Hill and Newar Dalits: including the Kami, Damai, Sarki

Caste category of Nepal's Muluki Ain (Civil Code) 1854(Pariyar:35)

This structure of caste system formulated by *Muluki Ain* is in practice among Gorkhas, not only in Nepal but also other parts of world. Same structure of caste system is still prevailing in Assam. Caste system among Gorkhas of Assam according to matrimonial relationship among them is given bellow:

Upadhyaya (Upadhyaya can't marry Sarmah and other caste)

Bahun

Janoi wearer

Sarmah (Sarmah can't marry Chetry and other caste)

Chetry (Chetry can't marry lower caste than it)

Nonenslavable alcohol drinker

Gurung, Magar, Limbu, Rai, Newar and similar   groups.

(Inter caste marriage among these groups is not permitted) .

Enslavable alcohol drinker

Tamang, Serpa, Lepcha   and
other Janajati Groups. (Inter caste marriage is not

Permitted among them)

These two groups are jointly known as matwalies.

Impure and untouchable

Kami, Damai, Sark etc   (Inter caste marriage is not visible among them also)

(This structure of caste system is prepared after field visit in Udalguri and Baska Ditrict of Assam by writer himself and on the basis of Muluki Ain of 1854 AD)

This structure of caste system is presented here on the basis of matrimonial relation because though the caste base discrimination is greatly decreased among Gorkhas, it is strictly followed among them for matrimonial purposes.

Martial Race theory (of Military recruitment) and Caste System among Gorkhas:

During the later part of Colonial Period, the 'Theory of martial race' was elaborated and became the principle basis for military recruitment into British Indian Army. After consolidating the British power in India, the East India Company established three sepoy (native) armies, one based in each of the three presidencies of Bengal, Madras and Bombay. All three armies were ethnically mixed, although the Bengal Army was predominantly drawn from the high-caste Hindus and Muslims of the Awadh and Bihar[4]. During the 1857 Sepoy Mutiny, most regiment of the Bengal Army rebelled against the British. On the other hand, some soldiers who belonged to the Gurkhas, Pujabis, Dogras etc had supported the Company Government to suppress the revolt[5]. The end of the mutiny ushered in the beginning of new recruitment policy, which forced the Colonial Government to give more importance to those groups who stood by the British in putting down the Mutiny: Dogras, Garhwalis, Gurkhas, Pathans, and Punjabis- whether Hindu, Muslim or Sikh- the so-called "*martial races*".[6] On the other hand, the concept of martial races is the outcome of the divide and rule policy of the Colonial government .As after the Mutiny, regiments and battalions of Indian Army were named and divided according to the class composition. The result was the evaluation of Colonial Army along ethnic lines with Dogra, Garhwali, Gurkha, Jat,

Kumaon, Mahar and Sikh regiments- to name only the most famous; these the British called "*one class*". There were also "*fixed class*" units, which meant a regiment or battalion having two or three classes, but with each of its subunits with one class. Finally, there were the "*mixed class*" units, comprising soldiers from different groups[7]. This process of military reorganisation after the Revolt of 1857 led to the introduction of martial race theory in Indian army.

The theory of martiality was predicted on the ideas that while the '*military instinct*' inherent in Europeans, especially the British, the same could not be said for all the diverse people of the Indian subcontinent[8]. MacMunn also declared, " In Europe as we know, every able bodied man given food and arms, is a fighting man of some sort, in the East...... certainly in India, this is not so[9]." In the case of the British Empire, the tendency of colonial officials to assign martial stereotypes to specific ethnic groups was primarily an outgrowth of the policy of indirect rule, which divided subject populations into tribes, clans, and castes for administrative purpose[10]. In the same way, they started the policy of recruiting members of a particular class in a regiment and named it after the name of recruit's class. This made it easy for British to control any regiment if they revolted against the Colonial government by using another regiment. Finally, martial stereotypes made colonial rule easier by helping British officials reorder and divide non-Western societies into more intelligible and manageable units[11]. Again, they classified each caste into one of two categories, '*martial*' and '*non-martial*'. The martial races were supposedly tall, broad- shouldered; light skinned and capable of enduring hardship. While the '*non-martial races*' were unwarlike, flabby, dark skinned and therefore unfit for military service. Still others were excluded due to their "ease of living" or branded as seditious agitators. Apart from their physique, the martial races were regarded as politically subservient or docile to authority[12]. However, an alternative hypothesis is that British-trained Indian soldiers were among those who rebelled in 1857 and thereafter recruitment policy favoured castes, which had remained loyal to the British and diminished or abandoned recruitment from the catchment area of the Bengal army. The concept (of martial races also) has its origin in Indian culture as one of the four orders (varnas) in the Vedic social system of Hinduism is known as the Kshatriya, literally "warriors" or martial class.

For some years identification of martial groups in Gurkha populated area formed a recruiting blueprint. The martial races of Nepal are *Magar,Gurung, Limbus, Rais, Tamangs, Sunwars, Thakurs* and *Chetris* ; each comprising a very numerous clans.[13] Chris Bellamy in his book "The Gurkhas: Special Force" writes that although logic might suggest that Gurkha soldiers, or the '*martial tribes*' from which many of them come, should be Ksyatriya, it does not work that way. The Brahmans never entitled the martial tribes to wear the *Jonai*. Therefore, they cannot be *Ksyatriya*, although some

individuals are. The *Thakurs* and *Chetris* are *Ksyatriya*, however, and wear the *Jonai,* but other martial tribes occupy an indeterminate status between the *Ksyatriyas* and *Baisyas*[14]. *Upadhyayas* are on the top of Gorkha Caste hierarchy and appointed as regimental priest or religious teacher- the Gurkhas equivalent of the British Army Padre. The caste system overlaps with the tribal system to provide tradesmen for army to perform task forbidden to higher caste Gurkhas. Four groups of tradesmen (which equate to tribes to some extent) – the *Sarki, Kami, Damai and Sunar* (these are lower class group) - are recruited menial workers. *Sarkis are* leather workers and cobblers and are enlisted as shoemakers and saddlers, and to repair equipment.*Kamis* are blacksmiths who, in recent and modern military context, equate to armourers. *Damais* may be musician or trailors, and in the Gorkhas are appointed as the later. [15] Thus it can be said that officers of colonial army gave more important on recruiting only those Gorkhas as soldiers who belong to middle stage of caste hierarchy.

The Gurkha soldiers were not only drawn from the selected caste groups, but organized along caste lines as well. Every Gurkha regiment was dedicated to a favoured caste. For example, the 2nd Gurkha Rifles were mainly *Magar*, while the 6th Gurkha Rifles were mainly *Gurung*. The 7th Gurkha Rifles was dominated by the *Rai,* and the 10th Gurkha Rifles by the *Limbu.* There were usually 10 Gurkha regiments, most of them comprised of the above four castes. There was one exception, however; the 9th Gurkha Rifles. This peculiar regiment enlisted mostly high- caste *Chhetri* and *Thakuri* from the traditional Gurkha recruiting regions of Nepal. When Gorkha Regiment was divided according to Tripartite Agreement, Britain opted against the 9th Gorkha Rifles regiment which was dominated by high class *Chetries* and *Thakuries*. Caste may not have been the only concern, but the 9th Gurkha Rifles was consciously handed over to India probably to get rid of the high caste from the future Brigade of Gurkhas.[16] These two castes fall under the second order of Hindu Caste hierarchy. Unlike *Magars* and *Gurungs*, *Khas* and *Thakuris* were heavily impregnated with the Brahmanical culture. Therefore Hindu orthodoxy is deeply cultivated among them (*Khas* and *Thakuris*) rather than the common people, the Gurungs and Magars. Shocked by the uprisings of higher class soldiers during the revolt of 1857, the Colonial government understand that lesser the number of these soldiers in their forces the better. In 1886, a recruiting officer sent a letter against the recruitment of *Chetris* and *Thakuris* [17]. Purushottam Baskota mentioned some portion of the letter in his book The Gurkha Connection: A History of Gurkha Recruitment in the British Army written by a recruiting officer as follows:

Please don't send any more of following as I have enlisted too many already, and don't want any more Khuttries Adhikari Chetrie, Taure Chhetries, Tewari Chetries, Bania chetries. In fact the fewer Chetries of all sorts the better.[18]

The pie diagram given below shows the caste wise distribution of 110,000 recruits recruited during the Second World War. It clearly shows that the pressure of recruitment during the War fell in the two prominent fighting races of Nepal namely Magar and Gurung. It also shows that least soldiers were recruited from upper and lower level of caste hierarchy.
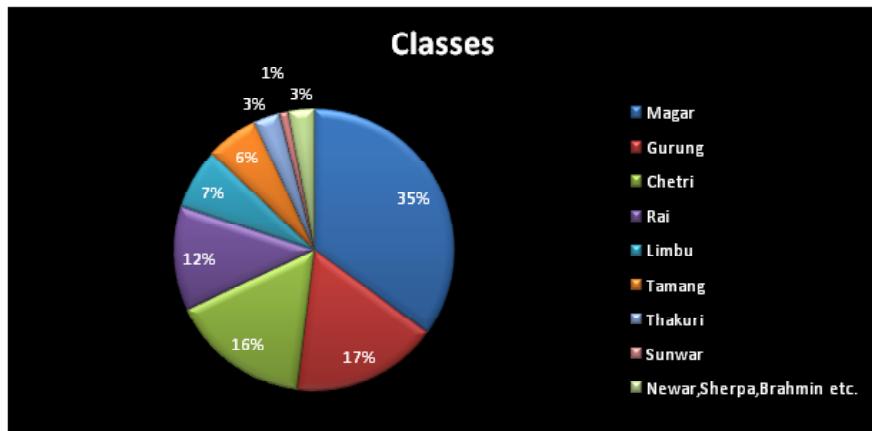
(Baskota:2014:136)

But how it was possible for British to find out caste of recruits? What methods did they used to find out desired candidate (candidate belongs to martial caste)? The tasks to find out candidates belong to martial group or caste was entrusted to *Galla Walla* (village level recruiter). So, in order to throw out unwanted caste the *Galla Wallas* used number of "*caste filters*", which can be classified as follows:

1)   The first caste filter is family name, which clearly identify ones caste. *Galla Walla* checked name and surname of a candidate in official certificate which contains candidate's name, his father's name and grand father's name; this made *Galla Walla* easy to determine intending candidates' caste. Sometimes it did not work as some family names of *Magars* and *chetris* are same (*Khadka, Thapa* etc.). On the other hand, "*Lama*" surname is common among *Tamangs, Gurungs, Bhotes* etc.

2)   Careful examination of candidates' physical feature is another caste filter used by Galla Walla. The recruiters carefully observed the body structure, physiognomy in particular, not only to identify any physical deformities or disabilities, but also to minimize the chances of undesired castes cheating. Men with darker skins were suspected of being a low-caste blacksmith, Kami. Most of the four favoured castes were identified by their apparently distinct features such as flat noses and high cheek bones. The latter groups, forbidden into the Gurkha regiment, have more pointed noses. A former *Galla Walla* joked: "In a way, recruitment was a "nose job": just throw out anyone with a pointed nose!" But in some cases this system of caste determination did not work because physical feature of *Gurung, Tamang, Limbu, Rai, Sunuwar*

etc are same. It is difficult to distinguish a *Tamang* from *Gurung, Limbu* from a *Serpa, Rai* from a *Sunwar*.

3)   To overcome the failure of above mentioned caste filter, *Galla Wallas* were sent to their native villages. For a native villager it is easy to determine one's caste because every person in the village is familiar to him or in some especial cases are his relatives. Even if he did not know some people intimately, he would most likely know their castes because of where they lived. The village caste system meant that a village usually has a majority of one particular caste, so much so that villages are often named after castes or subcastes; for example, the *Magar Gaun* (village), *Gurung Gaun*, *Ghale Gaun*, *Damai Gaun, Bahun Gaun* etc.[19]

Conclusion:

From the above discussion it can be said that the martial race theory of Gorkha recruitment has raised the importance of caste among Gorkhas, which resulted in the caste base settlement of Gorkhas in different places as mentioned by Mitra Pariwar in his PhD thesis. On the other hand it led to the popularisation of *Khas* Gorkha Culture and language (Nepali, earlier known as *Khas kura*) and placed several other Gorkha language and culture in endangered situation. Among Gorkhas, *Khas* were the first people who were completely hindulized by the migrants Hindu of Indian plain. Thereafter, the process of hindulisation of other tribes started, latter on the process of hindulisation becomes synonym of Khasalisation(among Gorkhas). Different tribes like *Rais, Limbus, Gurungs, Magars, Tamangs, Khas* etc are jointly known as Gorkhas. All these tribes have their own dress, culture, language, social norms and religious Gurus (teacher) etc. After all it can be said that these tribes are complete among them and can be regarded as separate tribes. But the appointment of *Upadhyaya* as religious teacher in every Gorkha regiment greatly reduced the importance of religious gurus of respective tribes and it helps in the speedy Khaslisation of these tribes in both traditional and new home (where they settled newly, especially around their regimental headquarter). The growing importance of Khas Brahmanas led to the expansion of Khas culture and language (Nepali) among other Gorkha tribes or caste. On the other hand languages and culture of Gorkha tribes other than Khas lost their importance. At last it can be said that the caste base theory of Martial race for Gorkha Recruitment has greatly encourage caste orthodoxy among Gorkhas. As only a person belongs to a pure martial caste got recruited as soldiers in Gorkha regiment, they try their best to maintain caste purity, which led to the caste base conservatism among Gorkhas.

Footnotes:

1.   Sinha Gokul, The Role of Gorkhas in the Making of Modern India, Bharatiya Gorkha Parisangh, 2008, p 05

2.   https://m.youtube.com/results?q= caste%20 system% 20in%20 Nepal%20 &sm=12

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Population Explosion in India : Causes and Consequences

* Rangadeep Bhuyan

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Abstract- *Population Explosion defined as a significant number of people staying in the individual area. It is a huge problem in india. In fact, in all over the world, it is increasing, especially in the poorer countries. The population of india was around 361 million during the census of 1951. It reached over 1.21 billion during the census of 2011. Population explosion refers to the sudden and rapid rise in the size of population among the human being. Population explosion is of many causes and many consequences. The main causes of population explosion in india are increase in birth rate, decrease in mortality rate, increase in life expectancy, lack of recreation etc. Population explosion results in to overpopulation, unemployment, poverty, illiteracy, poor health, economy, pollution and global warming etc. The present paper is an analyze the causes and consequences of population explosion in india.*

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Key words: Population, Explosion, Overpopulation, Unemployment and Poverty.

Introduction: Population Explosion defined as a significant number of people staying in the individual area. It is a huge problem in India. In fact, in all over the world, it is increasing, especially in the poorer countries. The population of India was around 361 million during the census of 1951. It reached over 1.21 billion during the census of 2011. Population explosion is a big issue in the developing country. No one people are following the right step to control the population, even the government of India is not leading proper rules and regulation for control the population explosion. It causes many problems among people. Population explosion refers to the sudden and rapid rise in the size of population among the human being. It is an unchecked growth of human population caused as a result of:

• Increased birth rate,
• Decreased infant mortality rate and
• Improved life expectancy.

In India, there is limited employment and literacy among the people. Due to the population explosion, it is prominent in underdeveloped.

Objectives of the study:

1. To study the causes of population explosion in India.

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* **Assam**

2.   To study the consequences of population explosion in India.

3.   To suggest the remedies to reduce the population explosion in India.

Methodology: The study is based on secondary data. The secondary data were collected from books, journals, newspapers and internet etc.

Causes of population explosion in India:

1.   Increases in birth rate: In India, there is population explosion increasing day by day. Most of the people don't have the knowledge about control the delivery. The birth rate is increasing due to the lack of awareness in people. There is the full range of gaping has increased in population.

2.   Decreases in infant mortality rate: Due to the age of science and technology, some people are getting the proper facility for improvement of good health and best medical care. Because of the science, there is an extensive use of preventive drugs, which can reduce the infant mortality rate.

3.   Increased Immigration: An increase in immigration often contributes towards population explosion, particularly in developed countries. It happens when a large number arrive at an already populated place with the intention to reside permanently.

4.   Increase in Life Expectancy: Another important cause of population explosion in India is increase in life expectancy. In India, there is the life expectancy will become weak, when the proper nutrition and good health do not improve by the human population. Due to improved living condition, the better sanitation, better nutrition and education in the human population improves the life expectancy. It is significant for the person.

5.   High level of illiteracy: High level of illiteracy is one of the most important cause of population explosion in India. Due to lack of illiteracy among women is the biggest problem of family planning. The female education directly related to age at marriage, the general status of women, their fertility and infant mortality and so forth.

In 1991, the male literacy rate was 64.13% and female literacy rate was 49%.

In 2011, the male literacy rate was 82.14% and female literacy rate was 65.46%.

In India, everyone should become literate either male or female. Education must develop the personal liberal, broad-minded, skill, create to new ideas and rational.

Consequences of Population Explosion in India:

1.   Over Population: In India, there is the number of Population and also impressing day by day. It is more useful for the Population Explosion. There are over population in India. Because of this condition of India, people are not getting comfortable and accommodate life. It also poses a threat to the environment.

2.   Poverty: Poverty is the key reason of population explosion in India. Most of the people, who belong from the poverty line, they have not any

knowledge about the overpopulation of country. They generate the high birth rate in India, which can cause and effect of population explosion in India.

Due to the result of 2011 census, the poverty level was 1.21 billion while in the forties the poverty line was 400 million.

3.   Illiteracy: In India the illiteracy is the primary reason of population explosion in India. The resource available fixed. In theory and practice, the total available resources are shared by the people using them. Some of the people have not any source to provide the education to their children.

4.   Poor health condition: If peopled do not get adequate food and nutrition , then they may suffer from poor health.

5.   Economy: Economy is an another important consequence of population explosion in India. People need food , cloth, shelter and occupation to make their living. The demand for consumption should never exceed the production or resource limit. The economy of any country is negatively impacted, if there is massive population explosion beyond the tolerance limit.

6.   Pollution and Global Warming: Pollution and global warming are most effective for the population explosion in India. Much population creates the pressure on the earth. There arise excessive demands for finished products leading to over-industrialization and over-utilization of resources.

7.   Unemployment: Unemployment is the main reason to back the economy of countries. Millions of people are jobless in India. They are not getting the job after finding everywhere.

Some measures to reduce the population explosion in India:

1.   Development of Agriculture and Industry: If agriculture and industry are properly developed, large number of people will get employment. When their income is increased they would improve their standard of living and adopt small family norms.

2.   More employment opportunities: The first and foremost measure is to raise, the employment avenues in rural as well urban areas. Generally in rural areas there is disguised unemployment. So efforts should be made to migrate unemployed persons from rural side to urban side. This step can check the population growth.

3.   Spread of Education: The spread of education changes the outlook of people. The educated men prefer to delay marriage and adopt small family norms.

4.   Raising the status of women: There is still discrimination to the women. They are confined to four walls of house. They are still confined to rearing and bearing of children. So women should be given opportunities to develop socially and economically. Free education should be given to them.

5.   Standard of living: Improved standard of living acts as a deterrent to large family norms. In order to maintain their higher standard of living people prefer to have a small family.

6.   Minimum age of Marriage: As fertility depends on the age of marriage.

So the minimum age of marriage should be raised. In India, minimum age for marriage is 21 years for men and 18 years for women has to be fixed by law.

Conclusion:

Population explosion has caused more pressure on earth. We should save energy so that the entire population can enjoy benefit. We can control the global warming issues by curbing the usage of fossil fuels. Food security is another area that need attention. The agricultural output should increase with growing population to make sure steady supply of food to all. We should use potable water carefully. With larger population, there is a need for harmony and peace among nations.

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Gender Discrimination and Feminism
A study of women's movement
In North East India

* Nayan Kalita

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Abstract- North-East India comprises of states like Arunachal Pradesh, Assam, Meghalaya, Manipur, Mizoram, Nagaland, Tripura and Sikkim. It is the most diverse region of India both ethnically and linguistically, most at the population belongs to the tribal groups and they prefer to live on the tap of the hills. Its tribal groups has its own distinct historical identity, social and cultural practices and life style which carries forward the region after many sancturies. Although the entire North-East India is populated by various groups of people, the entire region is a platform of cultural mosaic of various ethnic, linguistic and religious groups. As a whole the North-East India has a predominant role of tribal character carrying out sustained movements to attain their political objectives ranging from sovereignty to autonomous status within the fold of a larger one. Even the underground outfit of major non-tribal groups of Brahmaputra Valley has been inspired to launched the struggle for attaining complete soveriegnty. An important source of their inspiration undoubted by came from the tribal's of the entire area. The continuing armed conflict have no doubt an ethnic dimension, but in their range of expression they no longer strictly adhere to a single ethnic group. Their could be made possible only by promoting activities centering around institutional politics focused on individual equality and human rights.

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Key words: Gender Discrimination, Feminism, Patriarchal Society

The issue of gender discrimination is an enormous and burning problem within the territory of India. The ancient concept of patriarchal society downgraded women to a lower status within their household and even their workplaces also. This drastically affects women's health, financial status, education and as well as political involvement. In all the societies of North-East India women are the prime earners of children, the elderly and the ill, and compel to do most of the domestic tasks. Women's lives are greatly affected by reproductions which has an incisive and direct impact on their health, their educational and earning opportunities. In societies where women marry very young and much earlier than men, wives defer more to husband and this has a substantial bearing on women's chances of finding places in the society and

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*   **Associate Professor, Goreswar College, Assam**

receiving education. Taking into the scenerio of India, North East India is found to be remained aloof from rest of the country due to the marginalization of the region from the mainland of India.

When the whole country was celebrating women empowerment no one has little time to noticed the heroic movement of the women's of North-East India. North-East India has seen strong women's movements raising their voices against the misrule and injustice. In this paper an effort has been made to enumerate the strongest women's movements which were able to challenged the patriarchy and raised voice against social injustice.

1.   Movement of feminism is Assam:

The movement of feminism in Assam is as old as the freedom struggle in the region and the Asom Mahila Samiti was responsible in carrying out the movement. The samittee was established in 1926 under the leadership of Chandraprava Saikiani. The Prime motive of the samittee was to raised voice against tae violence against women. The main concern of the organization was women low literacy, gender discrimination and womens diginity in the workplace of the society.

The prime responsibility of the samittee is to conduct campaigns and have raised their voice against womens invisibility in the society and hence challenged the patriarchy inherent in it. Later their organization broke into various smaller groups with different views and modalities.The participation of Assam women in the civil disobedience movement was so massive that prominent Assamese historian Benudhar sarma described it as the womens movement. Women leaders like Chandraprava Saikiani, Amalprava Das, Puspalata Das etc. had played dynamic roles in the freedom movements. As well as the freedom movement, it also carried out protests against the prevailing condition of women education, Adult women education, mother and child welfare, setting up of khadi and village industries, in restricting child marriges and in prohibiting untouchability etc.

In 1940 it actively take part in various womens movements in a larger scale, mainly in lower Assam. After Independence Assamese women freely and activity took part in various civil and political movement in Assam, like state language movement of 1960, Refinery movement of 1967, medium movement of 1972 and the Assam movement against the foreigners issue of 1979-85, etc. which witnessed an active participation on the part of Assamese women. Apart from that women of different tribal communities like Bodo, Karbi, Missing and Rabhas have been activity participating in the autonomy movements of their respective communities.

But inspite of all these alarming steps of the women of Assam, the number of elected women to the Assam legislative Assembly have never exceeded 11% from the first Assembly to the 14th Assembly. In the first Assembly there was only 1 women member, It increased to 5 in second Assembly and the highest number of women members were elected to the

13th legislative Assembly constituency in 1911. In this Assembly 11% of the members were women. There are only 8 women candidates who have been elected to the 14th Assam legislative Assembly in 2016. Women representative thus comprises Only 6.35% of the 126 member Assembly House. During the election a highest turnout Of women voters was witnessed with 84.81% of the total 92,09,928 female voters excercising their franchise. Before this In 2014 general election only 2 women were elected to the Lok Sabha seats of Assam. In Rajya Sabha there is only one women MP (Ranee Narah) from Assam out of total 27 women member of the upper-House.

If we considered the figures we can see that the women of Assam have been taking active role in various social and political movements but there are still only a few who are elected to represent the Assembly and parliament constituencies. Like wise only a few women members have got opportunities to successfully perform their responsibility as Minister in the council of Ministers of Assam. The state has 126 seats at present but the womens participation in states legislatives election comparison to men is very low. Thus despite the having the glorious history of women of Assam they couldn't occupy good position in decision making process and leadership role in party politics. No doubt the participation of women in politics is increasing, but it is not satisfactory, presence of women is decision making levels will bring a different thought perspective. The need of the hour is to achieve a healthy democratic spare where each Women is represented.

2.   Movement of Manipur:

i)   Nupi Lan (1904) : Nupi Lan is a Manipuri word means women's war, which was first started in the year 1904 against the British rule in Manipur. The heirs of the ruling family were not happy enough with the rule of the British on the account of selecting chura chand Singh as the king of Manipur and hence started the first Nupi Lan in the year 1904. Slowly the agenda of the movement was changed and they started Nupi Lan on protest of the forced labour where the male members of the society within the age group of 17-60 would work freely for 10 days in the period of every 40 days, for the construction of then police agents bunglow after it was destroyed by fire. The women of Manipur protested against this since the male members had to suffer a lot and the women had to face various socio-economic obstacles. Almost 5000 women participated in the movement but had to withdraw the movement later.

ii)   Nupi Lan (1940) : The second phase of tae Nupi Lan was started in 1940. It was against the trade policy of Manipur Set by the king and the British. The trade policy was about importing rice from Manipur without looking at its limited production which was only sufficient for Manipuris subsistence. This policy led to a famine and economic disparity in Manipur. The women assembled at the market and protested against it. But the British with the help of local police wanted to suppress the movement and as a result

clash taken place between the women and the British. Many Manipuri women lost their lives. This movement lasted for several months and finally the women organizer cancelled the movement when the second world war was outbreak.

iii)   Meira Paibi (1970) : Meira Paibi is a social movement of Manipur started in 1970 against social disorder like alcoholism and drug abuse and finally leads to protects human rights in their community and fight against the injustices of AFSA (Armed force special protection Act).

During this period Meira Paibi has participated in the protest movement against the rape case of Thangjam Manorama in Manipur allegedly committed by armed forces. The ordinary women has came out from their native villages and marched against the armed forces to protect their civil rights. This is a democratic movement of the women and they mark the protest by lighting their torches. One of the major contribution of this Meira Paibi is the protest of Irom Sharmila against the AFSPA. She started the fast as long as 16 years back. Though recently she has broken her fast to fight the election. Earlier she was arrested for several times by the forces for her protests. She witnessed Assam Rifles personal gunning down 10 people including a minor student under AFSPA. She was forcibly arrested several times under section 309 of IPC for attempting to suicide and has been fed forcibly.

She declared before the supreme court of India that she has all the hopes for a better life to live but at the same time she wants the centre to withdraw AFSPA from Manipur. In 2015 she was declared a prisoner of conscience by Amnesty International to give direction to her long movement. But her movement has a tragic lost and she was compelled to abandoned the Meira Paibi.

3)   MHIP of Mizoram : The Mizo women's movement get momentum in 2013 when the Mizo inheritance Bill was passed which were related with the rights of Mizo women. Tae movement under MHIP was a long struggle of Mizo women lead by Pi Sargkumi, who was president of MIHP. The movement started in demand of abolition of Mizo Bride Price in traditional Mizo marrriages. They fought also against violence against violence against women, discrimination in workplaces and campaign for 33% women's reservation in political system of Mizoram, ultimately the movement became successful in 2013.

4)   Movement of Naga Mother's Association (NMA) -
NMA is an organization of Nagaland women who fought for women's peace in the disturbs areas. The foundation was established in 1984. The motto of NMA is "shed no more blood." in Nagaland and started its campaign against gender violence and human rights violation by extremist, Indian army and drugs and alcohol mafia. NMA trained the village women folk to maintain peace and prohibit violence by nurturing and sustaining ceasefire between underground outfit of Nagaland and security forces. It strongly approves the AFSPA and urged the security forces not to kill innocent person in the name

of terrorist in North-East India and particular in Nagaland.

Thus we can observe that the women's movement in entire North-Eastern region signifies to the development of gender discrimination and feminism in the whole region. It has given emphasized on the social status of women and their obstacles for social upliftment. A note worthy change has been observed on the part of women which always plays a pivotal role in social development in different society context.

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Role of Women in Preaching Sankardeva's Ekasarana-Harinsma-Dharma
(With reference to Sankaradeva's hagiographical Accounts)

* Bandana Boruah

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Abstract- Mahapurusa Sankaradeva, the versatile genius of the fifteenth Century initiated the Neo-Vaisnavite movement and brought a massive change to the socio-cultural, literary and religious domains of Assam. He introduced Eka?arana-harinama-dharma, a new religious belief in Assam to relieve common people from the gamut of socio-religious exploitation. It is found in his hagiographical accounts that people from every walks of lives joined hands with him and helped him in different ways in the preaching of his religious belief. The womenfolk, though their numbers were few, did not remain idle, but they too, extended their helping hands and contributed either directly or indirectly in preaching his Eka?arana-harin?ma-dharma, and sometimes, a few of them played the pivotal role in this prospect.

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Key words: Ekasarana-harinama-dharma, Spirituality, Hagiography, Preaching.

Introduction: Hagiography is a compilation of the eulogy of the life and activities of a religious preacher or a kingly person in which the composer always overlooks the shortcomings of the protagonist. The composer of a hagiography is a follower of the religious preacher or a subject of the kingly person, and he always exaggerates and sometimes adds supernatural elements to the life, personality and activities of the hero. In the hagiographical accounts of Sankaradeva different women have been mentioned along with their roles in the life and works of the saint preacher. These women have contributed either directly or indirectly in the inception, preaching and spreading of his *Ekasarana-harinama-dharma.*

Objectives of the Study: The following objectives have been discussed in this paper.
1. The contribution of women in the preaching of Sankaradeva's *Ekasarana-harinama-dharma.*
2. The spirituality of women and Sankaradeva's religious principle.

Methodology : The data have been collected from both primary and secondary sources and discussed in descriptive method.

Women in Hagiographical accounts of Sankaradeva: In the neo-Vaisnavite

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*   Research Scholar, Mahapurusha Srimanta Sankaradeva Viswavidyalaya, Assam

tradition of Assam, a few women have played vital role in spreading Sankaradeva's bhakti movement, and their activities have been dealt in and compiled along with the life and activities of the saint in his hagiographical accounts. These women contributed a lot to Sankaradeva's religion without their being aware of what they had done in the preaching of the saint poet, master preacher Sankaradeva's bhakti religion. It is relevant to discuss the role of women in this context; therefore, a few women, who have contributed in the preaching of Sankaradeva's philosophy have been selected to discuss in this paper.

Candari Ai: Candari Ai was a housemaid of Sankaradeva's family. She took care of and brought up Sankara taking him in her lap and shoulders. The reference of Candari Ai is available from the very birth of Sankaradeva in the *Guru-carit* of Ramcaran Thakur.

> *Kusumbe bolanta abe Candari shuniyuka I*
> *Snana karai putrakhani kole laiyuka I*
> (*Guru-carit*: Ramcharan Thakur: p-74.)

Candari was addressed as *Ai* because she shared every household matters and even sometimes, she advised Sankara too. When Sankaradeva had been painting the *Vaikuntha pata* for the enactment of the play *Chihna Yatra* he was perplexed in determining the pinpoint of the *Kalpataru Briksha* then Candari advised him to put it in front of the seventh door near the Srimandira. *''Bole Dekagiri saikhinite nidiya kiya, Srimandirar kakhe saptamdwar agkai?''* (Upen Chandra Lekharu. eidted. *Katha-gurucaritra* P28.) Sankaradeva thanked Candari Ai for her advice and put the *Kalpataru briksha* at the place as she suggested.

Candari Ai was once again, mentioned in the hagiography of Sankaradeva as a woman of exquisite knowledge of scriptures. A group of Brahmin *punditas* came with an evil intention to take a test of Sankaradeva's knowledge, and they confronted with Candari Ai. She explained the essence of the '*Gita*' to the Brahmin *punditas* as – "one could get rid of the bonding of this mundane world if one gets the blessings of Krsna". The Brahmin *punditas* ran away without meeting him, because they thought that one whose maid could explain the essence of the *Gita* within one *slooka* how scholar her master would be. (Upendra Chandra Lekharu: edited. *Katha-gurucaritra*. P 91).

Candari was mentioned for the last time when Sankaradeva displayed the *Brindavani bastra* to the common people. Candari Ai observing the sheet found out the breach of the chronology of the *bhatir batkeshi ghata* (the lower Batakeshi port) and the missed place of the *Batabriksha*. Sankaradeva admitted and said that both the preceptors have had been weaved the sheet of cloth, but the intelligent old woman detected its breaches, and after that the sheet was folded and put into a box. *''Dujana guruye kapur boway burie daya dhare, buri bar bhupa, tehe kapar japa bandhi thale''*. (U. C. Lekharu.

Edited.: *Katha-Guru Carit*. p166).

Candari Ai is produced as a housemaid in some hagiographies and in some others as a beggar. It is unbelievable that a woman with the status of the grandmother of Sankaradeva who stayed with his family mustered her livelihood by begging. The contribution of Candari Ai in the preaching of Sankaradeva's *Ekasarana-harinama-dharma* cannot be ignored; she indirectly preached it through her activities.

Kalindi Ai: Kalindi Ai was the second wife of Sankaradeva. When Sankaradeva was absorbed in practicing Art, Culture and Literature, Kalindi Ai silently resolved every problem and did not let any problem to interrupt Sankaradeva in continuing his practice. (Premkanta Mahanta: *Guru-Caritar Rasal Katha Aru Aisakal*. P 91)

Kalindi Ai did not give up her traditional practice of worshipping of the *Griha devata* until Madhavadeva explained to her realisation the futility of her worshipping of the *Griha devata*. Kalindi Ai could realize the futility of her practice, and taking initiation from Sankaradeva, she dedicated her whole life in preaching and spreading the philosophy of Sankaradeva after his death. One Bangsigopaladeva had developed the habit of not to take fish in his meal. Kalindi Ai requested Bangsigopala to take fish and said that Sankaradeva never prescribed to practice monkhood nor ever asked anyone to discard fish from meal. Kalindi Ai gradually changed the habit of Bangsigopala adding a little fish in his meal. (Upendra Chandra Lekharu: *Katha- Gurucaritra*. P 207).

Kalindi Ai had to keep alive the religion of Sankaradeva as well as to maintain her family amidst different misfortunes. Madhavadeva used to come to Patbausi to take care of Kalindi Ai. At this, Ratikanta the son of Sankaradeva's uncle, became envious and told Madhavadeva impertinently if he being a celibate did not ashamed of to visiting Patbausi twice in a day regularly. Madhavadeva told Kalindi Ai about the malicious rumours spread by Ratikanta. Kalindi Ai did not bother with such rumours because she believed that if one could keep purity and sanctity of body and mind till one's last breath none could do any harm. When Madhavadeva sought her permission to go to Behar, she advised him to go to Sundaridia. Madhavadeva at first hesitated to comply with her advice, for he thought, if he went to Sundaridia it would be an act of contempt to his religious predecessor. ''Kalindi Ai then told him that she had advised him with due deference to the advice of Sankaradeva to set up *Satra* (monastery) at Sundaridia.'' (Lakshmi Nath Bezbarooa: *Sri Sri Sankaradeva Aru Sri Sri Madhavadeva*—p-145). This incident is mentioned with slight difference in *Katha-Guru-Caritra* edited by Upendra Chandra Lekharu. One Satananda of Sankaradeva's family wanted the widow of Kamalalocana Thakur to get married to Bagaribariya Choudhary. Kalindi Ai said that she would inform him after consulting the matter with the other members of her family. She sought the advice of Madhavadeva, but

Madhavadeva told her that she should ask the wife of Kamalalocana. When Kalindi Ai asked the wife of Kamalalocana she replied that she did not want to get-married again, rather, she wanted to pass her life worshipping God. Kalindi Ai informed it to Satananda, but Satananda took it otherwise and thought that Madhavadeva debarred her to get-married again; he therefore, plotted treason against Madhavadeva and spread rumours, which severely hurt Madhavadeva. Madhavdeva decided to leave the house of Kalindi Ai and wanted to live at Guwabaca. When Madhavadeva informed Kalindi Ai about his decision, she asked him to stay at Sundaridiya. (Upendra Chandra Lekharu: *Katha-Guru-Caritra*. P 182. Fifth Edition 2006). Madhavadeva went to Sundaridia and stayed there for fourteen years. He initiated the women of Sundaridia and many others besides establishing a *Satra* at Sundaridia. If Kalindi Ai had not sent Madhavadeva to Sundaridia the women of Sundaridia would not have got the opportunity to purify themselves by taking initiation from Madhavadeva, moreover, the Sundaridia Satra would not have been established.

The wife of Jayanti Madhai: Jayanti Madhai, an irresolute *bhakta* was provided spiritual teaching with a beautiful example by his wife. Jayanti Madhai leaving the company of Sankaraderva came to stay for a few months with his wives. He asked them to throw away the old panes for cooking and prepare their meal in new panes. One of his wives placed few drags of half-chewed betel nut on the dish of boiled rice arranged for him and asked him to take his meal. Jayanti Madhai wanted to know why they had kept the drags in his dish. His wives explained that he went to Sankaradeva giving up their company, but unfortunately, he returned to them to satiate his lust for sensual pleasure. The wife of Jayanti Madhai taught him about the futility of sensual pleasure and made him to realize that they, like the drags of chewed and sucked betel nuts, have no use in the path of salvation; hence, he should avoid their company. Jayanti Madhai perceiving the words of his wife repented and became an ascetic *bhakata*. *Bule aji tumi muk saj rakhili jnan budh di: Mur param bandhav upakarihe bharja nahane II*. (Maheswar Neog: *Guru-Carit-Katha*. P 229).

In this way, she guided her husband, a distracted follower of Sankaradeva, to the right path of spirituality dissuading him from indulging in sensuality.

Sumati Ai: Sumati Ai was the wife of Mathuradas Burha Ata, the first *Satradhikar*, the head of a Satra institution, of Barpeta Satra. Once when the sporting centre of the Barpeta Satra had been gutted in fire, Mathuradas Burha Ata became very sad at this accident and he decided to go to Bhela with eighteen numbers of his junior to stay near his Preceptor, Madhavadeva. When he reached at Bhela, Madhavadeva asked him about the apostles of Barpeta Satra and his friend Narayan Thakur. Burha Ata told him that all the Apostles were living in peace but the sporting centre of the Satra had been burnt into

ashes. At this, everybody became sad, and Madhavadeva asked him if the ever-burning sacred lamp of Barpeta Satra had still been burning. Ata replied that ''his wife, an enthusiastic devotee, heaped up the ashes in the plinth, erected a curved shade above it and lighting a lamp there on, and she continued three times prayer along with other old women." (Laksmi Nath Bezbarooa. *Mahapurus Sri Sankardev Aru Sri Madhavadev*: p 182).

In the *Bar-Carit-* of Dinanath Bezbarooa, the earnest devotion of Sumati Ai is narrated through a story. One day, when Madhavadeva was taking rest lying on the floor of the *Kirttan Ghara,* Sumati Ai sent her son, Balai, with a lump of dried mud to bring it back smearing in the feet of Madhavadeva so that she could stick it as the dust of her Guru's feet. When Balai smeared the lump of dried mud in the feet of madhavadeva, he instantly caught hold on the hand of Balai and began to sing as – "*Alu, suna gowaler jayabulaya gopala Amara gawe dhula dila tumara cawale II",* and composed this song. Sumati Ai then, prayed from the outside of the Kirttan Ghara to excuse her. (p 181). In another context, Dinanath Bezbarooa mentioned in the *Bar-Carit* that Madhavadeva instructed the mother of Gobinda Atai and the other *Ais,* (the other old women), to perform the *Puwar-Namaprasanga,* (Morning Prayer), on the day of the performing of *Kutura Khela Bhaona* at Barpeta satra along with Sumati Ai. The role of performing Morning Prayer that has been started by Sumati Ai is still in vogue in Barpeta satra.

Ai Kanaklata: Ai kanaklata was the daughter of one Kanu Bhuyan of Koch Behar and the wife of Chaturbhuj Thaku, the son-in-law of Sankaradeva. Chaturbhuj Thakur made Ai Kanaklata his religious ancestor. When he was in his deathbed he called on his followers and said, ''my wife is as chaste as Lakshmi and she will keep alive the religion of Sankaradeva. You should keep my words and respect her as you respect me.''

> *Mura nija patniyei Lakshmi name sati I*
> *Sankarara dharma tehe rakhiba samprati II*
> *Tura sabe mura etu bacana neriba I*
> *Muhura samana kari Lakshmika maniba II*
> (Rama Kanta Muktiar Ata: *Ai Kanaklata Caritra*. p 158)

Ai Kanaklata along with her nephew, Damodar, rediscovered the Bardowa *Thana* deforesting a deep forest. *Deul*, *Kirttan Gharar barbheti*, *Akashi Ganga*, *Silikha briksha*, and even the stone plate used for grinding iron powder were discovered after deforesting the jungle. The rediscovery of the Bardowa *Thana* and its re-establishment added a new dimension in preaching and spreading of the religion of Sankaradeva all over Assam. At the beginning, of her preaching, the *Mahantas* were reluctant to acknowledge Ai Kanaklata as a religious head, they collectively interrogated her about the deep-rooted meaning of the religious philosophy embedded in different scriptures. She aptly explained the inner essences of the different principles of *Ekasarana-harinama-dharma* - the twenty-four *tattva*, the *Atma-tattva,*

the *Brahma-tattva* and the characteristics of *bhakatas* to the Mahantas. The Mahantas were amazed at the scholarship of Ai Kanaklata and they whole-heartedly acknowledged her as the real ancestor of the religion of Sankaradeva. Ai Kanaklata's becoming of the religious head breaking all the constraints of the medieval patriarchal society of Assam and her preaching and spreading of the *Ekasarana-harinama-dharma* organizing the *bhakatas* from lower Assam to upper Assam is a remarkable event in the history of *Ekasarana-harinama-dharma* of Assam.

It is reveals that the women discussed above have played important roles in some cases directly and in some others indirectly in the preaching of *Ekasarana-harinama-dharma*. It does not matter howsoever they performed their roles, or how they contributed to in the preaching and spreading of *Ekasarana-harinam-dharma*, but it is evident that without their contributions the philosophy of Sankaradeva would not have been spread so widely and rooted deeply into the core of the Assamese society.

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Violence against women in North–East India: A case study of Assam

* Kanaklata Konwar

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Abstract- *Violence is an act of coercion upon any individual. Globally, men experience higher levels of physical violence than women due to war, gang related activity, street violence and suicide, while women and girls are more likely to be assaulted or killed by someone they know, such as intimate partner violence. Domestic violence is also interpreted as Intra-family violence, wife battering, intimate partner violence, partner abuse or violence among family members. It is heavily indebted to patriarchal systems, psycho-social problems and unequal power relationship among family members.*

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Key words: Violence, Women, Physical Violence, Domestic Violence

Introduction: The term violence against women means any act of gender based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts arbitrary deprivation of liberty, whether occurring in public or private life. Violence against women continues to be a universal epidemic that kills, tortures and disfigures women physically, psychologically, sexually and economically. It is one of the most pervasive of human rights violations denying women and girls equally, security, dignity, self-worth and their right to enjoy basic freedoms. Violence against women is present in every country, cutting across boundaries of culture, class, education, income, ethnicity and age.

It is one of the most systematic and widespread human rights abuses in the world. It is directed against an woman and affects women excessively. Such gender based violence against women is a form of discrimination and deeply rooted in power imbalances and structural relationships of inequality between men and women. It harms families, impoverishes communities and reinforces other forms of inequality and violence throughout societies. In addition to causing injury, violence increases women's long-term risk of a number of other health problems, including persistent pain, physical disability, drug and alcohol abuse and depression.

The problem of crime against women is not new. Crime against women is direct or indirect physical or mental cruelty. The various kind of violence against women are eve-teaching, molestation, women abduction and kidnapping, rape, harassment to women at working place, dowry death. So

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*   **Assistant Professor, Sapekhati College, Assam**

women have been victims of humiliation torture and assigned to remain deserted. Consequently estimates suggest that more than 40% of the sanctioned posts for doctors are vacant. In other words doctors don't go to interior centres. They only appear when health camps take place in the area. According to National Family Health Survey II, women in Assam have limited access to health care services. The percentage of women in Assam receiving antenatal checkups is 5% behind the rest of India and 8% behind the other North Eastern states. The number of deliveries assisted by healthcare professionals in Assam if half of that in the rest of India. The percentage of women suffering from anaemia is also very high. Maternal mortality in Assam is amongst the highest in the country. However, it is important to note that the percentage of women who take decisions regarding their own health care in Assam, is higher than several other states and stands at 65%.

Sources of data collection:

Both primary and secondary data was collected. Secondary data was mainly collected to try and gain an insight into the incidence and trends of violence in the states of Assam. Newspaper articles, data collected from the various police stations on crimes against women and other books and research papers provided the base to begin work on the study. Interviews and group discussions with survivors of violence, organizations and individuals working on VAW, government departments and concerned individuals served as the primary sources of data.

Violence against women in Assam:

Violence against women is a manifestation of historically unequal power relations between men and women which have led to domination over and discrimination against women by men and to the prevention of women's full advancement.

Although both men and women face violence, on overwhelming majority of victims of sexual assault and domestic violence are women. The patriarchal nature of society often limits the space available for women to exercise their rights. It is indeed a matter of concern that the rise in violence against women is complementary to society's indifference to it.

Like the UN declaration on the elimination of violence against women, 1993 the meaning of violence in this study is not just limited to physical, sexual or psychological abuse exploitation from a long time. In the police records the crime against women are reported to be escalating alarming in the whole country.

On the other hand, in Assam an important state of North-East India, the crime against women has increased differently in the state. However, Assam has recorded the dubious distinction of having the highest rate of incidence of crime against women in North-East India and is ranked seventh in the country. According to the report of NCRB, Assam heads the list for all recorded crime against women including rape, in rape cases, Assam ranked sixth in the country

with 1,716 such incidents, kidnapping, abduction, dowry deatj and cruelty by husband and his relatives.

Objectives of the study: The objectives of the present paper are to find out-

(i)   To study the various issues relating to the domestic violence against women.

(ii)   Dimension and trend in the incidence of crime and violence against women in India with special reference to Assam.

(iii)   To inter-district pattern in crime and violence against women in Assam.

(iv)   To analyze the causes and consequences of physical, mental and sexual violence faced by women.

Methodology: The study was conducted in the state of Assam. The paper uses both analytical and descriptive methods.

Status of women in Assam: Women's status depends mainly on their rights and privileges and their roles assigned to them, most often on the basis of gender. Status is determined to a great extent in terms of socio-econmic indicators such as income, property, education and skills that open up opportunities of employment, better health and the ability to determine important events in life even when other are opposed to them. These incidents are also vitally interlinked with the concepts of power and position. It is widely acknowledge today that one cannot hope for gender equity unless have a share in the decision making process in the family and in the public sphere, thus enabling them to access the rights and opportunities provided to them by the state, society and socio-cultural institutions. The following section examines the status of women in Assam in view of the above indicators.

i)   Education: Education is a major catalyst in bringing about fair for reaching changes in the status of women. In the field of education, women in Assam are in a better position than the all-India average. As per 2001 census, the literacy rate for Assam is 64.28% as against 65.38% for India. While male literacy is 71.93%, female literacy stands at 56.03%. the male female gap in the literacy rate is perceptible although it is declining over time and is much below the all India average. Attainment of a higher literacy rate alone does not make a community educationally advanced. Completion of primary stage of education and continuation of school upto 15 years of age etc. are taken as indicators of educational attainment. The phenomenon of school dropout is a negative indicator of educational attainment. The dropout rates of both boys and girls in Assam remained higher than all India average from 1981 to 2001.

ii)   Work Participation: The impact of development activities on women in Assam in the past independence era is considerable. The role and status of women have undergone notable changes even the rural areas of the state.

Traditionally, the de-husking of paddy, and the rearing of silk worms for silk were done by the village women. The women remain engaged in the sorting of seeds, uprooting of seedlings, transplanting, harvesting, rearing

livestock and poultry. Although to begin with the village women were not allowed to go outside to seek employment for fear of losing the family prestige, this view has been gradually changing due to the spread of education. Most women in Assam, as the rest of India, are employed as marginal workers through home based crafts and weaving contributes to a certain degree of earnings. In urban areas of Assam where the conflict is relatively contained exposure and education have given women relatively greater flexibility. However avenues of employment remain limited and often women are forced to work for small remunerations.

The work participation rate of the women in Assam is considerably lower than that of men in general except in the primary sector where the rates are in favour of women. The participation of women in the secondary and tertiary sector is lower in Assam. The gender gap in the work participation rate is obviously in favour of women, in the primary sector and in favour of men in the other two sectors.

iii)   Political Participation: Beginning 1921, women from Assam played important and valiant roles in India's freedom movement. They started to organize themselves from 1915 onwards by framing women's associations called Mahila Samities, primarily for cultural, economic and educational empowerment of women and children. With the formation of Assam Pradesh Mahila Samiti in 1926, rural women's groups come to play a larger role in the national political life. Post independence too, women have played active roles in various social movements in Asssam.

In the state Assembly, as at the grassroots level, the participation of women is minimal. This is true even in areas where women have played pivotal roles in carrying out combined struggles on various issues. Thus although women have played a major role in the socio-political movement starting from the Indian freedom movement, their visibility and number in active electoral politics has been poor.

It is a fact that the status of women in Assam is the worst in terms of their position in decision making bodies. In Assam in 1977, out of three female candidates who contested for the Lok Sabha, 2 candidates were elected. No women from the state of Assam contested in the 1984 and 1989 elections. In 1991, 7 female candidates contested for the Lok Sabha but non was elected. Participation of women is low not only in the elected bodies but also in administrative posts.

Health: A study conducted by MEN in 2000, came out with the following findings. Due to the prevailing conflict in the region. Several primary Health Centre are seen to be dormant while some have been made into makeshift security posts. This has led to the breakdown of existing health services. In conflict areas, even where the infrastructure exists, the Primary Health Centre remained unmanned due to the high security risk. In other areas, the doctors run private pactices while the Primary Health Centre that they have been

assigned to remain deserted. Consequently estimates suggest that more than 40% of the sanctioned posts for doctors are vacant. In other words doctors don't go to interior centres. They only appear when health camps take place in the area. According to National Family Health Survey II, women in Assam have limited access to health care services. The percentage of women in Assam receiving antenatal checkups is 5% behind the rest of India and 8% behind the other North Eastern states. The number of deliveries assisted by healthcare professionals in Assam if half of that in the rest of India. The percentage of women suffering from anaemia is also very high. Maternal mortality in Assam is amongst the highest in the country. However, it is important to note that the percentage of women who take decisions regarding their own health care in Assam, is higher than several other states and stands at 65%.

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Like the UN declaration on the elimination of violence against women, 1993 the meaning of violence in this study is not just limited to physical, sexual or psychological abuse but also compasses those forms of violence that are coercive, threatening and result in the arbitrary deprivation of liberty of women in their public or private lives. As such, this study recognizes some values, social norms and traditional beliefs as contributory factors to VAW. North Cachar hills and Karbi Anglong are the two district of Assam wherein customary laws are legally enforceable. Jeuti Baruah, an experienced legal advocate in Assam in her article 'Property and women's inheritance rights in the tribal areas of North-East highlights some examples of discriminatory customary laws.

"In the entire hill area of Assam tribal women are not entitled to inherit

the father's or husband's property. They are governed by their un-codified customary laws and practices. It is observed that in some societies tribal women inherit property in absence of a male issue in her family sometimes she inherits land as gifted property from her father. Although there is no provision in the varied customary laws and practices relating to women's right to property and inheritance, daughters and widows receive family support till their marriage or remarriage".

The situation of Assam in the field of violence against women is not lagging behind. Dowry death and other forms of violence against women is a common feature in the news paper in Assam.

Violence against women by husband and his family in Assam during 2005-2011.

Head	2005	2006	2007	2008	2009	2010	2011 (upto August)
Currently by husband and his family	2206	2548	3000	3478	4398	5410	3822

Domestic Violence: In recent years, domestic violence against women has emerged as an important social evil in India. It has attracted the attention to a wide variety of agencies, from social scientist to healthcare provides. Violence against women may be psychological or physical. Physical violence is defined as the use of physical force against another person that results in the physical, sexual or psychological harm and including beating, kicking, slapping, stabbing, shooting, pushing, biting, stragglingamong other. Physiological violence is defined as the intentional use of power including threat of physical force against another person that can results harm to family life, livelihood, physical, mental, spiritual, moral or social development and include several abuse, harassment and threats.

While it is estimated that at least 3 out of every 5 women in India face domestic violence, reporting of such cases is extremely low. One of the major factors for this is the culture of silence surrounding domestic violence.

Domestic violence is one of most sensitive issues of every society and violence against women is now very significantly recognized as human right abuse. It is always the women who have to be in the tight rope, subject to inequality and looked down as an inferior sex in the society. Starting from childhood to the end of her life a woman she may be literate or illiterate has to be under the control of father or husband or the son. The extreme form such control can spark the violence within the four walls of homes at any time. So this need to be analysed carefully and study of those factors causing the violence may prevent a family suffering from the domestic violence. Till recently practices such as dowry and bride burning was unheard of in the North-East. As such domestic violence was considered to be a non-issue in the region. This however is for from the truth.

The gender development indices of Assam reflect the unequal treatment

meted out to women in the areas of health, education and income. Due to the patriarchal structure of society women have been relegated to a subordinate position. Consequently, many forms of domestic violence have received public sanction and are as such not considered to be within the ambit of domestic violence. A study conducted by NGHS-II found that, women internalized the domestic violence they forced to a large extent.

The past couple of years have shown increasing local media coverage of domestic violence in different parts of Assam. Police records show on increase in rates of domestic violence over the past ten years. This may be due to an actual increase in the number of women facing domestic violence or may be an indication of a greater reporting of such cases.

Dowry: Till a couple of decades back, the concept of dowry was practically unknown to the majority of the population in Assam. However, over the past few years there have been increased reports of dowry relates cases in the state. The TDMS revealed that although among the Assamese and tribal communities of Assam dowry related violence was not directly and overtly seen, indirect dowry related dowry related violence has grown over the years. The All India Democratic Women Association in 2003 conducted a study on dowry in five districts of Assam namely Kamrup, Barpeta, Dibrugarh, Dhubri and Sonitpur. 234 unmarried women and 237 guardians were interviewed. According to results, 20.9 percent of the respondents felt that they could be married without dowry. The survey also revealed that 20.8 percent of the unmarried girls except gifts from their parents at the time of marriage.

Dowry has been a major cause of concern amongst the predominantly Bengali majority areas in Cachar, Hailakandi and Karimganj. In MEN's recent visit to Lumding town which has a strong Bengali majority, the Director of Ghoruo, on NGO, reported that dowry deaths have become a scourge in the area he held an insatiable greed for assets such as consumer items and landed property responsible for this. In Silchar, the district headquarters of Cachar, the District Level Committee n crimes involving women and Nibedito Nari Sansthan are two organizations that have been actively dealing with cases of violence against women.

Sexual Violence:

Sexual violence can be used as a means of inflicting terror upon the population at large and could devastate communities which otherwise live cohesively in the interior villages. Sexual violence has increasingly been used as a tool of war in the North-East region. In Assam, as with a majority of cultures around the world, rape is viewed as a crime against the 'honour' of not just the girl who is raped but also of her family. If it is unmarried girl who is raped, there is even more pressure from the family to remain silent and pursue a case to prosecute the perpetrators. In some cases families resort to a 'compromise' and to an out of the case. Mita Goswami, a women's based in Tezpur, narrated a case, which she had handles while working with the Teapur

District Mahila Samiti.

According to official records there were a total number of 1995 cases of rape in Assam from 1998 to November, 2000. From 1999 – 2001, the number of molestations in Assam was 166. Most often even if people are aware of these violations the cases are not registered and there is no redress or compensation of any kind.

Violence against women and girls is rooted in the gender based discrimination, social norms and gender stereotypes that perpetuate this kind of violence. However, the best way to end violence against women and girls is to prevent it from happening in the first place by addressing its root and structural causes.

The North-East region of India does not have a common platform where problems of women, specially those of violence – domestic violence as well as ethnic violence are addressed. While interventions from external social organizations in terms of training and confidence building are coming in, it is felt that building a constituent base is an important step in generating public support for addressing gender based violence. This responsibility lies with the civil society on one hand, and state agencies on the other. However, women's organizations should be the facilitators in this process. The north region boasts of strong women's movements. It is important to build on this strong base to create coalitions by mobilizing diverse groups. Community watch groups should be created and mobilization of local government officials, legal advisors, community volunteers and survivors undertaken to establish procedures for reducing violence.

Initiating networks of women will encourage greater regional exchange on issues of gender equity, women's rights and empowerment of women. The network can also act as a base for service collaborations among domestic violence and sexual assault organizations. They could also serve as important pressure groups to advocate for rights of women of the regional as well as national level. All this could go a long way ensuring a violence free life for women.

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Automatic Thought Process and Meaning in Life among Physically Disabled Adolescent

* **Surabhi Misra**
** **Laxmi Dubey**

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Abstract- *A physical disability in general terms may be defined as limitation of a person's physical functioning, mobility, dexterity or stamina. It may include impairment or limitations of vital organs such as hearing / visual impairment, orthopaedic respiratory, haemophilic disorder and many more. The disability may be both genetic or occurred soon after birth or later in life. People with physical disabilities contribute a large and heterogeneous group of general population.*

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Keywords : Physical disability, Functioning, Mobility, Dexterity

The stigma attached to the disability makes the person feel **"an out of place"** object in this otherwise abled society. This negative automatic thought process and sense of leading a meaningless life pushes one into the deep / dark well of depression. This threatening and stressful reality leads to grave psychological crisis where one ponders in search of meaning in life constant experience of traumatic life situations/fighting with adversities to try and lead a life as normal as rest of the population gives rise to Automatic thoughts (both negative and positive)

(Butt and Lanig, 1996; Cohen and Williamson, 1988; Falro, 1996; Hurwitz, 1986)

Basically, a concept in cognitive behaviour therapy, automatic thought may be defined as images or mental activity that accurse as a response to a trigger (like an action or event) i.e. they flash in mind without conscious thoughts.

ATP is an unconscious/process determining how we perceive and interpret the events of our lives. This process may occur without the need of attention and interfering with the other concurrent thought process. Sometimes these thoughts are negative, pessimistic and completely illogical. They are actually the result of our core beliefs which establish our perceived boundaries of what we can do and what we cannot do.

Meaning in life has been best defined as **Victor Frankl** (1988, 1992) thought logotherapy which is a theoretical system of understanding the way

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*   Associate Professor, Department of Psychology, J.D. Girls P.G. College Kanpur (U.P.)
**   Lecturer, Department of Psychology, J.D. Girls P.G. College Kanpur (U.P.)

people develop and maintain meaning in their lives.

Search of meaning in life serves two important functions:
1) Protecting ones well being through effective coping.
2) And enhancing the well being through meaning, reconstruction and developments of psychological resources.

Thus it is clear that this dimension has a stronger association with positive than with negative well being.

Frankl (2004) says people are ready to sustain pain / suffering and trauma of life as long as they find meaning and can draw to at least one ultimate goal in life.

Promotion of more and more studies to this "much neglected" population of the society, may be a sincere and positive effort to enhance the disabled individual's ability to view beyond shortcomings and losses of life. Find opportunities to gain meaning from experiences. (Kendall P.C. Karegeshi G.P. 1979)

Channelize automatic thoughts into more of positive frame, and such dimension where one can set new / or rearrange life goals that do not conflict with physical disabilities.

(Persson and Ryden, 2006)

Ronan KR, Kendall PC (1997)

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Women representatives in Panchayati Raj Institutions of Bilaspur District: A study

* Dilip Kumar Agrawal

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Abstract- This research focuses on women representatives' scenario in Bilaspur district and the important role they have to play towards the governance of rural areas. The importance of women leadership, especially in rural local bodies has its place at the top of rural administration. Male leadership simultaneously dominates all over the jurisdiction of Panchayati Raj but, there are certain areas where women representatives yields good results, especially, wherever the need of raising the problems pertaining to rural women. In spite of male domination, the women leadership also plays challenging role. In the light of importance of women representation in politics the present chapter has made an attempt to assess the women representative scenario in the district under.

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Keywords :Panchayati Raj, Women Leadership,Governance

1.   Introduction: The empowerment and autonomy of women and the improvement of women's social, economic and political status is essential for the achievement of both transparent and accountable government and administration and sustainable development in all areas of life. The power relations that prevent women from leading fulfilling lives operate at many levels of society, from the most personal to the highly public. Achieving the goal of equal participation of women and men in decision-making will provide a balance that more accurately reflects the composition of society and is needed in order to strengthen democracy and promote its proper functioning. Equality in political decision-making performs a leverage function without which it is highly unlikely that a real integration of the equality dimension in government policy-making is not only a demand for simple justice or democracy but can also be seen as a necessary condition for women's interests to be taken into account. Without the active participation of women and the incorporation of women's perspective at all levels of decision making, the goals of equality, development and peace cannot be achieved.

2.   Elected Women Representatives: Participation and Decision-Making: Women's political participation and representation at decision-making levels are two different issues (Chaturvedi, 1985). Participation is a necessary but insufficient condition for representation does not flow

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*   Research Scholar, Ph.D., Dr. C. V. Raman University, Kargi Road, Kota, Bilaspur (C.G.)

automatically from participation. Women all over the world have participated widely in political movements in times of crisis but, once the crisis is over, they are relegated again to the domestic arena. Women's active participation in local bodies is creating a paradigm. The buzz word today is "Women can do it" which is proved very emphatically by various luminaries in different walks of life. Panchayati Raj Institutions, the grass root units of self-government have been proclaimed as the vehicles of socio-economic transformation in rural India, where 56.14 per cent of our people live according to the 2011 census.

Although women make up at least half of the electorate in almost allcountries and have attained the right to vote and hold office in almost all states who, are members of the United Nations, women continue to be seriously underrepresented as candidates for public office. The traditional working patterns of many political parties and government structures continue to be barriers to women's participation in public life. Women may be discouraged from seeking political office by discriminatory attitudes and practices, family and child-care responsibilities, and the high cost of seeking and holding public office. Women in politics and decision-making positions in Governments and legislative bodies contribute to redefining political priorities, placing new items on the political agenda that reflect and address women's gender-specific concerns, values and experiences, and providing new perspectives onmainstream political issues. The low proportion of women among economic and political decision-makers at the local, national, regional and international levels reflects structural and attitudinal barriers that need to be addressed through positive measures.

The equitable distribution of power and decision-making at all levels isdependent on Governments and other actors undertaking statistical gender analysis and mainstreaming a gender perspective in policy development and the implementation of programmes. Equality in decision-making is essential to the empowerment of women. National, regional and international statistical institutions still have insufficient knowledge of how to present the issues related to the equal treatment of women and men in the economic and social spheres.The inequality between men and women in the sharing of power and decision150 making at all levels, Governments and other actors should promote an active and visible policy of mainstreaming a gender perspective in all policies and programmes so that before decisions are taken, an analysis is made of the effects on women and men, respectively.

3.   Women and Inequality in Politics:

Women's participation in politics and government, however, remains limited. Although their parliamentary representation has steadily increased over the past decade, gender parity in politics at all levels is still a long way off. By July 2006, women accounted for just fewer than 17 per cent of parliamentarians worldwide. Ten countries have no women parliamentarians

at all, and in more than 40 others, women account for less than 10 per cent of legislators. At current annual rates of growth in the proportion of women members of national parliaments – about 0.5 per cent worldwide – gender parity in national legislatures will not be achieved.

The under-representation of women at the ministerial level and in local government is even more marked than in national legislatures. As of January 2005, women accounted for just over 14 per cent of government ministers worldwide. Nineteen governments had no women ministers at all, and among those governments that did include women, most had a token presence of around one to three women ministers. As of March 2006, only three countries – Chile, Spain and Sweden – had achieved gender parity in ministerial portfolios. At the local level, women account for less than 1 in 10 of the world's mayors.

The Indian Constitution guarantees political equality through the institution of adult franchise and the right to equality which prohibits discrimination on the grounds of sex. The equal political status will not be realized by mere declaration in the constitution. Voting in the elections do not bestow equal status. If adequate opportunities to take part in the deliberations of the nation are not provided, participation has no meaning.

The socio-economic conditions are not conducive for the effective participation of women in political affairs. Political equality is meaningless in a country where the mass of the population suffers from poverty, illiteracy, inequality of class status and power. Apart from these women suffer from traditional attitudes which made them to feel that they are unequal.

The political background of women shows that they are far away from an equal status along with men. Women are politically not active and do not come forward to participate in public affairs. The membership in political parties, public institutions, voluntary organisation exercise of franchise, discussing politics etc. explains the political profiles of the women. The problem of equal status and equal participation must be understood in the context of a society for,in a traditional society like India the participation of women in public life is not encouraging.

4.   Political Profile of Bilaspur:

Chhattisgarh government and politics have added some new leaves to the political records in India. However, the bifurcation of the larger state of Madhya Pradesh and the birth of Chhattisgarh was considerably a peaceful process. But the demand for a state to preserve the ethnic identities of the people here itself gave birth to certain new chapters in the history of India. This has made the formation of this new state an important issue for the whole nation. Presently the Executive head of the Chhattisgarh government is Shri Balramji Das Tandon, the Governor. The Legislative head is Chief Minister Dr. Raman Singh.

The important departments of the government of Chhattisgarh are police

department, agriculture department, general administration department, labor department, finance and planning and thewater resources department. Politics in Chhattisgarh is a very competitive field. The major national parties in the state are BharatiyaJanata Party and the Indian National Congress. The Chhattisgarh Janta Congress, BahujanSamaj Party and the Gondwana Party are the three most important state parties in Chhattisgarh. The Chhattisgarh government and politics is still guided by the various regional issues that led to the formation of this new state.

4.1   Government of Chhattisgarh:

The three divisions of the government of Chhattisgarh are the executive, legislative and the judiciary. The executive body of the government in Chhattisgarh is headed by the Governor. The cabinet of ministers works under the guidance of the Chief Minister and leads different departments of the government. There are various departments and institutions functioning under the Chhattisgarh government. Some of them are related to food, water resources, civil supplies, transport, labour and tribal welfare, panchayat and rura development, law and legal affairs, etc.

4.2   Chhattisgarh Political Parties:

The two most prominent national political parties that are present in the state of Chhattisgarh are the BharatiyaJanata Party and the Indian National Congress. The two parties have played an important role in all the elections conducted in the state. Some of the Chhattisgarh political parties of the state are the BahujanSamaj Party, the Chhattisgarh MuktiMorcha, Chhattisgarh Samaj Party and the Gondwana Party. The political parties in Chhattisgarh have several representatives from the tribal communities. Of the 146 blocks in the state of Chhattisgarh, 85 are representatives of the tribal communities who occupy 32 percent of the state population. Women also play an active role by participating in politics in Chhattisgarh.

5.   Women in Local Electoral Process:

The gradual transfer of power from British to Indian hands gave women experience in participating in the democratic process. The Government of India Act of 1935 extended the franchise to more than six million women, as compared with 313,000 under the Act of 1919. In 1937 general elections, eight women were elected from 'general' constituencies and forty-two from 'reserved' constituencies. Six women became ministers when the provincial cabinets were formed. It is natural then that in independent India women would participate actively more often than before in all aspects of politics, political office and thus heave 'political right' which has not happened.

Political rights may be considered to be inclusive of three main aspects-the right to vote in local, state and national elections, the right to be elected and the right to hold public office (legislative, executive and judicial), appointed or elective. Elections, therefore, constitute a major political activity for the people in general and women in particular in achieving political rights. Since

this appears to be the only area where the background in terms of education, economic conditions, social background and other such considerations do not come in the way of furthering their prospects, it is the first step in promoting equal participation of men and women in politics. Equality in political participation is of great significance in urban areas as the percentage of women's literacy is equal to that of men. They are more exposed to various modern developments like television, cinema, literature and public meetings as compared to their rural counterparts. Moreover, women constitute half the population. So to set up a representative and responsible government, it is necessary that more women enter the political arena.

A political system can properly be described as a system of representative government if it is one in which representatives of the people have a share in the making of political decisions. The term 'representative' is commonly used in three different ways, indicating different ways in which members of a committee or assembly can represent a larger group of people by virtue of their activities, by virtue of the manner of their selection and by virtue of their personal characteristics. In addition to being representative, the political system should also be responsible. Political responsibility signifies a government responsible to public opinion, to pursue policies which are prudent and mutually consistent and to be accountable to the representatives of the electorate.

In this process the representative system plays a vital role. It is through this system that public demands are expressed, modified and presented to the government. The political parties absorb a wide variety of opinions and merge them into a limited number of alternate policies. Political leaders use party conferences and election meetings to increase public understanding of their programmes. Periodic elections ensure that some weight is given to the opinions of inarticulate and unrecognized citizens as well as those citizens who know how to make their voices felt.

The early fifties came to be regarded as the period of women's triumph, with middle class women from a background of restricted lives confined to the roles of wives and mothers entering administrative, professional and political employment as equals to men. Women entered new occupations in the modern sectors in increasing numbers. Women were elected to Parliament and State Legislatures, became Cabinet Ministers, Governors of States, Ambassadors, Vice-Chancellors of Universities, and Judges and exercised their vote in increasing number in elections. Local self-governing bodies, in both urban and rural areas, were asked to include a few women on their panels by nomination, if they did not come through election channels.

6.   Grass-Roots Political Parties and Women:

Political parties are the life elements which keep the means of communication between the government and the people. They act as instruments to crystalise people's aspirations into party's manifestos for

implementation. The parties are important aids in transforming the multitude of un-coordinated public wills into an evident public will. It is the power of the parties in electing candidates to office which is the source of their strength in influencing the course of policy decisions and administrative programmes.

The question is often raised as to the relevance of political parties in local government. A communication approach other than partisan ways can detect problems and solving them is comparatively easily at this level because the arena is relatively small, people are less in number and hence the contact is closer. Clean and efficient administration and provision of basic amenities would be more than enough. However, with the string of political consciousness and technological advancement, people in a large or in a small area have different ideological views. They are keen to adopt different means reflected through various political parties, for the realization of their own objectives.

Local units of parties in India, as in other democratic countries, build themselves upon local services and therefore they invariably seek control over any governmental units with large powers. There are others who believe that parties ought to confine their efforts to those areas of government where broad policy is made. But contrary to such hopes, political practitioners and local citizens are very much concerned with where a school or hospital is built, where a road is constructed and who gets a tap. "Who gets what" is a crucial question in any political system, democratic or authoritarian, and whatever institution has the power to decide, it is invariably a target for those who want political power.

In India too political parties have built themselves on a local government base. Long before the Labour Party in Great Britain assumed national power it had won power in many Municipalities. In India, the success of Subhash Bose and C.R. Das in strengthening the national movement in Calcutta by gaining control of the Municipal Corporation is well known. Similarly, the Justice Party in South India established itself by winning control of district local boards. In recent years, both the DMK and Jan Sangh have tried to gain control of local bodies, both Municipalities and Village Panchayats, in their quest for state and national power.

The political parties thus have an important role as catalysts in the representative aspect of the process of local government. The most obvious contribution which the parties can make is to assist the local body in assuming the enthusiasm and focusing the support of the electorate. They are the brokers in transforming public interests into programmes of public action. They are sometimes indispensable means in aiding the public to select their representatives. Whether in opposition or not, the party man is in a more effective position than an isolated independent (Indira kumara 2005).

All the national political parties have their units in urban areas. In this chapter we are concerned with the political parties as organized at the city

level and the position of women in party hierarchy. Also a probe of such a nature would throw light on the type of leaders that are put up, named and also sustained by them.

Though each political party differs from others by their policies and progrmmes, the major political parties do not differ much in their goals towards bringing equality between men and women. It is to be noted here that all the major political parties in Bangalore City happen to be branches of broader national party structures. Local political leaders find it advantageous to have organizational ties with the national parties in order to get financial and other types of support while the national parties usethese local organizations to muster local support for their national policies and programmes.

7. **Electoral Process in Bilaspur District:**

The Constitution of India has vested, in the Election Commission, the superintendence, direction and control of the entire process, for conduct of elections to Parliament and Legislature of every State, and to the offices of President and Vice- President of India. Village and city local elections have been left to the State Governments under local Commissioners. Article 40 of the Constitution, which enshrines one of the Directive Principles of State Policy, lays down that the State shall take steps to organise village **panchayats** and endow them with such powers and, authority as may be necessary to enable them to function as units of self-government. The State Election Commissions constituted under the Constitution (Seventy-third and Seventy-fourth) Amendments Act, 1992 for each State / Union Territory are vested with the powers of conduct of elections to the Corporations, Muncipalities, ZillaParishads, District Panchayats, PanchayatSamitis, Gram Panchayats and other local bodies and are independent of the Election Commission of India.

8. **Status of Women Representatives in Rural Local Bodies in Chhattisgarh:**

The State of Chhattisgarh came into being on 1 November 2000, when it was carved out of Madhya Pradesh. According to the 2001 Census, Chhattisgarh has a total population of almost 2.1 crore. The State has 20,378 villages, 96 tehsils, 146 blocks and 16 districts. In accordance with Sections 78 and 79 of the Madhya Pradesh Reorganisation Act, any law already in force in the State of Madhya Pradesh when Chhattisgarh was created remained applicable in the new state of Chhattisgarh. Accordingly, the Panchayati Raj legislation in force in Madhya Pradesh at the time the State was divided became applicable to Chhattisgarh in toto. That law (as amended from time to time) has been re-designated as the Chhattisgarh Panchayat Raj Adhiniyam, 1993 and it provides the basis of the current Panchayat system in place in Chhattisgarh. The first elections to the three levels of Panchayats after the formation of Chhattisgarh State, were held in January 2005.The nomenclatures used for the three levels of Panchayats in Chhattisgarh under the Panchayat Raj Adhiniyam 1993 are as follows:

Level of Panchayat	Name Used:
District Panchayat	Zillapanchayat
Intermediate Panchayat	JanpadPanchayat
Village Panchayat	Gram Panchayat

The details of the number of Panchayats at each level are as follows:

Zillapanchayat	16
JanpadPanchayat	146
Gram Panchayat	9139
Total	**9301**

The details of the elected members at each level of panchayat along with women candidate at each level is given below:

Table– No. of elected representatives in each level

	Number of elected representatives				
	General	**SC**	**ST**	**Total**	**Women's**
Gram Panchayat					
Total No. of ward members	71010	16336	60084	147430	49763
Total No. of Sarpanchas	3488	864	5468	9820	3382
Grand total of elected representatives	74498	17200	65552	157250	53045
Percentage	47.4	10.9	41.7	100	33.7
JanpadPanchayat					
Total no of elected ward members	1362	305	1164	2831	954
Percentage	48.1	10.8	41.1	100	33.7
ZillaPanchayat					
Total no of elected ward members	153	35	117	305	103
Percentage	50.2	11.5	38.3	100	33.8

9.   Conclusion:

The empowerment and autonomy of women and the improvement of women's social, economic and political status is essential for the achievement of both transparent and accountable government and administration and sustainable development in all areas of life. The power relations that prevent women from leading fulfilling lives operate at many levels of society, from the most personal to the highly public. Women all over the world have participated widely in political movements in times of crisis but, once the crisis is over, they are relegated again to the domestic arena. Women in politics and decision-making positions in Governments and legislative bodies contribute to redefining political priorities, placing new items on the political agenda that reflect and address women's gender-specific concerns, values and experiences, and providing new perspectives on mainstream political issues. The Indian Constitution guaranteespolitical equality through the institution of adult franchise and the right to equality which prohibits discrimination on the grounds of sex. The equal political status will not be realized by mere declaration in the constitution. Women are guaranteed 33% reservation which is their constitutional right in elections. While women participation is stagnant at around 44% in India and world over, the status in Chhattisgarh is heartening as most of the reserved seats have been contested

here with a population of 2.1 crorein 2011. The perceptions of women in regards to their leader, especially women leaders, will be tabulated and analysed in the following chapter in order to assessed the ability and performance of women leader in their area and what respondents feel could help the women leader in achieving equal status among its male counterparts.

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A legal analysis of the laws relating to rape in India

* Taslima Firdosa

Abstract- *Rape is not just a dishonour to womanhood but it is a shame on the society as a whole. Sex crimes are one of the most peculiar categories of crime which is a product of the pervasive tendency of human nature. Uncontrollable hooliganism among the people having criminal sexual tendencies has become a serious problem for law enforcement agencies throughout the world. This paper emphasizes the changes brought in the laws relating to the offence of rape in India. It also focuses on the need of proper implementations of these laws in order to combat this heinous offence.*

Key words: Sex crimes, Rape, Tendency

Objectives: The main objectives of the research paper are
• To conduct an analysis of the existing laws relating to the offence of rape in India.
• To study the changes made in the laws relating to rape in India.

Methodology:

This research paper is, predominantly, a doctrinal analysis of the laws relating to the offence of rape in India. The objectives of the paper are achieved through both the use of primary and secondary legal sources .The primary legal sources relied on is comprised of statutory laws and regulations, case laws. The Criminal Law (Amendment) Act 2013 forms the basis of the study. It has also been necessary to rely on secondary sources of law including books, news paper publications, and documents such as information sheets issued from public authorities.

Introduction:

Rape is one of the worst crimes committed by the sex maniacs. It dominates the phobia of heinous offences. It is great dishonour to the dignity of womanhood. This offence has existed at every age in the society. During feudalism, the illiteracy and poverty was a curse to the people who could be exploited by the so-called lords even to the extent of being ordered to send the female members for the sex gratification. It does not mean that the laws were not there but the laws were of no use unless the obedience to them was observed by the people. Such tendency was declining with the decline of authoritarian attitude and the increase in literacy. [1]

In ancient India the offence of rape was punishable stringently. According

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*   **Research Scholer, Gauhati university, Gauhati**

to Manu the man of the same caste impurifying a girl by rape is fit to be assassinated but the man of the same caste impurifying so by the consent of the girl is not assassinable.[2] However, the circumstances have not changed much even in this period of modernization.

The word 'rape', is derived from the Latin term *rapio*, which means 'to seize'. Thus, rape literally means a forcible seizure. It signifies in common terminology, " as the ravishment of a woman without her consent and against her will, by force, fear, or fraud" or "the carnal knowledge of a woman by force against her will". In other words, rape is violation with violence of the private person of a woman, an outrage by all means.[3]

Man is a creature of endless moods and caprices. Dr. Freud, in his theory of criminal behaviour has explained sexual criminality in terms of functional deviations and mental conflicts in the personality of individuals. According to him, id generates sex urge in a person yet the force of ego and super ego within him makes him conscious that only the righteous means to fulfil this desire would project his personality and any deviation from the accepted norms would damage his reputation. As such, it is the force of self-consciousness (ego) and self criticism (super-ego) which keeps most persons on the right path. However, those who lack ego and super ego generally tend to indulge in sexual offences. [4]

Much of how victims and non-victims perceive rape is influenced by rape scripts, rape myths, and our beliefs of what constitutes a "real rape." One of the most pervasive problems that rape victims face after rape is the persistence of rape myths, which are false and prejudicial beliefs about rape, rape victims and rapists. Rape myth blame victims, assert that only certain types of women are raped and excuse perpetrators. For example, one widespread rape myth is that women who were revealing clothing are the type of women who are sexually victimized.[5]In order to brawl against sex offence it is very necessary that we first change our conservative thinking towards women.

Changes Brought In the Laws Relating To the Offence of Rape in India:

After the Nirbhaya gang rape case[6] that occurred on 16th December, 2012, the whole nation had undergone a revolt against the culprits as well as against the age old law, existing for the offence of rape in the Indian Penal Code. As a result of the protests, a judicial committee headed by J. Verma was set up to study and take public suggestions for the best ways to amend laws to provide quicker investigation and prosecution of sex offenders. After considering the public demands as well as required and necessary suggestions the committee submitted its report. Thereafter, the Criminal Law (Amendment) Act, 2013 was passed by the parliament which received assent of the President on April 2, 2013, but it has been retrospective effect, from the date, when the ordinance was promulgated i.e., February 3 2013. The new Act widened the definition of rape, broadened the ambit of aggravated rape and enhanced

punishment thereof.

In the year 1997 'SAKSHI' a voluntary organisation through a PIL writ[7] petition , approached the Supreme Court of India with a plea that existing Sections 375 and 376 of I.P.C and judicial interpretation thereof is not in tune with the current state of affairs. It had urged the Apex Court to direct, through an appropriate writ, that sexual intercourse' as contained in Section 375 should include *all forms of penetration, such as vaginal and oral penetration as also penetration by any part of body or by any object*. However a two-Judge Bench of the Supreme Court in *Sakshi* v. *Union of India and others*[8] had rejected the plea for re-interpretation of the provisions of Section 375, IPC to give them a wide import by expressly specifying 'various forms of penetration' within its ambit.

But after the enactment of the criminal law amendment act 2013 the definition of rape has been widened to a large extend including not just peno-vaginal intercourse but the insertion of an object or any other body part into a women's vagina, urethra or anus, and oral sex. This responds to a longstanding demand of women's rights groups. The issue of rape by different means was highlighted in the Delhi gang rape-case, where an iron rod was inserted into the victim's body. [9]

Also in another famous case law of *State of Uttar Pradesh* v. *Chholey Lal*[10] , the Supreme court had spelled out the distinction between the two expressions "against her will and aginst her consent". According to the court , clause Sixthly of Sec. 375 IPC was not attracted since the prosecutrix has been found to be above 16 years (although below 18 years). The court said that the expression "against her will" and "without her consent" may overlap sometimes but surely the two expressions in clause first and clause secondly have different connotation and dimension. The expression "against her will" would ordinarily mean that intercourse was done by a man with a woman despite her resistance and opposition. On the other hand, the expression "without her consent" would comprehend an act of reason accompanied by deliberation.

However after the amendment the age has been increased from 16 years to 18 years. Also the new amendment defines 'consent', to mean an unequivocal agreement to engage in a particular sexual act; clarifying further, that the absence of resistance will not imply consent. Non consent is a key ingredient for commission of the offence of rape. The definition of consent therefore is key to the outcome of a rape trial, and has been interpreted systematically to degrade and discredit victims of rape.[11]

A group of 6 sections Sec 376, 376A, 376B, 376C, 376D and 376E have been amended in the Code vide Criminal Law Amendment Act 13 of 2013 with a view to provide severe punishment to deter criminal from indulging into different type of aggravated crimes against women. Sec. 376 A and Sec 376 E specifically provides for punishment extended to death

penalty in rarest of the rare cases of causing death or resulting in persistent vegetative state of the victim and those who are repetitive offenders respectively. Gang rape has been included separately in Sec 376 D. sec 376 B includes marital rape and Sec 376 C includes custodial rape.[12]

Despite such stringent laws the offence of rape has not been able to be prevented and controlled in India at its fullest. According to the National Crime Record Bureau Data, 2016 while 2015 saw the registration of 34,651 cases of rape, this increased to 38,947 in 2016. Incidents of rape against women have risen far more sharply as compared to a rise in other crimes against women. The latest NCRB data for the year 2016 shows that while overall crimes against women have risen by just 3 %, incidents of rape have gone up by 12 %. [13]

Thus an Act has been enacted further to amend the Indian Penal Code 1860, the Indian Evidence Act 1872, the Code of Criminal procedure 1973, the Protection of Children from sexual Offences Act 2012.The new Criminal Law (Amendment) Act,2018 under Sec376 increases the minimum punishment for rape of women from 7 years to 10 years. Also includes a minimum punishment of 20 years rigorous imprisonment for the offence of rape on a woman less than 16 years of age. The new Act includes a new section i.e. Sec 376 AB which provides a minimum rigorous imprisonment of 20 years which may extend to a maximum punishment of death penalty. The offender has also to pay to the victim such fine that shall be just and reasonable to meet the medical expenses and rehabilitation of the victim. Another two new sections have been incorporated in this Act. According to Sec 376 DA where a woman under the age of 16 years is raped by one or more persons constituting a group or acting in the furtherance of common intention, in such case each and every person of such group shall be deemed to have committed the offence of rape. The punishment under this section is imprisonment of life and fine. Sec 376 DB has also provided the same thing but the victim under this section has to be less than 12 years of age. Also this section includes a more severe punishment extended to death penalty.[14]

Conclusion:

Though several deterrent laws have been enacted to overcome this heinous offence still a continuous effort has to be made in order to reduce this crime. However the judiciary has always guided the legislature and executive in enacting and implementing necessaries laws to battle against the felony of rape. It has been always there as a supervisor to protect and provide necessary redresses to the victims of rape. From time to time it has forwarded a helping hand to the rape victims to rehabilitate them as well as to provide them a preventive mechanism against the offence of rape. At times it has provided deterrent punishment to the rapists with capital punishment. It was not the first time when the Supreme Court had sentenced the four culprits of the Nirbhaya[15]'s case to be hanged till death. In the horrific rape and murder case

where a school girl was raped and murder in her apartment itself, the Court had sentenced the culprit with capital punishment.[16]

The Supreme Court has observed that:

"*Rape is a crime not only against the person of a woman, it is a crime against the entire society. It destroys the entire psychology of a woman and pushes her into deep emotional crisis. Rape is therefore the most hated crime. It is a crime against human rights and is violative of the victim's most cherished right, namely, right to life which includes right to live with human dignity contained in Art.21.*"[17]

No doubt the Criminal Law (Amendment) Act, 2013 and 2018 have brought a number of progressive steps in the battle against the sexual violence on women. However the Acts itself are not sufficient to redress and seek justice for violence against women. A strong progressive protest must be carried on by the social activists, jurists, judges and scholars and women's organisations, against this gruesome offence and also to protect victims of rape. Both the Government as well as the people of India needs to make colossal investments in building necessary infrastructure to deal with the crimes supplemented by meaningful reforms in the administration of the nation.

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Forest Conservation and The Scheduled Tribes and other Traditional Forest Dwellers(Recognition of Forest Rights)Act, 2006 – An Overview

* Prahlad Kumar Brahma

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Abstract- *The lands the tribal have been living since their birth have been snatched away for many reasons in many occasions. The eco system around them has been harmed or destroyed. Rehabilitation has been provided in rare occasions. But that started their ruin in life. Their freedom of culture and social system has forcefully been changed.They, being backward in education,have been economically exploited by a section of people who always seek such opportunity. False promise and high dreams of development have been projected before their eyes through which they have been exploited and allegation of vanishing everything has been labelled.But the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 has brought a ray of hope for doing justice to the tribal people in India. By virtue of this act they will be able to get their dueswith regard to their land. That apart the act will help to conserve the eco system by maintaining the status quo position of the forest and environment. Their role in environment management has been recognised by the government which was acknowledged by the international community long back.Under this research article attempt has been made to highlight the provisions of the act which recognises the overdue rights of the tribal people and to focus how it will help to conserve forest or biodiversity.*

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Key words: Tribes, customs, environment, forest, rights and international community.

Introduction: The shy tribal people never like any disturbance in their habitats. Therefore to avoid disturbance created in the name of development or alleged torture meted out in the name of violation of laws they enter in the jungle and lead their live in their own way. Hunting and gathering livelihood from the Mother Nature is the prime method of their way of living. They consider forest as their source of livelihood. Therefore they worship it through worshiping the god of forest or jungle. They believe that the god provided it for their livelihood andonly at the wish of the god they are getting the livelihood from the forest. Therefore when they go for hunting, an oblation is offered in the name of jungle god. Further they pledge that they will collect only the required amount, accordingly will hunt and will do no harm to other things or

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*   **Assistant Professor of Law, B.R.M. Govt. Law College, Assam**

living being unnecessarily. These practices are there among some of the tribes who depend on nature. This witnesses the respect shown towards the Mother Nature by the tribal people. A section of tribal people rear animals and bring up like a family member. Bisnoi community treat a kind of deer as their family member. Breast feeding of deer by female member of the family are also found.Bodo tribal with Mwshahary surname which represents the tiger clan also used to show their grief and sorrow whenever they get the news of death of a tiger and do formalities which are followed during the time of death of a family member. These are mere instances to show how tribal people are attached to the forest and how they balance the ecology. As mentioned above that they never harm the nature rather live with the nature they, by rearing the wild animal and other living beings, preserve the biodiversity also. These hard facts were not recognised for long time particularly in India. Though, this reality was acknowledged by the world community in the year 1992 through the provision inserted in Principle No. 22 of Declaration of the United Nations Conference on Environment and Development.[1]

In India developmental policies have been taken even without paying heed to the loss in certain matters. Dams have been built; electricity has been generated but required measures have not been taken properly. A good number of high promiseshave turned to be a false promise. Agitations like Narmada Bachao Andolon and othermovements in different forms were launched but could not subjugate the demand of development resulting setting up of big dams in the name of multipurpose projects and compelled the affected people to bow down to the policy. It ignored the ruin of the species which lived on the nature prior to the installation of the dam.

The developed country by using hegemony is going one step ahead in hurting the nature and has been playing the blame game on green house effect. So it is the civilised people not the alleged tribal people who has wounded the nature and reached to this state of abnormal weather forecasting.[2]

In a country where a good number of natural things are worshiped, the environment management personnel like environmentalist and tribalhave no respectful place in the society. Rather the industrialist or the personnelwho breach eco system or affect the biodiversity, get the respectful place. The false promisor of sustainable development who eye only of their profit get the favour of the ruler of the country for many reasons.[3]For such reason a good number of wetland has been granted for building for residential purpose where the builders harvest the maximum profit or permission is granted for setting up of factories. On the other hand the tribal people have been facing the threat of eviction. Apart from that some clever members of advanced community or illegal land grabbers have aggravated the situation by encroaching the protected areas or reserved forest areas by pretending to be aborigine of that particular area. In such premises the authority also fails to identify the actual aborigine of that particular area since majority of tribal people hardly records their holding

of land and accordingly eviction drive is carried out where the tribes or actual aborigine of that area suffers the most. In this way tribal people have been displaced and deprived of their right to live.

In numerous International covenants the right of tribal people has been enumerated. In good number of International agreement of which India also happens to be signatory the rights of the tribal people has been mentioned. The role of tribal people in environment management has been recognised. International Covenant on Economic, Social and Cultural Rights of 1966 and International Covenant on Civil and Political Rights of 1966 in Article 1 of both the covenant provides for pursuing economic, social and cultural development as a matter of right for self determination[4]. Article 2(2) (a) of Indigenous and Tribal Peoples Convention, 1989 also provides inter alia for promotion of customs and tradition of the tribal people[5]. In the Draft United Nations Declaration on the Rights of Indigenous Peoples, 1994 also the contribution of the indigenous tribal people to sustainable and equitable development and proper management of the environment has been recognised[6]. But in India the tribes or the community who resides in the jungle have got their rights only in the year 2006. They have been exploited.They did not receive due regard. They were legged behind though it is not a good sign for all round development of the country. They should not be discriminated with negative attitude. To be ignorant about the customs of our own people is not a happy situation from any point of view[7].

Recognition of Forest Right:

Section 3 of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act deal with the rights provided under the Act. It provides right to hold and live in the forest. Under this section the right of ownership has been given. It also enables the villagers to set up certain institutions like dispensary or any other institutions including educational institution on that particular plot of land.Provision for rehabilitation on eviction has also been provided in this section. Provision for giving alternative land to the effected persons is provided. Another important issue covered under this section is intellectual property right. The Act has given the Intellectual property right to the community if they desire. However this provision should be read with the provisions contained in the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Rules 2008. The rules prescribe certain formalities for enjoying the rights prescribed under the Act. As prescribed rules one has to apply before the Gram Sabha for acquisition of particular plot of land. The application has to be accompanied with certain documents as prescribed under Rule 13.

Section 4 of the Actprovides overriding effect of the Act. By recognising and vesting rights to the tribes and other traditional forest dwellers the section reads as follows: 4. (1) *notwithstanding anything contained in any other law for the time being in force, and subject to the provisions of this Act, the*

Central Government hereby recognises and vests the forest rights….

The section provides for a heritable right to the holder of the plot of land. By this it may be presume that the generation of the family will enjoy the benefit of that particular land.Complex formality of obtaining clearance fromthe concern departments is also exempted to make the process simple. This section also clarifies the issue of rehabilitation after eviction more clearly by stating that there would not be any eviction of the forest dwellers even in necessity until rehabilitation process is completed. Section 4 (1) (F) provides that no resettlement shall take place until facilities and land allocation at the resettlement location are completed as per the promised package. So it may be presumed that there is least chance of making false promises which usually happened earlier.

Another very important section of the Act is section 5 which prescribes duties on the part of the land holders. It prescribes duty of protection of the wildlife, forest and biodiversity. Therefore by getting the right they cannot misuse the rights. By assigning the duty along with the rights the systematic environment management has been done.

Analytical overview:

The long overdue rights of the tribal people who live on the nature have been recognised. The Act appears to have given the maximum possible rights to the tribal people who reside in the forest. Gram Sabha has been given wide power in case of recognition of the forest dwellers and receiving applications for holding land under the Act[8]. But there is possibility of misuse of these powers by the Sabha which is usually dominated by the member of the advance community. The Sabha may either discourage tribal people who happen to be unacquainted with the Rules by asking documents for establishment of their rights. Besides this, as the tribal people hardly carry documents mentioned under Rule 13 they may be disappointed if the authority stick to the evidences prescribed in that Rule. Therefore, it is suggestible that, if the tribes otherwise identified as tribes or resident of that particular area on the basis of other evidence which has not been enumerated in Rule 13, then also such tribe should be recognised and provided the holding.

Another issue to be addressed is that, since the Act though speaks about providing rights only to the tribes and other traditional forest dwellers, even then if a member from advanced community also resides there for a period prescribed in the Act for entitlement of rights, then also that particular individual will get the benefit of the Act. In such situation there is possibility of taking the advantage by the member of advanced community to sabotage the other member of the backward community. Therefore this issue should be looked into by the Sabha. Apart from that certain guidelines should be formulated for better governance of such areas. The Supreme Court of India also was of the opinion of formulating guidelines[9]. With such awareness programme the tribal people or the forest dweller may be engaged in conservation of

biodiversity in a more effective manner. The illegal misuse of forest product or destruction of biodiversity on instigation or on enticement of a section of people having vested interest or smuggler of forest product will be controlled.

Conclusionand suggestions: The Act and the Rule thereof has precluded the possible adverse motive of a section of people by making the rights non alienable and prescribing certain criteria for establishing claim.The Act has recognised the rights of the Tribal people. On the other hand by assigning the duty it has taken a step to protect the forest and biodiversity. But the Act or the Rules thereof have not provided any provision which assigns duty to the government for bringing awareness to the tribal people. Therefore awareness should be brought among the tribal people. Until and unless the tribes become aware of their rights then the benefit of the Act will remain only on paper.

(Endnotes)

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3. The industrialists get the clearance from the govt. on the promise that they will compensate the loss environmental degradation. The govt. also in the name of setting up of new industry for national economy compromise and sway by the false promises. Giving licence illegally on extraneous consideration has also been reported in different media in different occasion.

4. See P.R. Gandhi,Blackstone's International Human Rights Document, Second Indian Reprint2001, Universal Law Publishing Co. Pvt. Ltd., p. 68, 51. The provision reads-"1. All peoples have the right of self determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development".

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Sustainable Entrepreneurship- A Study Based on Silk Industry In Assam

* Jakir Hussain Choudhury

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Abstract- *Although sericulture especially ericulture has been an occupation of many rural Assamese people for long time, it is still at the subsistence level due to various economic and non economic factors like Shortage of eri feeds. The main cause of shortage of feeds and mulberry or lesser growth of area under plantation is due to the pressure of increasing population on wasteland for food crop cultivation, erosion of rivers, lack of protective measures from the government to preserve naturally grown food plants etc. In this context, a look through the lens of sustainability reveals opportunities to improve our natural environment, people's quality of life, while at the same time creating economic value. The paper focused on the concept of sustainability and the relevance of sustainable entrepreneurship today, addressing what sustainable business ideas are. The paper is an attempt to outline different elements of sustainable entrepreneurship and its challenges and to identify and evaluate sustainability-related opportunities in the study area. The study has been conducted in Silk Industry in Assam with the help of both primary and secondary data.*

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Key words: Sustainable, Entrepreneurship, Silk, Industry, Assam, Ericulture.

Introduction: Entrepreneurship is vibrant assertion of the facts that individual can be developed, then outlook can be changed and their ideas can be converted into action though on organized and systematic program for entrepreneurs. Entrepreneurship plays an important role in the economic growth and development of nation. It is a purposeful activity includes in initiation, promotion and distribution of wealth and service. According to A Schumpeter "The entrepreneurship is essentially a creative activity or it is an innovative function"

Sericulture is an important labour-intensive and agro-based cottage industry, providing gainful occupation to around 7.25 million persons in rural and semi-urban areas in India. Sericulture is a major cottage Industry in Assam, comprising of both Mulberry and Non-Mulberry silk worm culture and production of its natural silk. Non mulberry silk in general Muga and Eri silk in particular have closely associated with the rituals and traditions of Assam,

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*   **Assistant Professor, Kharupetia College, Assam**

and thus silk production and its uses has been an important household activities leading to economic development of a large section of rural people. It is practised in more than 10532 villages and provides self employment to 2.60 lakh of families approx. Amongst these, Muga, the non-mulberry silk worm rearing and its silk production stand a unique position not only in Assam but also in the global map of sericulture. 94 % Muga silk and 62 % of Eri silk is produced in Assam for and placed in 3rd position in silk production in the country. Assam alone produces 2012.70 MT of eri silk and 118.04 MT of Muga silk and 23.40 MT Mulberry silk during the year 2013-14.. The total different types of silk worm food plantation available in the state are 1453.02 hactre Som (Muga), 825.25 hactre in Eri and 720.00 hactre in Mulberry, and abounded wild Oak plantation for Tassar in Karbi Anglong and Dima Haso districts. The yield production of leaf (Silk worm's food), in these plantation are at 16-18 MT in Som, 20-30 MT in Keseru and 6-9 MT in Mulberry per hactre.

Definitions of Sustainable Entrepreneurship:

WBSCD (World Business Council for Sustainable Development) defines sustainable entrepreneurship as the "continuing commitment of business to behave in an ethical way and contribute towards economic development while improving the quality of life of the workforce, their families, and the local and global community, as well as future generations". According to **Gerlach,** in a narrow sense, sustainable entrepreneurship can be defined as innovative behaviour of single actors or organisations operating in the private business sector that are seeing environmental or social issues as a core objective and competitive advantage. However, in a broader sense, it can be viewed as innovative behaviour of actors in the context of sustainability, including actors from governmental and non-governmental, profit and non-profit organisations

Motomura defines sustainable entrepreneurship as 'making things happen in a way that takes into consideration the short, medium and long-term". It can be contrasted to "selfish entrepreneurship", in which people seek advantages only for themselves, as well as to "unconscious entrepreneurship", in which a non-sustainable way of life is produced that generates imbalances of all kinds.

Sustainable entrepreneurship is typically associated with the triple bottom line comprising three Ps, namely, people, planet, and profit. 'People' refers to an enterprise's treatment of its workforce; 'planet' refers to the impact of the company on natural resources and the environment; and 'profit' relates not just to the financial returns of the enterprise, but also to the allocation of the financial returns between investments and distribution of the gains.

Dean and McMullen defined it as "the process of discovering, evaluating and exploiting economic opportunities that are present in market failures which detract from sustainability, including those that are

environmentally relevant."

Literature review:

SE can be considered as an emerging and new field in entrepreneurship study (Gibbs, 2009; Hall et al., 2010; Hockerts and Wüstenhagen, 2010). Specifically, it links the objective of sustainable development to wealth accumulation among entrepreneurs (Tilley and Young, 2009) and has changed the ways entrepreneurs perceived on environmental resources issue (Graham, 2010). Sustainable entrepreneurship combines the goals of entrepreneurship and sustainable development (Thompson et al., 2011, Dean & McCullen, 2007; Cohen & Winn, 2007; Schaltegger & Wagner, 2011). The triple bottom line focuses on economic prosperity (profit), environmental quality (planet) and social justice (people – the aspect which was overlooked before by previous research) (Elkington, 1999).In the same line, the aim of sustainable entrepreneurship is to balance the triple bottom line of people, planet, and profit (Thompson et al., 2011). Dean and McCullen (2007) indicate that opportunities "are present in market failures" and Hockerts and Wüstenhagen (2010) point out that they come from market disequilibria. Cohen and Winn (2007) and Dean and McCullen (2007), market failures provide opportunities for sustainable entrepreneurs who are about to resolve them and can achieve profitability while reducing environmentally degrading economic behaviors at the same time. Sustainable entrepreneurship is much more complicated and more confusing compared to the others, because a holistically and equally contributions to economic, social and environment is required (Tilley and Young, 2009; O'Neill et al., 2009).SEas "sustainopreneurship", in which he further explains that it is concept emphasizing on three dimensions: (i) Seeking,finding and/or creating innovations to solve sustainability related problems; (ii) Get solutions to the market through creative organizing and; (iii) Adding sustainability vaue with respect for life support systems.

If timely measures are not taken the Muga (Antheria assamensis) heritage of Assam may face extinction in the next three decades or within 2040. Muga worms have been dying for last two decades due to air pollution from brick factory, coke industry, cement factory and oil refineries also. Muga worm feeds on leaves of these trees. After the desertification and being affected by stagnant flood water Som and Soalo trees die within few months. This has been happening for years and most of Muga rearing areas are now almost free of this cultivation. At least 1500 farmers of Dhemaji districts have lost average 100 som trees due to such desertification and stagnant water.

Objectives of the study:
• To identify the various aspects of sustainable entrepreneurship and its challenges in the silk industry in Assam.
• To observe the conditions preventing sustainable entrepreneurship opportunities in the silk industry in Assam.

Scope of the study:

- **Topical Scope:** Sustainable entrepreneurship in the silk industry.
- **Geographical Scope:** Assam within North East India.

Research questions: Based on literature review and objectives of the study, the researcher has framed the following research question:

What impact sustainable entrepreneurship can leave in the study area?

Research methodology:

Research Design: The study is descriptive and empirical in nature.

Sampling Size: The study has been carried out with 34 entrepreneurs from silk industry.

Sampling Technique: The researcher has adopted convenient sampling method.

Data Collection Method: Data has been collected by applying both secondary and primary method of data collection. Secondary data has been utilized to find out the theoretical information and consists of books, published journals and the internet.

Primary data has been collected by using structured questionnaire, Personal observation and in-depth interview from 34 entrepreneurs involved in silk industry in Assam.

Limitations / future scope of the study:

- The study has been concentrated on silk industry in Assam. So in future similar study can be done based on nationwide.
- A comparative study can be done considering two different states' silk industries and sustainable entrepreneurship.

Findings:

Based on 1st Objective: Various aspects of sustainable entrepreneurship and its challenges in the silk industry in Assam.

- The researcher has identified four aspects associated with sustainable entrepreneurship, say- Economic, Social, Cultural and Ecological in the study area.

Challenges Facing in each Aspect in the silk industry in Assam:

Economic Challenges: Decreasing feeders of silkworm → Decreasing silkworm production → Decreasing Silk Production →Losing Profit.

Social Challenges: Entrepreneurs' contribution towards social and environmental surrounding and fulfilling the needs of the society.

Cultural Challenges: Providing natural silk product instead of adulterated silk.

Ecological Challenges: Saving the silkworm from climate change , pollution to sustain silk industry.

Based on 2nd Objective: To observe the conditions preventing sustainable entrepreneurship opportunities in the silk industry in Assam.

- Nearly 78% of the respondents have opined poor condition of silkworm feeders as the condition for preventing sustainable entrepreneurship in the study area.

- Maximum (94%) of the respondents viewed the impact of adulterated silk as the condition that prevent them to think for sustainable entrepreneurship.
- Nearly 82% of the respondents have agreed the cost factor as against sustainable entrepreneurship.
- Proper ethical training is again another factor that hinders them to think on such line reported by 50% respondents.
- Nearly 70% of the respondents blamed market competition which hinders them to maintain sustainable entrepreneurship.

Suggestions:
- Entrepreneurs should not resort in providing the adulterated silk instead of natural silk.
- The decline of Som and Soalo plantation areas in government sericulture farms have pushed Muga silk towards the verge of extinction. So the effort must be there to protect such plantation by the government as well as by the growers.
- Entrepreneurs must follow ethical norms so that they can show the pride of Assam infront of others by using actual silk and should not compromise with the culture for the sake of earning profit.
- The entrepreneurs should involve in finding and creating innovations to solve sustainability related problems.
- Entrepreneurs in this line should add sustainability value with respect for life support systems.
- For sustainable entrepreneurship, Stakeholder engagement must be there.
- For sustainable entrepreneurship, entrepreneurs must think for the impact of their enterprise on the natural resources.
- They should concentrate on short, medium and long run benefit including all the stakeholders.

Conclusions:

Sustainable entrepreneurs need awareness of the negative effects of pollution, energy dependence, and climate change than ever before in the study area. These environmental challenges can be opportunities for them which need to capitalised through innovative business solutions that benefit the environment, create jobs, and generate wealth. In this regard the entrepreneurs need to combat the challenges of four aspects say, cultural, social, economic and ecological shown in the study to maintain sustainability in the silk industry in Assam.

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Socio– Economic status of dimasa people with special reference to dimadao wapu village of Dima Hasao District

* **Dipalee Haflongber**

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Abstract- *Socio-economic status is a combined measure of family's or individual's economic and social position in relation to others, on the basis of income, education and occupation. The study is significant because a very few studies have been conducted on the Socio economic status of Dimasa people especially in our state and particularly in Dimadao Wapu village of Dima Hasao District. The present study has revealed the Socio-Economic Status of Dimasa people. It has also helped to improve their Socio-Economic Status and has also provided necessary guidelines for improving the Socio-Economic Status of Dimasa people of Dimadao Wapu village.*

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Key words: Socio-economic Status and Dimasa people.

Introduction: Socio-Economic status (SES) is a measure of an individual's or family's economical and social position based on education, income and occupation. Socio-Economic status is considered as one of the important variable in social science research. The concept 'Socio- Economic status' is used in social sciences as well by layman quite frequently yet there is no general consensus regarding its definition and measurement. Measures used in the literature are those of convenience or availability. In general, SES is considered as an indicator of economic and social position (Stawarski and Boesel, 1988. Australian Bureau of Statistics, 1994). While assessing the SES of aborigines and indigenous people defined SES as the level (status) of social and economic position of people in society and is reflected by various indicators. Socio comes from the word 'social' and refers to people and the ways (level) they fit into the community in which they live. It reflects how well they are educated, have jobs etc. economic refers to the financial position of people within society and include, how much they regularly earn, whether own a house and the assets owned etc. Several indicators of one's social status, viz. education, health, contact with criminal justice system, employment/ unemployment, housing, access to services, water, sewerage etc. and of economic position, viz. income ownership, assets level, holidays etc. have been outlined (Australian Bureau of Statistics, 1994).

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*   **Assistant Professor, Nowgong College, Assam**

Thus, the review clearly outline the frequently used indicators of SES as, education, income, wealth, employment/ unemployment, housing, access to services, possessions, presence of reading material at home, race, social class, social standing /prestige, material / social deprivation, network etc. Incomes, education, material possessions etc. are ever changing and not static, over the years the so called rigid caste system has also become 'somewhat' flexible in the sense that rate of inter caste marriages has increased. The salaries of employees have increased enormously, literacy rate has improved, the material possessions which used to determine the status has changed e.g. in villages the bullocks and bullock carts were considered prestigious, now tractors and farm implements have replaced them.

Area of the Study:

Dima Hasao district area is a part of Assam. Topographically, the district can be divided under three district regions, viz. the low lying areas, the high hills of Eastern and Western portions, the plateau areas. Dimadao Wapu village is come under the low lying areas of Dima Hasao district. This village consists of 55 houses consisting of total 321 populations. In the East of this village Langdrengko village, West Warilampu, South Amrudisa and North Ditor Kachari village are situated. Dimadao Wapu is a village consisting of Dimasa people. Majority of the villagers of the study area are illiterate. Majority of villagers involved in shifting cultivation rather than permanent cultivation. This village is situated at the distance of 5 kilometers from Lanka to Haflong road. Villagers have to come far away for marketing and medical treatment. There exists a L. P. school in the study area.

Rationale of the Study:

Socio – Economic status is an important factor which influences other aspects of human being like academic achievement, developmental programmes, intelligence etc. Various studies have been conducted on socio-economic status such as Socio- Economic Status in relation to academic achievements by Ahmar and Dr. Anwar, 2013 and Socio- Economic Status and Intelligence by Gnandevan, 2011. However, it is felt that it is necessary to study the Socio- Economic Status of Dimasa people.

Further the study is significant because a very few studies have been conducted on the above mentioned topic especially in our state. The present study will reveal the Socio- Economic status of Dimasa people. The study will also reveal the Socio- economic Status of both male and female Dimasa people. It will also help to improve their Socio- economic status and will also provide necessary guidelines for improving the socio-economic status of Dimasa people of Dimadao Wapu Village.

Statement of the Problem:

The review of related literature on socio- economic status reveals that the construct of socio-economic status has attracted many researchers. Social intelligence of students depends on their socio-economic status (Gnandevan,

2011). It is found that the academic achievement was influenced by the socio-economic status and those who belonged to high socio-economic status showed better performance (Ahmar and Anwar, 2013).

The review of related literature reveals that the socio- economic status of the Dimasa people has not been explored yet, hence the present investigation is undertaken to find out the socio- economic status of the Dimasa people. In order to undertake the study, a survey will be conducted in the Dimadao Wapu village. Therefore, the study has been entitled as "Socio- Economic Status of Dimasa People with special reference to Dimadao Wapu village of Dima Hasao district."

Objectives: Objectives of the study were as following:-
1. To study the socio- economic status of the Dimasa people of Dimadao Wapu village of Dima Hasao district.
2. To study the socio- economic status of the female Dimasa people of Dimadao Wapu village of Dima Hasao district.
3. To study the socio- economic status of the male Dimasa people of Dimadao Wapu village of Dima Hasao district.

Hypotheses: On the basis of the above objectives, following hypotheses have been formulated-

H_1 The socio-economic status of the male will be higher than the female Dimasa people of Dimadao Wapu village of Dima Hasao district.

H_2 The socio-economic status of the female Dimasa people will be low.

H_3 The socio-economic status of the male Dimasa people will be low.

Operational Definition of the terms:

Socio-economic status: Socio-economic status is a measure of an individual's or family's economic and social position based on education, income and occupation.

Dimasa people: Dimasa people refers to both male and female people belonging to Dimasa community.

Delimitation of the Study: The present study has been delimited as following:-
1. The present study was delimited to the study of socio-economic status of the Dimasa people.
2. The study was delimited to only the Dimadao Wapu village of Dima Hasao district.

Methodology:

Method: The present study was conducted through descriptive method of research.

Population: All the Dimasa people of the Dimadao Wapu village of Dima Hasao district were regarded as the population for the present study.

Sample: The study was conducted on a representative sample of 30 people from the total population, selecting both male and female people. While selecting the sample, the purposive sampling technique was used.

Research tools: Socio-economic status scale developed by Rajbir Singh, Radhey Shyam and Satish Kumar was used to collect data.

Data Collection: The Sample was selected by using purposive sampling technique from different socio-economic status of the Dimadao Wapu village of Dima Hasao District, Assam. The investigator personally collected the data. Before administering the data collection procedure, they made clear about the purpose of collecting data. The research tool socio-economic status scale was scored and interpreted as per the procedures given in the manual. The instruction for data collection, scoring and interpretation as given in the manual was strictly followed.

Statistical Treatment of Data: Necessary statistical treatment used wherever possible. In order to achieve the objectives of the study Mean and SD were used.

Analysis and Interpretation of Data:

Table 1: Difference between male and female Dimasa people in relation to socio-economic status

Gender	N	Mean	SD
Male	15	40	9.68
Female	15	34.27	10.33

In table 1 it was found that the Mean and SD value of Socio-economic Status of male Dimasa people was 40 and 9.68 and that of female Dimasa people was 34.27 and 10.33 respectively.

Table 2: Various categories of socio-economic statuses of the female Dimasa people

SES Category	N	Mean	SD
Low SES	10	28.1	5.45
Lower Middle	03	43.33	1.53
Average Middle	02	51.5	0.71
Upper Middle	-	-	-
High SES	-	-	-

In table 2, the Mean and SD value of the various socio-economic status of the female Dimasa people were shown and among those the Mean and SD of the female from low SES was 28.1and 5.45, lower middle SES was 43.33 and 1.53 and Average Middle SES was 51.5 and 0.71. For upper middle SES and high SES no data were found.

Table 3: Various categories of socio-economic statuses of the male Dimasa people

SES Categories	N	Mean	SD
Low SES	8	31.62	5.85
Lower Middle	4	43	1.41
Average Middle	3	54.33	4.93
Upper Middle	-	-	-
High SES	-	-	-

In table 3, the Mean and SD value of the various socio-economic status of the male Dimasa people were shown and among those the Mean and SD of the male from low SES was 31.62 and 5.85, lower middle SES was 43 and 1.41 and Average Middle SES was 54.33 and 4.93. For upper middle SES and high SES no data were found.

Major Findings of the study: After analyzing the data the following major findings were noted-

1. It was found that the socio- economic status of male Dimasa people was higher than the female Dimasa people of Dimadao Wapu village of Dima Hasao district.
2. It was also found that though the female Dimasa people fall under various categories of SES (low SES, lower middle and average middle) yet the number of female people in the low SES was more.
3. It was also found that the male Dimasa people fall under various categories of SES (low SES, lower middle and average middle) but the number of male people in the low SES was more.

Conclusion:

From the above study it is clear that some differences are there in the Socio-economic status of both the male and female Dimasa people. It is also clear that both the male and female Dimasa people from Dimadao Wapu village of Dima Hasao district are fall under various categories of SES viz. low SES, lower middle and average middle SES but the number of people is found high in the low SES category. No data were found for upper middle and high SES in case of both male and female Dimasa people of Dimadao Wapu village. So, for improving the socio-economic status of the Dimasa people of Dimadao Wapu village of Dima Hasao district proper step should be taken by the Government.

Suggestion:

Government should pay more attention to improve the SES of Dimasa people of Dimadao Wapu village by improving the quality of education, providing income source and improving their financial status.

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An Economic Study of Market Arrivals and Price of Pulses (Chickpea, Pigeonpea) in Selected Markets of Neighboring States

* Sudha Singh
** R.C. Singh, ***Amarjeet Singh

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Abstract- *This study was based on the secondary data of growth rate pattern on arrival and price of selected major pulses(Chickpea, Pigeon pea) in in Karwi district of Uttar Pradesh and Satna district of Madhya Pradesh for the period of 10 years i.e. from 2007 up to 2016.Monthly wholesale arrival and price data was collected from Agmarknet and from Mandi Simiti for both Karwi and Satna districts from 2007 to 2016. The seasonal variation in arrivals was calculated by using compounding growth model. In intra-year arrival index was found highest in case of pigeonpea and chickpea in the month of March and February to April. As regard the prices, the highest price index of pigeonpea and chickpea was observed in the month of July to September and August to November. It was same in case of pigeonpea and chickpea in both Karwi and Satna districts.*

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Keywords: Market Arrivals, Prices, Chickpea, Pigeonpea, Compounding Growth Model.

Introduction: Agricultural marketing plays a significant role in the movement of commodity from the producer to the consumer and in stabilizing the prices. Agriculture is the backbone of the Indian economy but in real terms, the farmer does not get proper returns from his investment. Agricultural Marketing not only stimulates production and consumption but accelerates the pace of economic development. With a breakthrough in agricultural production and surplus as a result of the introduction of modern farm technology, high yielding varieties and other inputs, the need for an efficient agricultural marketing has increased manifold. The variation in prices of agriculture commodities has been one of the major factors affecting the income levels of the Indian farmers. Due to increased agriculture production every year, the arrival in the market is also increased and prices also increase along with time. Normally every year increasing trend is seen in arrivals and prices of agricultural commodity. India has traditionally been a pulse importer country despite of the largest producer in the world. India accounts 27% of the total production and 30% of

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*   Division of Management, Mahatma Gandhi GramodayaVishwavidyalaChitrakoot, M.P.
**   Professor, Mahatma Gandhi GramodayaVishwavidyalaChitrakoot, M.P.
***   Division of Management, Mahatma Gandhi GramodayaVishwavidyalaChitrakoot, M.P.

total consumption. India accounts 35% share of world area under pulses (FAOSTAT). Pigeon pea (Tur) and Chickpeas (Gram) contributes largest share of pulse production. The market for Pigeon pea (Tur) and Chickpeas(gram) is large and widely spread but more lucrative. In Uttar Pradesh and Madhya Pradesh state pulses are generally marketed in regulated markets. To help the farmer in disposing of their produce in the market smoothly by reducing the exploitation level and to promote fair trade by providing various infrastructure facilities the market regulation act came into existence. The objectives are to study the intra year and inter year variation of arrival of selected pulses.However, fluctuations in prices often lead to inefficiency and adversely affect the efficient allocation of resources for farmers. If price volatility is higher and more unpredictable, there is greater risk of incurring losses or realizing gains on future sales. Agricultural price volatility and efficient price discovery has always remained a major concern of producers and consumers in a predominantly agrarian economy like India. It elevates the risk for producers who makes planting decision months prior to harvest and provides mixed signals to buyers of agricultural commodities. It is a major concern for the policy makers since volatility in commodities have determined the economic prospects of nations for eons and would continue to do so in the future (Dasgupta and Chakrabarty, 2009). Price discovery and price volatility could impede the flow of fundamental information across markets, when it reflects excessive speculative noise. (Arnadeand Hoffman 2015). Prices of pulses in India have experienced a significant amount of volatility due to production variability, which has been problematic for various stakeholders.

Material and Methods: The present investigation is based on Chickpea, Pigeon pea which is major pulse crop cultivated in Both the states Uttar Pradesh and Madhya Pradesh. From Uttar Pradesh Karwi district wholesale market were selected whereas from Madhya Pradesh Satna district wholesale market purposively based on highest area under selected pulses crop. One regulated market from each district of selected region having the highest arrivals of Chickpea, Pigeon pea selected for the study. Secondary data on monthly arrivals of Chickpea, Pigeon pea in Karwi and Satna district were collected from the year 2007 to 2016, from the published records and reports of the Agmarknet, Satna Mandi Simiti and Karwi Mandi Simiti. Time series data on monthly arrivals and wholesale Chickpea, Pigeon pea obtained from the offices of the respective regulated markets.

Growth analysis:

To study the growth in area, production and productivity of major crops and input use, data were collected for the last ten years (2007 to 2016) and annual compound growth rate was worked out as under;

$$Y_t = ab^t e_t \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots \text{(i)}$$

Where,

Y_t is area/production/productivity of selected crop and input use under study in time period t

t is time element that takes the values 1, 2, 3, ………. n

a   =   Intercept or Constant

b   =   Regression or trend coefficient which equals to 1+ r

r   =   Compound growth rate

e_t =   error term

equation (i) can be written as

$Y_t = a (1 + r)^t e_t$ ……………………………………. (ii)

On logarithmic transformation of equation (ii) we get:

$\text{Log } Y_t = \log a + t \log (1 + r) + \log e_t$ ……………… (iii)

The compound growth rate was obtained as

r = [(Antilog of b) – 1] × 100

't' test was applied to test the significance of 'b' *i.e.* regression coefficient, which is-

$$t = \frac{|\hat{b}|}{\text{S.E. of } \hat{b}}$$

Result and Discussion:

1.   Seasonal Pattern of Arrivals and Price of Chickpea, Pigeon pea in Karwi Market:

Chickpea (Gram)- The Compound growth rate is -17.83% Which was significant at P=0.10 this indicate that the average arrival of Gram in Karwi market has decreased significantly during the years. Graph 3 shows that the average arrival of Gram was maximum in the month of April(8781.8) and may. And subsequently the average arrival was highest in the month of April and gradually it has decreased till October. There is sudden more supply in the month of November. The average arrival of gram was lowest in the month of February (1197.5). In case of price there is increasing trend in the price of gram from January to December. The highest average price was in the month of October (3180.5) and the lowest average price was in the month of January (2565.8). Overall there was not much variations in the price of Gram during different months.
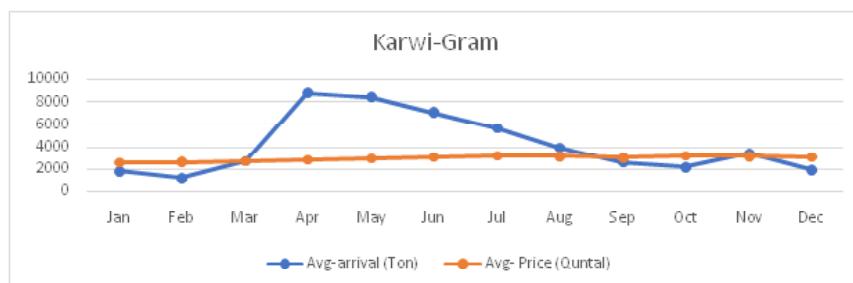
Pegionpea (Tur)- The Compound growth rate is -13.38%. This indicate that

the average arrival of Tur in Karwi market has Decreased during the years. Graph 4 shows that the average arrival of Tur was maximum in the month of May (5253.8) and June. And subsequently the average arrival of Tur was decline. The lowest average arrival of this tur was in the month of February (374.6). The average price of Tur was Maximum in the month of May (4010) and lowest was in February (3342). Overall there was not much variations in the price of tur during different months.
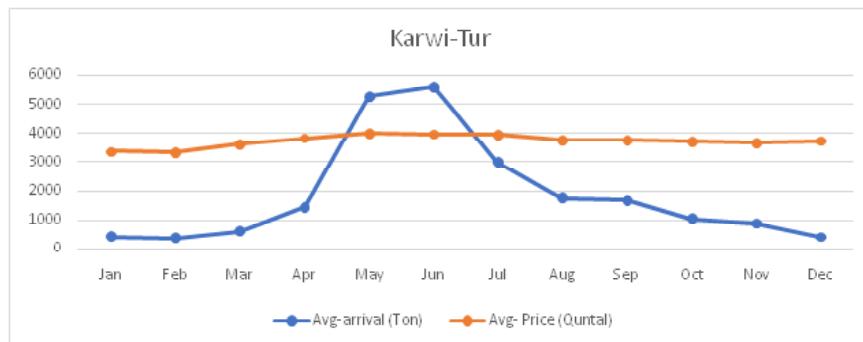
Table.1 Seasonal indices of monthly arrivals and Price of ChickpeaKarwi Market (2007 to 2016)

Month/Year	avg-arrival (Ton)	Avg- Price (Quntal)
Jan	1859.7	2565.8
Feb	1197.5	2615.8
Mar	2733.3	2668.8
Apr	8781.8	2845
May	8381	2905
Jun	7032.6	3035.5
Jul	5656.5	3205
Aug	3968	3150.1
Sep	2599.1	3030.4
Oct	2199	3180.5
Nov	3381	3159
Dec	1932.1	3102

Table.2 Seasonal indices of monthly arrivals and price of Pigeon pea Karwi Market (2007 to 2016)

Month/Year	avg-arrival (Ton)	Avg- Price (Quntal)
Jan	435.2	3372
Feb	374.6	3342
Mar	619.4	3612.5
Apr	1437.6	3837.5
May	5253.8	4010
Jun	5596.5	3975
Jul	2980.9	3955

Aug	1743.8	3763.8
Sep	1670	3785.8
Oct	1031.4	3739.2
Nov	884.8	3690
Dec	402.6	3740

2.   Seasonal Pattern of Arrivals and price of Chickpea, Pigeon pea in Satna Market:

Chickpea (Gram)- The Compound growth rate is 35.22%. Which was significant at P=0.01 this indicate that the average arrival of Gram in Satna market has increased significantly during the years. Graph 3 shows that the average arrival of Gram was maximum in the month of April(4819.22). The lowest average arrival was in the month of February (695). The average arrival of this gram after the month of February was sudden decline till December. The average price of gram was maximum in the month of January (2606) and the lowest average price in the month of December (1656). Overall there was variations in the price of Gram during different months. This trend was not there in Karwi Market.
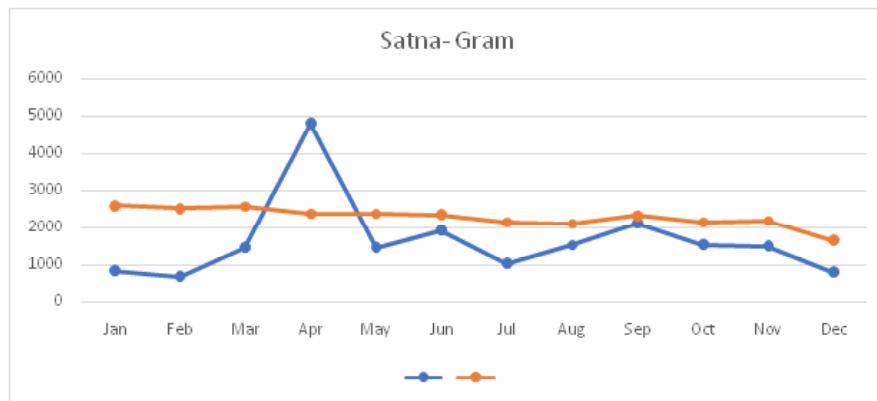
Pigeon pea (Tur)- The Compound growth rate is 17.84%.   This indicate that the average arrival of Tur in Satna market has increased during the years. Graph 4 shows that the average arrival of Tur was maximum in the month of March (413.6). Which was subsequently the average arrival of Tur was decline till December. The lowest arrival of this tur was in the month of December (17). The average price of Tur was Maximum in the month of may (3645.2) and lowest was in November (3063.5). There were variations in the price of tur during different months.
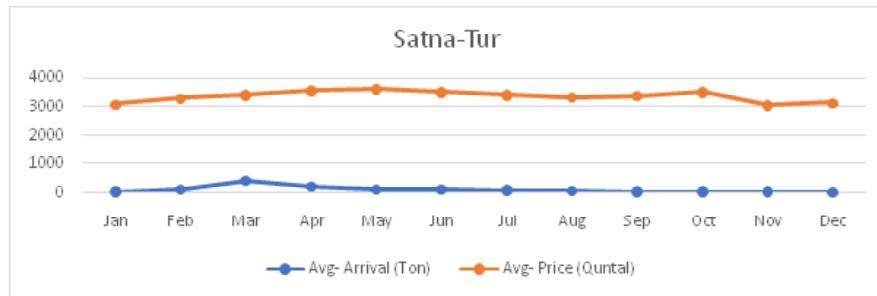
Table.3 Seasonal indices of monthly arrivals and price of Chickpea Karwi Market (2007 to 2016)

Month/Year	Avg- Arrival (Ton)	Avg- Price (Quntal)
Jan	842.4	2606
Feb	695	2531.5
Mar	1467.4	2581
Apr	4819.22	2385
May	1462.3	2380.5
Jun	1922.3	2357
Jul	1054.1	2157.5
Aug	1532.8	2118
Sep	2123.3	2334
Oct	1536.9	2146.5
Nov	1515.2	2183
Dec	808.3	1656

Table.4 Seasonal indices of monthly arrivals and price of Pegionpea Karwi Market (2007 to 2016)

Month/Year	Avg- Arrival (Ton)	Avg- Price (Quntal)
Jan	32.4	3100.4
Feb	103	3308.2
Mar	413.6	3429.8
Apr	213	3582.5
May	96.1	3645.2
Jun	99.3	3547.7
Jul	72	3429.1
Aug	70.9	3351.5
Sep	33.1	3398
Oct	30.9	3531.2
Nov	24	3063.5
Dec	17	3145.5

Conclusion:

Thus, it can be concluded that the moderate market competitiveness in markets as the arrivals and price were concentrated among few large traders. Results shows that in Satna crops Chickpea and pigeonpea there was lot of

variations in arrivals in different months and there was difference in the price of different commodities.While, this trend was not followed in Karwi Market. Thus, it is evident from the foregoing discussion that the bulk of the pigeonpea commodity come for marketing in both the market immediately after harvest of the crop (January to May) and prices of pigeonpea decreased sharply during these days. Farmers of the region have weak hording capacity. Traders give more price incentives during slack arrivals period. Whereas, in Chickpea commodity come for marketing in both the market immediately after harvest of the crop immediate after harvest of crop (March to April) same as Tur.

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Global warming : A great challenge to humanity

* Raman Ch. Nath

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Abstract- *In fact, the question of Global warming and climate change, no loner, remains a local issue, it now becomes a global issue. So the response towards it must be global.Steps are to be taken at the earliest before things go out of hand. All the nations, irrespective of their level of development, must come forward unitedly without making any differences to tackle the growth of this problem with a view to save the blue planet from extinction.*

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Key words: Global warming, Environmental issues, Environmental awareness

Introduction : Global warming is one of the major environmental issues of our time and the single greatest challenge facing environmental regulators. 'Global Warming' is the buzzword in the context of present environmental awareness that echoes in every corner of our planet. Global Warming and climate change is one of the greatest areas of concern among environmentalists, Scientists, academicians and policy makers world wide. With the advancement of Science and technology our participation in global warming processes has been rising. This crisis is comprehensive in nature which effects every aspects of our life. Though we are not fully aware of global warming but directly or indirectly, knowingly or unknowingly we all are contributing to global warming and climate change.

Objectives: The broad objectives of this paper are :-

i)   To Study about the cause-effect relationship of global warming.

ii)   To Study about the importance of global warming and climate chang in the 21st century.

iii) An attempt is made to bring an awareness among the masses about the impacts of global warming and how to combat it.

Methodology :

The Study is mainly based on secondary sources. It follows books, research papers, magazine, newspaper articles etc. Moreover, in order to know something about the current development in the topic we have to search the internet.

Global Warming:- Its Meaning:

Global Warming refers to increase in the average temperature of the earth's near surface air and ocean. It means increase of earth's environmental

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*   (M.Phil) Assistant Professor, M.S. Girls' College Assam.

temperature and is caused due to green house effect. The green house gases are water Vapour, Methane (CH_4), Nitrous oxide (N_2O), carbon dioxide (CO_2) are present in the earth's atmosphere, forming a cover or thin layer and absorb some amount of sun heat making our planet warm. It is because of the presence of all these green house gases that life in all forms is possible, in absence of which would mean that Earth would be 30° colder-too cold and inhospitable for most species. But due to some men made activities, these gases are increasing day by day, as a result of which, a thick blanket of all these gases has formed and is trapping excess amount of heat causing a rise in the environment temperature. This arise in temperature of the earth is called "Global Warming". It is just like the disease of fever. when our body temperature increase than the normal body temperature of 98.6^{oF} - means our body is hot and ill. Likewise when the temperature of our planet increase, our planet became hot and intolerable and this happening is known as global warming.

Factors and Causes Added to Global Warming: Some of the important factors and causes of global warming are as follows:

I)   Carbon Dioxide (CO_2) : The Present of excessive carbon dioxide, one of the important green have gases caused 55%, global warming on earth. Burning of fossil fuels like coal, petrol, diesel etc in big industrial plant and the automobiles have increased the production of carbon dioxide. Deforestation is also one of the major causes of CO_2 Pollution. Man for their own comfort has been cutting off trees for housing and other purposes. The decreased in the number of trees means excessive presence of CO_2 in the atmosphere.

II)   Methane (CH_4): Methane is another greenhouse gas in the atmosphere. Almost 18% of the increased green house gases due to methane. Methane emissions are said to come from domesticated animals such as dairy cows, goats, pigs, buffaloes, camels, horses and sheep. These animals produce methane during cud- chewing process. Methane is also released from rice or paddy fields that are flooded during the sowing and maturing periods. It is also emitted from landfills and other waste dumps, and during the process of oil drilling and coal mining.

III)   Nitrous Oxide (N_2O): Nitrous Oxide has contributed 6% of the man made input of green house gases. It is responsible for trapping heat in the troposphere and caused depletion of Ozone Layer in the atmosphere. Nitrous Oxide emission has been attributed to fertilizer application. Excess use of fertilizer and pesticide in agricultural land has led to the increase in N_2O. Moreover, it is emitted from Nylon products and from burning of biomass and coal.

IV)   Chlorofluoro Carbons (CFCS): The presence of chlorofluoro carbons in the atmosphere caused the depletion of ozone in the stratosphere, as a result of which the Ultra violet rays from the sun directly reach to our planet and caused more heat in the earth. It has caused 24% of human contribution

to green house gases. It comes from production of plastic foams, air conditioner and refrigerators leaking etc.

V)   Water Vapour: WaterVapour is the most powerful greenhouse gas. Daily evaporation of water occurs from places like oceans, lakes, streams and soil etc. Such increased evaporation of water in the air acts like a blanket cover in differentlayers of the atmosphere, which traps the radiated heat from the earth and return it back to the earth. Even sometime it caused clouds in the atmosphere as a result of which heat will not escape to the sky and that's why it caused global warming. It isestimated that if the quantity of greenhouse gases continues to rise at the present rate then the earth mean temperature will rise between 1.5 to 5.5°C by 2050

Impact of Global Warming: As the concentration of green house gases increases, the IPCC (Intergovernmental panel on climate change) estimates that the averageglobal temperature will increase by 6° Celsius in the near future and if this will happen, then no one will be able to save the earth from extinction. Some of the important consequences of global warming are as follows:-

I)   Snow Melting: One of the most important and visible indicators of global warming is the recession of glaciers and snow covers in many parts of the world. For example, Himalayan region has the largest concentration of glaciers. The region is rightly called as 'the water tower of Asia'. The Himalayan Glaciers feed seven of Asia's greatest rivers including Ganga and Brahmaputra. It ensure water supply to about one billion people.Continuously melting down of glaciers in Himalayan region is expected to have serious consequences on bio diversity, agriculture production and also livelihood system of people.Because snow melting resulting from global warming in Himalayan range may caused flood in the northern part of
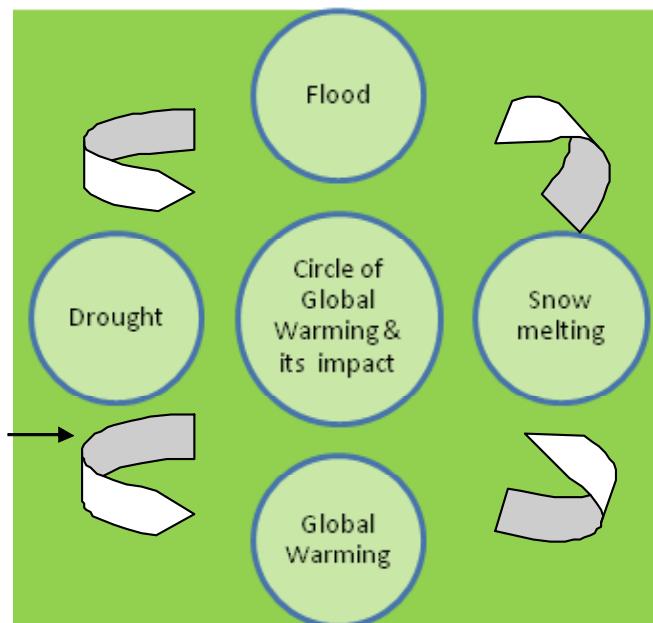
Global Warming $\rightarrow$ Snow melting $\rightarrow$ Flood Draught

India Infact such snow reserved in mount Himalaya is the main source of water that flows in the form of river. But if due to such snow melting and flooding it will be vanished that will result the lack of the source of water, our rivers will dry and ultimately it may caused draught.

(2)   Rise in Sea Level and Impact on Coastal Belts:

Coastal belts are more prone to the devastating impacts of global warming.Scientists are of the view that certain consequences are likely to occur if the current trend of global warming continues. The area of Arctic's perennial polar ice cap is declining at the rate of 9% per decade due to which sea levels are rising and may lead to coastal floods in the low-laying coastal areas. People dwelling in the deltas of the Brahmaputra, the games, the Mississippi and the Nile will be affected by the rise of sea level. In this context we can cite the example of Sundarban, the group of 102 Islands that spreads over parts of India and Bangladesh. The sea level around the Sundarban is rising due to global warming and the Islands are under threat of getting submerged. Already 2 of 102 Islands have submerged.

Moreover as the oceans are getting warmer due to global warming, tropical storms are becoming more powerful.Scientists have found that the destructive potential of hurricanes has greatly increased along with the ocean temperature.

3)   Impact on Human Health:

The rainfall pattern in our planet will be changed due to global warming, which caused affecting the distribution of vector – borne disease like malaria, dangue, filariasis, elephantiasis etc. Water stagnation and warmer temperature would favour the breeding of mosquitoes, snails and some insects, which are the vectors of such diseases.

The gradual increase of temperature will aggravate our respiratory system and increase skin diseases. Pollution and global warming from green house gases will also caused sleeplessness, feeling of pain in the nerve system, increase blood pressure and unnatural heart palpitation, problem of deafness and will effect our digestion process. People will become mad, age old and sick people become irritant.

4)   Impact on Agriculture:

A serious effect will have seen on agricultural productivity due to global warming and climate change. Productivity of most crops may decrease due to increase in temperature and decrease of water availability. Quality of crops may also be deteriorated. Increasing temperature would increase fertilizer requirement for the same targets of production and result in higher GHG emissions. Moreover, increased frequency of droughts, floods, strom and cyclone may again affect in crop production.

5)   Impact on Forest Eco System:

In India forest accounts for about 20% of total geographical area and it can play a very important role in economic development of the country. More

than 30 million people of India are directly involved in gathering and trading non-timber forest products (fruits, seeds, flowers, leaves, honey, gum etc). But such rich Forest ECO system and forest dependent communities have seriously affected by Global warming led climate change. Plant flowering, bird arrival date of breeding will be affected from climate change. Again critically endangered species of forest could become extinct for the change in natural set up.

Measures to Combat Global Warming:

To save our blue planet and all its inhabitants from the worse impact of Global warming we can suggest the following measures:-

o   Less use of fossil fuels and switch over to non- fossil fuel sources of energy.
o   Less use of fertilizer and pesticide.
o   Planting more trees i.e., increase aforestation.
o   Use of efficient automobiles and machinery in industries.
o   Using energy saving bulbs.
o   Clean development mechanism.
o   Going for renewable source of power like wind power and solar power,
o   Travelling by public transport and bicycles instead of cars etc.
o   Cut down the current rate of the emission of green house gases
o   In addition to these, mass awareness campaign and counseling services should be conducted by the Govt. and NGO of the respective countries for reducing green house gas emissions.

Conclusion:

In fact, the question of Global warming and climate change, no loner, remains a local issue, it now becomes a global issue. So the response towards it must be global.Steps are to be taken at the earliest before things go out of hand. All the nations, irrespective of their level of development, must come forward unitedly without making any differences to tackle the growth of this problem with a view to save the blue planet from extinction.

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Perspective on Hazards and Institutional Disaster Management

* Jonali Medhi

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Abstract- *There has been an increase in the number of natural disasters over the past years, increasing losses on account of urbanization and population growth, as a result of which the impact of natural disasters is now felt to a larger extent. India is prone to multi hazards, which include earthquake, flood, cyclone, drought, forest fire and epidemics. Understanding of the earth's materials and dynamic process is essential for different fields of application and to face varying environmental problems, such as soil erosion, building materials, landslides and different foundations also. According to the United Nations, in 2001, natural disasters of medium to high range caused at least 25,000 deaths around the world, more than double the previous year, and economic losses of around US $ 36 billion. To create awareness among the people about disasters and its consequences and to prepare them in advance to face such situations and to ensure their participation in the disaster mitigation plans. The issue of safety audit and structural mitigation of the built environment need to be addressed taking ground realities into consideration, always keeping in mind the social and economic issues involved. The idea of sustainable development imposed by various states and social organization of a nation on environments ability to meet present and future needs.*

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Key words: Hazard, Disaster, Disaster management, Institutional disaster management.

Introduction: Generally when one uses the term **disaster** we mean some natural hazards like cyclones, earthquakes, landslides, avalanche, floods, droughts and the list goes on. These disasters occur due to the peculiar geography and geology of the area. The Indian subcontinent in general and India in particular are visited by a number of disasters every year.

A **hazard** is something that can cause harm, e.g. electricity, chemicals, working up a ladder, noise, a keyboard, a bully at work, stress, etc. By definition it can be said that Hazard is a phenomenon that poses a threat to life, health, property, or environment. Hazard is a disaster at dormant stage. A **risk** is a measure of the expected losses due to a hazard. By definition it can be expressed as:

Risk = *Consequence resulting from the release of a hazard* ***x*** *Probability of the occurrence of that event*

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*   **Arya Vidyapeeth College Assam**

Hazard can be broadly classified as:
•   Dormant- The situation presents a potential hazard, but no people, property, or environment is currently affected. For instance, a hillside may be unstable, with the potential for a landslide, but there is nothing below or on the hillside that could be affected.
•   Armed—People, property, or environment is in potential harm's way.
•   Active—a harmful incident involving the hazard has actually occurred. Often this is referred to not as an "active hazard" but as an accident, emergency, incident, or disaster.

A **natural hazard** is a naturally occurring event that might have a negative effect on people or the environment. Natural hazard events can be grouped into two broad categories:
o   Geophysical hazards encompass geological and meteorological phenomena such as *earthquakes, coastal erosion, volcanic eruption, cyclonic storms, and drought.*
o   Biological hazards can refer to a diverse array of disease and infestation.
o   Hazards such as floods and wild fires can result from a combination of geological, hydrological, and climatic factors.

Many geophysical hazards are interrelated; for example, submarine earthquakes can cause tsunamis, and hurricanes can lead to coastal flooding and erosion.

India has been traditionally vulnerable to natural disasters on account of its unique geo-climatic conditions. Floods, droughts, cyclones, earthquakes and landslides have been recurrent phenomena. About 60% of the landmass is prone to earthquakes of various intensities; over 40 million hectares is prone to floods; about 8% of the total area is prone to cyclones and 68% of the area is susceptible to drought. In the decade 1990-2000, an average of about 4344 people lost their lives and about 30 million people were affected by disasters every year. The loss in terms of private, community and public assets has been astronomical. Apart from the natural disasters there are also many man-made disasters. Some of the major man-made disasters are the incidents of Chernobyl, 3 Mile Islands, the Bhopal Gas tragedy, the atomic bombings in Hiroshima and Nagasaki during the world war II etc. Disasters themselves are not limited to specific part of the world, though, certain areas might be more prone to certain specific type of disaster (Sharma, 2007).

The topic of "Hazard Vulnerability in Indian Subcontinent" caries great importance now-a-days. Some of the most disaster prone areas of Indian Subcontinent are -
•   *59% of land vulnerable to Earthquakes.*
        Biggest quakes in Andaman's, Kuchchh, Himachal, Kashmir, N. Bihar and the North East
•   *8.5% of land vulnerable to Cyclones.*
        Due to cyclones, in Bay of Bengal (India & Bangladesh), 1.25 million

lives have been lost
- *5% of land vulnerable to Floods*
  > 1 million houses damaged annually + human, social, other losses.

Hazard Assessment and Management is an interdisciplinary subject that spans physical, biological, and health sciences, law, and commerce. The identification and management of hazards in modern society, and risk assessment associated with these hazards, is an emerging and important discipline. National Disaster Management Authority (NDMA) provides various guidelines concerning with disaster management with a special thrust towards earthquake disaster mitigation of NE India. According to Kayal (2006) North East region of India is the most susceptible to major intensity earthquake. National Policy and National Programmes are yielding results in generating awareness and increasing the level of preparedness, which are vital for mitigation of such kind of disaster. Some of the Government initiatives in such respects are –

- Implementation of Disaster Management Act (2000),
- Implementation of The National Policy (2010), with a vision for a safe and disaster resilient India.
- Amendment of Building Bye-Laws to ensure earthquake disaster resistant structure construction.
- Establishment of National Disaster Response Forces (NDRF).

Establishment of National Institute of Disaster Management and Institutes in the States for imparting training in Disaster Risk Management (DRM).

Key **components** of a Disaster Management System would be:
- Preparation of Hazard Assessment Maps,
- Vulnerability Assessment,
- Assessment of Demographic Distribution ,
- Infrastructure, Lifelines and Critical Facilities,
- Logistics and Transportation Routes ,
- Human and Material Response Resources,
- Communication Facilities.

Institutional Disaster, on the other hand can be defined as those incidents or accidents that occur in any institution as a result of some natural disaster like earthquake or some man-made mistakes like stampede or due to poor infrastructure.

Whatever may be the type and causes of disaster; whenever such situation arises it results in the death of many people along with loss of property putting a strain on the economy of a country or a region.

Disaster Management for Institutional Disaster:

The disaster risk reduction has not received due attention yet it is not denied that any investment in disaster mitigation will yield a higher rate of return than any other development project (Dekens, 2007).

Disaster Management for Institutional Disaster can be divided basically

into the following three stages:

- Pre-disaster management- The pre-disaster stage activities includes the following:
  - i. Preparedness and mitigation aspects for facing the disaster in a planned and coordinated manner.
  - ii. Taking proper measures while building the infrastructure of any institution.
  - iii. Keeping safety aids like fire extinguisher, first aid kits etc.
  - iv. Giving proper disaster management training to all.
- Emergency state or during disaster stage- The phase after the occurrence of disaster involves the rescue and relief operations.
  - i. During this stage when survival is the prime goal, we have to rescue the affected population and provide immediate relief.
  - ii. Panic must not be created among the people as this may lead to stampede resulting in the injury and in extreme cases even death of people.
  - iii. Children and older people must be taken care of and should be given preference while making an escape.
  - iv. If earthquake occurs in an institution instead of running we should stand in a corner or hide under a table and hold something strong.
- Post disaster management-
  - i. Quick evacuation of seriously injured cases just after calamity for minimizing the mortality among the disaster affected people.
  - ii. Appropriate and efficient management of hospitalized cases.
  - iii. Prompt and effective anticipatory, anti-epidemic measure to prevent the outbreak of any epidemic in the aftermath of the disaster.
  - iv. Effective and safe logistic support for essential items including medicine.
  - v. The most important post disaster aspect is the rehabilitation of the affected communities that may be categorized as-
    - a. Housing and Infrastructure Redevelopment.
    - b. Social Rehabilitation Programme.
    - c. Economic Rehabilitation Programmes
    - d. Other Related Programmes and Activities.

In the process of hazard mitigation, coordination of various Stakeholders like
- Policy makers,
- Decision Makers ,
- Administration,
- Professionals (architects and engineers at various levels) ,
- Professional Institutions,
- R & D Institutions,
- Financial Institutions,

•   Insurance Sector ,
•   Community,
•   NGOs,
•   Common Man, etc. makes the mission of mitigation of a disaster makes successful in the proper sense.

When a disaster strikes, the Authority will coordinate disaster management activities. The Authority will be responsible for:-
  i)   Coordinating/mandating Government's policies for disaster reduction/mitigation.
  ii)   Ensuring adequate preparedness at all levels in order to meet disasters.
  iii)   Coordinating response to a disaster when it strikes.
  iv)   Co-ordination of post disaster relief and rehabilitation.

The Disaster Management Teams at the village level will consist of members of voluntary organisations like Nehru Yuvak Kendra and other non-governmental organisations as well as able bodied volunteers from the village. The teams are provided basic training in evacuation, search and rescue etc. According to Singh (2008), "Disaster Management" relates all the activities prior to, during and after the disasters, design to maintain control over disasters and to provide a framework for helping at-risk persons, minimise or recover from the impact of the disaster. The prediction of any disaster, its monitoring and impacts etc. need to be assessed for taking sustainable measure to mitigate such situation in future.

Conclusion:

Hazard is a potentially damaging physical event that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation. Appropriate risk management depends on the accurate risk assessments following understanding the concept of risk, the vulnerabilities involved and the nature and extent of exposure to hazard. Provision for risk assessment has to be built into regular policy design to arrive at a proper cost benefit analysis regarding disaster related development planning. Every development planning needs some basic infrastructure, which are used in some way for the development process. For a sustainable development, it is necessary to make the planning/ programme more organized and systematic. Effective planning integrated with wider development planning would meet the requirements of development and disaster prevention, mitigation and preparedness as a whole.

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Impact of Home Environment on Social Intelligence of Adolescent – A Study

* Pramod Kumar Naik
** Rashmi Shukla

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Abstract- In the 21st century due to advancement of science, technology and educational system the life style of individual's changes in a greater extend which cause many psychological problems by which the youth become socially in adjustable. Adolescence, itself is an unstable, unbalanced and unpredictable period in human life. Home environment has a very important role in making socially adjustable person. If an adolescent cannot adjust properly in his social and educational environment then he has got frustrated and comes under stress. The home nurtures the individual and prepares him for his role and function in society. The main objectives of the topic are to find out the significant impact of home environment on social intelligence of higher secondary students. A sample size of 400 Boys and 400 Girls total 800 Class-XI Students were selected and taken up for the study. Home Environment Inventory developed by Dr.Karuna Shankar Mishra and Social Intelligence Scale by Dr. N.K. Chadha and Usha Ganesan was used for the study. It has been found that, there is a significant impact of home environment on social intelligence of both boys and girls students of higher secondary schools

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Keywords: Home Environment, Social Intelligence, boys and girls students, Government and Private Higher Secondary schools.

Introduction: Education is a comprehensive and complex process aiming at bringing change not only in knowledge and skill but also change in attitudes, behaviour, personality, values, of the students. In this process not only the school but home also plays an important role. The home and family was the original social institution from which all other institutions developed. There was a time when no school existed; home was act only educational agency where children used to learn everything by imitating other people and by getting instructions from them. The home and family is the centre of social, emotional, moral education and values. No family would tolerate immoral deeds of any one of its members, since it bring slur to the name and prestige of the whole family. Adolescence is a period of developing social skills and career development. Home works as a boon to develop the qualities required for happier life. The home works an important role in giving contribution to

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*   Professor & Dean (Education) Dr. C.V.Raman University Kargiroad, Kota, Bilaspur (C.G.)
**   Ph.D Scholar (Education) Dr. C.V.Raman University Kargiroad, Kota, Bilaspur (C.G.)

its adolescent. A disciplined, calm, peaceful environment of any home helps in developing proper social skills in them these in turn helps the adolescent in adjusting with different situations and focusing their goal and on their performance. Home gives social training. For school going children the home and family is the most central portion of social environment. The child spends more time at home than in school.

Social intelligence can be defined as the human ability of decoding the happenings of the world and responding to it likewise. This ability is exclusive to humans and distinguishes us from the rest of beings in the animal kingdom. Social Intelligence is also the capability to act wisely while maintaining human relations. It is markedly different from just intelligence, unlike what people used to think earlier. Over the years, it has been observed that many exceptionally intelligent people struggle a lot while maintaining a social life. "Social intelligence is the ability to understand and manage men and women, boys and girls, to act wisely in human relations; it is equivalent to interpersonal intelligence, it deals with knowledge of social situations and more properly called social cognition." As the decade and century drew close the family environment could guide our life minute by minute towards noble goals, rather than your like being controlled by self serving motives, customs, accidental occurrences, impulse or emotions. Social intelligence cannot only guide but inspire and motivate you and giving you energy and zest for living and for doing something meaningful. Social intelligence is necessary for high self esteem. It is the need to pay attention to the inculcation of social intelligence in the students at all the stages of education.

Significance of the study:

The priceless resource of any country is its human resources and youth are the back bone of the society. Young people are a crucial segment of a nation's development, their contribution is highly needed. Young people are social actors of changes as "youth are not only the leader of tomorrow but also the partners of today. So every nation demands a socially intelligent youth having integrated personality that leads the future generation. But in the 21st century due to advancement of science, technology and educational system the life style of individual's changes in a greater extend which cause many psychological problems by which the youth become socially in adjustable. Adolescence, itself is an unstable, unbalanced and unpredictable period in human life. Home environment has a very important role in making socially adjustable person. If an adolescent cannot adjust properly in his social and educational environment then he has got frustrated and comes under stress. It has been seen from the earlier study that children who come from home that provide supportive and enriched environment have better social relationships as compare to the children coming from poor home environment. The family nurtures the individual and prepares him for his role and function in society. Consciously or unconsciously the home environment moulds the behavior,

personality, and attitude, level of aspiration, aptitude of the child.

Though quite a few studies have been conducted on home environment in relation with different variables but while reviewing the related literature the investigator could not lay his hands on such studies which explored the impact of home environment on social intelligence of adolescents. It is pertinent to mention here that proper adjustment is a pre requisite for developing personality and reducing the stress among children. Hence the study will make sincere effort to verify and test the impact of home environment of higher secondary school students on their social intelligence. Therefore following problem statement was specifically framed for this study.

Statement of the problem: The problem for the present study is stated as follows:

"Impact of Home Environment on Social Intelligence of Adolescent - A Study".

Operational definition:
1. **Home Environment**: - The home environment is the social environment characteristics of family and all. The home environment comprises all the blood relation and members present in the family.
2. **Social Intelligence**:- Social intelligence can be defined as the human ability of decoding the happenings of the world and responding to it likewise. This ability is exclusive to humans and distinguishes us from the rest of beings in the animal kingdom. Social Intelligence is also the capability to act wisely while maintaining human relations.

Objectives of the study:
1. To study the significant impact of home environment on social intelligence of higher secondary boy's students.
2. To study the significant impact of home environment on social intelligence of higher secondary girl's students.
3. To study the significant impact of home environment on social intelligence of higher secondary students.

Hypotheses of the study:
1. There is no significant impact of home environment on social intelligence of higher secondary boy's students.
2. There is no significant impact of home environment on social intelligence of higher secondary girl's students.
3. There is no significant impact of home environment on social intelligence of higher secondary students.

Sampling: In this study, all the Class-XI students belong to Government and Private Higher Secondary Schools from Korba district and Bilaspur district of Chhattisgarh formed the population of the study. In order to collect the data for the present study 20 Higher Secondary Schools were selected through purposive sampling techniques. Out of 20 Higher Secondary Schools 10 are government and 10 are private schools. Again 400 Boys and 400 Girls total

800 Class-XI Students have taken randomly as the subjects of the present investigation from the selected Government and Private Higher Secondary Schools of Korba district and Bilaspur district of Chhattisgarh. Purposive and Simple random sampling method has been used by the researcher for selecting the samples**.**

Tools used: The researcher has used the

1.   Home Environment Inventory developed by Dr.Karuna Shankar Mishra.

2.   Social Intelligence Scale by Dr. N.K. Chadha and Usha Ganesan.

Statistical techniques used: With the help of statistical software package (**SPSS 16.0**) all the analysis were performed, Mean, Standard Deviation, t-test were calculated and interpretations were made. The result so obtained are interpreted and discussed in the light of problem factors to make the result meaningful.

Findings:

HO-1 There is no significant impact of home environment on social intelligence of higher secondary boy's students.

Table – 1

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.250[a]	.063	.060	8.422	1.762

a. Predictors: (Constant), HOMEENV

b. Dependent Variable: SOCINT

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1886.787	1	1886.787	26.602	.000[b]
	Residual	28229.150	398	70.928		
	Total	30115.937	399			

a. Dependent Variable: SOCINT

b. Predictors: (Constant), HOMEENV

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	98.444	2.263		43.499	.000
	HOMEENV	.054	.010	.250	5.158	.000

a. Dependent Variable: SOCINT

Interpretation: A linear regression was run to determine the impact of home environment on social intelligence of higher secondary boy's students. The Durbin-Watson statistic for data is 1.762 which indicates that there is no

correlation between residuals and there is independence of errors. Result of ANOVA concludes that home environment could statistically significantly predict the social intelligence, F (1, 398) = 26.602, P < 0.0005 and the home environment accounted for 6 % of the explained variability in social intelligence .The regression equation is: Predicted social intelligence = 98.444 + 0.054 x (home environment). Thus the **HO-1** "There is no significant impact of home environment on social intelligence of higher secondary boy's students" is **rejected**.

Result: It has been found that, there is significant impact of home environment on social intelligence of higher secondary boy's students.

HO-2 There is no significant impact of home environment on social intelligence of higher secondary girl's students.

<div align="center">

Table – 2
Model Summary^b

</div>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.690^a	.476	.475	7.021	1.890

a. Predictors: (Constant), HOMEENV
b. Dependent Variable: SOCINT

<div align="center">

ANOVA^a

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Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17813.841	1	17813.841	361.341	.000^b
	Residual	19621.096	398	49.299		
	Total	37434.938	399			

a. Dependent Variable: SOCINT
b. Predictors: (Constant), HOMEENV

<div align="center">

Coefficients^a

</div>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	61.361	2.521		24.342	.000
	HOMEENV	.219	.012	.690	19.009	.000

a. Dependent Variable: SOCINT

Interpretation:

A linear regression was run to determine the impact of home environment on social intelligence of higher secondary girl's students. The Durbin-Watson statistic for data is 1.890 which indicates that there is no correlation between residuals and there is independence of errors. Result of ANOVA concludes that home environment could statistically significantly predict the social intelligence, F (1, 398) = 361.341, P < 0.0005 and the home environment accounted for 47.6 % of the explained variability in social intelligence. The regression equation is: Predicted social intelligence = 61.361 + 0.219 x (home environment). Thus the **HO-2** "There is no significant impact of home environment on social intelligence of higher secondary girl's students" is

rejected.

Result: It has been found that, there is significant impact of home environment on social intelligence of higher secondary girl's students.

HO-3 There is no significant impact of home environment on social intelligence of higher secondary students.

<div align="center">

Table – 3

Model Summary^b

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Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.438[a]	.192	.191	8.286	1.923

a. Predictors: (Constant), HOMEENV

b. Dependent Variable: SOCINT

<div align="center">

ANOVA^a

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Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13008.758	1	13008.758	189.489	.000[b]
	Residual	54784.117	798	68.652		
	Total	67792.875	799			

a. Dependent Variable: SOCINT

b. Predictors: (Constant), HOMEENV

<div align="center">

Coefficients^a

</div>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	85.162	1.782		47.782	.000
	HOMEENV	.113	.008	.438	13.766	.000

a. Dependent Variable: SOCINT

Interpretation: A linear regression was run to determine the impact of home environment on social intelligence of higher secondary students. The Durbin-Watson statistic for data is 1.923 which indicates that there is no correlation between residuals and there is independence of errors. Result of ANOVA concludes that home environment could statistically significantly predict the social intelligence, $F (1, 798) = 189.489$, $P < 0.0005$ and the home environment accounted for 19.2 % of the explained variability in social intelligence. The regression equation is: Predicted social intelligence $= 85.162 + 0.113$ x (home environment). Thus the **HO-3** "There is no significant impact of home environment on social intelligence of higher secondary students" is **rejected**.

Result: It has been found that, there is significant impact of home environment on social intelligence of higher secondary students.

Conclusion: It is high time that the performance of parents and teachers are empirically tested, analyzed and explained. Doesn't matter the school is government or private, the students are boys or girls, parents and teachers are required to do their own duty at home and school for developing social value among students. It is indeed, the need of the hour. Because social behavior of the students directly affect the academic achievement, personality development

of the students as well as peace of society. The finding of the study shows that there is a significant impact of home environment on social intelligence of higher secondary students. It means home environment influence the social intelligence of both boys and girls students of higher secondary schools. Home environment is one important factor in improving adolescent social intelligence. Social intelligence helps the adolescent in assessing social relations in different social situations. Home environment helps an adolescent in adjusting to social relations and maintaining proper relations in the society and making adjustment to different life situations. If the home environment is not good it has an adverse effect on the adolescent social intelligence. Thus I can say that impact of home environment on social intelligence cannot be neglected, proper home environment would pave a way for the adolescent for their bright future in life. This study would help teachers, parents and students to be sensitive to the factors that enhance social intelligence and keep the home environment healthy. Hopefully this study can be used to help educators to take a critical look at the aspects of home environment and social intelligence of students and attempt to initiate change with fruitful success. Parents should teach their children about useful social skills and values of life and allow them to learn from the reality of social order. Through logical consequences children are offered choices and are encouraged to make responsible decisions rather than being forced to submit. Parents should accept responsibility for doing what they can to improve the situation other than making futile attempts to make children behave. Instead of ruling children, parents can create an atmosphere in which guiding and helping children is possible.

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Aurobindo's theory of evolution–an analysis

* Tapashi Roy

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Abstract- *Aurobindo's theory of evolution is determined by his conception of reality. According to him, Existence-Consciousness-Bliss constitute the three fold nature of reality or the absolute which is the self of our individual existence. The individual self and the world in which it reach evolve out of the absolute reality by a process of self-limitation and self-experience. This power of self-limitation is what the Vedanta means by maya though unlike the world is regarded as real by Aurobindo. Aurobindo regards creation as a double process-it is descent or involution and ascent or evolution. It is the descent of the devine into the world by forms and also ascent of the worldly forms to its original higher status. Aurobindo conceives seven aspect of reality namely-1.Matter, 2.Life, 3.Mind, 4.Supermind, 5.Bliss, 6.Consciousness force and 7.Existence. Aurobindo maintains that the evolution beings transformation of the lower realities by the force of higher principle. The evolutionary process does not end there but would continue to more upward till it reaches existence itself. The ultimate destiny of evolution is the conversion of entire nature into the devine nature and of human beings into Gnostic beings.*

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Key words: Evolution, Reality, Individual Existence, Self-limitation , Self-experience

Introduction: Sri Aurobindo was born on 15th August, 1872, in a Bengali Hindu family in Calcutta, West Bengal. He was an Indian nationalist, freedom fighter, philosopher and poet. He was also a spiritual reformer. He has also evolved a new method of spiritual practice, which he called Integral Yoga. Sri Aurobindo has had a significant impact on Eastern and Western thought. One of his main contribution to Indian Philosophy was to introduce the concept of evolution into Vedantic thought. Sankhya philosophy had already proposed such a notion centuries earlier, but Aurobindo rejected the materialistic tendencies of Sankhya, and proposed an evolution of spirit rather than matter.

Evolution is too potent a fact to stand in need of any more proof. The anti-evolutionary arguments like Oswald Spenglar, have now become out of date. The theory of evolution has been adopted in almost all fields of human knowledge. The theory of evolution should find the sequence and purpose of all the levels of existence, matter, life, mind and spirit and also speculate the future course of the process consistent with its general scheme. In philosophy,

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*   Assistant professor (contractual) S.B.M.S College, Assam

the development of the universe and of consciousness through time is referred to as evolution.

Evolution is not a mechanical movement without any purpose. It is a movement towards a goal. If evolution means merely the adaptation of the organism to a rigid physical universe, then there can be no talk of any moral or social evolution. When science can not explain how of the evolutionary process, it calls all growth and evolution of new forms accidental. And when spirituality explain the 'why', it calls all evolution as conscious evolution. It is the involved spirit that makes sense to the evolutionary process. And it is the spirit which makes evolution meaningful and not accidental. All evolution is in essence a heightening of the force of consciousness in the manifest Being, so that it may be raised into the greater intensity of what it still unmanifest, from matter into life, from life into matter.

Evolution And Involution:

Aurobindo's theory of evolution is determined by his conception of reality. According to him Existence-Consciousness-Bliss constitute the threefold nature of reality or the absolute which is the self of our individual existence. Sri Aurobindo discusses his spiritual theory of evolution in his book 'The Life Divine'. He regards creation as a double process- Involution or descent and Evolution or ascent. It is the descent of the divine into the world by forms and also ascent of the worldly forms to its original higher status. There are seven aspect of reality, according to Aurobindo namely Matter, Life, Mind, Supermind, Bliss, Consciousness force and Existence. Aurobindo calls these seven aspect of reality as the cords of being. This implies that they are not successive stages of evolution but the aspect of reality which exist in eternal unbroken unity in the integral absolute consciousness.

The description of the involutionary aspect of creation as given by Sri Aurobindo follows more or less the same pattern in the Vedantic description of creation with the difference that the terms, concepts etc. In the Vedanta, creation is described as a result of avidya. In the Advaita Vedanta, it is said that in reality, there was never a creation and that this cosmic delution is nothing but a sporting or joyous act. Aurobindo describes involution as a plunge of the divine reality into ignorance. Evolution presupposes involution, infact evolution is possible only because involution has already taken place. The eight stages or cords of being involve both these processes. It is on account of the descent of the spirit in matter, life and mind that these ascent to the higher region of the spirit. Matter can evolve into life only because life itself has involved in it, life can ascent to mind only because there has been a descent of mind into life already, the entire lower hemisphere can ascent to the higher one only because the higher is already in the lower one. Sri Aurobindo feels that the lower can not evolve into the higher unless the higher is already in it because evolution cannot proceed out of nothing, because it cannot violate the principle of 'nothing out of nothing'. Therefore, Aurobindo conceives

evolution as the reverse process of involution. He says, "…Spirit is a final evolutionary emergence because it is the original involutionary element and factor. Evolution is an inverse action of the involution what is an ultimate and last derivation is the involution is the first to appear in the evolution, what was original and primal in the involution is in the evolution the last and supreme emergence."[1] According to Aurobindo, evolution is so far reach up to the fourth stage is mind. But the time has come when evolution must produce the higher stage namely supermind which is the link between the creator and the world. The link cannot be the mind because mind always desorts reality by arbitrary division and reach to mayavada or illutionism. There mind and it is what Aurobindo calls the supermind. This supermind is the infinite divine mind which lays hidden within Aurobindo maintains that the evolution being transformation of the lower realities by the force of the higher principle. For example, when matter ascent it becomes repetitive and adoptive and then life emerges in it. The ascent from mind to supermind takes place through certain intermediate stages such as mind, higher mind, illusion mind, intuitions overmind and supermind. When the supermind emerges a radical change take place in evolution, after this evolution will be true knowledge and not ignorance. The evolutionary process does not end there but would continue to more upword till it reaches existence itself. The ultimate destiny of evolution is the conversion of entire nature into the divine nature and of human beings into Gnostic beings.

Although the evolutionary process has to ascent so many stages, it would not take a very long time, for with the ignorance of the higher levels of mind, the process become quicker. Compared to the evolution of matter like ignorance move it, mind must work quickly and so on.

The Aim of Evolution:

Sri Aurobindo was a Neo-vedantin. He believed that we are sparks of the divine. The ultimate aim of evolution is to attain divine life. This is possible only when we go from mind to supermind. Sri Aurobindo feels that it is difficult for mental thought to understand or describe supramental nature, it is impossible for mind to forecast in detail what the supramental change must be like. Supermind is a state beyond mind and therefore cannot be understand in terms of mental categories. Aurobindo maintained that souls that would emerge as a result of the supramental transformation would not remain mental man but would become superman. They would not be man of ignorance, but man of knowledge, the Gnostic being. This transformation will seek to establish a race of Gnostic beings.

The Gnostic being is a perfect and complete individual. This perfection results from highest possible integration both within and without. Sri Aurobindo describes character of the Gnostic being as, "A complete self knowledge in all things and at all moments is the gift of the supramental Gnostic…with a complete self-mastery not be merely in the sense of control

of nature but in the sense of a power of perfect self-expression."[2] The Gnostic being always acts in awareness of the harmony of his individual self with the total self, of his individual will with the total will, of his individual action with the total action. This simply means that the Gnostic being is completely divinished spirit. All the activities of the Gnostic being is based on knowledge and not ignorance. Therefore Sri Aurobindo says that an evolution of Gnostic consciousness brings with it a transformation of world-consciousness and world- action.

Gnostic individual is the man with an entirely changed and spiritualized outlook. He is the individual who has been able to acquire knowledge, and therefore his outlook towards everything- towards matter, life and mind. The supramental Gnostic being makes himself one with the creative impetus and therefore words for the emergence of Divine life on earth by transforming others also into Gnostic beings. The attainment of the supramental status is not the ultimate destiny of man. The superman are also required to work the transformation of others and therefore the ultimate goal of evolution lies still ahead.

Divine life is a life in which all individual would be Gnostic being in which there would emerge a race of beings endowed with supramental powers. Describing the nature of Divine Life Sri Aurobindo says, " To be and to be fully in nature's aim in us."[3] The Divine Life is the emergence of a perfect life on earth, a life not of separation or isolation, but one of unity and harmony. Sri Aurobindo lays great emphasis on the divinization of life along with the realization of spirit.

Integrationism and Evolution:

Sri Aurobindo's theory of evolution is known as Integrationism because his theory of evolution admits mechanism, emergence, teleological and so on. All these characteristics has been involve in his theory. So his theory of evolution is known as integrationism. According to him, the process of evolution follows a triple character namely, a widening, a heightening and an integration. As the evolution starts from matter, there take place an evolution of the forms of matter proceding from simple to more and more complex ones which may admit the concentration and action of a complex and subtle form of consciousness. This is called by Sri Aurobindo the process of widening. Therefore the process of widening means providing greater scope for the operation of every new element. Secondly, there is a heightening or ascent from grade to grade from the lower to the higher grade. For example, when the principle of life evolves out of matter, there is an ascent of the evolutionary process from the grade of matter to that of life. Thirdly, as soon as the evolution reaches a higher grade, it takes up all the lower grades and transform them according to its own principles and laws. Thus there is not merely an ascent from a lower to a higher grade but a rising up and transformation of the lower grades as well. This is called by Sri Aurobindo,

the process of integration.

As he puts it a taking up of what has already been evolved into each higher grade as it is reached and a transformation more or less complete so as to admit of a total changed working of the whole being and nature, an integration must be also part of the process, if the evolution is to be effective. In Integral evolution, there is a development of the triple character. An evolution of the forms of matter, more and more steady and intricately organized to admit the action of a growing, complex and subtle organization of consciousness is the indispensible physical foundation.

Conclusion:

In the previous chapter, we have made an elaborate study of Sri Aurobindo's conception of evolution. We have seen that Aurobindo regards creation as a double process- involution and evolution. Evolution pre-supposes involution only. Evolution is possible because of involution which has already taken place. Evolution is the gradual emergence of existence, consciousness force and bliss through higher and higher forms. Aurobindo's evolution admits both mechanism and emergence. He firmly believes in teleology. Evolution has a purpose; the purpose of evolution is to attain divine life. Sri Aurobindo holds that the ascent to a higher grade does not mean the abandonment of the lower grades. The process of transforming lower grades by a higher principle, has been referred to called by Aurobindo, the process of integration. The conception of integration occupies a very important place in Sri Aurobindo's theory of evolution. This makes Sri Aurobindo's theory of evolution vitally different from the other theories of evolution both Eastern and Western.

Though Aurobindo's evolution resemblance extent. The Western view of Lloyd Morgan and Alexander, there is a great difference where as the Western thinkers believes in the emergence of entirely new qualities. Aurobindo believes that whatever evolve premise in the cause. Thus it resemblance the classical Indian theory of Satkaryavada.

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The concept of Bhakti in Bhagavad Gita

* **Sayeda Jowena Dewan**

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Abstract- *The path of devotion is the central part of the Gita. It ends with this teaching to Arjuna as well as to the whole mankind who seeks rescue from the pain and sorrows of life.*

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Key words:Path, Evotion, Bhakti

The concept of *Bhakti* in Bhagavad Gita*:*

The word '*Bhakti'* is derived from the Samskrt root '*bhaj'*, which means 'to deal out, to divide, to share' etc. The root *bhaj* is generally used 'to express love' and *Bhakti* primarily means 'adoration'.[1] Though it is very difficult to translate the word *bhakti* in English. Adoration, devotion, love are commonly used to express its meaning.

Bhakti is a kind of surrender, trusting and depending on the grace of God. The love or surrender of this type has a feeling of dedication of every work to the Lord without any thirst for the result. It is such a sacred experience which negates all desires and fills the heart with pure love and devotion to the holy God.

The word *bhakti* is not limited to religious usage; it also occurs in the non religious perspectives.

The Encyclopedia of Religion and Ethics, defines *bhakti* as an affection or *anurakti* fixed upon a Lord. It further describes *bhakti* as that particular affection (*rakti*) that arises after (*anu*) the knowledge of the Adorable One. *Bhagavat* means 'the adorable one', *Bhagavata* means 'a worshipper of the Adorable One'.[2]

Different scholars offer different definitions of *bhakti*, but they agree that it is a concentration or comprehension of the Self.

The original Samskrt word is for meaning *bhakti* is '*parampremarupa'* which means 'of the nature of Absolute love'. In one sense it is one's love for the Absolute, in the other, it is the love of the Absolute.[3] There is a mutual interchange of the deliverance of love- *bhakti* or self surrender of the devotee to God and *mukti* or the consequent surrender of God to the devotee.

Bhakti means to serve. A devotee gets overwhelmed by God's power, wisdom and goodness and stays always ready to praise and converse about God's qualities in front of others. Adoration is the soul of religion. It implies a duality between the devotee and the object of devotion. It is believed in the

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*   **Assistant Professor, Patidarrang College, Assam**

Gita that duality is deceptive. But it seems that duality is more beautiful than non duality as there is worship.

Some thinkers are of the opinion that *sraddha* may be compared with the term *bhakti*; but the first term signifies 'intellectual beliefs' and hence is a pre requisite of *bhakti* which means loving devotion.

The concept of *bhakti* has its firm basis in the Vedic literature.

Bhakti yoga can be practiced by nine main ways separately or together. These limbs of devotion are : *Sravana*, *Kirtana*, *Smarana*, *Padasevana*, *Archana*, *Vandana*, *Dasya*, *Sakhya*, *Atmanivedana*. As Siddhesvara Bhattacarya mentions in his The Philosophy of the Srimad Bhagavata (1962), p.188 to 198.

According to Yati (1993), *sravana*, *manana* and *nididhyasana* are the three steps in the quest of devotion. All these three aspects are included in the word *anusandhana*.

Chapter 7 of the Bhagavad Gita explains that *bhakti* is a form of worship which consists of unceasing and loving remembrance to God. Faith and complete submission to a selected God is considered to be an important aspect of *bhakti*. Worship of the personal God is suggested as it is the easier way open to all, the weak and poor, the illiterate and the ignorant.[4]

Krsna says Arjuna that even the slightest amount of realization of righteousness (*Dharma*), the *Brahma-vidya* will save him from great danger.[5] In chapter 12 also, it is mentioned that among the different processes of realizing the Absolute Truth, *bhakti* yoga is the highest.

The teaching of the Bhagavad Gita is to realize the Supreme Reality or Brahman through the realization of one's own self. The path of *bhakti* according to the Gita is, supreme knowledge (*rajavidya*), a supreme secret (*rajaguhyam/ guhyatman)*, supreme purity (*pavitram*) to be realized by immediate experience, very easy to practice which is indestructible.[6]

Krsna says that a disciplined *yogi* who concentrates his/her mind only on Him and continuously remembers Him, can easily reach Him.[7]

At the beginning of chapter 7 of the Bhagavad Gita, the Lord wishes to deliver a full integral knowledge of the Supreme to his disciple Arjuna. He goes on clarifying that *jnana* is spiritual wisdom and *vijnana* is rational knowledge about the phenomenal world. *Jnana* is knowledge of *bhakti yoga* and *vijnana* means the practice of *bhakti*.[8] The Absolute is not mere relationless alien but it is present in its multiple appearances. It is present in human and nature but not limited by these.[9] His *Prakrti* consist of eight elements which is the Lord's lower nature and the higher nature is the soul or the *jiva*. The Supreme personal Lord is the repository of these lower (*apara*) and higher (*para*) aspect of the Supreme.[10] The teacher says that there is no other standard higher than *Isvara* and nothing is outside Him. The Gita says that for attaining *moksa,* both *jnana* and *vijnana* are necessary.

Unlike Samkara, the Gita advocates the world in its manifestation is

real. The unmanifested Eternal Being remains unseen from us. We only perceive the changing modes, but these are the changing shadows of the Permanent Lord.[11]

One who worships the Supreme Lord directly by devotional service is called personalist and one who engages himself in meditation on the impersonal *Brahman* is called impersonalist. According to Krsna the first way to realize the Absolute Truth, that is, *bhakti yoga* or devotional service to Him is the best of all.

The Gita mentions about four classes of devotees – arta, the distressed, Artharti or devotees with certain wishes, Jijnasu or the seeker of knowledge and those who are *jnanis* or the self realized. The Gita says among these devotees who worship without any desire and with knowledge takes shelter in the Lord knowing that nothing else worth getting except knowing the Supreme, is the dearest to the Lord.[12] He continues saying that all these devotees are righteous as they are the worshippers. A person of wisdom attains the Lord after several births and takes refuge to the Lord.[13]

The seeker of the transient material happiness go to different gods and they get those perishable rewards as they ask, but the true devotee who are perfect in wisdom goes to realize the Eternal Being.[14] God is *Saccidananda*, that is, *sat*, *cit* and *ananda*- existence, knowledge and bliss. *Bhaktas* goal is to reach this Bliss aspect of God. It is reciprocal way of love. In *bhakti* the first move must come from the *bhaktas*, the rest is left to the God.[15] Krsna starts to preach Arjuna about the real nature of the Self, the path of attaining it and showed him the Universal Form. Arjuna is advised to fulfill the purpose of the Supreme.[16]

In several chapters, the Gita urges to be a whole hearted devotee with full knowledge of dwelling in the Lord.[17] Devotion in the Gita is not devoid of knowledge; rather it includes knowledge because with the help of bhakti the devotee comes closer to the Divine and knows the true form of the same (*bhaktya mam abhijanati yavan yas casmi tattvatato jnatva visate tadanantaram*).[18] On the other hand, a person of perfect knowledge is full of love. He/ she sticks on relationship of love and faith with a personal God and to fulfill Divine purpose he acts according to His will.[19]

Yoga, generally means union with the Divine. . It is a spiritually desired end. The paths which lead to it is also called *yoga*. The various paths to attain the ultimate destiny are not opposed to each other but are more or less dependent on each other.

In the next verse, that is, in v.56, the Gita again says that one who does his/her all *karmas* and takes shelter in God, he/she attains God's grace and the Eternal Abode with God. As the individual is an instrument of the Lord and the *prakrti* it assumes with knowledge, is the power of the Lord.[20] It is advised in the text that all actions should be surrendered to the Lord and all thoughts to be pointed towards Him constantly, obeying Him as the Supreme.[21]

The Lord advices to renounce all duties and to take refuge in Him, He will release us from all ills.[22]

Knowledge sometimes seems to be a hindrance in the path of devotion. Now a days the realization among people can be perceived that meditation, knowledge, work and devotion all have their specific values in some ways. The great Indian philosopher Samkaracarya is a teacher of the path of knowledge at the same time a devotee. So, actually there is no conflict between the two.

The Gita says that knowledge, action and devotion are not interdependent to each other but they are subordinate to *bhakti*. They are essential at the initial stage of *bhakti*. At the higher level, they are not necessary.[23] But it says that *yogins* are superior to *jnanins*.[24] In the next verse, it admits the superiority of the devotees.[25]

Bhaktiyoga is a multisided practice which requires both a commitment to God as well as to loving fellowship of the people that surround one. The word *bhakti* is a very flexible word.[26]

The *yogas* in the Bhagavad Gita are in many ways interrelated. Though one can choose any of the several *yogas* to achieve the goal, yet that one is the primary path for him and he has to follow or practice the other *yogas* in a secondary manner.

Love leads to Light, *bhakti* leads to *jnana* and *jnana* is the joy of *Brahman*, the joy of Infinite.[27]

But each yogic path is different from other so the followers of the paths are also different as their personalities play a major role in choosing a path of emancipation.

Bhakti does not exclude karma too. Krsna explains to Arjuna that if a person performs all deeds, constantly seeking shelter in the Lord, he will reach His everlasting dwelling.[28] He urges his beloved disciple to do his actions without expecting the result of the same for the Lord's sake and thus to attain perfection[29] and surrender all actions to Him. One who has conquered his/her senses, remains evenminded, becomes fit be united with the Brahman.[30] Krsna says that it is better to stick in one's own nature though it is performed imperfectly.

The Gita points towards devotion as a straight and self adequate way to reach the final goal to God. The ultimate goal of all the *yogas* is to acquire pure bliss. Krisna says that the devotees, who worship Him, in His manifested form, have better *yoga* knowledge.[31] But the others who worship the unmanifested, everlasting Reality by controlling the senses will ultimately reach Him. But their path is more difficult and problematic. Krsna further says that He will be savior of the devotees who from the bindings of the vicious cycle of birth and death.

Krsna mentions that knowledge (*jnana*) is better than blind practice (*abhyasa*), meditation (*dhyana*) is better than knowledge, renunciation of

desire of fruit of action (*karmaphalatyaga*) is better than meditation. This is the immediate way to peace.

The Gita says that by whatever way men worship the Lord, He responds to them accordingly.[32]

All the paths of *yoga* are offered by Krsna as a means to attain liberation. These *yogas* though separate, are interdependent. At intellectual level they may be different but at practical point of view they are one. All the *yogas* are essential and are of equal importance. The Gita mentions that *jnana yoga* is superior to *karmayoga*;[33] but it does not preach to renounce *karma*. Nor does it preaches the *karmayogi* to avoid the search of knowledge. *Bhakti* according to Krsna is strengthened by knowledge but is not knowledge itself.[34]

The path of devotion is the central part of the Gita. It ends with this teaching to Arjuna as well as to the whole mankind who seeks rescue from the pain and sorrows of life.

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Gandhian Influence on 'Indra Singh Nayal' of Kumaun During Freedom Struggle: A Historical Study

* Neeraj Ruwali

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Abstract- *Indra Singh Nayal was one of the greatest men ever born. He was a class by himself, a triumphant hero, a many splendorous genius and a tower of strength to people of Uttarakhand. Young Nayal, right from his childhood, was very sensitive and receptive to all that was happening around him. He was influenced by many great personalities like Gandhiji. Allahabad proved to be a very good training centre for Indra Singh Nayal and when he left Allahabad in the year 1926, he was a mature young man with a lot of new ideas of how to participate in the freedom struggle, and how to inspire others to do so. At Allahabad Sri Nayal started participating actively in political agitation in connection with freedom struggle. These participating events gave a definite direction to his future course of life, which ultimately made him a well known leader of Uttaranchal where he served till his last.*

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Key words: Non Cooperation Movement, Civil Disobedience Movement, Harijan, Round Table Conference, Untouchability, Cottage Industry

Methodology: Historical, Analytical, Argumentive, Descriptive, Narrative

Introduction: Indra Singh Nayal has been on e of those freedom fighters from Kumaun who has contributed so much for getting India free from the clutches of the British colonialism. Getting inspired from Gandhiji he participated in Non Cooperation Movement, Civil Disobedience Movement and Quit India Movement. During that time As a lawyer he had shown the courage to fight for the cases of freedom fighters when every other lawyer refused to plead for them. He fought against untouchability and became the champion of Harijans. He made efforts for the spread of education in the remotest parts of Kumaun. Like Gandhiji he was always in favour of development of cottage based industries in villages.

During Non cooperation movement Sri Nayal as a student of Mayor college enrolled himself in the volunteer corpse, which had been formed to give active support to the Non cooperation movement. On the arrival of Prince of Wales in India in November 1920, congress party decided to boycott it. It was decided that all the foreign clothes should be burnt at public places on the exact day of his arrival on 17th November, 1920. Nayal also participated

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*   **Assistant Professor, Department of History, M.B. Govt. P.G. College, Haldwani (Nainital)**

in this boycott moment and burnt all his mill clothes and vowed to use only khadi throughout his life, which he fulfilled till his end. Young Nayal was one of the handful students who left his college. However, on the arrival of his aged father to Allahabad, he had to retrace his decision and join the college again.

Nayal had the opportunity of seeing Gandhiji when he visited Allahabad in 1921. Nayal was deeply impressed with the simplicity of Gandhiji. He was a confluence of simplicity, lean, thin and ordinary stature and extra ordinary personal. Nayal had a deep imprint of Gandhiji's view on his life. During his stay as a student in Allahabad, he joined Dharna at the Triveni site on the occasion of Makar Sankranti. British authorities had put restrictions on the movement of the public without taking into confidence the people's representatives. Nayal joined this Dharna alongwith Pt. Nehru, Pt. Madan Mohan Malviya, so ultimately British authorities had to bow down and it is accepted the wishes of the general public.[1] Above is underlined the path that led to Nayal's active contribution in the Non cooperation movement and consequently freedom struggle of India.

Indra Singh Nayal was a man of multifaceted personality and could not bind himself with the cheap street politics of today. He had from the very beginning fire inside him, to participate in the freedom movement. After acquiring a law degree in 1926 from Allahabad, he permanently left for Nainital to start his future course of life. From 1927, to till his death, he remained associated with the socio-political life of Nainital district and contributed a lot for its development in particular and Uttarakhand in general. In 1929, Gandhiji visited Nainital as a part of his hectic tour of the country in connection with Harijan Kalyan. Nayal was appointed the treasurer for the welcome function to be organised at Nainital town.[2] Nayal showed his capability as a good financial organiser while collecting money from the public for presenting a purse of Rs. 22000/- to Mahatma Gandhi. Nayal was a member of the congress party from Kumaun accompanying Mahatma Gandhi during his journey. Pt. Nehru and Acharya Kriplani were other distinguished visitors.[3]

Indra Singh Nayal actively participated in Civil disobedience movement. In May 1930, arrest of Pt. Nehru activated the movement in Nainital also. A procession was taken out in the morning time with Gandhiji's photograph in a palanquin with Pt. Pant as well as Nayal joining it. When the procession reached Tallital bus stand, police intervened and did not allow it to go ahead. Dharna started there itself, and many small processions were taken out at different places of the town. By the evening many arrests took place and next day Pt. Pant was also arrested.[4] Pt. Pant, before his arrest, had written a letter authorising Nayal to take charge of this movement in his absence and had also given guidance in this connection. However, Nayal could not do much for this movement as he himself was arrested after few days and awarded six months imprisonment. He was sent to Shahjahanpur jail.[5] During 1932-37,

Nayal played a predominant role in social works inspired from Gandhiji.

During Quit India Movement, Nayal, as a lawyer, did what best he could do. Many workers were arrested from Uttaranchal. The movement turned violent and cases of arson took place. At that time, none of the lawyers of repute were willing to take up the cases of the freedom fighters apprehending ire of British government. Nayal came forward and pleaded all their cases free of cost. This was indeed a bold and courageous service and at the same time, it was a great help to the needy.[6]

Nayal was the Champion of Harijans. He always fought for the right cause of down troddens specially untouchables. He, throughout his life, endeavoured to remove the curse of Hindu society i.e. untouchability and to great extent he was successful in his endless efforts. He was of the view that untouchability was a great impediment for achieving social and political equality. He organised a lot of meetings to condemn it and was able to mobilise enough support to create a positive environment in this direction. Nayal tried his best to eliminate it but was successful only partially. Nayal always cherished and longed till his last to make this region free of all the social vices. In 1932, Britishers established communal award which provided separate electorates for untouchables. Gandhiji opposed this move and tried to plead the case at the round table conference to no effect. He decided to sit on fast unto death.

Nainital also did not remain untouched with the above national upheaval. There were widespread efforts for the upliftment of untouchables. Nayal took the lead in this matter and met spectrum of the Hindu society, contacted the leading citizens and tried to convince one and all to remove this curse. He conducted street meetings and gave this problem widespread publicity. Nayal's strategy was to get the door of Naina Devi temple opened for the Harijans. The day a Hari Katha was being organised in the temple, he led some Harijans and tried to enter the temple. In the process the volunteers were manhandled and not allowed entry. This had a lot of effect on the general public who forced conservatives to relent. The Harijans though not permitted inside the main temple, were allowed to enter the temple complex as a whole and have the 'Darshan' of the deities from the outside steps. The Harijans were also allowed to participate in the katha. The temple was ultimately opened completely for them after some time.[7]

Nayal also remained as President of Bhartiya Harijan Sewak Sangh. In that capacity Nayal did a lot for the untouchables. He endeavoured for the admission of Harijan children in schools and their participation in all activities along with higher caste Hindus. He arranged scholarships for Harijan students which helped them to continue their schooling. There was a very unhealthy custom being practised during the thirties in Uttaranchal as a whole. Sweepers were provided with left over food of the individuals. This was very unhygienic and Nayal was ultimately successful in abolishing this hateable custom.[8]

Nayal, throughout his whole life, made tireless efforts to spread

education in the backward areas of Uttarakhand. He was of the view that unless and until people are educated, no other developmental activities were possible. He wanted to carry the torch of education to the entire rural areas to every nook and corner of the districts. Uttaranchal region as a whole was very backward from the educational point of view. The general economic condition of the people in rural areas was very unsatisfactory and only a microscopic minority was in a position to send their wards to the towns for high school education. Even after his selection as Chairman of the district board, Nayal could not do anything in this sphere as boards at that time were not empowered to conduct running of high schools. Whatever was the situation Nayal did not give up hope and did what was within his capacity. He established two private school - one in Okhalkanda - a pure hilly area and other at Khatima - in Tarai areas. Selection of these two places shows the political acumen of Nayal as he gave equal weightage both to plains and hilly areas so as to avoid any public charge of discrimination between these two different regions. As a member of the council, he time and again, expressed discontentment about the lack of Primary and Junior High School in this area .

He wanted more government aid to private colleges and stressed for opening of new colleges in remote areas.[9] Nayal was an ardent exponent for establishing a Federal University at Nainital. He was of the strong belief that moral education must be provided in schools. He was not happy the way younger generation was forgetting the old heritage, customs, festivals etc. and running after everything which was ultra modern. He desired that future citizens of India, at school stage, must be acquainted with the basic norms of religion including 'Patanjali Yoga'. He did not agree with his opponents that this would interfere with the concept of secularism in any way.[10]

Like Gandhiji, Nayal was an exponent for the development of village based cottage industries. Nayal wanted to completely utilise the manpower available in the villages. He said that there should be some sort of cooperative based cottage industries side by side with cultivators. There must not be exploitation of villages and to some extent, villages should be made self sufficient and independent. All the possible technical help should be made available to the villages. Endeavours should be made to improve the functioning of the industries, there by bringing new ideas, concepts etc. keeping pace with modern age. He said that government should take lead to arrange sale of raw materials and purchase of manufactured goods for all village based industries. In Uttaranchal, however, he encouraged weaving and spinning of wood since 'Pankhies', 'Pasminas', 'Thulmas' and 'Chutkas' etc. prepared in this part were already in great demand. Nayal was of the opinion that if proper agencies were established and these can arrange raw wool from outside, it would boost the development of this industry.

Conclusion: Thus it can be said that Nayal was a strict Gandhian by his thoughts and dealings both. He always wore 'Khadi', which he considered a

symbol of nationalism like Gandhi he was a strict disciplinarian and very punctual to his engagements and appointments. He was against any pomp and show and preferred simple way of life. He was deeply influenced and impressed with Gandhiji's doctrines regarding prohibition, moral education, cottage industries, khadi development etc. He remained throughout his life, an exponent of all the above programmes. Nayal was very much disturbed with rapid growth in alcoholism among the people of this area. He wanted government to take immediate measures to prevent situation from further worsening.[11] Nayal, like Gandhiji, whenever got the opportunity, raised the burning problem of unemployment in the hilly areas. He never liked people from the plains selected in government jobs in this region, ignoring completely the claims of the local people being the sons of the soil. As a true Gandhian, he was very much cautious for proper maintenance of public funds and never liked its misuse. He never drew any allowance or took other benefits in the capacity of the chairman of the college committees started by him. Like Gandhiji, he was a staunch devotee of Bhagwat Gita. He had studied in detail various commentaries by all eminent authorities, present and past in order to understand the complex philosophy involved therein. Everyday he meditated for about one hour. He was fond of simple food. He participated in Gandhian Non cooperation, Civil disobedience, Quit India and Individual satyagraha movements. He boycotted school, college and foreign clothes. He proved as a good champion of harijans. Like Gandhiji, he was a devout social worker and believed in providing and stressing education based on morality.

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Greater Assamese Society in Ancient Assam

* Nasrin Ara Rahman

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Abstract- *Assam is the frontier province of India in the North East. The most striking feature of ancient Assamese Society was the Varnasrana system. The queen held a position of responsibility in the State. The Deodhani Assam Buranji presents an interesting accounts of the various past times of the Ahom Monarches.*

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Key words: Assam, India, Varnasrana, Deodhani, Mnarches, Province, Assamese society

Assam is the frontier province of India on the north-east. The boundaries of Assam lies between latitudes 28" 18' and 24" north and longitudes 89" 41' and 97" 4' east. It contains at present an area of 54,000sq. Miles constitute the plain districts. Assam is therefore, divided physically into two main parts, the highlands of the frontier tracks to the north and east, and the plains below. The plains consist of the treat river valley of the Brahmaputra. The area of the Brahmaputra valley is 24,283 sq. meter miles.

The most striking feature of ancient Assamese society was the varnasrama system. The classes Varna and the four stages divide the life of men. The Kamrupa Kings take special care to preserve the traditional division of society, namely, Brahmanas, Ksatriyas, Vaissys and Sudras. But varna had by this time lost its original significance and become synonymous with jati, the system which laid emphasis on birth and heredity.

The smallest unit of society was probably the joint family or large household, comprising of the family, with wife, unmarried daughters, sons etc. Joint family was, as it had been in early times, the normal practice. The family was Patriarchal and daughters had no right to their father's properties. She had, however, her claim to the bridal gifts and presents and was entitled to maintenance, after the death of her husband, by her sons or by the brothers of her husband. At the death of the father, usually in case of commoners, separation and division took place, there youngest son getting the first preference in choosing his own share. Among the nobility, the usual practice was to hold the land in joint partnership and divide the profits at the end of the year. This was possible as they could keep a large number of slaves or employ the paiks assigned to them in cultivation.

Though the position of women was subordinate to man, she enjoyed

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*   **Assistant Professor, Karmashree Hiteswar Saikia College. Assam**

great freedom in the society, where the tribal outlook still prevailed. There was no purdah system. According to Shihabuddin, the wives of the Rajah and the peasants alike never veiled their faces before anybody and they moved about in the market places with bare heads.

Women played an important role in all family affairs. Besides rearing up her children and doing here household duties, she helped cultivation in every state except ploughing. As women from queen downwards were proficient in spinning and weaving. No formal education was given to the girls. However, she got teachings in morality and spiritualism from the elder members of the family and through the recital of the Kirtana and the Namaghosa in her house as well as in the village Namghar. The exhibition of the bhawnas or one-act plays on religious themes also greatly helped in disseminating spiritual enlightenment among all village-folk.

In the nobility circle, however, girls learnt the three R's from the male members of the family. Enough for her if she could read the Ratnawali, the Kirtana and the Namaghosa. As stated, the position of the Court ladies was different, who were maintained out of public funds in the form of east's called Meals. The influence exercised by the Court ladies in political affairs has been described in relevant places.

Among social institution that of marriage in many ways is the most important part of society. The Hindu sastras recognized eight modes of marriage. They are 1) Raksasa or Ksatra Vivaha, where the bride is carried by force, paisaca, a great elopement, Gandharva, a secret informal union, Asua, aquirment by purchase. Brahma, where the birde us freely fiven to a worthy bridegroom with due ceremony Daiva, where she is married to a priest, Arasha and Kaya.

From the fact that the copper plates in their set lists of officials include the name Rajni, it seems that the queen held a position of responsibility in the stage. Even later times, the naris held a privilege position is known from the fact the Ahom King Siva Singha (1714-1774 A.D.) not only married Phuleswari, a nari attached to Siva temple, but subsequently made her the Bar Raja or the Chief Queen and caused coins to the strack jointly in the name. The purdah system was unknown, and women used to bath openly in reverse. There was custom of appointing women as dancers and courtesans in connection with temple service which probably came into vogue in India about the third century A.D become quite common in Assam. There was the system of virgin-workshop or Kumari Puja in Assam.

Rice, fish, meat, fruits and vegetables constituted the articles of food of the Assamese people, rice was a part of all meals in Assam. Assamese people used to eat a traditional breakfast consist of chira with yoghurt and Jaggery, mostly farmers ate cooked rice worked overnight (Poita) simply accompanied with salt, mustered Oil, Onion, Chilly etc. spice such as ardroka (ginger), (jira Vumin), (Pipaaliyaka long peppa) (Marica Peppa) etc. Meat and fish

comprised common articles of diet.

Accordingly to the Kalika Purana, Textile materials divided into four classes Karpara cotton, wool and silk, muga & ari. The art of dying both yarn and cloth was well known. Embroidered cloth was also manufactured. Ornaments worn by men and women on different parts of their bodies of the people of Assam was quite common.

Deodhani Assam Buranji presents and interesting accounts of the various past times of the Ahom monarches, such as hawk fights, elephant fights, buffalo fights, figure contest etc. Fishing done by the common people by traps, baskets and bamboo rods with iron rail.

Dancing and music were popular amusements. Besides the inscriptional and the literary evidence, there are many of men and women, in dancing pastures. The common people were not illiterate. Education was centered round the guru-grija, sometimes held in the porch of a temple, literature worth the name came to be produced in Assamese towards the beginning of the 13th Century A.D. in the court of Durlaba-Narayana of Kamrupa.

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The Politics of Difference and the Traumatic Specters of Enslavement in Toni Morrison's Works

* Sangeeta Shekhawat

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Abstract- *Since race, sex and class have been so interrelated in the history of America, it is not surprising that when Afro-American women writers published their works, they necessarily reflected on that relationship. Black women novelists of the twentieth century have openly portrayed their experiences of exploitation-political, racial, sexual and emotional. Being victim of racist, sexist and classist assumption, their works of fiction reflects their version of American experience and their striving to present the black women's quest for total freedom as a human being.*

The tradition of Afro-American women novelists is entirely a stunning expression of various configuration of social definitions that have been inflicted on the black women. Toni Morrison, the foremost twentieth century Afro-American women novelist, has added substantially to the body of African-American literature through both her fiction and non-fiction works. Her works gives a clear understanding of black life, society and culture. Morrison's works more vividly describes this horrendous tale and its accompanying effects. She writes to strengthen the black women against the heavy odds of racism, sexism and classism by developing the necessary political, social and aesthetic consciousness. This paper intends to explore the effects of race, gender and class in shaping the works of Toni Morrison and Afro-American women writers.

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Keywords: Race, gender, class, sexism, black, exploitation, enslavement

Toni Morrison belongs to a group of writers in America like Maya Angelou,Toni Cade Bambara,PauleMarshall, Alice Walker and Gloria Naylor for whom writing is a liberating tool, a subversive strategy and an artistic mode of self-expression. Combining the aims of the black freedom movement and Women's liberation, Morrison seeks to produce literature which is irrevocably and indisputablyblack. Like Edward Said who exposed orientalism as a western style for dominating, restructuring and having authority over the orient. She explores the distortion of black reality by the dominant group for its vested interests.

Havinghad a struggleful journey,African-American writing established its genre as a sole purpose of 'uplifting the black race'. Iola Leroy or shadow uplifted was the first novel written by Francis E.W. Harper in (1892),since then the African-American writers never stopped to look back,many great

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*   Research Scholar, Department of English, University of Rajasthan, Jaipur (Rajasthan)

writers contributed for the upliftment of Black life and culture enrichment of black literature. ManyAfro-American writers showed the pain and suffering of black people through their writings. However,Morrison has a distinctive place among them.

Toni Morrison, through her writing, extended the world of African American writing into a wider landscape. Her works inspired many women writer to think and feel free about how much they can flourish as an African American female writer in biased and racialized world. She is feminist in her cause of preservation of the rights of women. The two major issues that troubled the Black feminists are: to introduce race into feminist theory and the subject of gender in Afro-American discourse.

Morrison through her works presented the non-linear Afro-American socio-historical realityfragmented by a historical past of disconnection and ruptures. Her works offer a fresh perspective on black life, their history and genealogy. The major focus of her works is apartheid, slavery and racism and psychological and social effects on the blacks over ages. Notonly restricting themselves to the effects of these practices writer like Toni Morrison have traced the historical development of these ideologies. Morrison's novels show the victimization of black people within the context of a racist social order. The social history found in her novels is the history of daily inescapable assault by a world which denies minimum dignity to the blacks.

Like other women novelists of the contemporary period, Toni Morrison analyses the relationship between race, gender and class. In each of her works she explores some aspects of the oppression affectingAfricanpeople. Morrison was titled as a "Black woman writer". She is committed to survival and wholeness of entire black community. Morrison has also been called of womanish stories of her novels and revealed through the eyes of black women. She does not adopt any kind of political feminism associated with women's movement of the 1970s. rather she writes in the strengths of black women against the heavy odds of racism,sexism,and classism by developing the necessary political, social and aesthetic consciousness. In her first novel,*The Bluest Eye*, eleven-year-old Pecola who longs for blue eyes becomes the victim of the white culture which both directly and indirectly rejects them. *Sula* published in 1973, Morrison's primary emphasis here is on gender, she presented the struggle for individual rights in general and women's rights in particular. *Song of Solomon* is the novel in which class in relation to race and gender becomemore focal. In 1981 Morrison, published*Tar Baby* in which the thematic emphasis is on class struggle, the struggle between the ruling class and slaves. This novel reflectsMorrison's abilities and commitment to explore the cause and effect between race, gender and class. Her masterpiece creation *Beloved* published in 1987, this novel shows the theme of collective class struggle against capitalism and gender oppression also considered a visible problem. *Jazz* is a disturbing psychological tale of a childless African-

American couple,desperately yarning to come in terms with their frustration and aspirations.

Pecola goes mad,Cholly rapes his daughter, Guitar joins a band of social avengers kills his beloved,Sethe kills her daughter.All these characters show the mad,anarchic and destructive tendencies afflicted by American society and the psychological wounds caused by racial discrimination.

The overriding theme of her works is the sense of identity of a black person trying to recover his history and culture which had so far been suppressed by dominant white culture.Toni Morrison says in one of her interviews, "I don't want to bow out with easy answers to complex questions. It is the complexity of how people behave under white dress that is of interest to me."[1]

What she means to say is that it is the complexity of how people behave under the pressure of white hegemony that is of interest to her. Toni Morrison has produced some of the intense studies in the strains that a madness inducing white society puts on its black member in America.

Aclose study of the interrelationship of race, gender and class in the novels of Toni Morrison, reveals the emergence of an evolutionary pattern.one can perceive a progressive thematic and structural development in her works. She uses each novel as a framework for investigating various problems of and solution to the African's dilemmas. In each of her novels Morrison explore some aspects of oppression afflicting African people. Each successive novel reflects her growing understanding of the nature of the African's oppression.as her narrative structure develops, she learns to shape her theme artistically so as to provide accurate presentation. One can perceive the thread that runs through and connects novel after novel as one picks up where the other leaves off thematically and structurally.

Morrison further shows that Africans all over the world are one people having the same history and showing the same plight since they are seen as one by those outside the African nation. No matter what their class status might be clearly she wants African people to see themselves as one people, undivided by their class status.

The lives of African-American women have been critically affected by racism, sexism and classism which are systems of social and psychological restrictions. The racist, sexist and classist structure of the American society compartmentalizes its various ethnic groups, defamed the colored as inferior and characterizes males and females as center and margin respectively. Just as blacks as a group are relegated to an underclass by virtue of their race, women are relegated to a separate caste by virtue of their sex.Black women have been victimized not only by racist andsexist assumptions but also by class exploitation which is,perhaps,the greatest source of oppression of blacks in America. The basic myth of racism is that the white are more intelligent and more virtuous than the black by the mere fact of being white.furthermore,

whiteness is automatically equated with beauty and culture, and blackness with ugliness and slavery.

Racism, sexism and classism signify the traumatic conditions under which African-American lived in white America,women in particular. Right from the days of slavery, theblacks, irrespective of sex,realized the cruel reality of racism.Judged from the perspectives of white man their life became unbearable. Sexism which was more brutal both physically and mentally was the real cause of suffering and grievance to the black women, actually black women were exploited by both the black and white men. Just as blacks were relegated to an underclass by virtue of their race, so were women relegated to a separate caste by virtue of their sex and race.

Confronted on all sides by social and sexual discrimination, the black woman has no friends but only liabilities and responsibilities. Responsible for their own and their children'swell-being and future, these women had to face daily the reality of their relationship with white women, and above all, with black men. But within the separate caste,a standard woman was designed in termsof a class definition. The ideal southern lady image of eighteenth centuryAmerica has been one of the dominant factor inAmerica's conception of women. She was expected to be beautiful in an ornamental way,chaste,pious,married and eventually, amother. She was obviously a white beautiful and rich woman who didn't work. The ideal concept of woman in the society than, is not only racist and sexist but also classiest. And because black woman was by the nature of their race, conceived of as lower class, they could hardly approximate the norms;

Themes such as the quest for freedom, the nature of evil and the powerful verses of the powerless became themes of African-American literature. For instance, William Well Brown's slave in his*Clotel*(the book is considered the first novel written byAfrican-American) verbalize the disparity in riches and their exploitation:

> "The big bee flies high
> The little bee makes the honey,
> The black folk makes the cotton
> And the white folk gets the money."[2]

This folk rhyme encapsulates the history of black and white interaction in the United states and what is more, it epitomizes the sentiments expressed in protect literature.Morrison writes from a folk aesthetic, is much like the one that informs Ralph Ellison's theoretical assertion, that folklore is the basis of all great literature:

"For us (blackAmericans) the question should be, what are the specific forms of that humanity and what in our background is worth preserving or abandoning. The clue to this can be found in folklore which offers the first drawings of any group's character. It preserves mainly those situations which have repeated themselves again and again in the history of any given group. It

describes those rites, manners, customs and so forth, which insure the good life or destroy it; and it describes those boundaries of feelings, thought, and action which that particular group has found to be limitation of the human condition. It projects this wisdom in symbols which express the group's will to survive….. These drawings may be crude but they are nonetheless profound in that they represent the group's attempt to humanize the world. It's no accident that great literature, the product of individual artists is erected upon his humble base."[3]

Thus, to be black and female is to suffer from the twin disadvantages of racial discrimination and gender bias. Black women suffer not only because they are black and female but also because they are economically poor. The ideal concept of women in American society is not just racist and sexist but essentially classist. The poor black women who could hardly approximate the norm are discriminated against and dehumanized. Possibly no other social group has been subjected to such an unedifying spectacle of human debasement and depravity. Beingblack, the African women suffered fromracism; Being females they were the victims of social atrocities at the hands of the white patriarch well as the blacks and being former slaves, the white established forces them to live on meager resources and were compelled to remain poor. Inshort, the black women in America were made victims of triple jeopardy-racism,sexism,and classism.

Racism and sexism are allied and have a parallel exitance as source of oppression of Blacks. They are mutually interdependent and hence they arise from the same set of circumstances. Gloria Wade Gayles explains this interesting phenomenon through the imagery of circles:

"There are three major circles of reality in American society which reflect degree of power and powerlessness. There is a large circle in which white people, most of them men, experience influence and power. Far away from it there is a smaller circle, a narrow space, in which black people regardless of their sex,experience uncertainty, exploitation and powerlessness. Hidden in this second circle is a third circle, a small dark enclosure in which black women experience pain, isolation and vulnerability. These are the distinguishing marks of black women hood in white America."[4]

What we see here is the omnipresent, all embracing reality of racism as a common factor in the lives of all blacks, irrespective of sex.The black men were forced with the hard fact and cruel reality of racism. Theyrealized right from the days of slavery that his colour and physiognomy were terrible handicaps and such would mark him off as evil, despite all claims to the contrary judged by the white men's standard of life,behavior and beauty, his life became unbearable because the universal codes of social and psychological matrix as laid down by the dominant white culture were forcibly thrust upon him.

Race, gender and class the three-main source of oppression of blacks in white

America are not separate entities but are closely linked with each other. They are so organically connected that one cannot understand their interrelationship in spite of their ever-shifting appearance. Racism and sexism can be understood as by-products of capitalism. The economic system of slavery, an early form of capitalism, is the cause of racism and sexism stem from class exploitation. Thus, as sources of oppression of blacks,racism,sexism,and classism are mutually interdependent and arise from same set of circumstances

Racism started in America when masters of the land brought the first Africans in chains and used their labour to enrich their coffers.as a result black people soon ceased to exist as human beings in the white world. In an illuminating study of the origin of racism in the united states.JoelKolves says that the white masters "first reduced the human self of his black slave to a body and then the body to a thing; he dehumanized his slave, made him quantifiable and thereby absorbed him into a rising world market of productive exchange."[5]

Thus, began the oppressive story of racism in America.it brought with it pain sorrow bloodshed death and above all the negation of an entire race. The African-American race was persecuted and viciously outlawed from all avenues of decency hope, progress and livelihood. Racism a life threatening non-nurturing force exists even today this is becoming the forum for all types of discussion.

Racism may be defined according to Hernton as "all of the learned emotions on the part a group of people towards another group whose physical characteristic are dissimilar to the former group; behavior and emotions that compel one group to ……treat the other on the basis of its physical characteristic alone as if it did not belong to the human race"[6]

The basic myth of racism in other words isthat the white are more intelligent and more virtuous on the psychological level. Whiteness is automatically equated withbeauty and cultural and blackness with ugliness and slavery. Since race,sex and class have been so interrelated in the history of America, it is not surprising that when Black women writers published novels they necessarily reflected on that relationship. The African-American women novelists expressed a stunning expression of various configuration of social definitions that have been inflicted on the black women. Theworks of black women novelists from 1892 to present have had to react to the elements of race,gender and class as the factors upon which the social definition of black women is based.

Black women novelists of the twentieth century have openly portrayed their distress experience of political,racial,sexual and emotional exploitation.Black women were not only victims of racist, sexist and classist assumptions but also suffered by scholarly neglect. They strive to presentthe black women's quest for total freedom as a human being. Their works reflect their version of American experience. The ill treatment of the black coloured

women in the west goes back to the history of colonisation and white authority. Under the imperialistic rule, women from subordinate cultures were generally dislocated from their native soils and taken as slaves to White men.Thus,the black history shows the endless journey of exploitation by white people.In Toni Morrison's works, the discord in the family relationship as well as in the gender relationship arise out of the racial suffering of the Blacks. She condemns racism as a concept where the struggle is not between the white and black but it is between the strong and weak.

Morrison stands as a powerful literary figure on the international literary canon. Her place in the American letters is immortal. Through her imaginative, creative, realistic, fiction, non-fictional writing she has given a massage that mankind must rise up to the level of individuality and each person must respect the reality of the human landscape. We are a global community and there are unlimited possibilities of integration.

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Misery, Mujra and Metamorphosis: Understanding Courtesanship through Umrao Jan Ada

* Abu Sayad Rofi

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Abstract- Mirza Muhammad Hadi Rusva's Umrao Jan Ada, published in 1899, recounts the life of a courtesan named Umrao Jan Ada of the nineteenth century Lucknow and is one of the early notable works of Urdu fiction. The novel consists of fifteen chapters and each chapter begins with a ghazal which highlights the importance of poetry throughout the novel. It deals with various aspects of the society of the 19th century Lucknow - gender, religion, linguistic and courtesan culture through the story of Umrao Jan Ada, a courtesan in the brothel or thekotha of Khanum Jan. Whether or not the character of Umrao Jan existed in reality is a question which Rusva leaves unanswered. The main plot of the novel is filled with suspense and surrounded by a series of incidents and subplots. Rusva's intent is to present life in Lucknow as it was, almost like a mirror of his time. In this novel, we find a wide variety of characters from both the upper and lower strata of the society. This paper aims to explore how Mirza Muhammad Hadi Rusva decodes the problematic of prostitutes as the significant 'other' in society, who lie on its margins and how he draws the contours of the trajectories of the lives of courtesans and how they deal with their tribulations.

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Keywords: society, culture, prostitution, courtesanship, class hierarchy, politics and authority.

Analysis: Umrao Jan Adaunfolds the story of a young girl Amiran, who gets abducted in her childhood and is sold to a woman named Khanam Jan, who trains her to become a courtesan. Amiran is thus transformed into Umrao Jan in a kotha which entertains customers only from the highest levels of society. The novel traces the trajectory of not only Umrao but also on a parallel level,of all the other girls working as sex workers in 19th century Lucknow. Defying the order of his day, Rusva was a man with an extraordinary education and experience in many domains like the Urdu, Persian and English languages, mathematics, logic and astronomy. He spent most of his adult life in the city of Lucknow, which is apparent in his credible portrayal of the city.

The novel begins with Umrao telling the narrator the story of her life which was contained within the cauldron of patriarchy and child marriage. The central character, Amiran, herself was the victim of a child marriage arranged by her father with one of her cousin. Another character with a similar

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* M.A. in English, Jamia Millia Islamia University, New Delhi

fate in the novel is Kariman, who is married off to a man six time her age. A discussionon society can not be complete without describing the lives of people of Lucknow from other walks of life, who worked as servants, teachers, dancers and musiciansto earn their livelihood. And then there were thenawabs or noble men of the court, who lived their livesluxuriously. Accompanying their many little festivities was theextravagant food coupled with dancers, musicians, poets and courtesans. And since most of the nawabs used to inherit their ancestral property, they were quite thriftless. They celebrated outside, however, it can be observed that women,too, had their own space and ways to celebrate, though it was indoors. The birthday celebrationof a nawab's son being a women-only or a zanaani gathering is an example of this.

Turning to the literary culture of the elite class of the 19th century Lucknow, a steep inclination towards poetry, mainly in the Urdu language, led to the organising of literary meet-ups, primarily mushairas. Both, listening to and reciting to ghazals and nazms were looked forward to. Often, dance and musical performances accompanied such evenings. Rusva has used many verses in almost all the episodes of the novel, including the very first chapter of the novel, with the following couplet:

"How many tales of pleasure we recall-
A preface to the pain of sorrow's call."

Through Rusva's vivid descriptions, the nineteenth century Lakhnavi (Lucknow's) way of dressing, talking and indeed, living, can be visualised through the novel. In his narrative, Rusva also highlights the selective mannerisms of people about their clothes. The importance of education, especially of religion, dance, music and etiquettes, has also been highlighted. Interestingly, the impact of colonial subjugation does not penetrate the 19th century Lakhnavi culture. The observation that they could sustain a cultural trajectory fairly independent of the colonial one, could be accounted to the fact that most of the nawabs of the period works under them and they got the respected positions in the society.

There is very little literature available written by and on the lives of prostitutes in India. Often a controversial subject of discourse, any generalisation about prostitutes needs to be made objectively and carefully. In India, though prostitution can be dated back to the ancient era, courtesanship has relatively a recent history, originating during the 16th century Mughal rule, especially in Lucknow. Like Amiran, many girls and women were forcibly put into becoming a courtesan due to the dearth of money, and were made the victims of their fate. However, someof themconsciously chose courtesanship as their profession, for varying reasons.

The novel also depictsthe various people who visited these kothas. Rusva also points out at the variationsamongst the courtesans according to their physical appearance, ability to persuade men and mastery in singing and dancing. Courtesans having below than the average appeal and skill generally

entertained the commoners with a lower payment.

There is another side to the pleasure that the audience received from the performing courtesans. The nawabs met the courtesan with the purpose of not only enjoying the mujra (dance), but also to converse through poetry, discuss greater and universal themes like love and devotion. Sometimes, the nawab and the courtesan fell in love with each other. Owing to the taboo that a nawab can't marry a courtesan because of the difference in their respectabilities, the courtesans often had to sacrifice their love and had to carry on entertaining the new customers until they grew past their youth. Bismillah fell for Nawab Chauhan but could not marry him, while Khurshid Jan fell for Pyare, and couldn't be with him either.

Though class is not a major running thread throughout the novel, one may find the prevalent class hierarchies, portrayed as a subtext. The society is thus represented as a stratified community, with the aristocratic nawabs and the nobility being at the top, who enjoyed political and economic powers, followed by teachers or ustaads, servants and the courtesans or tawaifs at the bottom. Interistingly, many courtesans were given servants at their disposal; thus power was not asserted in a unilateral or absolute sense, but always in a relative sense.

Ruswa employs humour and irony to lighten the mood for a brief respite from the harsh reality. Umrao Jan serves as an instrument who describes the state of aged men wanting sex for money. She talks about Nawab Jafar Ali Khan, *"He was about seventy years old, completely toothless, his back was bent and he did not have one black hair left on his head, but he still thought himself worthy of love"*.

In a society constructed on the norms of partiarchy, men are allowed polygamy more than women. Women, expected to fit into the submissive stereotype, often don't have the agency to oppose the forces that perpetrate these discriminations. Often,the tawaifsgot more attention of the men than the their wives and daughters. The courtesans spent most of their time with the aristocrates whichcommoners can't imagine of; and this by virtue of their knowledge, intellect and skill which lacked in the *"pure"*wives and daughters.

Even then, in spite of their luxurious lives and the attention of the nobility which they gained, the courtesans still had a constant miserable tag attached to them of being *"impure"*. Having once embarked on the journey of courtesanship, they can never tie themselves again to their family, for the sake of their family's pride and honor. Any association other than mujra was unacceptable for them. This is evident in the novel when Umrao goes back home and is faced with a murder threat by her own brother.

Like Umrao Jan, highly demanded prostitutes or courtesans leave theiroriginal kothas and set up new private ones, for her own clients.

The politics of authority within the set-up of a kotha, too, is dealt with in the novel. The head of the kotha is Khanum Sahib, who enjoys all kind of

luxury and freedom as she is monetarily equipped and has good relations with the nawabs. No one can go against her word, ironically, not even the nawabs. In the private kothas,women used to enjoy more freedom, as it was a system largely governed without men. It would be worthy enough to mention about Guhar Mirza as he served the kotha from his childhood by doing the things suggested by the girls and prostitutes. Along with authority, Khanum Sahib also possessesa mastery in dance and music. In the novel she warns the teacher twice for teaching the wrong raagas to Umrao, which shows that she wasvery conscious about the girls and women, who were to become futuretawaifs. Thus, the private kothasportraya subversion of the force of patriarchy outside it.

Some characters who, though not being central to the narrative, aid in its development, need mentioning. People like the Maulavi and Bua Husaini uphold the moral uprightness of the society as they put their best into their work for the ones whom they love. Both of them proved to be very helpful for Umrao Jan. Father of Amiron (Umrao) prove to be a loyal person as he tells the truth in front of the judge but for that he has to lost his only daughter, who became the victim of the revenge.

Ruswa's novel takes the reader through the many turbulences in Umrao's life. Although the dislocations in Indian society created by the advent of British rule, and later by the penetration of this rule into the countryside. The consequent resistance, have been the subject of innumerable studies, the impact of such developments on subaltern classes like courtesans has scarcely received any attention.

Conclusion: Umrao Jan Ada portrays a romanticized version of a prostitute. It depicts the trajectory of an abducted girl who is made to become a courtesan, by distinctly disproving the myth of the 'fallen woman'.Just as a newly formed butterfly grows out of its larva only to live few months, a courtesan is nurtured and invested in to bring about her metamorphosis which may yield artistic impetus, both through body and mind, which lasts for only a couple of decades, before the enigma of courtesan wanes.

Umrao Jaan also presented as a Bollywood film produced by Muzaffar Ali in 1981, which has been remade by J. P. Dutta in 2006. Rusva's presence is felt throughout the novel.

His response and clever remarks render the narrative livelier. The narrative of the novel has its blotches. It has some superfluous descriptions and implausible didactic viewpoints, which we see at the end of the novel. And the novel concludes with a speech by Umrao to the profession of prostitutes. As the novel begins with a verse, the novel ends with a line of verse too- "My dying day draws near. Perhaps, oh Life My very soul has had its fill of thee."

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Needs of N–LIST in College Libraries of Assam with Special Reference to Sivasagar and Charaideo District: An Analytical Study

* Nijumoni Changmai

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Abstract- *The libraries are faced with the various challenges due to exponential growth of information universe and meet the diverse needs of users to provide faster and easier access. Today's library environment is currently undergoing a rapid and dynamic revolution leading new generation of libraries with the emphasis on e-resources. In this time, the UGC- INFONET Digital Library Consortium, INFLIBNET centre and IDEST- AICTE Consortium, New Delhi takes major initiative for college libraries users; provide e-resources through N -LIST at affordable cost. The main important things are that no subscription fee is required to deposit by the colleges of NE state to subscribe in N-LIST programme. Therefore, this paper takes an analytical look at N-LIST and tries to highlight, present status of college libraries of upper Assam specially two district, namely Sivasagar and Charaideo districts college libraries.*

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Key words: College library, E-resources and N-LIST at Sivasagar and Charaideo District.

1. Introduction: Library is the backbone of every higher educational institution. A Library is an essential prerequisite for successful implementation of higher educational programme. No formal educational programme can be successful without the help and cooperation of a Library. The Kothari Education Commission (1964-1965) was found very much serious about importance of library in higher educational institution stating that "nothing could be more damaging to a growing department than to neglect its library, give to it a law priority." The library should be an important centre of attraction of college and university. Libraries are treasure house of knowledge. In the changing environment library professionals are supposed to know the nature of the change and design competencies accordingly. Computerization electronics and telecommunication have resulted in the alteration of almost every function performed in the libraries today. The role of traditional librarianship is changing into cyberarianship to include the task of scanning, filtering, selecting, organizing and packaging the information flooding the world day in and day out. College libraries have moved out from the four walls of library and are now acting as active players in the universe of

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*   Assistant Librarian, Sonari College Library Assam

knowledge. The library environment is currently undergoing a rapid and dynamic revolution leading to new generation of libraries with the emphasis on e-resources. Lots of efforts have been taken in past few years to overcome this problem of financial crunch by resource sharing through consortia for college libraries. The UGC- INFONET, Digital Library Consortium, INFLIBNET centre and INDEST- AICTE consortium, New Delhi takes major initiative for college libraries users, provides e-resources through N-LIST at discounted price. It will enable access to scholarly information in e-format at highly discounted rate. It will facilitate desk top access to high quality e-resources to our students and researchers. The programme was funded by the MHRD under NME-ICT to extend access to selected e-resources to college covered under section 12B of UGC act as well as non-aided colleges during from 2010-2013. The programme has subsumed under e-shodhsindhu consortium as college component from year 2014 being funded by UGC. The major advantage is that no subscription fees are required to deposit by the colleges of Northeast state to subscribe in the N-LIST programe. This paper trying to highlight the needs, awareness and present status, specially selected college libraries of Sivasagar and Charaideo district of upper Assam.

1.1   Current Status of N-LIST :

As on September 6th 2018 a total number of 3088 Govt/ Govt aided colleges covered under the section 12B of UGC ACT as well as Non-aided colleges in India. Login ID and password for accessing e-resources has been sent to the authorized users of these 3088 colleges. All e-resources subscribed for college under the N-LIST project are now accessible through the N-LIST website.(http://nlist.inflibnet.ac.in)

1.2   Needs and Importance of this Programme: The N-LIST project has four distinct components:

i.   To subscribe and provide access to selected e-shodhsindhu e-resources to technical institutions (IITS, IISC, IISERS, NITS) and monitor its usage.

ii.   To subscribe and provide access to selected INDEST e-resources to selected universities and colleges and monitor its usage.

iii.   To subscribe and provide access to selected e-resources to 6000 govt/ govt aided colleges   and monitor its usage.

iv.   To act as a monitoring agency for college and evaluate, promote, impart training and monitor all activities involved in the process of providing effective and efficient access to e-resources to colleges.

The INDEST and UGC-INFONET are jointly responsible for activity listed at i) and ii) above. The IFLIBNET centre, Ahmadabad is responsible for activities listed at iii) and iv) above. The INFLIBNET centre is also responsible for developing and deploying appropriate software tools and techniques for authenticating authorized users.

The main advantages, needs and importance's of N-LIST are

i.   Remote access to e-resources with Users Id and password.
ii.   Accesses to e-resources are not bound to the IP-Address. One can use these e-resources from home also.
iii.   N-LIST provides e-resources to colleges at affordable cost.
iv.   No subscription fee is required to deposit by the colleges of North-Eastern state to subscribe in the N-LIST programme.
v.   Provide multiple accesses of 24hours a day and 7days a week and 365 days a year.

2.   **Limitation of study:**
The area of present work covered eight college libraries of Sivasagar and Charaideo district affiliated to Dibrugarh University. Sivasagar formerly known as Sibsagar and covers an area of 2668 square kilometers. The district comprises two sub-divisions i.e. Sivasagar and Nazira. Sivasagar district has acquired its distinct identity due to the co-existence of different races, tribes, languages and cultures. Charaideo district is an administrative district of Assam. It was formally declared a new district of the state on 15th August 2015. Sivasagar and Charaideo district are famous for tourism as a historical place as well as for Ahom king. Both districts come under upper Assam division. There are several institutions for tertiary education. The major eight colleges of Sivasagar and Charaideo district are –
a)   Sivasagar College(Joysagar)
b)   Gargoan College
c)   Moran College
d)   Sivsagar Girls College
e)   Sivasagar Commerce College
f)   Sonari College
g)   Sonari Commerce College
h)   Borhat B.P.B.M College.

3.   **Objectives of the study:**
a)   To know the awareness on N-LIST programme among the students and faculty members of selected colleges of Sivasagar and Charaideo District.
b)   To find out the present status of use of N-LIST programme in provincialized college libraries of Sivasagar and Charaideo District.
c)   To study the source of using N-LIST programme in the college libraries of Sivasagar and Charaideo District.
d)   To know the preferences of e-resources.

4.   **Methodology**: Data are collected from N-LIST website, conversation with the librarians of concerned college libraries and applying also questionnaire method.

5.   **Data Analysis and Interpretation:** A structured questionnaire was distributed to the college libraries to gather data pertaining to the objectives set for the study. To collect information relevant to the topic, personal interview,

phone call and E-mail communication etc were also carried out. Based on the responses received from the libraries an attempt has been made to analysis the data to present the findings thereof.

5.1 Basic Information about the College and their libraries of Sivasagar and Charaideo District

SL No	Name of the College	Year of establishment	Staff strength of the library			Stream
			Total staff	Professional	Non-professional	
1	Sivasagar College(Joysagar)	1947	3	1	2	Arts and Science
2	Gargoan College	1959	4	3	1	Arts and Science
3	Moran College	1964	5	2	3	Arts and Science
4	Sivasagar Girls College	1964	4	3	1	Arts and Science
5	Sivasagar Commerce College	1969	3	2	1	Commerce and Arts
6	Sonari College	1970	4	1	3	Arts and Science
7	Sonari Commerce College	1991	2	1	1	Commerce and Arts
8	Borhat B.P.B.M.College	1995	2	1	1	Arts

The above table presents a list of the selected colleges and college libraries according to their year of establishment, their staff strength and stream. Sivasagar college is the oldest higher educational institution in both districts. From the above table it has observed that Moran College has maximum numbers of library staff than other surveyed colleges. Borhat B.P.B.Memorial college and Sonari commerce college has least number of library staff. On the other hand in most of the college libraries non-professional staff are more than professional staff.

5.2 Basic ICT Infrastructure (Hardware) of Sivasagar and Charaideo District College Libraries.

Sl No	Name of the College	Total no's of computer	Total No of Scanner	Total no of Printer	Total No of Projector	Use of Telephone
1	Sivasagar College(Joysagar)	20	3	3	1	Yes
2	Gargoan College	14	2	2	1	yes
3	Moran College	16	2	2	1	yes
4	Sivasagar Girls College	8	2	2	1	yes
5	Sivasagar Commerce College	16	2	2	1	Yes
6	Sonari College	12	2	2	1	yes
7	Sonari Commerce College	3	1	1	1	No
8	Borhat B.P.B.M.College	2	1	1	1	No

ICT is one of the most important parts of modern libraries, without hardware facility no libraries provide web based services to its users. This table highlights ICT infrastructure (hardware) level with regards to computer,

scanner, printer, projector, telephone of surveyed libraries. It has found that except Sonari Commerce college library and Borhat B.P.B.M. college library, other all college libraries have comparatively sufficient ICT infrastructure.

5.3 Internet Connection, Power Backup Systems and use of software in surveyed College Libraries of Sivasagar and Charaideo District:

Sl No	Name of the College	Internet Connection	Wi-Fi Connection	Proper Backup System	Software use for Automation
1	Sivasagar College(Joysagar)	Yes	Yes	Yes	SOUL
2	Gargoan College	Yes	Yes	Yes	SOUL
3	Moran College	Yes	Yes	Yes	SOUL
4	Sivasagar Girls College	Yes	Yes	Yes	SOUL
5	Sivasagar Commerce College	Yes	Yes	Yes	SOUL
6	Sonari College	Yes	Yes	Yes	SOUL
7	Sonari Commerce College	Yes	No	No	Applying
8	Borhat B.P.B.M.College	Yes	No	No	No

Internet connection, power backup system, automation process are playing a major role in providing services and accessing e- resources in libraries. Almost all the surveyed college libraries have internet connection and other facilities. But Sonari commerce college library and Borhat B.P.B.M college library have yet not fulfilled the requirements for accessing e-resources.

5.4 Status of use of N- LIST in Sivasagar and Charaideo District College Libraries:

Sl No	Name of the College	N-LIST Member	Year of member ship	Users of N-List	Orientation Programmes Organized
1	Sivasagar College(Joysagar)	Yes	2013	Teachers, Research scholars and students	Yes
2	Gargoan College	Yes	2016	Teachers, Research scholars and students	Yes
3	Moran College	Yes	2015	Teachers, Research scholars and students	Yes
4	Sivasagar Girls College	Yes	2016	Teachers, Research scholars and students	Yes
5	Sivasagar Commerce College	Yes	2015	Teachers, Academic staff	No
6	Sonari College	Yes	2016	Teachers, Library staff	No
7	Sonari Commerce College	No	No	No	No
8	Borhat B.P.B.M.College	No	No	No	No

To find out the present status of use of N-LIST in Sivasagar and Charaideo District college libraries data has been gathered from the selected college libraries and the N-LIST members are presented this table. Most of the college libraries are interested in access N-LIST. At the time of survey the librarian informed that mainly teachers are interested to access information

through N-LIST according to their needs. The above table shows that some college librarian organized orientation programmes and take minimum 4 classes at beginning session for new comers regarding use of libraries, use of N-LIST and what kind of facilities available at their library.

6.   **Findings and Conclusion**: Finally following findings are found during the study.

i)   At first, most important and notable matter is that the urban area colleges are better than in rural area's colleges from every side.

ii)   It has been seen that most of college library's staff are not trained with modern technology.

iii)   In some college libraries found their poor staff and lack of modern technology for introducing e-resources.

iv)   During the survey, it has been noticed that Sivasagar college library, Sonari college library and Borhat B.P.B.M. college library's librarian seats are lying vacant which greatly hampered to take any new decision.

v)   Due to vacancy in librarian seat, some colleges are unable to organized orientation classes for new comers regarding use of e-resources and other library facilities.

vi)   Insufficient fund for college libraries also unable to fulfill their user's requirements.

vii)   It has found that mostly teachers access the N-LIST for preparing articles, preparing presentations for projects etc in maximum college libraries.

N-LIST has given great opportunity to the users of colleges to access information related to their requirements. N-LIST has improved the information access and helped in extending better library services and these led to increase user's satisfaction. It has enhanced the prestige and image of the library and helped sharing of e-resources through networking environment. Because all Govt aided college covered under section 12B of UGC Act is eligible to access e-resources through the N-LIST programme. Non-aided colleges can get benefit from the N-LIST programme by joining the programme. During the survey period some respondent have suggested that more resources such as science direct may be included in N-LIST. It is helped that programme will be accessible to more colleges with wide coverage in future. At last, Librarians and library authorities should take initiatives to create user friendly environment for the users for using this services as well as create awareness among the library users towards the benefits of e-resources and other areas for library professional.

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- iv)   Sibsagargirlscollege.edu.in
- v)   Sibsagarcommercecollege.org.in
- vi)   https://www.sonaricollege.edu.in
- vii) Sonaricomcollege.org
- viii) www.borhatcollege.org

Learning ethos and key elements of effective classroom management in higher education

* HemshikhaTalukdar

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Abstract- *Any learner enrols into the higher education institutions with certain fancy dreams or assumptions in mind. These aspirations may be related to better, higher and higher educational needs, personal or psychosocial desires as well as vocational or professional targets. Again each of the higher educational institutes have their own distinct social entity profusely vibrantwith different multi-ethnic groups and multi-cultural customs and communities encompassing a vivid range of courses and curricula and possessing many other dimensions of human life. In consonance with these circumstances, there exists a very dynamic plethora of learning ethos of the learners and enormous sundry responsibilities mount on the shoulders of the academia in order to keep up with the expectations of all levels of stakeholders and effective classroom management holds a much significant aspect in this direction, thereby acting as a guiding force towards the successful achievement of the general as well as specific learning objectives. This write-up is a humble endeavour to present a description of the varied approaches involved in maintaining a conducive classroom climate through scientific and thoughtfully well-designed instructional strategies centred aroundthe teacher's pedagogic knowledge and skills while incorporating miscellaneous management principles so as to enliven the spirit of learning in thehigher educational institutions.*

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Key words: Learning ethos, classroom climate, instructional strategies, management dynamics, teacher's tactics.

Introduction: Any learner enrols into the higher education institutions with certain fancy dreams or assumptions in mind. These aspirations may be related to better, higher and higher educational needs, personal or psychosocial desires as well as vocational or professional targets. Again each of the higher educational institutes have their own distinct social entity profusely vibrantwith different multi-ethnic groups and multi-cultural customs and communities encompassing a vivid range of courses and curricula and possessing many other dimensions of human life. In consonance with these circumstances, there exists a very dynamic plethora of learning ethos of the learners and enormous sundry responsibilities mount on the shoulders of the academia in order to keep up with the expectations of all levels of stakeholders and effective classroom management holds a much significant aspect in this direction,

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*   M.ed. Final Yr. Student, Gauhati University

thereby acting as a guiding force towards the successful achievement of the general as well as specific learning objectives.

Learning ethos: "Learning is the acquisition of habits, knowledge and attitudes. It involves new ways of doing things, and it operates in an individual's attempts to overcome obstacles or to adjust to a new situation. It represents progressive changes in behaviour. It enables him to satisfy interests to attain goals."(Crow and Crow, 1975). The word 'ethos' refers to character or beliefs or ideals characterising a community or nation. "Ethos is the articulate expression of what the community values. It includes the quality of relationships within the school, the traditions, the professional compartment, the approach to classroom management, the out-of-class decorum, the aesthetic personality of the school reflected in the student and faculty dress codes, the visual and auditory imagery, and the physical plane itself…Ethos is the way in which the school expresses (or doesn't) truth, goodness, and beauty through the experiences of every person who enters our halls."(Phillips, 2012).

Thus learning ethos is related to the ethics in learning involving the feelings of the receiver (learner)towards the sender (teacher) and may be considered as the spirit or exuberance or credibility of the total learning procedure. The aim of developing positive learning ethos should be to nurture the young adult learners of the higher educational institutes and help them to grow into confident individuals, resourceful learners and respectful contributors to the entire global human fraternity.

Classroom climate: The overall environment of the classroom constitutes the classroom climate and plays a very important role in moulding the destiny of the entire teaching-learning process.The general tone or climate of the classroom has an influence and can cultivate specific attitudes and perceptions, which means more than simply good behaviour among students. When attitudes are positive, learning is enhanced; when they are negative, learning suffers. Hence, teachers need to be aware and monitor their attitudes and perceptions as students perceive them and accordingly relate favourably to the subject or otherwise.

Classroom climate is the actual and overall learning environment of the classroom encompassing the intellectual climate, social climate, the emotional climate and the various physical aspects of the classroom. The climate variables are order and safety, success, task comprehension, and challenge promoting student motivation. Through the organisation of a proper classroom climate, continuous improvement should be emphasized, and doing better should be the target.

Importance of conducive climate in effective classroom management:

- A positive classroom climate feels safe, respectful, welcoming, pleasurable and supportive of student learning.
- There are less distractions and so most learning takes place within a properly maintained classroom environment.

- Good and conducive classroom setting can help the students achieve their goals faster.
- A conducive classroom climate supports the pupils' natural curiosity, creativity and a desire to learn.
- Favourable classroom climate aids in developing a strong rapport among the teachers and the learners.
- More student participation takes place as they learn through exploration and discovery using their senses.
- Proper classroom climate and the psycho-social interactions therein ultimately blessesthe learners with a feeling of contentment.

Instructional strategies:

At the higher education level, even the subtlest thing can make a huge lot of a difference in the students' mindsets and hence the overall the teaching-learning process. Teacher's attitude, behaviour, approach, speech, action and so forth has both direct and indirect impact on the learners' perception of instructional information. Hence everything, right from entering the classroom, greeting the students, opening a new topic, manner of presentation, closing style etc. comes under the umbrella of the teacher's instructional strategy.For every new topic, the instructional strategy must be prepared keeping in mind the learning objectives and if necessary, also redesigned considering the learning outcomes. Again, for every new day as well as from time to time the teacher's strategies must be changed with a view to the students' psychology of keeping the classroom motivated to learn. Also, the instructional objectives need to be so set that those are straight-forward without any ambiguous meaning and even the students may be involved in the framing of the final instructional objectives for the unit. Student participation leads to increased motivation of the learners and satisfaction on the part of the teachers as well thus contributing to the success of the instructional process.

Some significant instructional inputs for effective classroom transactions and management:

- Written products comprising different written materials having scientific accuracy and pedagogic quality, books, articles and other relevant information needs to be collected, compared and compiled for developing instructional strategy.
- Spoken products include verbal inputs liketopic-related appropriate word jargons, audios, dialogues etc. to enliven the class.
- Constructed products like flow-charts, pictorial charts, maps, clay models, images, videos etc. are based on the content and context of reference and bring out the desired evidence of specific behaviour as per the instructional objectives.
- Artistic performances may include drawing flow-charts, demonstrating through pictorial inputs, maps, simulated models, videos etc. The teacher may involve in team-teaching on demand of the subject-matter

usingmusic, hilarious as well as serious facial expressions, intonations, etc.

• Leadership behaviours of the teachers aids in collaborative lessons, inclusive classrooms, quality interactions, an organised and systematic approach to instruction,seeking expert suggestions, monitoring and adjusting various participatory roles etc. to assist the learners' progress.

• Cognitive structures are crucial as the more comprehensible input, the greater the learning proficiency. Using levels and visual tools for concrete as well as abstract learning experiences, inductive/deductive/expository/ discovery teaching methods, content sequencing and clustering as per the different maturity and ability levels of the pupils encourages the learners in developing their own cognitive maps and subsuming the new knowledge under the already formed concept network.

• Values like self-control, compassion, gratitude, service to others, environmentalism etc. can be inculcated through the right kind of instructional strategies.

• Self-actualisation is the ultimate goal of developing the instructional strategy which refers to the need for personal growth and development throughout one's life.

Management dynamics:

"Management is a science which concern with how the people cooperate to reach the organization goal"(Kimani, 2011: 17).The higher educational organisation dynamics refers to the processes of continuously strengthening the available resources and enhancing the performances of the workforce to promote higher learning, feasible research practices and strategic management to achieve better alignment of policies and priorities.

• **Planning:** Strategies for determining the learning objectives, time for presentation, explanation of the main concepts, associated skills, teaching techniques, manner of media, etc. must be well-planned while developing the instructional strategy.

• **Selecting:** For effective classroom management the teachers' existing knowledge-repository should be appropriately strengthened and suitable learning components for various learning outcomes are to be selected.

• **Developing:** Designing problem solutions involving diverse learning components works for constructivist strategies associated with different dimensions of academic literacy.

• **Motivating:** Motivation and appreciation through public praise, certificate, prizes like books, novel opportunities for participation can contribute significantly in the fulfilment of the learning targets.

• **Managing change:** For handling any crisis situation,a well-designed human resource management strategy should be there with the teachers.

• **Maintaining relationships:** Good inter-personal relationships among the students and the teachers adhering to a responsible pattern of conduct

and demeanour is a must for classroom management.

• **Evaluationg and appraising:** This alongwith record keepinghelps to monitor the performance of each individual in aclassroom and to identify the development and capacity building needs.

Teacher's tactics:

Instructional processes in the class can go on smoothly and effectively only when there is a healthy and conducive climate in the class. Hence proper classroom planning and management tactics of the teacher, taking into account the various instructional variables like introductory focus, involvement, personalisation and feedback can help in achieving the formulated instructional objectives successfully.

Dr. APJ. Abdul Kalam, former President of India (2002-2007) states that "the resource of the youth is an important building block for transforming India into a developed nation".However, the youths may face different problems like family problems, college problems, social problems and personal problems which may pose concentration issues in the class and ultimately lead them astray. Therefore the teachers can make use of certain situation-specific tactics in attracting the learners' attention and managing an all-inclusive and effective classroom environment such as;

• **Equity and excellence for all students:** Treating all the learners with respect and equality increases their excellence in all spheres of life and induces responsible conducts keeping a balanced classroom climate.

• **Subject competence:** Professional competenciesare key elements in effective classroom management increasing the interest and motivational level of all the students and helping in concept formation.

• **Pedagogical knowledge:** This helps in better learning by the students as it aids the teachers to be aware of their learning capabilities and devise effective lesson-plans, more specific assessment tools, re-arrange the classroom settings etc.

• **Inclusive learning strategies:** Instead of behaving like a commander, the educator must motivate, promote and facilitate various inclusive learning activities of the young adults like group-discussions, problem-solving, case-studies etc. to create a conducive classroom climate.

• **Cooperation:** The academicians must be able to lend a helping hand to the learners, co-operate with one another in all curricular matters to retain the vigour of the classrooms which is very conducive for the greater development of the institutions.

• **Empathy:** A good teacher is always empathetic towards the pupils' feelings, emotions and sentiments acknowledging the inter-personal sensitivity of their relationships. This enables the learners to develop trust and a positive regard towards their teachers to foster a 'learning environment'.

• **Unconditional acceptance:** All categories of students must feel safe,

comfortable, energized and totally accepted by the educators to seek help and advice from the teacher whenever the necessity arises.

- **Openness:** Constructive criticism by the teacher helps the learners to open up and acknowledge their flaws and improve continuously. Openness on the part of the teachers in sharing various resources to all the students greatly aids in effective classroom management.

- **Well-defined standards for practice and performance:** A clear vision of good teaching- learning helps to set goals, form rapport, avoid judging, reinforce and encourage positive actions etc. simultaneously enhancing the overall learning environment.

- **Reflective Practitioner:** A true professional always takes feedback from the learners, introspects on the deficient areas of learning and works on them. This type of reflective behaviour of the practitioners can genuinely improve the quality of classroom climate.

Conclusion: Therefore, it is apt to say that the climate of the classroom influences the attitudes of the learners towards learning ethos and resultant behaviour. Attitude towards learning needs to be life-long which places an enormous amount of responsibility upon the teachers for effective classroom management.

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Gunotsav at a glance for the quality improvement of primary education in Assam

* Gobinda Brahma

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Abstract- *Right to Education (RTE) Act, 2009 is clearly mentioned in article no. 21A of Indian constitution. According to this act, primary education is the birth right of every child aged between 6-14 years. Sarva Siksha Abhiyan of 2001 has taken various steps for the universalization of primary education of the country which is the largest primary education programme of the world.*

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Key words: Quality, Improvement, Primary, Education

1.   Introduction: Gunotsav is the primary education development programme which is adopted from the Gujrat state of India. The first phase of Gunotsav is introduced in Assam in 2017. Gunotsav is mainly observed for the quality improvement of elementary education in Assam. It tries to fulfil the mandate of RTE, 2009 where every children of India aged 6-14 years have the constitutional right to receive the quality of elementary education in the country. So, the Assam Government has already conducted three phases of Gunotsav programme in the state.

1.01: Objectives of Gunotsav:
To provide quality of elementary in Assam.

To fulfill the mandate of RTE, 2009.

To indicate learning gapes and to design effective strategies to meet up these gapes.

To ensure learning enhancement and achievement of learning outcomes by all children at elementary level.

To assess the performance of schools on areas viz-Scholastic, co-scholastic, availability of infrastructure and community participation in schools.

To ensure greater participation of all stake holders starting from teachers, students, administrators, communities and enhance accountability among them for quality education.

To support the schools and education system to improve the quality of education and ensure better functioning of schools.

Clarify the teachers regarding the philosophy of CCE (Child Care Education) and to implement the same in true spirit.

Holistic diagnosis of elementary schools for better performance.

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*   Assistant Professor, (Selection Grade) M.C. college, Assam

To develop accountability of teachers in learning environment.

1.02: Source of Data Collection: Data is collected from the secondary sources i.e. from Books, Journals, Govt. report, internet etc.

1.03: Executive Body of Gunotsav:

State Education Department.

Director of Elementary Education.

SSA (Sarva Siksha Abhiyan)

DEEO (District Elementary Education Officer)

SCERT (State Council of Education Research and Training)

BEEO (Block Elementary Education Officer)

1.04: Areas of Assessment:

There is appointed some external evaluators from the various departments to assess the following areas of elementary schools of Assam. So, multiple choice test and five point scale have used in these assessment process.

Area	Indicator	Marks
A. Scholastic:	* Reading, writing and Numeracy.	**60%**
B. Co-Scholastic activities:	* Morning assembly * Recitation of Jatiya Sangeet. * Celebration of National and Internationalday * Annual sports. * Arts education. * School Library. * Students parliament * Plantation. * Mental health and hygiene. * Disaster Management. * Personal and Social Skills.	**20%**
C. Availability of Infrastructure: (National and Human Resource)	* Toilets for Boys and Girls. * Drinking Water. * Classroom. * Furniture. * Provision for electricity. * Hand washing facility. * Use of Computers. * Boundary Wall. * Play Ground. * Mid-day meal. * No. of teachers. * No. of Students (Enrolment)	**10%**
D. Community : Participation	* Participation of SMS in School activities.	**10%**

  * SMC meeting.
  * Monitoring of school functioning
    by SMC.
  * Social audit.
  * Summer Camp.
  * Community Contribution.
  * Community support in quality
    enhancement of schools.
  * Mothers Group, Saturday club,
    Utilisation of grants.

1.05: Result through the Grading System: The grading of schools for academic achievement is given as follows:

Grade	Score (in %)
A^+	87 and above
A	74-85
B	61-73
C	48-60
D	Below 48

So, State Education department has taken sole responsibility to declare the result of Gunotsav programme. After declaration the result, state government will take remedial steps for the quality enhancement of elementary schools of Assam.

1.06: Expected outcome:

It will help to track academic performance of each child across all subjects throughout the elementary cycle.

It will indicate learning gaps of children.

Design and implement remedial strategies based on the identified learning gaps.

Enhance learning of students through timely regular feedback and bring about improved learning out comes.

Increase retention rate and reduce dropout rate.

Generate awareness and greater participation among the community of people and all stake holders.

Ensure for better school functioning.

1.07: Conclusion:

Gunotsav is the best primary education programme through which the quality of Elementary Education of Assam can be evaluated. The students learning outcome, poor enrollment, attendance of teachers, lack of academic support of the Head masters and teachers, girls exclusion from primary education, poor management of schools, dropout rate, out of school children, community participation etc. can be depicted through this study. So Gunotsav will help to generate a greater participation among all the stake holders and ensure for better school functioning of the state elementary education.

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'Connecting culture with mathematics classroom'- A study on primary students of Ukhrul district, Manipur

* Genevieve Ngasainao
** Vandana

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Abstract- *There had been significant push from all stakeholders of school education to make learning of mathematics easier, interesting and much fruitful. Through NCF-2005 to position paper by National Focus Group on 'Teaching of Mathematics', a conscious effort has been made in this direction. All these efforts hail the basic idea of making mathematics learning more enjoyable, meaningful and engaging. Also it strongly pitches for removing the fear of failure from students' mind. Even after all these efforts the ASER report (2014) kept reporting the deteriorating learning level among students in mathematics. The present paper discusses that how a teacher can help students in learning mathematics joyfully and interestingly without fear. It raises a hope for learner and teacher both for accomplishing the greater goal of learning and teaching mathematics through innovative strategies. The initial input from the research study suggests that use of ethno-mathematical strategy at lower primary level can really benefit students learning.*

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Key words: ethno-mathematic, Tangkhul tribe, innovative teaching strategy, joyful learning

Introduction: Although mathematics is considered as one of the core subject in school education however its outcome shows that importance of the subject is still lacking as the survey conducted by various agencies had continuously reported students' poor understanding and achievements in mathematics (ASER report-2014). Poor learning level especially in the rural areas deprived of basic need affects their performance in learning. Singh and Singh (2012) noted how deprived people living in slum whose learning outcomes of elementary schools were less satisfactory than learning outcomes of elementary schools at national level. Children living in the tribal areas with various challenges faced a similar kind of situation in learning. As responsible citizen it is our duties to look on the welfare of the nation which definitely include the concern for deprived section of society to make education inclusive for all sections of society, henceforth, contribute to the well being of the society.

Teacher's behaviour and attitude greatly affects learning as highlighted

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*   SRF, NEHU
**   Assistant Professor, NEHU

in the National Policy on Education (1986) as mentioned in (Sharma et al., 2013.). It recommended warm, welcoming and encouraging approach is needed for child and the best motivation for the child to attend school and learn. The previous problems i.e. fear, the psychological aspect is manifested in the NCF (2005). Sarma's (2014)'s article "Learning Mathematics in Early Grades" revealed, children can do many things, however, fear hamper students' learning.

Another problem of mathematics subject was that student finds mathematics as boring subject because of its abstract nature in teaching that might lead to lack of interest among students for learning mathematics. After analysing some of these problems this paper discusses how a teacher can help students in learning mathematics joyfully and interestingly without fear. It raises hope both for learner and teacher in accomplishing the greater goal of learning and teaching mathematics through innovative strategies. In the present paper the researcher had discussed one strategy based on the contextual learning of the learner.

Need of the study: Primary education is a stage where the child enters in the school with her/his cultural milieu. It takes time to separate the home culture and the schools. In this initial stage it is important to ensure the smooth transition of students from home to school. In this context using the familiar language and objects for teaching help students to develop a friendly and fearless approach towards learning. The primary level of learning has even stronger implication for teaching and learning of mathematics. Mathematics is widely considered as one of the most difficult subjects and all the beginners approach toward learning mathematics is surrounded by skepticism and fear. This create hurdle in the initial stage in the process of teaching and learning mathematics. But if a teacher can utilize and capitalize his teaching on cultural context of students it can make the learning of mathematics joyful, interesting and easier.

Since the position paper (2006), NCERT on mathematics focus a lot on making mathematics contextual and constructive, an effort has been made by the researcher to teach students through ethno-mathematical strategy. It is always helpful to have the contextual knowledge to study any society. The researcher have focused on the contextual learning and used cultural resources as a teaching strategy to make mathematics learning interesting and contextual for primary students of Tangkhul tribe.

Objective of the study: The objective of the present study was to know, how the cultural context of students can be utilized to maximize learning outcome of students in mathematics at primary level.

Methodology: Since the study propose to use cultural context of mathematics in the classroom. For doing so researcher first need to explore the mathematics which existed in the culture of Tangkhul Tribe. The researcher explored the cultural methods and practices involving basic mathematical concepts. The

researcher developed a good rapport with the people of Tangkhul Tribe which helped her to find out these practices. After exploring these practice the researcher implemented these practices to teach the primary class students. The feedback and after class reporting by students has been truly encouraging and discussed in this paper

Mathematical concepts explored from Tangkhul tribe:

The traditional corn counting was one of the practices used long back and somehow practicing by few people who find it difficult in counting. The cultural games had the components of counting, addition and division. The mathematical elements in cultural context were arranged under the sub-heading for teaching mathematical concepts in the classroom are as follows:

•   Counting of corn seed had basic operation arithmetic.

•   Cultural game known as "Lungyárva" in local dialect ingrained the concept of counting, addition and division.

•   The traditional drawing and picture on the traditional house and traditional attire of the cultural which had geometrical elements.

•   The cultural measurement existing in the culture like "Lam", "Mataknakei", "Khap", "SeÌiraÌ", etc. These elements were related to concept of measurement.

These were some of the elements identified and adopted for classroom teaching to help children in understanding more easily by using the cultural content in learning.

Utilizing the cultural mathematical practices in classroom:

Keeping the objective in mind the cultural context of students to help children in learning mathematics joyful and interesting without fear, however, the researcher use the ingrained cultural resources for teaching the concept. Like for an instance for teaching the geometrical shapes like rectangle, triangle the researcher not only teach from the textbook concept only but the cultural material having the attributes in it. Figure 1 shows the rectangle and circle drawings on the traditional house that was taken for teaching purpose.

Rectangle   Circle

Figure: 1

Like in the same way for teaching other concepts various cultural resources were used for teaching strategy for example, teaching the concept of measurement using the cultural context synonymously with the textbook concept of measurement. Figure 2 shows cultural context of measurement.

Pictures	Cultural context of measurement
	Ven pati (pang mati)- Measurement that starts from the small finger to index finger called ven pati where 'Ven' means finger and 'pati' means fingers. Thus it is called four fingers in English. Students would be taught that the smallest unit of measurement would be taken as ven pati and explained also the standard unit of measurement i.e. millimetre (mm).
	Wai- Measurement which starts from expanded thumb to last small finger called Wai. This measurement is the bigger unit of measurement. The bigger form of measurement in standard unit is centimeter or centi.
	Khap- It is the hand span measurement as shown in the picture. The hand span measurement is called khap and which is bigger to wai. The measurement bigger to centimetre is decimetre or deci.
	Seira/ khudup- The measurement larger to khap is Seira or Khudup and the standard form of measurement decametre or deca.
	Mataknakei (mathik akai)- The second largest unit called mataknakei or huining whereas the second largest standard unit of measurement is hectometre or hecto.
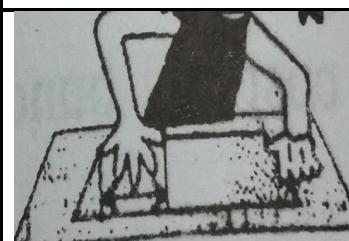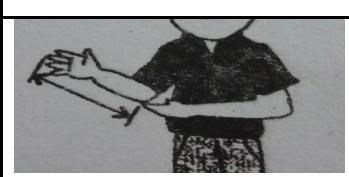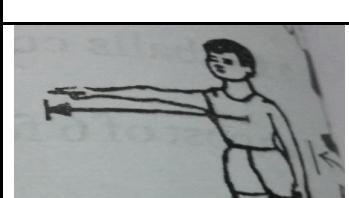
The students were taught with the help of cultural practices found in the culture for two weeks. Children during the teaching process the students were shown the traditional house at first. They were asked to look at the

house and point out the diagram which the researcher had taught from the textbook. And for teaching the concept of measurement the local measurement were used for teaching standard form of measurement.

Findings and discussion: using the cultural mathematical practices in classroom received manifold feedback from students. After analysing the learning experience of students, all the experiences were presented under these three major categories;

- Fear about mathematics
- Interesting and joyful learning
- Learning the basic mathematical concept

1.   Fear about mathematics- The cultural teaching helped students to remove fear from their mind as it was observe by the researcher that while students were shown the cultural diagram from the traditional house there was a smile on students' face which is a simple gesture but a positive attitude responding from the strategy. Learning has to take care for children' psychological aspects so that children learn joyfully without fear and do not take learning as burden (NCF, 2005).

The researcher also had informal conversation with students after two weeks of teaching. As the planned concepts were taught, I was not going to teach them again. There was a mixed feeling among students and most of them were asking me to take more classes. I told them it was not possible for me to take classes and also they were having their exams; however, they said they were willing to sit for extra class if I could teach them. I was amazed and surprised with overwhelming reactions from students. I was encouraged to witness their increasing interest in learning mathematics. It was just opposite to their usual reaction for the mathematics' classes taught through traditional teaching methods. In one of the final classes while talking about the mathematics classes taught by the regular teacher the students expressed their desire to learn mathematics with the new strategy applied by the researcher.

2.   Interesting and joyful learning- Educationist like Pavlov, Thorndike in their laws of learning discussed how interest affects leaning. Learning with interest leads to readiness to learn which make learning more effective. It was found that students are interested to look at those pictures seeing those familiar things which are connected to their life.

The interesting part was that when I ask some students to make some holes which they will play the next day they willingly took initiative to make holes before class. I do not point their name but they voluntarily responded, "**Miss we will...we will**". Then I told that there was time to make the hole as recess time was over for that day but they reply hurriedly that they will come the next day more early than normal timing. It shows their interest and willingness to play and they are not scared of me as a teacher.

Teaching is best effective when there are lot of interaction between

pupil and teacher. When I introduced the cultural material in the classroom, i could easily see the curiosity and glee on the face of   learner. Also slowly as we moved farther classes after classes the interaction with students kept on increasing. .

3. **Learning the basic mathematical concept**- when students were asked to point out the figure from the drawings on traditional house it was found that they successfully did the task. Initially students were taught in the blackboard the shapes and its properties after which they were given the picture and asked to point the figure or shape which the researcher has taught. Almost all the students can point out what has been taught. Another concept was measurement where students were taught with the help of cultural measurement existing in culture. Local term of measurement were used and found effective when majority of the class could remember their local measurement term synonymous with the standard form of measurement.

Besides, students' feedback and responses schools principle was delighted and accepted by request to teach the students. The principle made me to explain my study and the concept of my strategy and it happen that principles responded positively and was willing to adopt this innovative teaching if student find it easier to learn. They also asked me if I can do something they are ready and will support for any help. The words of encouragement helped me in my deliberations and I thought there are lot of possibilities in the coming future.

Conclusion:

The findings of the study provide encouraging output for the teachers and learners in the field of mathematics. It helps teachers to tackle the basic hurdles in learning mathematics. Absence of fear from the mind of children prepares them for the classes and makes them ready to learn. Study also suggests that utilizing the cultural mathematical elements for classroom teaching develop interest among students and makes learning experience joyful. The study offers a strategy to teachers so they can battle out the initial hurdles of teaching and learning of mathematics. Overall the strategy can be useful for improving the learning outcome in mathematics.

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Effect of obese and physical activity on hypertension

* Md. Fakhra Shayan

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Abstract- *One hundred sample selected for this research purpose. The purpose of the present study was to find the relationship between obesity and physical activity in terms of hypertension. Two hypotheses were formulated for empirically verification. Age range of the respondents was 22-36. There is a difference between obese and non obese in terms of blood pressure. Obese group showed high blood pressure than non obese group. Physically active group showed standard blood pressure although physically passive group showed superiority in blood pressure.*

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Keywords: Physical, Activity, Hypertension

Introduction: Blood pressure is determined both by the amount of blood your heart pumps and the amount of resistance to blood flow in your arteries. High blood pressure is a common condition in which the long-term force of the blood against your artery walls is high enough that it may eventually cause health problems, such as heart disease. High blood pressure generally develops over many years. Most people with high blood pressure have no signs or symptoms, even if blood pressure readings reach dangerously high levels.

Obesity is defined as the abnormal accumulation of e"20% of body fat, over the individual's ideal body weight. The National Institutes of Health have defined 30 kg/m^2 as the limit over which an individual is qualified as obese. Accordingly, the prevalence of obesity in on the increase in children and adults worldwide, despite World Health Organization warnings.

Obesity can result in serious health issues that are potentially life threatening, including hypertension. Obesity ultimately results from an imbalance between energy intake and energy expenditure (Rosenbaum M, Leibel RL). previous findings have shown that genetic predisposition does not automatically lead to the development of obesity, because eating habits and patterns of physical activity may play a more significant role in the amount of weight gained (Racette SB, Deusinger SS).

•   Being overweight or obese. The more you weigh the more blood you need to supply oxygen and nutrients to your tissues. As the volume of blood circulated through your blood vessels increases, so does the pressure on your artery walls.

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*   Department of Psychology, J.P.University, Bihar

•   Not being physically active. People who are inactive tend to have higher heart rates. The higher your heart rate, the harder your heart must work with each contraction and the stronger the force on your arteries. Lack of physical activity also increases the risk of being overweight.

Physical inactivity is strongly positively associated with hypertension, and intervention studies have demonstrated that increased physical activity is effective in the treatment of high blood pressure in a variety of populations (J. Stamler, R. Stamler, and J. D. Neaton). Several studies have reported useful data on the benefits of exercise, health, and nutritional program in children (S. D. Leary, A. R. Ness, G. D. Smith et al. 2008). However, to the best of our knowledge, relationships between physical activity and hypertension have not been studied in Indian context. In the present study, the relationship of blood pressure, obesity and physical activity of adult person has been studied.

Purpose of the study: The purpose of the present study was to find the relationship between obesity and physical activity in terms of hypertension.

Hypotheses: Following hypotheses were formulated for empirical verification.

1.   There will be no significant relation between obesity and high blood pressure.
2.   There will be positive and significant relation between physical activity and hypertension.

Methodology:

1.   Sample: This study was conducted in city of Chapra among adult aged 22–36 years. 100 samples have been taken from chapra district.

Tools:

a)   Personal data sheet prepared for collecting personal details like height, weight, obesity and age.
b)   Sphygmomanometer for measuring blood pressure
c)   BMI chart for asses obesity
d)   Daily activity sheet prepared by researcher

Result:

It was hypothesized that there will be no significant relation between obesity and high blood pressure. According to BMI sample was divided into two groups. One is called obese group and other is non obese group. By the PDS, obese group had given information regarding daily schedule, intake food and other relevant information as well as non obese group. Two times measured blood pressure of respondents and compare the situation. Scores were collected separately and interpreted.

Table No.-1
Systolic condition

Variable	Group	No	Mean	SD	SE	t	df	p
Blood pressure	Obese	42	130.80	7.56	1.16	4.22	98	.01
	Non Obese	58	124.05	6.43	.89			

Table No.-2
Diastolic condition

Variable	Group	No	Mean	SD	SE	t	df	p
Blood pressure	Obese	42	92.16	8.38	1.29	3.92	98	.01
	Non Obese	58	85.56	7.92	1.09			

In the light of the result displayed in above table that obese group shows high blood pressure than their counterparts. Thus the null hypothesis is rejected. The first hypothesis was not confirmed.

It was hypothesized that There will be positive and significant relation between physical activity and hypertension. Physical activity sheet were administered on respondents and collect relevant data.

Table No.-3
Physical activity and Hypertension

Variable	Group	No	Mean	SD	SE	t	df	p
Blood pressure	Physically active	56	82.24	9.24	1.23	2.50	98	.01
	Physically passive	44	86.76	8.78	1.32			

Table No.-4
Systolic condition

Variable	Group	No	Mean	SD	SE	t	df	P
Blood pressure	Physically active	56	122.24	6.16	.82	3.22	98	.01
	Physically passive	44	126.46	6.84	1.03			

In the light of the result displayed in above table that passive group shows high blood pressure than their counterparts. Thus the hypothesis is retained. The second hypothesis is confirmed.

Conclusion:

There is a difference between obese and non obese in terms of blood pressure. Obese group showed high blood pressure than non obese group. Physically active group showed standard blood pressure although physically passive group showed superiority in blood pressure.

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- email fshayan46@gmail.com
- shayans001@gmail.com

Effect of Trataka Practice on Inteligence of Sedentary College Going Women

* Krishna R Nibu

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Abstract- *The purpose of the study was to find out the effect of Trataka practice on intelligence for which sixty participants of B.A II & III with the age range between 19-21 years were randomly selected from Govt Degree College , Kota , Sharnapur (U.P) of academic session 2017-2018 who were divided equally into experimental (N=30) & control (N=30) group respectively. The subjects were administered a questionnaire on Intelligence developed by Dr. S. Jalota to know the initial status of both the groups, before the actual administration of the tratakapractice . Six week tratakapractice were given to experimental group which included trataka practice with candle , and shavasna. Control group was not exposed to any kind of treatment. After the completion of the six week tratakapractice post test data was taken of both group (experimental and control group) on intelligence by administrating the same questionnaire. The statistical technique employed was Analysis of Covariance (ANCOVA), to find out the effect of tratakapractice on intelligence. The findings of the study reveal that there was no significant effect of tratakapractice on intelligence. Although the pre-mean score and post mean score of both the groups differs. This might be due to the testing effect, because the pre test makes the participants sensitive for further testing.*

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Keywords: Trataka Practice, Emotional Intelligence, Nature, Social intelligence

Introduction: The concept of Emotional Intelligence has roots in discussions that began as early as the late 1930s, when researchers began describing a non-intellective intelligence sometimes described as "social intelligence." Emotional Intelligence itself was first defined in the early (s by (Salvoy and Meyers1990). as "a type of social intelligence that involves the ability to monitor one's own and others' emotions, to discriminate among them, and to use this information to guide one's thinking and actions." Salvoy and Meyers expanded their definition to include "the verbal and non-verbal appraisal and expression of emotion, the regulation of emotion in the self and others, and the utilization of emotional content in problem-solving."

Common criticisms of emotional intelligence and emotional intelligence measures are the multitude of qualities encompassed by the concept and its

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*   **Assistant Professor, Lakmibai National Institute of Physical Education, Gwalior (M.P.)**

loosely defined nature. Some authors have described overlaps between emotional intelligence models and personality constructs. Therefore, careful analysis is required to determine what is and what not emotional intelligence. The criticism extends to the instruments used to measure and assess emotional intelligence.

Various investigators have engaged in research designed to examine and apply emotional intelligence constructs within academic, medical, and other learning settings (Barker, John W. 1965). Lam et al investigated the notion that advanced emotional intelligence was correlated with greater individual performance, often above and beyond that associated with one's level of general intelligence. Although yoga is more widely known for the beneficial role it plays in the development of a person's physical attributes as well as with the medical conditions that affect a person's being on a physical scale, it also helps substantially in improving a person's metal attributes. There are many techniques in yoga for focus and yoga asanas for concentration such as the Surya Namaskar that helps the body relax and allows the mind to open up (Boespglug, Leray R. 1968). Pranayama and Meditation are the best known yoga techniques to bring about increased concentration and memory power. Specific yogic asanas such as the inverted poses help to nourish the brain by enhancing the blood circulation and increasing oxygenated blood in the body (Bond, Marjorie Helen. 1959). One of the best and most effective yoga concentration exercises is known as the Tratak.

The purpose of the study was to determine the effect of tratakapractice on intelligence of sedentary college going women . The study was delimited to the B.A II and III year students of Govt Degree College , Kota , Sharnapur (U.P) for the academic year 2017-2018. Further the study was delimited to the Govt Degree College , Kota , Sharnapur (U.P) female students only.It was hypothesized that tratakapractice may improve intelligence of college going sedentary women .

Methods:

Total of sixty (N = 60) subjects were selected randomly from Govt Degree College , Kota , Sharnapur (U.P) and randomized group design was used. The age range of participants was 19-23. Thirty (N = 30) subjects were selected from B.A. II year and BA III year (N = 30) subjects were selected. The intelligence of subjects was measured with the help of a questionnaire constructed by Dr .S. Jalota.

For the improvement in emotional intelligence tatakapractice was given and it included Tratak practice with candle and Shava Asana. A pre-test data on intelligence was taken with the help of a questionnaire developed by Dr.S.Jalota. After experimental treatment the same test was administered and was termed as post test. The test was scored as per the guidelines suggested in the manual by the author. Descriptive statistic was also computed and to compare the pre-test and post-test of experimental and controlled group

analysis of covariance (ANCOVA) was employed at .05 level of significance.

Results

<div align="center">

Table 1.

Mean value and standard deviation of Experimental and Control Group

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Groups	Pre Mean	Pre SD	Post Men	Post SD
Experiment Group	35.76	11.37	39.30	11.32
Control Training	33.16	10.16	37.39	12.9

<div align="center">

Figure 1

Pre-test and Post test illustration with Descriptive Statistic

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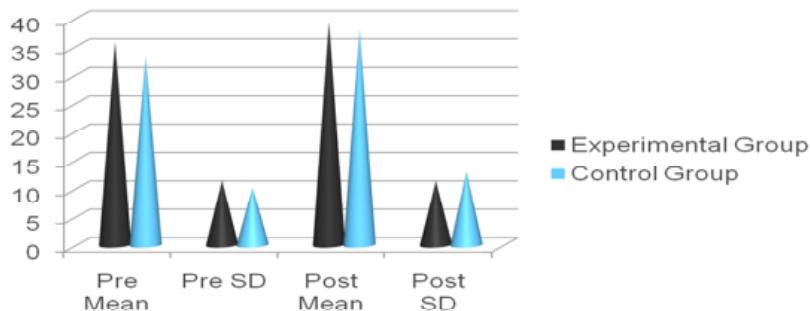
The effect of concentration training on intelligence was analyzed by computing ANCOVA.To eliminate

<div align="center">

Table 2.

Analysis of Co-Variance between pre-test and post-test scores of experimental and control groups

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SV	SS	df	MSS	F Value	Sig.
Treatment	10.47	1	10.49	.167	.684
Error	3578.47	57	62.47		

<div align="center">

*significant at .05 level, F.05 (1, 57) = 4.00

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The results of the study indicate that there is no significance difference on intelligence as a result of tratakapractice.

Discussion and Conclusion:

Literature on intelligence reveals (Burely ,L loyd R and Anderson ,Roy Lcnard. 1955) that it usually gets developed in childhood and there is significant difference is probably due to the above mentioned fact. It can also be observed that there is a slight increase of intelligence between pre and post test as scores of experimental or controlled group. It may be due to the reason that the subjects might have learned after pre test as usually there is a tendency to discuss among the friends, it may also be due to the reason the some test of intelligence was administered to the students during pre and post treatment and the gap between the administrations about 6 weeks. On the basis of

findings the researcher has concluded that concentration training had no significant effect on the improvement of intelligence and the scholar has also concluded that if the training programe time increased more than 6 weeks then significant changes can be seen.

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Study of Physico–Chemical Parameters of Ranchi Lake

*Ajay Kumar Choudhary

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Abstract- *The present work was carried out during summer and rainy period on Ranchi Lake. Physio-Chemical analysis of physico-chemical parameters such as both atmospheric and surface temperature, transparency, pH, CO2, and DO values were recorded. All the values of physico-chemical parameters showed slight variations during the summer and rainy seasons.*

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Key words: Physio-Chemical analysis, water body, litre polyethylene bottles

Introduction : The study had been restricted to the shallow littoral zones of the water body. The sampling at different sampling sites of the was done by gently wading into the water as far as possible and taking water samples by hand into one litre polyethylene bottles. Water samples were taken from the surface i.e. from upper 5 c.m. layer.

The analysis for physico-chemical characteristics of water was don following the standard method given by APHA (1960), Golterman (1969) and Trivedy and Goel (1984).

Some of the parameters were analysed in the field while most of the parameters the samples were preserved using suitable preservative as indicated by Trivedy and Goel (1984). The whole analysis was completed within 48 hours.

The air and water temperature was measured with an ordinary mercury thermometer with an accuracy of 0.1^0 centigrade.

The data recorded on physico-chemical characteristics of water was statically analysed in aquatic environment, an statistical test by (FAO) 1979.

The data was analysed for mean (M) and standard deviation (SD) co-efficient of standard deviation (CSD) variation (V) and co-efficient of variation (CV) since these analysis could provides all essential information required in Limnological Study (FEO) 1979.

Materialand Methods:

StudyArea: Ranchi Lake is a beautiful lake located at the heart of the city and at the base of Ranchi Hill. The Ranchi Lake offers a beautiful and unique experience to the visitors. Located far away from the hustle and bustle of city life, this lake is frequented by many people during their tour of Ranchi. The

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* **Department of Zoology, Dr. Shyama Prasad Mukherjee University, Ranchi Jharkhand, India**

Lake of Ranchi, located near the GPO of the city, was excavated by Colonel Onsley, a British agent in the year 1842. The lake is adjacent to the Ranchi Telephone Exchange. Situated in the middle of the city, the Ranchi Lake has enhanced the beauty of the place. The lake is visited by the local people as well as the visitors coming from other parts of the country. People can also enjoy boating at this freshwater lake of Ranchi. The exotic location of the Ranchi Lake has made it a perfect location for spending ideal vacation with family and friends. The vast extension of the lake and the blue sky above enable visitors to have a great time. The banks of the Ranchi Lake at Ranchi can also be utilized as picnic spot. As it is located at the base of the Ranchi Hill, people can have a splendid view of the hill while visiting the lake at the same time. They can also plan short trips to the Ranchi Hill and Shiva Temple during their tour to the Ranchi Lake. The bottom of the pond is flat with of soil.

Collection of Water Sample: The study had been restricted to the shallow littoral zones of the water body. The sampling at different sampling sites of the water body was done by gently wading into the water as far as possible and taking water samples by hand into one litre polyethylene bottles. Water samples were taken from the surface i.e. from upper 5 c.m. layer.

Physico-Chemical Analysis: The analysis for physico-chemical characteristics of water was don following the standard method given by APHA (1960), Golterman (1969) and Trivedy and Goel (1984).

Some of the parameters were analysed in the field while most of the parameters the samples were preserved using suitable preservative as indicated by Trivedy and Goel (1984). The whole analysis was completed within 48 hours. A brief description is as follows :

The air and water temperature was measured with an ordinary mercury thermometer with an accuracy of 0.1^0 centigrade.

The transparency was recorded as the depth upon which a Secchi's disc was visible, when lowered in water or was taken out of water. pH was measured by using battery operated single electrode portable pH meter (Toshniwal Model CI-47). The conductivity was determined by a conductivity meter (Systronix Model 3CI-1).

The dissolved oxygen was determined by modified Winkler's method (Welch, 1952; Odum, 1971). The free carbon dioxide and total alklinity were obtained by titrating the sample against 0.1N phenolphthalein indicators respectively.

Total suspended solids were estimated by filtering 250 ml of sample weighing the dried residue left over the filter paper. The total dissolved solids were measured as residue left after evaporation of filtered sample. The suspended organic matter was estimated as weight loss after igniting the suspended solids in a silica basin at 600^0C.

Chemical oxygen demand was measured by reflexing the sample with

potassium dichromatrically by developing a colour with EDTA, sulphanilic acid and naphalamine hydrochloride sodium acetate. Biochemical oxygen demand was measured with the help of BOD incubator.

Phosphate-phosphorus was analysed colorimetrically by ammonium molybdate-stanous chloride method and chlorides by titrating the sample against silver nitrate using potassium chromate as indicator. Calcium and magnesium were measured by EDTA method using murexide and erichrome black-T as indicator respectively.

Water Quality Index (WQI): The different parameters were again calculated followingOtt (1978)and Lohani (1981) for water quality index of the water body. The water quality index was calculated by taking annual mean of recorded data and their standard values (permissible values of various pollutants) for the drinking water, recommended by Indian Council of Medical Research (ICMR). Some standard values which were not available in ICMR standard were taken from the standards of United States Public Health Services (USPHS), World Health Organization (WHO) and European Economic Community (EEC).

From observed values and standard values quality rating and weightage were calculated.

The quality rating qi for ith water quality parameter (i=1, 2 ....10) was obtained, in general, from the equation :-

qi   =   100 (Vi/Si)
Where Vi   =   Values of ith parameter
Si   =   Standard of ith parameter

Equation ensure that qi=O when a pollutant (the ith parameter) is absent in water, while qi=100 if the value of this parameter is just equal to its standard value. Thus the large the value of qi the more polluted will be the water with ith parameter.

The exceptions to Equation are the quality ratings for two parameters viz. pH and dissolved oxygen, which require special calculation. The permissible range of pH is 7.0-8.5. Therefore, the quality rating equation becomes :-

qpH   =   100 [(VpH 7.0)/(8.5-7.0)]

Where VpH= Value of pH-7 means simply the numerical difference between VpH and 7.0, ignoring its algebraic sign.

Equation ensures that qpH=0 for VpH=7.0

The situation is slightly complicated in case of dissolved oxygen, since, in contrast to other pollutants, the quality of water is enhanced if it contains more dissolved oxygen. Therefore, the quality rating q^{DO} for this parameter has been calculated from the equation :

q^{DO} =100[14.6/(14.6-5.0)$^{-VDO}$/(14.6-5.0)]

Where, VDO=values of dissolved oxygen.

In Equation (3),14.6 is the solubility of oxygen (in mg/litre) in distilled

water at 0^{0C} and 5.0 mg/litre is the standard for drinking water. Equation (3) gives $q^{DO}=0$ when VDO=14.6 mg/litre and $q^{DO}=100$ when VDO=5.0 mg/litre.

It is well known that the more harmful a given pollutant, the smaller is its permissible value. So the 'weights' for various water quality parameters are assumed to be inversely proportional to be recommended standard for the corresponding parameters i.e.

Wi=K/Si

Where, Wi= Unit weight for ith parameter.

and K= constant ofProportionality.

The constant of proportionality is determined from the condition :-

$$\sum_{i=1}^{10} Wi = 1$$

For calculation of water quality index firstly sub-index (SI) i corresponding the ith parameter is determined. These are given by the product of the quality rating qi and the unit weight Wi of the ith parameter, i.e.

(SI)i=qiwi

The overall water quality index can be calculated by aggregating these sub-indices (SI)i linearly, which is presented as :

$$W.Q.L \quad = \quad \sum_{i=1}^{10}(SI)i = 1 \qquad \sum_{i=1}^{10} wi$$

$$= \quad \sum_{i=1}^{10} qiwi$$

Results and Discussion: Seasonalvariationsof certainphysico-chemical characteristics of pondwaterduringsummerand rainy seasonsare shownin Table.

Temperature is one of the most important physical factors, which regulatenaturalprocesswithin the ecosystem.Air and surface water temperatures vary from 27.1- 36.4°Cand 28.2-34°C respectively. Both these temperaturesof Ranchi pond vary considerablyduringdifferentseasonsviz. summerand rainy; temperaturebeing the lowest in the month of Octoberand highestin the month of June. Generallyincreased solar radiation due to comparativelylonger day length may explaingradual increasein both air and water temperaturefrom October to May-June.Maximumrecordofwater (Reed 1962, Dutta 1978). Timms (1970) reportedthat turbidwaters are warmer than temperature in June (36.40) may also be attributed to low macrophytic productionand highestload of Suspended matter. Suspended matteris known to absorbmoreheatfrom insolation the cleat ones under the same circumstances. Similarly a gradualreduction in solar illumination may explain fall in both air

and water temperatures observed from Aug-Oct. The chemical factors like pH, free CO2 and alkalinity showed only minor seasonal fluctuations. It was in monsoon, when a greater fall in pH (7.2-7.8) was recorded and it appears reasonable to suggest that low phytoplankton population was responsible for decrease in pH (George 1961, Zutshi1976). Dissolved oxygen was found to be higher in rainy season (4,0-5.8mI/L) and lower in summer months (3.5-4.3 ml/L). Winter rise in dissolved oxygen has also been worked out earlier by Singh et aI. (1980) and Rao (1986) and it appears to be due to its greater solubility, reduced microbial decomposition of dead organic matter and low organismal respiratory demand at low temperature and increased progressive growth of submerged macrophytes. The amount of free CO2 ranged between 4.0 and 12.8 mg/L, being higher in summer and lower in rainy months. Inverse relationship of dissolved oxygen and free CO2 was observed. Similar trend was observed by well known workers (Welch 1952, Hutchinson 1957 and Kadlec 1962). The alkalinity (both PA & MA) ranged between 150 and 300 mg/L. The maximumvalues were recorded in summer, and minimum in rainy season. These observations support the opinion of Saha and Pandit (1986).

Munawar (1970) observed an inverse relationship between pH and alkalinity which is in conformation to the observations of Saha and Pandit (1986) and Zafar (1964). This work confrrms that the similar generalizations, obtained from the pond under observation, are also true.

Dissolved oxygen showed an inverse relationship with water temperature. This is probably due to two reasons. In summer at high temperature, the rate of oxidation of organic matter in water increases and oxygen is consumed during the process. Secondly, at higher temperature, the water has a lesser oxygen holding capacity and some oxygen is lost to the atmosphere. So, the present study reveals that the inverse relationship observed between the dissolvedoxygenand temperature was similar to that observed by many workers viz., Ganapati (1943), Saha et al. (1959) and Singh (1960).

Table : Variations in physico-chemical characteristics of water during summer and rainy seasons.

Parameters	Summer Seasons		Rainy Seasons		
	May	June	Aug	Sep	Oct
Atmospheric Temperature ^{0}C	34.1	36.4	27.1	30.1	28.1
Surface Temperature (^{0}C)	33.0	34.0	29.2	28.2	30.2
pH	8.4	8.7	7.2	7.8	7.6
Carbonates (mg/L)	18	16	10	12	16
Biocarbonates (mg/L)	272	300	150	170	180
DO (ml/L)	4.3	3.5	5.2	4.0	5.8
Free CO_2 (mg/L)	12.8	8.4	4.0	5.0	7.0
Transparency (cm)	23.0	22.0	31	28.5	27.4
Rain Fall (cm)	-	-	1	5	3
Nature of Climate	Calm	Calm	Calm	Calm	Calm
Water Colour	Slightly Transparent	Slightly Transparent	Light Green	Light Green	Light Green
Biomass by Volume (ml)	6.2	5.0	7.0	6.5	7.5

Conclusion : A view ofphysio-chemical parameters have been analysed for

water characteristic assessment namely Air Temperature, Water Temperature. Transparency, pH, Conductivity Dissolved Oxygen, Free Carbon Dioxide, Total Alkalinity, Carbonate, Bicarbonate, Total Suspended Solids, Phosphate, Nitrate, Silicate, Chloride, BOD,COD, Sodium, Potassium, Calcium, Magnesium. The variation in air and water temperature was influenced by atmospheric condition. The thermal equilibrium was never achieved because the equilibrium temperature was continually changing as metrological condition changed. The temperature of water body lagged behind the equilibrium temperature.

The reduced transparency observed during the two years of study was mainly due to suspended solids, suspended organic matter and high planktonic growth. The chief source of the suspended solids and organic matter was the continuous input of sewage and allochthonus materials in the water body. From pH view point the water body under investigation appears a sound habitat for both benthic fauna, planktonic pupulation and also fishes. The pH remained nearly constant being slightly alkaline due to water hyacinth and no significant alteration in pH was reflected due to sewage input.

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A Study on Botnet and Detection Techniques

* **Sangita Baruah**

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***Abstract-** Botnets are considered as the greatest threat for the cyber security. Computers are compromised over the Internet and without the knowledge of the legitimate users they become a member of the bot army and perform various malicious activities, such as such as Distributed Denial of Service (DDoS), send spam emails with viruses attached, password cracking, phishing, malware dissemination, key logging, identity theft, internet fraud, e-business extortion, etc. The scenario is more dangerous because all the above mentioned attacks are done remotely and in a distributed way. Since attacks are launched from various parts of the world, this makes detection very challenging.*

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Key words:Bot, Botnet, IRC Botnet, HTTP Botnet, P2P Botnet, Botnet Detection

I.   Introduction: There are numerous malware found over the Internet such as viruses, worms, Trojans, etc. Amongst all these malware, botnets posses significant threat to the cyber world as well to the society. Botnet is a network of compromised computers that is remotely controlled by an attacker, known as botmaster. Botmasters try to compromise vulnerable computers over the Internet so that they can make a network of compromised computers which can be used for performing various malicious activities, such as such as Distributed Denial of Service (DDoS), send spam emails with viruses attached, password cracking, phishing, malware dissemination, key logging, identity theft, internet fraud, e-business extortion, etc[1]. Botmasters use numerous techniques and infection vectors to compromise a computer over the Internet. A legitimate user may be infected by clicking a malicious email attachment, visiting a compromised website or unknowingly downloading the bot binary in their computer[2]. These infected or compromised computers are known as bot or zombie computers. The botmaster tries to compromise more and more computers so that he can increase his bot army and use their cumulative potential to do various cyber crimes. Once a computer is compromised, the botmaster can access the CPU as well as the IP address of that computer. If a botnet consist of some thousands or millions of computers, than it gives the botmaster processing power of almost a supercomputer with diverse IP addresses all around the globe. Traffic generated from diverse IP addresses makes detection of botnet and subsequently detection of offenders

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*   **Assistant Professor, Cotton University, Assam**

very difficult [2]. It was found that in Taiwan during early May 2009, Waledac botnet was used to send spam emails by using more than 233 IP addresses[3]. To evade detection botmasters try to launch attacks from various IP addresses.

The botmaster remotely instructs all the bots under his control through its command and control (C&C) communication channel. Depending on the technology used by the botnet for communication, they are classified as:

    a)   IRC botnet
    b)   HTTP botnet
    c)   P2P botnet

In an IRC botnet, a compromised computer is directly connected to an IRC chat room which is under the control of a botmaster and receives instruction from it. Botmasters either use public IRC chat rooms or can have their own private IRC chat rooms. IRC botnets are based on IRC protocols. IRC protocols were originally designed for communication and data dissemination between end-users [3].

A HTTP botnet is similar to an IRC botnet. A compromised computer is automatically connected to a malicious HTTP server set up by the botmaster, which is also used for instructing the bots. HTTP is the most commonly used Internet protocol and is used by most of the applications. To avoid detection attackers tries to blend their malicious bot traffic with normal HTTP traffic [3,10].

In a P2P botnet, the botmaster communicates with the bots using P2P protocols. Botmaster can either use existing P2P protocols or they can devise their own P2P protocols. It is a new form of botnet and is highly stealthy and resilient [3]. There are numerous P2P applications used over the Internet. Attackers try to compromise vulnerable computers over an existing P2P network and use the same network for communication. This is the most convenient way for the attackers. Some attackers create their own P2P network.

II.   Botnet Overview:

Bot technology is not very new. Bots were present from early stage of Internet. The word bot originated from the word 'robot' and hence are also known as software robots. Initially they were used to automate some scheduled repetitive tasks and were totally benign. For instance web crawler or web spider is an Internet bot that is used by the search engines to browse the World Wide Web for the purpose of web indexing. Cyber criminals came to know about the potential of the Internet bots and started using them for malicious activities and for their financial gains.

Table 1: List of known benign bots

Date	Name	Type	Purpose
December 1993	EggDrop	IRC	Playing games, file transfer, automating channel admin commands [4]
May 1999	Napster	P2P	Find peer and share music file [4]
November 1999	Direct Connect	P2P	File Share [4]
March 2000	Gnutella	P2P	File Share [4]
September 2000	eDonkey	P2P	File Share [4]
March 2001	Fast track	P2P	File Share [4]
May 2001	WinMX	P2P	File Share [4]
June 2001	Ares	P2P	File Share [4]
July 2001	BitTorrent	P2P	File Share and quick download[4]
May 2003	WASTE	P2P	File Share [4]
November 2003	Kademlia	P2P	File Share [4]

The first IRC botnet appeared in 1993 [3]. Since then cyber criminals have been using them for various malicious purposes. A Chinese hacker launched DDOS attack aganist a music website by exploiting 60,000 computers and caused million dollars loss to the website [3]. The Waledac botnet is capable of sending 1.5 billion spam email daily and according to Microsoft it was found that in 2009 from December 3 to 21, 650 million malicious spam email were sent to Hotmail, which was enough to affect its services. The American government as well as business houses considers botnets as the greatest threat to the cyber security. Botnets have caused over 110 billion dollar loss globally [2].

Table 2: List of real world malicious bots

Date	Name	Type	Purpose
April 1998	GTbot	IRC [4]	DDOS attack [12]
April 2002	SDbot	IRC [4]	Send spam email [13]
October 2002	Agobot	IRC [4]	
April 2003	Spybot	IRC [4]	
September 2003	Sinit	P2P [4]	Use key loggers to steal credentials [3]
March 2004	Phatbot	P2P [4]	
March 2006	SpamThru	P2P [4]	Send spam email [3]
April 2006	Nugache	P2P [4]	DDOS attack and send spam email [3]
January 2007	Trojan.Peacomm	P2P [4]	
November 2008	Conficker A	HTTP [5]	Send spam email [8]
December 2008	Conficker B	HTTP [5]	Send spam email [8]
February 2009	Conficker B++	HTTP [5]	Send spam email [8]
March 2009	Conficker C	P2P [5]	Send spam email [8]
April 2009	Conficker E	P2P [5]	Send spam email [8]
Late 2006	Kraken	IRC [5]	Send spam email [8]
Around 2006	Rustock	P2P [5]	DDOS attack and send spam email [5]
Mid 2006	Storm	P2P [5]	DDOS attack and send spam email [5]
2010	TDL4	P2P [5]	DDOS attack and send spam email [5]

2008	Torpig	Centralized [5]	Credential stealing [5]
2006	Zeus	Centralized [4]	Credential stealing and banking information [5,6]
April 2008	Waledac	P2P [5]	DDOS attack and send spam email [5]
Early 2009	Koobface [6]		Target online social networks [6]
September 2011	Zeus P2P [6]	P2P [5]	Credential stealing and banking information [5,6]
2011	Windigo [6]		One variant compromises Linux server and other variant targets Windows users [6]

III.   Botnet Architecture:

Botnets basically have two architectures: Centralized and Decentralized Architectures.

Both IRC and HTTP botnets have centralized architecture [3]. Centralized architecture is based on client-server model. In a centralized architecture the botmaster directly communicates with the C&C servers. A botnet may have more than one C&C servers. These C&C servers communicate with the bots. Centralized architecture can be easily constructed but have the drawback of single point of failure. Once the C&C server is detected, the entire botnet can be shot down. By disabling C&C servers, the botnet can be made inactive as all the bots will lose contact and hence will not be able to operate.

P2P botnet has a decentralized architecture. There is no designated C&C Server. At any moment of time a node can be simply a bot or C&C server, depending upon the instructions provided by the botmaster. As there is no designated C&C Server, P2P botnets can evade detection very easily and overcomes the disadvantage of single point of failure suffered by traditional centralized botnets. The decentralized architecture makes P2P botnets very rigid and stealthy and it is very hard for the defenders to detect the presence of P2P botnets. Moreover they are very resilient to dynamic churn [7]. This means the network is not affected even if some existing peers leave or some new peers join the network.

The above figure on decentralized architecture is based on Zeus P2P botnet. Botmaster periodically instructs a subset of the bots to work as proxy bots. The harvester bots will fetch command and instructions from the proxy bots. Harvester bots will also pass the stolen data to the proxy bots. To hide the identification of the botmaster, there is an additional layer of dedicated HTTP servers between the bots and the botmaster. In the figure all white nodes are harvester bots and coloured nodes are proxy bots. The dotted lines shows the information flow [11].

IV.   Detection Technique:

Botnet detection is a challenging task. As mentioned in the above section

botnet attacks are done remotely in a distributed manner. Moreover to evade detection they keep on updating their binaries and try to blend their traffic with the normal legitimate network traffic, as they use existing protocols for C&C communications. Apart from these they use several other techniques to escape detection such as IP address flux, domain flux, binary encryption, communication encryption and rootkit techniques. Most of the botnets also use self defence mechanisms. They have the ability to disable security products, auto updates and firewalls. Some of them have the ability to hide themselves into the processors memory. Some of the widely used detection techniques are discussed below:

Signature based detection:

Every botnet has specific traffic characteristics. These are known as signatures. Botnet traffic is monitored and gathered information is stored as botnet's binary signature. These signatures are than used to detect malwares in other systems. Such screening requires packet level analysis which is done by using DPI (Deep Packet Inspection). This technique of detection is most commonly used. But one of the major drawback of this technique is that it cannot identify undefined new signatures. To evade detection botmasters keeps on updating bot binaries. As a result every time a bot malware is updated, its corresponding signature also changes. Also there are many botnets whose functions are identical, but they have different signatures. These two drawbacks makes signature based detection very challenging. Intrusion Detection Systems (IDS) are build based on signature based detection. IDS stores known malware signatures into their databases and identifies attacks based on predefined signatures. Malwares will evade detection if their signatures are not predefined. This system will also have drawback in situation when network traffic is very high. Because at the time of high network traffic it won't be possible to do deep packet inspection of every incoming packet. To increase efficiency of the system techniques like packet filtering or sampling may be applied, but chances of missing packets is very high. Another drawback is that, IDS are known to have high false alarm rates [1, 2, 6, 9].

Anomaly based detection:

Anomaly based detection techniques are based on analysis of network traffic flow. It has been observed that normal network traffic is very much random and unpredictable where as botnet traffic is quite uniform. Botnet traffic may occur at specific intervals, may have uniform packet sizes and have uniform number of packets exchanged. Analysing network flow, bot operations can be easily detected. Anomaly based detection have several advantages over signature based detection. As these techniques do not depend on predefined signatures, they can easily detect new forms of malware by analysing their activities. They are also immune to encryption. Anomaly based detection can be implemented using various techniques such as statistical techniques, machine learning, graph analysis, etc. Amongst all these techniques

machine learning is more promising for detecting bot activities [1, 2, 6, 9].

DNS based detection:

DNS based detection is similar to anomaly based detection. Bot activity is detected by analysing DNS traffic. Bots get command and instruction from the botmaster through the C&C server. So, to communicate and locate the C&C server hosted by DDNS, bots perform DNS queries. Thus by identifying domain names with abnormal traffic such as high or concentrated DDNS query rates, can lead to detection of the botnet. However this type of detection may have high false positive rates, as there may be many legitimate popular domains with abnormally high traffic. Another drawback is that, this detection technique may be evaded by generating fake DNS queries [1,6].

Data Mining based detection:

Signature based detection is not much beneficial for modern bot detection as they keep on updating their signatures. Anomaly based detection techniques is also not preferable in some situations. Most of the modern bots are very stealthy. They don't generate much anomalies in their traffic. They don't generate high network traffic or high network latency, as they use normal application protocols for communication. Data mining based detection techniques will be much beneficial for detection of stealthy botnets. These techniques are implemented using machine learning, classification and clustering.

Table 3: Comparison of various detection techniques

Detection Method	Advantages	Disadvantages	Implementation Technique
Signature based detection	Can detect known malware easily	Cannot detect unknown malware, high false alarm rate, not immune to encryption	Deep packet inspection
Anomaly based detection	Can detect unknown malware, immune to encryption	High false positive rate	Machine learning, statistical techniques, graph analysis
DNS based detection	Can detect unknown malware, immune to encryption	High false positive rate, not immune to fake DNS queries	Machine learning, statistical techniques, graph analysis
Data Mining based detection	Can detect unknown malware, immune to encryption, low false positive rate	Cannot detect in real time	Machine learning, classification and clustering

V.   Conclusion:

With the advancement in communication technology more and more people are using digital platforms. Knowingly or unknowingly end users can become victims of cyber crimes. Botnet posses highest security threat to the cyber world. Though botnets are present from the early days of Internet, but still there is limited literature. This paper is an attempt to elaborate botnet and there detection techniques.

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Pachyderm in peril: Crop raiding, railway traffic and elephant-train collisions in eastern Karbi Anglong, India

* **Rekib Ahmed**

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Abstract- Wild Asian elephants are being killed by trains in Assam, India and a regular occurrence. This study assessed elephant-train collisions along a railway segment in Karbi Anglong, a hill district. Skewness and kurtosis of train's traffic volume during dusk-night-dawn (DND) were found -0.89 and -0.04 respectively (W=0.86, p<.05). There was a significant variation of traffic volume at the time period. In September, there was a significant difference of traffic volume between day time and DND {t (13) =2.35, p<.05}. Traffic volume of DND between September and October {t (13) = .47, p>.05} and between September and November {t (13) = -.11, p>.05} did not differ significantly. The best supported model for influencing factor of elephant-train collision is determined by the distances of damaged crop fields to the centre point of the railway line. The coefficient of distance in September was negative (b= -.123) and significant (p<.05), suggesting that larger sizes of crop damage was related to closer proximity of the railway line.

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Key words: Elephant-Train Collision, Traffic Volume, Damaged Crop Field.

Introduction: Transportation infrastructure in wildlife home ranges affects wildlife habitat through habitat fragmentation, act as a barrier to wildlife movement and exacerbates wildlife mortality through wildlife vehicle/train collisions (Seiler & Helldin, 2005; Waller & Servheen, 2005; Van der Grift, 1999). Temporal variations in wildlife-train collision is often determined by seasonal and diurnal variations in traffic volume, weather conditions and animal activities such as foraging, mating or breeding behaviour (Jaren, 1991). Railway transportation is far more effective for potent as an agent of direct mortality of wildlife due to collisions than road way transportation (Dorsey, 2011). It results in some 72 odd animal deaths a year due to wildlife train collisions in India (Jayachitra & Ramachandran 2012) where Asian Elephant (Elephas Maximus) are among the major victims of train hits (Roy & Sukumar 2017). The objectives of this study were to understand temporal patterns of elephant crop depredation around the railway line and to understand the temporal variation of traffic volume using time series data of September, October and November, 2016. The present study area under Karbi Anglong

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*   **Phd Research Scholar, Gauhati University**

East Forest Division had four cases of elephant mortality due to train strikes between the period of 2000 and 2016. Among these, the case of 27th September, 2016 was investigated to understand railway's traffic behaviour and crop raiding strategies of elephant around the railway line.

Materials and methods:

Study area: The study area comprised of three fringe villages of Nagaland border along the 3 km long railway line between Khatkhati railway station and Laharijan Crossing Gate No-ST/58KM 263/2-3 in Eastern Karbi Anglong. This railway line is surrounded by a mosaic of forest, low flat hillocks, river, wet lands, crop lands, tea gardens, livestock grazing pastures and settlements. The river Dhansiri flows south-west to north-east along with the railway line. The climatic condition and daily weather of the area is determined by the leeward position of the Karbi plateau (locally called 'Chenge-Arnam'), the altitude of landforms and vegetation cover (Bezbaruah 2003). The vegetation cover ranges from semi evergreen forest, tropical deciduous forest, mixed deciduous forest to grassland forest. The area surrounded by three important elephant habitats viz. Nambar Reserve Forest, Kaliani Reserve Forest and the Nambar & Garampani wildlife sanctuaries.
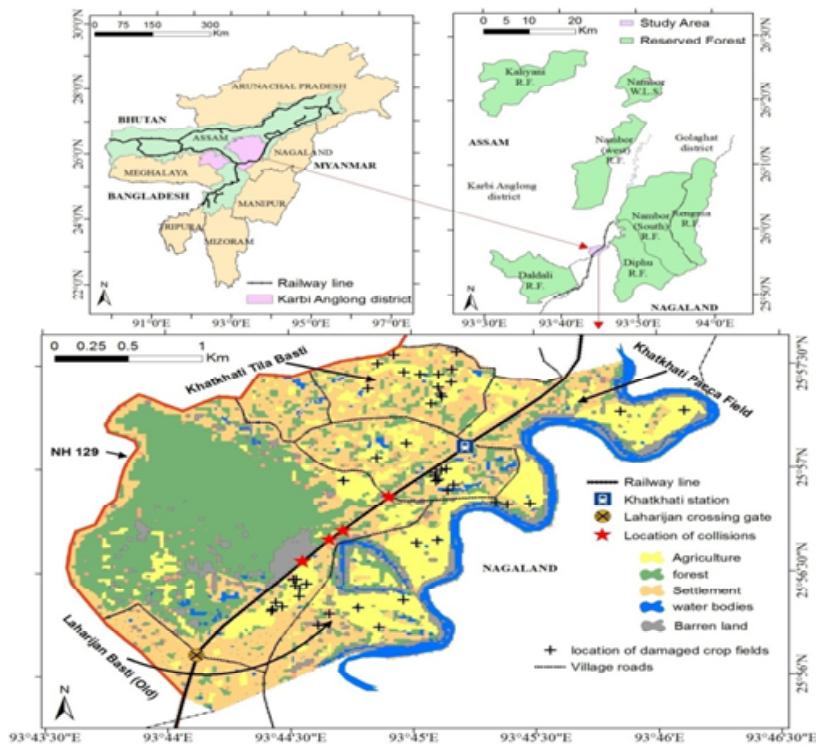

Figure 1. The map of the study area

Data collection:

The information relating to elephant mortalities along with date, time, sex and age group information of elephants were collected from the Divisional Forest Office of Karbi Anglong East Division, Government of Assam and previously published news reports. Railway traffic data for the months of September-November, 2016 were acquired from the Khatkhati railway station and the Laharijan railway crossing gate. The data included daily information regarding the types, time and number of trains traversing the railway segment. A total of 14 consecutive days of the each month was selected to analyse variation of traffic volume in the section.

Data on crop damage was acquired through the use of questionnaires and monitoring the area around the railway line on a monthly basis. The data included crop type, the size of crop fields and damaged crop fields, distance from the damaged crop field to the centre point of the railway line, number of elephants responsible for crop damage and details pertaining to the type and extent of damage. Damaged crop fields were classified into two types, i.e. trail damage (elephant having walked through the crop fields) and area of damage (widespread damage) (Sitompul 2004). The location points of all the parameters were recorded with a hand-held global positioning system (GPS) Garmin GPS MAP 64s device.

Table1. Description of parameters and their characteristics

Parameter	Description
Day time	Variation of traffic volume during 6a.m.–6p.m.
DND	Variation of traffic volume during 6p.m.–6a.m.
Types of damage	Coded as widespread damage=0 and trail damage=1
Elephants responsible (RE)	Group size of elephants involved in crop depredation (coded as group=0 and single=1
Size of damaged crop fields (SDCF)	Sizes of damaged crop fields were presented by farmers (converted into hectare)
Distance	Distance between crop depredation incidents and the centre point of the railway line

Data analysis:

The parameters of types of damage (trail and area of damage) and elephants (single and group) were converted as grouping variables. Mann Whitney U test (non-parametric) was used to determine the difference between types of crop damage and distance to the railway line. Multiple linear regression models were employed for each month separately in order to determine the impact of distance and responsible elephants on the size of damaged crop fields. Railway traffic data were divided into two time period, i.e. day time (6a.m. – 6p.m.) and dusk-night-dawn (DND) time (6p.m. – 6a.m.). Paired sample t test was used to detect the difference of traffic volume between day time and dusk-night-dawn time. Skewness and kurtosis were used to study the variation of traffic volume between the time series data for each month. The Shapiro-Wilk test was used for each time period of the months. All the

statistical analysis was carried out using IBM SPSS (Version 23).
Results:

Two elephants were killed by up Rajdhani Express (12436) during the study period (27th September, 2016; 12.20 a.m.; 93°442 22.6082 2 E - 25°562 22.9182 2 N). The train struck two female elephants, one was a calf of about 5 years and the other was a sub-adult about of 15 years in age. The collision also caused the damage of a signal post of the railway line. Besides this incident, three mishap incidences occurred in the area in which three elephants died due to train hits between the years of 2000-2016.

The values of skewness and kurtosis of the traffic volume in September (DND) were -0.89 and -0.04 respectively (W=0.86, p<.05). There was a significant variation of traffic volume at the time period. High normality of kurtosis value indicated a mesokurtic distribution. This implied that traffic volume was increasingly concentrated at higher ranges (negatively skewed or left skewed). There was no significant deviation of both the values of skewness (-0.21) and kurtosis (-0.15) from normality during the day time. Variation of traffic volume was not significant (W=0.89, p>.05) at DND in the month of October. On the contrary, the values of skewnes (-0.54) and kurtosis (0.25) of day time indicated that there was an approximate normal distribution of mean traffic volume as the both values were found close to zero. The traffic volume in the month of November (DND) was positively skewed (0.61) and the value of kurtosis was negative (-0.23). There was no significant variation (W=0.95, p>.05) of traffic volume during the period. However, traffic volume at day time exhibited a distribution with fairly skewed (0.31) patterns and the value of kurtosis was -0.65. The results of paired samples t-test showed that there was a significant difference of traffic volume between day time and DND {t (13) =2.35, p<.05}. Traffic volume of DND between September and October {t (13) = .47, p>.05} and between September and November {t (13) = -.11, p>.05} did not differ significantly.

Table 2. Descriptive statistics of traffic volume in the months of September, October and November of 2016.

Parameters	September Day time	September DND	October Day time	October DND	November Day time	November DND
N Valid	14	14	14	14	14	4
Missing	0	0	0	0	0	0
Mean	15.50	13.93	15.14	13.71	14.21	14.00
Std. Error of mean	.50	.41	.64	.28	.38	.53
Median	16.00	14.50	15.50	14.00	14.50	13.50
Mode	16.00	15.00	16.00	13.00	13.00	13.00
Std. deviation	1.87	1.54	2.41	1.07	1.42	2.00
Variance	3.50	2.38	5.82	1.14	2.03	4.00
Skewness	-.21	-.89	-.54	-.21	.30	.61
Std. Error of Skewness	0.59	0.59	0.59	0.59	0.59	0.59
Kurtosis	-.15	-.04	.25	-1.09	-.65	-.23

Std. Error of kurtosis		1.15	1.15	1.15	1.15	1.15	1.15
Range		7.00	5.00	9.00	3.00	5.00	7.00
Minimum		12.00	11.00	10.00	12.00	12.00	11.00
Maximum		19.00	16.00	19.00	15.00	17.00	18.00
Percentiles	25	14.00	13.00	13.75	13.00	13.00	12.75
	50	16.00	14.50	15.50	14.00	14.50	13.50
	75	17.00	15.00	17.00	15.00	15.00	15.25

Two major crops were grown in the area. These were winter paddy (June/July-November/December) and Mustard (October/November-February/March). Besides these, various vegetables such as okra (*Abelmoschus esculentus*), cabbage (*Brassica oleracea*), potato (*Solanum tuberosum*), Indian bean (*Lablab purpureus*), pumpkin (Cucurbita moschhata), and bottle gourd (*Lagenaria siceraria*) were grown. Most frequent types of crop damage were widespread damage rather than trail damage in which 42.1% of incidences found as trail damage and 57.9% incidences were widespread damage. The number of incidences of trail damage significantly increased with decreased distances from railway line in September (Mann-Whitney U= 4.0, p<.05), October (U=2.0, p<.05) and November (U=1.0, p<.05). The R of the regression models for each month (0.84, 0.77 and 0.87) showed that there was a strong positive relationship between damaged crop fields as the dependent variable and distance and elephant's group as the independent variables. Moreover, the R^2 (coefficient of determination) value of 0.71, 0.60 and 0.75 for each month implied the adequacy of the models that 71%, 60% and 75% of the proportion of the variation of damaged crop fields were explained by both distance and elephant's group. The coefficient of distance in September was negative (b= -.123) and significant (p<.05), suggesting that larger sizes of crop damage was related to closer proximity of the railway line.

Table 3. Regression Model Summary.

Model	R	R^2	Adjusted R^2	Std. Error of the estimate	Change Statistics					Durbin-Watson
					R^2 change	F change	Df1	Df2	Sig. F Change	
September	.84 [a]	.71	.64	.02	.71	10.90	2	9	.004	1.79
October	.77 [a]	.60	.49	.02	.60	5.94	2	8	.02	1.18
November	.87 [a]	.75	.70	.02	.75	17.93	2	12	.00	2.04

a. Predictors: (Constant), RE, Distance.

Discussion: The estimated values of skewness and kurtosis demonstrated that increasing deviation of mean traffic volume from normality (either positively or negatively skewed) with high normality of kurtosis can significantly influence on elephant train collision. Though, a consecutive platykurtic (negative) kurtosis was found over all the months (DND time),

but, kurtosis in September was almost zero (-0.04) and it can be said as a mesokurtic kurtosis (Brown 1997). Very low and negative kurtosis reflect the lower variation of traffic volume in October and November. Low negative skewness of mean traffic volume of day time changed into high negative skewness at DND time and these were oscillated either positively or negatively between day and DND time over all the months. Variation of traffic volume particularly at the night time affect on the movement of wildlife (Mazerolle 2004), as their foraging activities mainly take place on night time due to high human disturbance in day time (Morelle, Lehaire, & Lejeune 2013). In Assam, majority of the mishap incidents of elephants-trains was occurred between 6 p.m. and 5 a.m. (dusk-night-dawn time) (Sarma, Easa & Menon 2006).

The best supported model for influencing factor of elephant-train collision is determined by the distances of damaged crop fields to the centre point of the railway line. Parameter estimates in September showed that larger sizes of crop damage occurred when distances of damaged crop fields decreased from the railway line. The level of crop damage increases due to increase abundance of the wildlife (Beasley & Rhodes, 2008) and abundance of wildlife along the railway line is one of the important factors of wildlife-train collision (Dorsey 2011). Difference in distance of damaged crop fields to the railway line in September, October and November was probably affected by the variation of traffic intensity in all the months. Variation of traffic volume influenced on behavioural response of wildlife and it affected on spatio-temporal movement patterns of moose in Sweden (Neumann, Ericsson, Dettki & Radeloff 2013).

Conclusion

There is not any alternate railway line to shift traffic volume in the study area. Therefore, it is necessary to diagnose variation of train's traffic volume as well as its impact on elephant train collision. The study provides a crucial insight on the incidence of accident but additional information and more sampling is required across different railway segments of Assam to develop mitigation strategies for such incidences. There is a need for a continuous monitoring of elephant's movement and behaviours around the railway lines to understand the spatio-temporal pattern of crop raiding and to predict the elephant-train collision. Moreover, reduction of trains speed could prevent train's strikes but it is economically cost prohibitive (Becker and Grauvogel 1991; Dorsey 2011) when traffic volumes rely entirely on a single track.

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