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# Sonari College Academic and Research Journal সোণাৰি মহাবিদ্যালয় বিদ্যায়তনিক আৰু গৱেষণা পত্ৰিকা



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Sonari College Research Consultancy Cell

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Sonari College Research Consultancy Cell

Sonari College Academic and Research Journal || ||

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## Principal's Column



Presently there are many new and emerging challenges for higher education in respect of updated course content and curriculum. Academicians and students alike now are required to explore new areas of study in their respective disciplines. Identifying new subjects and studying old ones with the application of new theoretical frameworks are the primary objectives of research. Research Journals provide the most suitable platform for expression of innovative ideas of academic relevance.

We at Sonari College endeavor to provide the academic community of the college and beyond with a similar platform to forward their contributions towards research. The Sonari College Academic and Research Journal has been developing over the past five years as a journal of exceptional academic scholarship.

On the publication of the sixth issue of the journal I extend my congratulations to the Editorial Board and to contributors of the articles and wish for the journal's bright prospects.

> (Dr. Bimal Chandra Gogoi) Principal

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#### **Editor's Note**

An academic and research journal is a periodical publication in which scholarship relating to a particular academic discipline is published. Academic journals serve as permanent and transparent forums for the presentation, scrutiny and discussion of research. The purpose of an academic journal, according to the first editor of the world's oldest academic journal Henry Oldenburg, is to give researchers a venue to "impart their knowledge to one another, and contribute what they can to the grand design of improving natural knowledge, and perfecting all Philosophical Arts, and Sciences". An academic journal's prestige is established over time, and can reflect many factors, some but not all of which are expressible quantitatively. In each academic discipline there are dominant journals that receive the largest number of submissions, and therefore can be selective in choosing their content.

In the natural sciences and social sciences, the impact factor is a convenient proxy, measuring the number of later articles, citing articles already published in the journal. There are other, possible quantitative factors, such as the overall number of citations, how quickly articles are cited, and the average "half-life" of articles. There is also the question of whether or not any quantitative factor can reflect true prestige; natural science journals are categorized and ranked in the Science Citation Index, social science journals in the Social Sciences Citation Index. In the Anglo-American humanities, there is no tradition (as there is in the sciences) of giving impact-factors that could be used in establishing a journal's prestige. Recent moves have been made by the European Science Foundation (ESF) to change the situation, resulting in the publication of preliminary lists for the ranking of academic journals in the Humanities. These rankings have been severely criticized, notably by history and sociology of science British journals that have published a common editorial entitled "Journals under Threat."

Though it did not prevent ESF and some national organizations from proposing journal rankings, it largely prevented their use as evaluation tools.

The Internet has revolutionized the production of, and access to, academic journals, with their contents available online via services subscribed to by academic libraries. Individual articles are subject-indexed in databases such as Google Scholar. Some of the smallest, most specialized journals are prepared in-house, by an academic department, and published only online—such form of publication has sometimes been in the blog format. Currently, there is a movement in higher education encouraging open access, either via self archiving, whereby the author deposits a paper in a disciplinary or institutional repository where it can be searched for and read, or via publishing it in a free open access journal, which does not charge for subscriptions, being either subsidized or financed by a publication fee. Given the goal of sharing scientific research to speed advances, open access has affected science journals more than humanities journals. Commercial publishers are experimenting with open access models, but are trying to protect their subscription revenues

Sonari College Academic and Research Journal is a research-based journal that has been published annually since 2012. The journal is intended as a forum for academics and researchers to share knowledge and opinions in their respective areas and to identify new issues and to shape future directions for research. This is the 6th volume of the journal and 19 research papers/articles have been published in this volume. These research papers/articles cover different aspects of Science, Humanities and Social Sciences that is a concoction of Interdisciplinary research. It is my privilege to get research papers of academicians from other states of India. I extend my heartfelt gratitude to Dr. Geetha from Kerala, Dr. Tanaya De from West Bengal, Dr. Aokumla Walling from Nagaland, Dr. Bhola Nath Gupt from Varanasi and Shyamolima Saikia from Gargaon college, Assam for their paper contribution to the journal in spite of their busy schedule. I also extend my sincere thanks to all the paper contributors of this volume.

It is hoped that this diverse collection of research papers/articles will be a valuable resource for academics, research scholars and will stimulate further research in the respective areas. Constructive criticism is solicited from the readers for improvement of the future volumes.

Dr. Anita Konwar

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Sonari College

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#### CONSTRUCTION OF PATRIARCHY IN KERALA

Dr. Geetha.E Govt. Victoria College, Palakkad, Kerala

Increased literacy and other favourable human development indices are not translated into high standard of life for women in Kerala are considered as a paradox. The matrilineal tradition followed by majority of castes had created a historically favourable background for assertiveness for women in Kerala. Themselves being the part of educated work force, they have access to certain areas of the public sphere to some extent. But female political participation and female agency in decisive roles at social and familial levels also seem very less. Added to all, sexual violence and other kind of violence including domestic violence against women are increasingly being reported in Kerala recently.

Patriarchy as a social institution crept into the social life of Kerala during the colonial times. Though much publicised in the travellers' accounts and missionary records with a negative tone, the *Malayalis* remained loyal to their matrilineal and other aligned practices with great regard as deviation from custom was never occurred to them. During his reign, Tipu Sultan had made an attempt to change the native customs, but was not successful. The hegemonic rule by the British could alter the situation, willingly or unwillingly native practices gave way for colonial norms, several ideological apparatuses played their role in this transition.

#### COLONIAL JUDICIARY

Women of Kerala never belong to a homogenous entity. Though matriliny was predominant in the land, there were patrilineal communities like the Muslims, the Christians, certain tribes and the apex caste in the caste hierarchy, the *Nambudiri* Brahmins, were both

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patrilineal and patriarchal. Unbridled freedom was not enjoyed by women of either of this practice, and segregation of males and females was considered as a mark of respectability. Females were not expected to appear in the front court yard of the houses, and their mobility was restricted to the inner spaces of the house. Though subjected to severe feudal and caste oppressions, the working class women were not segregated from their male counterparts as it was not practical. Though male prerogative was routine, they enjoyed some rights in the family as earning members, and could argue with males on that right.

In the matrilineal set up, women enjoyed certain rights, including equal right on family property, right to permanent residence at the natal house, educational rights, right to divorce and right to remarriage. Widowhood was non-existent as alliances between males and females in matrilineal communities were not counted as marriages, but only sexual contracts. The protagonist of the first Malayalam novel. Indulekha remarks: "It is the freedom that cannot be dreamed even in Europe."2 Regarding the management of property the eldest female members enjoyed same rights as that of the eldest male members in pre-colonial times, but judiciary struck down such primitive practices and enforced English Family Law . Herbert Wigram, a judge in nineteenth century colonial Malabar writes: "I had before me a case in which the custom of female management was found by the munsif. I then wrote: 'I cannot agree with munsif that the evidence is sufficient to prove a family custom which, though it may be in accord with primitive usage, is opposed to the present usage of every other nayar family in Malabar. I do not deny that in some tarawadu females are entrusted with the management with the consent of the males, but I never yet heard of a case where the headship was claimed as of right by the female, except in the case of the kovilagams. Management of a female, like the management of an anantharavan must, in my opinion, always be presumed to be with the consent of those on whom the law confers the right of the management, i.e., the senior male, and may at any time may be resumed.""3 What the eldest female had been denied by his ruling was the customary matriarchal power, giving way to male prerogative with the active support of colonial judiciary.

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#### COLONIAL LEGISLATIONS

During the colonial times, though legal changes were transforming the interaction between government and people regarding revenue collection and land relations in Kerala, in the social sphere, the customary laws remained predominant. The educated intelligentsia, though a minority, were dominant enough to formulate public opinion on behalf of whole society as they had close access to government agencies. Their attempts was to bring social changes in the legislative way, by coaxing the colonial government to appoint a marriage commission4 to enquire into the necessity of initiating legislations and thereby to put an end to the primitive practices associated with marriage and inheritance in Kerala. By legislative reforms, they meant to give a progressive face to the familial features of the Malayalis by equating it with the dominant western norms and get the approval of colonial modernity, which was getting currency by that time; total restructuring of the society on egalitarian principles or expanding the space of women on the principle of gender equality were not their agenda.

Customs permitted plurality of partners, mostly as serial monogamy, on the principle of hypergamy, for the women of matrilineal communities. K.R Krishna Menon, retired sub judge of Walluvanadu taluk, in his answers to the interrogatories to the Malabar Marriage Commission says: "There is no authority for prohibiting polyandry, and a positive rule which is supposed to have the force of law, actually permits it.5 But such a practice had been viewed with disdain by the public imagination since the second half of the nineteenth century. The public memory was reluctant to recollect such immoral acts of certain women in certain localities, and would narrate that as isolated incidents of primitivism<sup>6</sup> and not as general custom of the matrilineal people. B. Kamaran Nair, District Munsiff, Chowgat Taluk says: "There is a tradition that in some places in Nedunganad, polyandry once prevailed. But you will find on closer investigation that the association between sexes by a Sambandham was rather loose in those localities." Though some women took the freedom to initiate and end a sexual contract almost on her own without any obligations on both parties, mostly such affairs were decided by the family on some material conditions like feudal obligation, or caste consideration as an alliance with superior caste like the nambudiris were considered prestigious to the household.

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The matrilineal communities in Kerala, especially the nairs had to face derogatory comments about their marriage and inheritance at many levels. Sir. C. Sankaran Nair, who introduced the Malabar Marriage Bill in the Madras Legislative Assembly in 1892, recollects the reason for introducing such a bill: "The nair community had no marriage law, a woman therefore, could discard her husband. On account of our law of inheritance, according to which succession was through females, and the absence of any law of marriage, it has been doubted whether we were Hindus. There are reasons to think that the nair community was one of the tribes which were incorporated in to Hinduism wholesale, the priests amongst them accepted as Brahmins. The theory that the succession in the female line and kinship traced through females is proof that they were primitive tribe cannot hold in this case at any rate, as they were the ruling race and far advanced in culture." For the reformers "communal property, polygamous relationships and matrilineal descent were the vestiges of a savage natural past. Private property and monogamous marriages with conjugal coresidence and patrilineal descent heralded the beginning of a new nation."8 When the hegemonic culture insisted upon homogenization of the practices regarding marriage, inheritance, and family, diversity existed in the precolonial Malabar was forced to go. "Legal changes masked beneath its transparent surface a new legal and social morality that was welcomed, and soon became normative among the matrilineal population."9

The legislative reforms transformed the matrilineal marriage from contract to sacrament as a measure to get legitimacy in the eyes of *modern* norms and pan-Indian Hindu doctrines. It prohibited bigamy, brought wife under husband's guardianship, shifted her residence from her house to her husband's house, she was to be maintained by her husband and he became her guardian. Easy divorce and right to re-marriage were discouraged. Patriarchal tendencies that had already present in Kerala's social milieu and nurtured under the colonial presence were given legality under these reforms. Women's dependent status was endorsed by the newly evolved patriarchy in Kerala

THE PUBLIC SPHERE

The missionary intervention and legislative attempts in the last decade of nineteenth century brought the women question in the forefront

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in Kerala. The fluid nature of gender regarding dress, manners and duties prevailed in Kerala were problematized and brought for vigorous public discussion by different agencies. The nascent public sphere emerged in Kerala by the same time, though by and large an elite space, enthusiastically took up this project. In this public sphere, women also were active as writers in journals and magazines with didactic zeal, but they came up more or less as the agents of patriarchy and focused on means of fostering natural feminine qualities, mostly by the influence of their education. "Women appeared as the agent of a highly individualising disciplinary power, deployed both within and outside home"10 Their insistence was upon monogamy, chastity, conjugal obligations, companionate conjugality, dress reforms and education of women. The opinions expressed in this bourgeois public sphere might not have been the opinion of the general public, as it was in infancy and sectarian in nature and none of its affiliations was able to express the opinion of the general public, on the contrary, certain dominant voices counted there much more. By expressing a note of dissociation to the majority of opinion expressed towards the Malabar Marriage Commission in favour of legal sanction to customary practices related to marriage and inheritance, O. Chandu Menon, a member of the Malabar Marriage Commission, a judge in the colonial service, a nationalist, and the earliest of the Malayalam novelists says that "I do not attach much value to the evidence taken before the commission as a true reflection of the native public opinion in Malabar on the subject of the proposed changes in the marriage system. It appears to me that most of the witnesses that appeared before us, and many that answered interrogations, had made up their mind before-hand, either to support or oppose the Bill and did not care to represent public feelings on the subject."11 Though the later political formations like the Gandhian movement and the Left movement in Kerala had incorporated women into their activities, it was never on equal terms with men, women were not expected to come to leadership, their participation was limited to regional level, the patronising attitude of the male activists reigned the sphere, and women's contributions were taken for granted. By and large the patriarchal public sphere in Kerala, since its inception was hostile to acknowledge women in any capacity tends to remain the same.

WOMEN AND EDUCATION

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Education has been the most powerful disciplining apparatus that colonised the minds with hegemonic ideologies of the colonizer. Though not universal, education was not totally denied to women of Kerala. In formal or informal way, certain sections of women were educated in precolonial Kerala. Writing was not encouraged, but they were given lessons in reading of religious literature, arithmetic, astrology, emphasising on moral and religious instruction.

The colonial modernity had agreed that women were to be educated. The western missionary societies and government agencies were active and enthusiastic in spreading western knowledge among the natives; also girls. But schools opened with that purpose were separate and the curriculum meant for girls were different from that of boys; and was loaded with concept such as separate sphere of activity for males and females, to convince the girls about their newly constructed roles in society, and restrict them to limit their roles into such spaces. "The education of girls should be practical with reference to the position which they fill in social life. It should not imitate the education suitable boys nor it should be dominated by examinations"12 Indoctrination and engendering of individuals had effectively carried out by colonial education and carried over without alteration in the later period. Female education was encouraged- not for the benefit of women, but for the benefit of her husband and children- as a nurse, teacher and home maker. Her education and other endowments are to be used for such purposes, not for the development of her personality and to expand her self. "One plausible outcome of the colonial situation was the colonized began to identify with their oppressor, to assume the superiority of his values and knowledge, to see themselves as weak and ignorant, and to depend on the colonizer for a definition of the situation, protection and for other resources"13 The colonial education completed the historical submission of malayali women and assertion of masculine malayali men. In a feudal- caste dominated social order, gendered spaces hardly existed. Use of ritual language and gestures insisted by feudal order never encouraged masculinity. In dress and manners the males were not much different from females. The new education taught the males to be masculine. When they lost the public sphere for colonial and feudal powers, they ventured to display that at the

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domestic sphere. It was in this historical context that the fluid gender roles prevailed were wiped out and institutionalisation of patriarchy taken place in the social milieu of Kerala.

Education empowered women to get employed, to be economically contributing, to incorporate modern knowledge derived from health science and technology to enhance the quality of their life and family, but it disempowered them socially as the concepts internalised by them created a marginalising effect on women, which essentially taught them to willingly subject to male power, made them feel that to be feminine is more important than to be autonomous.

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#### Herbal Remedies to those in Ancient Ayurveda and to Modern Research and Medicine Tanaya De

Correlation of Knowledge of Common Indians on

Assistant Professor PG Department of Zoology Hooghly Mohsin College Hooghly, West Bengal

#### Introduction:

From time immemorial, traditional healing practices like Ayurveda, Kampo, traditional Korean medicine, and Unanietc are widely practicedin many early civilizations. They use natural remedies and utilize plant extracts in curing ailments. In old days, such experiments and studies for years together have evolved into orderly-regulated systems of medicine. Modern medicine had once overlooked these traditional healing practices and was and is hugely accepted, yet such traditional herbal medicines had also remained popular in many countries. Now-a-days, considering various side-effects of Western medicines, that there has been huge shift of acceptance towards these practices even from public and medical professions may be due to greaterunderstanding of the mechanisms of actions by herbs(Thirumurugan, Senthamil, Yamini, & Dhanasekar, 2015) and gaining great importance in recent times after their efficacies have been reported in different studies. In Germany, herbal products are termed 'phytomedicines' and are popular. Although only small fraction of existing plant species have been researched in recent times, the first pharmacologically-active compound morphine was isolated from opium long back(Yuan, Ma, Ye, & Piao, 2016). In India Ayurveda have been practiced from age-old times (Meulenbeld, 1999). The Charaka Samhita is (thought to be written around 400-200 BC) is considered one of the oldest and the most important text of Ayurveda by Charaka. Another text,

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the SushrutaSamhita described the ancient practice of surgery (shalya) by Susruta written around same time. It is supposed to be the first of its kind. The former used verse and poetry while the latter used both prose and poetry in the texts. AshtangaSangraha and AshtangaHridayam are the work of Vagbhata. These are thought to be dated a little after CharakSamhita and SusrutaSamhita, that is, after 400 BC.(Dick, 1998). In Vedic texts was the first record of Ayurveda as medical scriptures(Dikshith, 2008). In Atharvaveda was traced the origin of Ayurveda(Narayanaswamy, 1981). Use ofplant extracts has been rampant in this form of medicine.

Since Ayurveda has a deep root in India, the knowledge of effects and efficacies of these herbal treatments have been percolated in daily life of Indians. This study is an effort to know how far the knowledge of common people regarding these plant extracts can be correlated to the data laid down by the scholastic texts of Ayurveda and to what extent this ancient knowledge have incited modern research and medicine.

#### Methods

#### Survey conducted

On-line and personal survey was conducted to evaluate the level of common knowledge on use of herbal remedies. Respondents wereIndians from different social status and different age with n = 35.

The questionnaire of the survey were as follows

- What are the plants/ herbs that you have used as remedy? Please mention the parts of the plants used and the ailments for which you use/d them
- What are the plants/ herbs that you know are poisonous? Please mention the parts you use as poison. If you know the ailment it causes or the chemical present in it which causes it, please mention that too
- What is your source of information regarding these plants: (Tick all that applies)
- 11 18 11 Sonari College Academic and Research Journal

a.	Parent (penologymana) benologyman Walaman agazod
b.	Neighbours Neighbours
c.	Playmates 1804(2) 1806(18) Visit Misman 18 18 18 18 18 18 18 18
d.	Local religious preachers
e.	Doctors at heliuse has desembuted
f.	Ayurvedic Scripts
g.	Internet and an analysis of the second secon
4.	Do you have any idea whether these remedies are mentioned in the
Ayur	vedic scriptures in India? (Tick the appropriate choice)
	Strongly agree 1 2 3 4 5 Strongly
	disagree
5.	What are the names of the Ayurvedic scriptures that you know of:
Write	None if you donot know of any
6.	Do you believe that natural elements help to cure ailments? (Tick
the ap	opropriate choice)
dida	Strongly agree 1 2 3 4 5 Strongly disagree
7.	Do you believe that some medicines of alleopathy use active
ingre	dients from natural source? (Tick the appropriate choice)
Stron	gly agree 1 2 3 4 5 Strongly disagree
8.	What are the treatments / medicines you know of using natural
poiso	ns and ailments that it treats
9.	Do you believe home remedies and natural care help to rejuvinate
youth	ful vigour?
	Strongly agree 1 2 3 4 5 Strongly
disag	ree assessmenting as suppliedly vising beta above only over yell.
	The results were then summarised
Cont	emporary Avurvedic books searched

Some contemporary Ayurvedic books and websites were searched for mention of some common medicinal plant that was indicated by most of the respondents. Two most commonly referred herbal medicinal plants was

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chosen, namely, Turmeric (Curcuma longa) and Tulsi (Ocimumtenuiflorum), while two most commonly referred poisonous plants were selected, namely, Yellow Oleander (Bengali-Kalke)(Thevetiaperuviana) and Datura(Daturastramonium, Daturametel) and studied in texts

#### Contemporary Research Articles searched

The contemporary research articles were then searched from Pubmed and Google to understand the extent of research undertaken and the extent to which the mechanism of action of these medicinal plants or plant poisons have been unfurled, namely Turmeric, Tulsi and Yellow Oleander and *Datu*ra.

#### Websites searched, Chemists' Shops explored

First, different websites were searched for use of natural ingredients in allopathy medicine, the generic names and the brand names were searched for drugs prepared from the active ingredients from the plant-extracts and then Chemists' shops were visited to know whether such drugs are available in market in local Indian medical shops

#### Results

#### Survey Results

Most of the respondents have indicated medicinal properties of Turmeric (for gastrointestinal problems, skin diseases and inflammation), Tulsi (For cough and immunity), Ginger (for cough mainly), Vasaka (also for cough and lung problems), Neem (antimicrobial and analgesic), Brahmi (for memory and brain functions), Aswagandha (for fertility and immunity) etc. They have also indicated many plant parts as poisonous like Yellow Oleander (cardiac poisoning), Datura (hallucination, mind-altering properties, death), castor beans (stomach upset), Calotropis gigantean (Bengali - Akanda)latex (blindness), Tragiainvolucrata (Bengali - Bichhuti) leaves (extreme skin irritation) etc.

The respondents have reported that they received this knowledge mostly from parents and to a lesser extent from neighbours and playmates or local
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religious preachers. Among the respondents, about 75% have indicated that they believe these remedies were written in Ayurvedic texts, though many of them have not read them, as indicated their lack of knowledge of the names of ancient Ayurvedic texts. Only about 25% of respondent could name a few texts. But about 75% believe that natural elements can cure ailments. Almost half of the respondents believe that allopathy has adopted various natural ingredients to make their drugs but among the rest opinions are divided. They have indicated the names of different venoms used as medicines, like viper venom (blood pressure control), Hemlock poison (convulsions), hirudin (anticoagulant), morphine (severe pain), atropine (dialation of pupil) etc. Almost all have agreed that home remedies are effective to maintain youthful vigour.

#### Revealed by contemporary Ayurvedic books and websites

An excellent compilation of medicinal plants from Ayurveda was done by AyurvedacharyaShibakali Bhattacharya, in Bengali, by the name "ChiranjibBanoushadhi". It has several volumes representing a precious repository of medicinal herbs. He was indeed a scholar who quoted Slokas of different Vedas to explain the benefits and properties of different plants. Turmeric (Sanskrit – Haridra) (Curcuma longa), was described quoting Slokasfrom Hrikvedas and Yajurvedas. He mentioned the CharakaSamhita and SusrutaSamhita also described the benefits and uses of Turmeric. Mention was made of its uses as anti-microbial, anti-roundworm, in gastrointestinal problem, in skin diseases etc. Even composition was described (curcumin, Alkaloid zingiberine, antiseptic oil p-toylmethylcarbinol, ketonic acid and alchoholic constituents(Bhattacharya S., 1976)

Basil (Sanskrit - Tulsi) (Ocimumtenuiflorum). It was found to be present in Puranas and reference was drawn of the fact that Tulsi was initially not found in Vedas, later on mention of it was discovered from Slokas of UparbahaSamhita of Atharvaveda. Here it is said to have intense anti-microbial property and microbial growth even after rot of body part on snake-bite was said to be prevented by Tulsi. In CharakSamhitaTulsiwas referred to as Surasa, and was said to be used for respiratory problem.

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Chemical composition was mentioned – phenolic components eugenol, methyl eugenol, carvacrol, terpenoids like caryophyllineetc, camphor, traces of acetic acid(Bhattacharya S., Tulsi, 1976).

Datura (Sanskrit –Dhustur) (Daturastramonium, Daturametel) – This was also mentioned in slokas of UparbahaSamhita of Atharvaveda. These were found to be more used in Tantrik texts than in Charaka, Susruta, Vagbhata. But according another ancient scholar Chakrapani, Charaka used the term "Suman" or "Kanak" to actually mean Datura. This view was not accepted by other scholars. The seeds were mentioned to be used in damaging nervous system and causing the victim to be converted to mad. It is used in intoxication too. But it has medicinal uses too. The seeds and skin of roots were used in skin diseases like leprocy. Roots were treated to cure madness in specific doses. Leaves are used to treat fungal infection of scalp, pain and inflammation etc. Chemical composition was alkaloids like hyoscyamine, atropine, scopolamine etc., Vitamin C, oil and allantoin(Bhattacharya S., Dhustur, 1976)

Yellow Oleander (Bengali - Kalke) (Thevetiaperuviana) - Also called yellow Karabi, it differs from Red and White Karabirak that were mentioned in earlier Vedas and Ayurveda texts. The shape of the flowers is different and it was originally not found in India until fourteenth century A.D. It was supposed to be brought from West Indies or South America. In 15th century in an Ayurvedic text Rajnighantu mention is there of four types of Karabi, viz., red, white, yellow and black. All these are termed Karabi due to the fact that they were similarly poisonous and caused death to the horses, hence also called Ashwaghna (that which kills the ashwa or horse). All of them belong to same family Apocynaceae. In the same text it was mentioned all four had similar poisonous and medicinal properties. The barks of stem and roots are poisonous when taken in higher quantity but can be treated for fever and cardiac treatment in lower doses. Leaves, saplings stimulate vomiting, are poisonous but can be treated in skin diseases, urinary problems. Seeds and fruits are extremely poisonous, cause severe damage to heart, nervous system, delirium may ensue and there may be paralysis of brian, gut, spine and may cause death. It was used as a method of suicide. Chemical composition – Glycosides -thevetin B,2'-O-acetyl cerebroside, neriifolin, peruvocideetc, methyl ether, fatty acids, pale yellow oil, leaves have alpha and beta amyrin and a cardiac glycoside(Bhattacharya S., Karabi (Kalke phool), 1995).

Several websites too have mentioned the similar properties of all these four plants described in previous sections. Some of these websites may be mentioned here. The medicinal effects of turmeric (Benefits of Turmeric), Tulsi(Surprising Health Benefits and Medicinal Uses of Eating Basil (Tulsi), 2013), Datura(Garden)(Datura stramonium (Common Name: Jimson Weed) Medicinal Uses, Side Effects and Benefits, 2014) and Yellow oleander(Zamani & Aslani, Yellow oleander and the heart, 2011)(Choudhary, 2017) have been described

#### Revelation by Contemporary Research Articles

A study showed anticancer effects of curcumin, the yellow ingredient of turmeric, regulating a variety of biological pathways of mutagenesis, apoptosis, tumorigenesis, cell cycle and metastasis. Studies also suggested that curcumin has anti-inflammatory, antiplatelet, antioxidative, hepatoprotective and antitumor activities, more frequently in cancers of the liver, pancreas, skin, prostate, ovary, lung etc. Also may be used in treatment of arthritis(Perrone, et al., 2015)(Rahmani, Al, Aly., & Khan, 2014). Curcuminregulate a variety of molecules including oncogenes like p53, egr-1, c-myc, bcl-XL, etc. and transcription factors like NF-kB, STAT-3, and AP-1 as well as protein kinases like MAPK, enzymes like COX and LOX. Curcumin was found to be effective in lung cancer too(Mehta, Patel, & Sadikot, 2014). In diseases like obesity, arthritis, pancreatitis, diabetes, various cardiovascular, neurodegenerative diseases, acute and chronic inflammation occur. Curcumin can inhibit inflammatory cell proliferation, invasion, and through various mechanisms as already mentioned. Curcumin may induce apoptosis through caspase cascade activation as well as mitochondrial and receptor-mediated pathways(Shehzad, Rehman, & Lee, 2013). Curcumin may be effective in diabetes and Inflammatory Bowel Disease (Zhang, Fu, Gao. & Liu, 2013) (Suskind, Wahbeh, Burpee, Cohen, Christie, & Weber, 2013)(Zdrojewicz, Szyca, Popowicz, Michalik, & Œmieszniak, 2017).

Tulsi or Holy Basil with its flavonoids, orientin and viceninhas been found to prevent radiation-induced sickness, mortality at lower concentrations in animals. Studies with mice with tumorindicated that Tulsi extract and its flavonoids are able to protect the tissues not affected, against the tumoricidal effects of treatment of radiation(Baliga, 2016). Ethanolic extract of Tulsi was found to be effective in preventing the bacteria Actinobacillus actinomycetemcomitans from growing in dental plaque(Eswar, Devaraj, & Agarwal, 2016). Tulsi has been found to have benefits as antimicrobial, adaptogenic, antidiabetic, hepato-protective, anti-

inflammatory, anti-carcinogenic, radioprotective, immunomodulatory, neuro-protective, cardio-protective activities (Mondal, Mirdha, & Mahapatra, 2009).

After eating the roots of *Datura*by some in Kawasaki City, Japan in 2014, there was a report of a case of severe food-poisoning(Ushiyama, Akaboshi, Ohsawa, Shimizu, Matsushima, & Shimizu, 2017). In 1801, a doctor of Kentucky discovered anticholinergic poisoning by Daturastramonium (Jimsonweed) and thus came up with suggestion to use it topically to dilate the pupil before cataract extraction(Leffler, Schwartz, Wainsztein, Pflugrath, & Peterson, 2017). A case was presented in a study of a homicide with Datura poisoning while performing a robbery. On autopsy, scopolamine, atropine, and hyoscyamine were found in the vitreous humor, and also methanol. Police found that local travel guide added Datura to a drink to stun and rob his victim. The victim died due to disordered heart rhythm as a consequence of severe anticholinergic syndrome on fatal Datura intoxication(Le, Delannoy, Mesli, Hédouin, & Tournel, 2016). A case of a boy with slurred speech, fever, hallucinations, tachycardia, dilated pupils, confusion and disorientation was reported in a study. It was found that the patient had accidentally ingested seeds of Daturastramonium in a neighbor's garden. This anticholinergic toxicity are a result of toxins in the plant, especially atropine(Özkaya, Güler, Karabel, Namlý, & Göksügür, 2015). Both Daturainnoxia and Daturametel was found to possess high antioxidant properties with D innoxia more potent than D metel (Bhardwaj, Kumar, & Ojha, 2016). Atropine and scopolamine in Daturastramonium may modulate muscarinic receptors by blocking them (particularly the M(2) receptors) on respiratory tract smooth muscle and submucosal gland cells, thereby relieving asthma(Pretorius & Marx, 2006). Extract of Daturastramonium along with two other plant extracts was found to be effective in prevention of spontaneous seizures in rats(Peredery & Persinger, 2004). It was also shown to be used as anaesthtic agent(Dote, et al., 2017). Datura may be used foe anti-inflammatory activity and reduction of autoimmune skin-disease by regulating differentiation of T cellsand modulating JAK/STAT signalling pathways(Su, Wang, Yang, Wu, Cheng, & Kuang, 2017).

In a study 21 patients with history of Yellow Oleander ingestion was followed and most of themrevealed conduction defects in sinus or atrioventricular nodes and some had atrial or ventricular arrhythmias, the typical outcome of digoxin poisoning(Zamani & Aslani, Cardiac findings in acute yellow oleander poisoning., 2010). There are cases of cardiac

Table 1:

Chemical name/ generic name	Brand name	Manufacturer	Country	Plants	Uses	Reference
Ephedrine	Ephedrine Efipres Sulfidrin Tedral SA	Unicure (India) Pvt.Ltd. Neon Laboratories Ltd Samarth PharmaPvt. Ltd. Pfizer Limited	India	Ephedra sinica	Sympathomimetic, antihistamine, can be used for asthma	(Drug "Ephedrine" Price list, 2017)
	Brokaid Primatene Akovaz Corphedra	Flamel Technologies Par Pharmaceutical, Inc.	France, US	Action of the control		(Akovaz (Intravenous), 2017) (CORPHEDRA Drug Profile) (Helmenstine, 2016)
Chlorocarvacrol	Hädensa	Could not retrieve	Austria	This chemical is found in Tulsi too	Antiseptic agent Ointment in treatment of piles, anal fissures and anal itching, anti- inflammatory, pain	(Products OTC) (Helmenstine, 2016)
Carvacrol	Oregano	Could not retrieve	Could not retrieve	Made from a herb of Lamiaceae, same family of Tulsi; Chemical Found in Tulsi too	Respiratory tract disorders, gastrointestinal ailments, menstrual and urinary tract problems	(Vitamin or Supplement) (Nordqvist, 2017) (Helmenstine, 2016)
Eugenol	Alvogyl Begesic	Specialities Septodont	France Czech Republic Israel Latvia	Chemical Found in Tulsi too	Anaesthetic, antimicrobal, disinfecting, stimulant, aromatic and anticonvulsant	(Product catalogue» Dental materials» Surgery) (Alvogyl, 2017) (Helmenstine, 2016)

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(Eugenol, 2017) (Drug "Curcumin" Price list, 2017) (Helmenstine, 2016)	(Chinnuswamy) (Brand Index »Hyoscine brands in India   DrugsUpdate India) (Home » Drugs A to Z » Scopolamine) (Helmenstine, 2016)	(Drug "Atropine" Price list, 2017) (Helmenstine, 2016)	(Scopolamine Multi-ingredient medications containing scopolamine)
Anti-inflammatory, anti-tumorogenic, anti-oxidant, liver and gastrointestinal problems etc	Sedative, muscle problems Parkinson-like conditions, certain muscle spasm problems, irritable colon syndrome, vorniting associated with motion sickness	Dilation of pupil	A a standy Laptopsy s tomor cors to a resident
Curcuma longa	Daturasp.	Atropa belladonna (deadly nightshade) [Chemical also found in Daturo]	ease of a day mile day mile
Singapore India	International	India	Could not retrieve
Sanat	Inga Zydas Cipla Alcon Inc	Biomiicron Pharmaceuticals Indus PharmaPvt. Ltd.	Could not retrieve
Turmix	Belloid Tab, Buscopan Amp, Buscopan Plus Tab, Hyospan Tab, Hyoswift Tab, Spaslnj SoptoHyosci ne, TransdermSc	ATP Atronex	
Curamin	Scopolamine	Atropine	Multi-ingredient medications containing scopolarnine

A MAN BAXO D LE MAN BAXO D LE MAN BAXO D LE MAN BAXO D LE MAN BANG D LE COLOTECTAL BE	(Lanoxicaps (Oral)) (Helmenstine, 2016)
upper respiratory combinations	Cardiotonic, relieve symptoms of congestive heart failure and to regulate certain types of arrhythmias
ed use dult early solie illust 176 o and anomagneted	Digitalis purpurea (purple foxglove)
id, Engarmanida aspeniatus Roco	awoult piestoudo Mitawlauvadiny
Lamon baard og Grandsidens og	signature vente
A Server Christ Server 2000) & Server Server Sies discussed al Mong with me rel Eth butter his dig	Could not retrieve
Atrohist Plus, DeconhistLA, Rolatuss-SR, Protuss	Digitek Digox Lanoxicaps
ramine/hypscyamin e/phenylephrine/ph DeconhistLA, enylpropanolamine/ scopolamine systemic Tablet	Digitoxin (cardiac glycoside)

Note: The above table is just a compilation offew information as described/suggested by different websites, mentioned here as retrieved from them. None of these drugs/compounds and information mentioned here are intended to be taken or followed without medical prescription and this Table 1 is not intended for any medical advice, diagnosis or treatment

(atrioventricular block) that are well known for *Thevetia* reported in another study(Durasnel, et al., 2014). A 25-year-old woman reported that she ingested seeds and petals of yellow oleander

Thevetiaperuviana intentionally and then was evaluated. It was found she has a tendency of depression and it may have been the consequence of that (Fentanes, 2014). In regulated doses it may show medicinal benefits. Tperuviana methanolic extract on supplementation on human cancer cell lines, namely prostate, breast, colorectal and lung, exhibited cytotoxic activity resulting in a significant reduction of cell motility and colony formation. Also, there is reduction of cell-size, induction of membrane blebbing and detachment of cells, apoptosis too was observed confirmed by DNA fragmentation (Ramos-Silva, et al., 2017). There is a report on cardiotonic effect of the glycosides of yellow oleander along with some other plants (Orhan, Gokbulut, & Senol, 2017).

#### Information from websites and Chemists' Shops

Some websitesdepicted that many medicines use active ingredients from plant extracts. They suggest that there are more than 120 chemical substances derived from plants that are considered as important drugs currently in use in one or more countries in the world. Thesemay have been prescribed by physicians probably after analysing the patients. For example, Digoxin from Digitalis purpurea, a cardiotonic by brand name Digitek, Ephedrine from Ephedra sinica, a sympathomimetic, antihistamine, often used in asthma, under brand names Epfire (India), Akovaz (France) etc. (Taylor, Plant Based Drugs and Medicines., 2000) (Dubey, 2008)(Helmenstine, 2016) was found to be mentioned in the websites. Some such and few other phytochemicals including the ones discussed above, as depicted by some websites, are compiled in Table 1 along with the references that mention them. This is just a glimpse of the much larger list that can be compiled with more information

Then Chemists' Shop was explored to see whether these drugs are available. Some of these drugs mentioned here were found to be available in local shops, while others may have been available elsewhere in India or the world, which may be explored in future

#### Conclusion and Discussion

The empirical knowledge of common people in India revealed they could name different plants and their uses in remedies of various ailments, like turmeric for inflammation, gastrointestinal diseases, Tulsi for cough etc, *Datura* as poison and medicinal values, Yellow oleander as

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deadly poison and medicinal uses. They also mentioned the use of Brahmi, Ginger etc. uses in daily life ailments. They believed that this knowledge must have been written in Ayurvedic texts. Ayurvedic texts too revealed the mention of these plants in medicinal uses, the uses depicted in Vedas and in Ayurveda texts being similar to some extent to the common knowledge of the respondents of survey, of course the scholastic texts would reveal much more knowledge regarding the plants in consideration in this study, namely Turmeric, Tulsi, *Datura*, Yellow oleander. Ayurveda being an ancient and predominant form of medicine in ancient India, it is probable that the knowledge of applications of herbs as prescribed by the erstwhile scholars and sages have been carried through generations and have spread widely among masses across social ladders.

Surprisingly, this knowledge was percolated in recent researches and several studies have revealed their benefits and mechanisms of action. Due to the fact that western medicine had initially scorned and rejected herbal source of medicine often calling them "quack", a term that gained popularity even amongmany Indians, rejecting the age-old experimentally proven information of Ayurvedas, hence the research in Ayurvedas had stopped evolving which could be the lead cause of its decline, as no science can prosper without progress in research. Now that new researches are coming up, this brings a hope that more future studies regarding the treasurehouse of herbs would bring more knowledge to the world.

Also it was found that many western allopathy medicines with different brand names are being manufactured taking active ingredients from plant products. Many research institutes in both India and abroad are regularly screening and evaluating the efficacies of plant extracts for control of different diseases. The National Cancer Institute (NCI) in US has collabrativeresearch for screening active plant chemicals for treatments of cancer and AIDS. To name few others The South African Council for Scientific and Industrial Research, The Institute of Biological Diversity (INBio) in Costa Rica, The Institute of Chemistry, National University of Mexico, The University of Dhaka in Bangladesh, Central Drug Research Institute, India and several others all across the globe are now showing interest in studying plant-derived chemicals for evaluating their efficacy against certain ailments (Taylor, Cancer and AIDS Research Searching for the cure., 2000)(New Drugs).

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Thus, there is indication of some correlation between common knowledge of Indians regarding use of plant-parts to ancient practices of application ofherbal remedies as described in Ayurveda. Also, new researches are being taken up regarding this information. Allopathyand Western medicines are also trying to include plant products as their active ingredients in some of their drugs

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## Early Ao Naga Settlements and Village Formations: Lenses from Oral tradition and Archaeology Dr. Aokumla Walling

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The Ao Nagas have rich oral sources on the early settlements and village formations. These oral traditions talks immensely about different areas of early settlements and how they came and settled at the present inhabited area. It also talks immensely about the formation and naming of the village. With no script of their own and having only the spoken words which was passed on from one generation to another, these oral narratives constitutes the history of the early Nagas. This paper tries to project the importance of oral traditions in understanding the early settlements and village formations and its usefulness in archaeological endeavor to reconstruct some aspects of the past of the Nagas.

## Early Ao Naga Settlements and Village Formations: Lenses from Oral tradition and Archaeology Introduction

Oral traditions are exceptionally rich source of knowledge among the Nagas. Nagas like the rest of the tribal communities of the northeastern region share a common feature of having only the spoken language with no script of their own. It was only from 19th century, when the region was annexed and brought into the fold of the colonial rule that the local languages began to transcribe using the Roman script (Aier. 2012:227). What was before is just the word of mouth, passed on from one generation to another. These oral narratives constituted the history of the Nagas.

Engaging oral sources became synonymous with writing a new kind of history. Oral traditions provide an emic perspective, an insider's view, which, although subject to alteration through generational transmission, still offers a self- portrait of a society's history (Mason 2000: 244). Thus, for the societies with no written records, and whose

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past is interwoven in its oral traditions, the incorporation of such narratives be considered together with archaeological, historical and other pertinent available evidence. This paper aims to put forward that an interdisciplinary approach is essential to account the pre colonial Naga history. It makes use of the oral traditions and archaeological study in the historical reconstruction of the region.

#### Early settlements

Ao's are one of the major tribes in Nagaland. They have rich oral sources on the early settlements and village formations. These oral traditions talks immensely about different areas of early settlements and on how they came and settled at the present inhibited area. It also talks immensely about the formation of early villages and the reason behind the naming of the village. Ancient abandoned sites which are laid scattered in the landscape highlights the early settlement and if detailed research is carried out it can speak a lot about the early Ao Naga society.

Oral traditions of the Ao Nagas talks of "Longterokotsu" ('long'stone, 'terok'- six, 'otsu'- story, Aos are believed to have originated from the six stones) an oral tradition of how they came into being. This oral tradition of Longterok is linked to the Ao Naga ancestral village of Chungliyimti (presently in Tuensang district of Nagaland, inhabited by the Sangtem tribe). The oral narrative of "longterok" is vital for the Ao's that their folklore, songs, narratives and all other customary practices are traced to Longterok. According to the oral narratives, Aos left Chungliyimti and after crossing the Dihku River settled in a fertile, forested virgin land with broad, plain elevation, which they named as Aonglenden (Aongforested land, lenden-plain). Aos consist of both the Chungli and Mongsen groups which are supposed to have crossed the river together. As they were staying at Aonglenden, the legend has it that one night ten women gave birth to ten sons. Thus, the place came to be known as Soyim Aonglenden (So-birth, Yim-village), meaning birth village of ten sons. However, this new settlement had to be abandoned within a short period of time as the son of the Unger (Councilor or chief) was killed by a tiger. They migrated to another place called as Koridang (Kori- plant fiber rob for holding the basket, dang- broken). From Koridang, Aos scattered to different places.

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#### Early Village formations

Every Ao Naga village has an oral narrative behind its establishment. It is from *Koridang* that the Aos separated to different village settlements, presently dividing it into 6 ranges, from the highest-Ongpangkong range, to the lowest, Japukong and Tsurangkong range (also the youngest range), which borders with the plains of Assam (the division of ranges was done during the colonial period for better administration).

Due to the shortage of water, food and other problems compelled a group of people at Koridang to leave the place and move to form a new village. Oral tradition says that since they went away from Koridang, the name Kupza (meaning 'going into') was given to that group and their village is known as Kupza. Later two groups of people left and from new villages, namely, Settsu and Longkhum village (There are oral narratives regarding the naming of these villages). The remaining group of people left Koridang and went back to Soyim and called that place as Ungma (meaning 'loss of Unger'). It is said that when this group were staying at Ungma, a man called Kuradi, went for hunting and found a new place suitable for habitation. Returning to his village he suggested to some of his friends to settle in the newly found place. However, the people of Sovim/Ungma did not agree to his proposition. The villagers pleaded not to go away and wanted to stay together but the group determined to leave, did not listen to villagers. They went apart from the parent village and established a new village in defiance of the wishes of the parent village and named it as Mokokchung village ('Mokok' means 'defiance' and 'Chung' means 'refuse/stop') (Longchar 2002). These are just some oral narratives highlighting early village formations.

The oral narratives gives details of geographical markers, place names, genealogy, contacts, exchanges and names of persons which gives a detailed testimony of the historical events. It helps us in understanding the early settlement pattern and the driving forces behind the selecting and settling in an area as well as the reason of abandoning them (in some cases). Whenever settlement is made, it involves involvement of people and the clans, adaptable environment and landscape for economic practices, availability of water resources, capacity of the

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land to hold the population and defence. Most of these village formations happened during the pre colonial times. Thus, while studying the pre colonial history of the Nagas, it is important, as Sharma (2006) has pointed out the need to develop a concept of history which goes beyond information and description and tries to analyze the existing data on economy and society in a manner which reflects upon stages of development and socio-economic formations.

#### Selection of a site for settlement

Village plays an important role in the formation of Ao society. A village cannot be established by its own. It needs various factors of social importance. Whenever it became necessary for the Ao's to establish a new village, the geographical topography of the new site and its picturesque view was reconnoitered carefully. The early Ao society was a society of headhunters and it was essential to save from the hand of the enemies. Enmity with any village landed in headhunting the enemy's village. In order to select a site for habitation a hillock was searched and occupied. This strategic location of a hillock offered best defense against enemies attack. Though there can be some elevated plains around, a hillock was preferred for habitation. Secondly, availability of water sources was an important consideration for the Aos in selecting the location of a village. There are examples of villages which were abandoned due to drying up of water sources. Therefore at least two perennial sources of water were essential requirements for selecting a village site. Thirdly, accessibility to forested areas where the villagers could collect woods and hunt animals for food and for providing land for later usage was looked into1.

In addition to the natural suitability, Ao's also draw lots from dreams before they took over a new site. Only when luck was in their favor and dreams propitious that they decided to move in to the new place. A batch of selected people representing as many clans of the group or the village would first go to the site for inspections. A portion of land digging at the site is carried out to know the fertility of the soil. First they will dig a hole and refill the dugout. If the soil which has been taken out does not fill up the hole again the site is discarded. However, if the soil after filling up is left over with some more soil, it shows sign of a fertile land and the land is taken over for cultivation and settlement<sup>2</sup>.

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#### Material evidences-Archaeology and Oral traditions

Oral narratives have been used to collaborate with archaeological evidence in order to test the reliability of site locations, time depth and socio- cultural developments. Using the oral narratives many archaeological sites which the Aos associates are identified and explored.

#### Chungliyimti

One of the earliest documented ethnographic records of Chungliyimti is the work of J H Hutton in his Diaries of Two Tours in Unadministered Area East of the Naga Hills (reprint 1986) where he pointed out its archaeological potential. What followed much later was the archaeological exploration carried out at Chunglivimti by V. Nienu (1974) and later in the year 1992, under the guidance of T C Sharma and M Alemchiba, the Dept. of History and Archaeology, North East Hills University, Kohima Campus and the Directorate of Art and Culture, Govt. of Nagaland, undertook archaeological study of the site, which reported evidence of grinding stones, spindle whorls, pottery vessels, beads of rear stones and earrings (IAR 1992). In the year 2008 a major research program was initiated jointly by the Anthropological Society of Nagaland and the Directorate of Art & Culture, Govt. of Nagaland where archaeological excavation was carried out at Chungliyimti, under the guidance of Dr. Tiatoshi Jamir, Nagaland University.

The excavation revealed a settlement that was inhabited from ancient up to modern times with several house plans based on post-holes. Evidence of a few unfinished stone celts (both sandstone and phyllite), beads made from glass, tile, jade, agate, amethyst, carnelian and poshan, spillitecelts and iron tools were also reported. Pottery evidence indicates a complex of traditions ranging from coarse, simple and twisted cord marked wares, basket impressed and geometric and paddle impressed design as well as some wheel made pottery, besides some wheel-made variety. Radio carbon dating of the site was carried out from the charcoal sample, assigning a date of 980-1061 A.D (Aier and Jamir 2009).

#### Rito

From Koridang, a group of people moved to a place called Rito. It is now an abandoned site with no human habitation, however, showing

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traces of the past settlement. Most of the surface finds are potsherds, fragments of smoking pipes, stone sharpeners, sling balls, spindle whorls and other unidentified objects. No bones or metal objects were found.

According to the oral tradition the Rito people used two types of pottery- the handmade and the wheel made. They didn't make their pots and were brought from an Ao village popular in making handmade pots, Changki village, and the wheel from Bangkulong (Assam). The maximum number of potsherds collected from the survey is the handmade red wares, having a variety of designs, mostly paddle impressed and globular in shape. The second type of potsherds covers just a few percentages of the surface finds, with no designs, having content of mica and sand granule. It however has more elaborate rim and though the sherds are in fragments the shapes might have been in variety (Walling 2008)

#### Noksenkeni

The site Noksenkeni (Mokokchung district) is associated with a group of people known as the 'Molungers' who are now dispersed to different parts. The site revealed a good number of potsherds along with some sharpening stones and grinding stones. Two types of potsherds were revealed from the exploration -the handmade and the wheel made wares. Handmade wares shows more in proportion then the wheel made however more eroded. The handmade wares are having paddle impressed designs. However, because of the poor preservation the designs are difficult to identify. The wheel made is more or less plain wares though the shapes would have been more varied in this type of wares. No complete ware either in handmade or wheel made was found. An impressive find from the exploration is a sharpening stone around 75cm×35cm lying in the area of the 'Arju-Morung' of the Molungers. Some other finds includes sharpening stones and a grinding stone.

#### Conclusion

The historical validity of such events as recorded in the oral tradition are referred to as legitimate oral documents by the Aos in reconstructing their past history and in justifying various social and cultural practices. Such narratives are continuously scrutinised and in the event of any

disagreements, validation and verification of the story is sought from the relevant village (Aier: 229). These oral narratives of the Nagas are subject to verification by the community, whose history unfolds through a narrative. The paper supports the use of oral tradition by linking it to a shared past, and supports the argument by Aier (2012:228) that they are not totally 'shut within a lived past and to itself' (Lenclud 1997: 62), but continuing to have a relevance even in the present. Thus, new insights and discoveries can be obtained at the point where archaeological and oral sources meet and when the different strands of evidence come together and are verified in a rational explanation.

The integration of the data that are emerging from material culture through excavations and oral narratives which are actually a fossilised chain of thoughts, deeply ingrained in the mind of the people who have inhabited the region for a very long period of time "since times immemorial". It is this very set of data that can only address the issue of reconstruction of the past, especially for the region where oral narratives are the predominant. Oral traditions if treated seriously may yield a whole new area of inquiry, which supported by known ethnographic facts, could be the impetus for a different kind of culturally focused archaeological research and in the process, entirely new, and explanatorily rich line of archaeological research may emerge. (Whitely 2002: 413)

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#### (Footnotes)

- 1. Interview with Bendangangshilmsong, 2015
- 2. Interview with T SenkaAo, 2014



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## Clean India Mission: The Role of School in India Dr. Bhola Nath Gupt Malviva Centre for Peace Research

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#### Introduction

Clean India Mission was officially launched on 2 October 2014 at Rajghat, New Delhi, where Prime Minister Narendra Modi himself cleaned the road. SBM is a cleanliness campaign. SBM is national cleanliness campaign established by Government of India. This campaign involves the construction of latrines; promoting sanitation programmes in the rural areas cleaning streets, roads etc. This campaign has been known by its different name, Swachh Bharat Mission (SBM) or Swachh Bharat Abhiyan (SBA) or Clean India Mission.

Through SBM, it promotes to implement the proper waste management through the scientific process, hygienic disposal, reuse and recycling of municipal solid wastes. It also creates an environment to improve the quality of life of people in rural area. People from different sections of society have come forward and joined this mass movement of cleanliness. From Government officials to jawans, bollywood actors to the sports persons, industrialists to spiritual leaders, all have lined up the noble work. Millions of people across the country have been day after day joining the cleaning initiatives of government department, NGOs and local community centers to make India Clean. Government has urged people to spend their only 100 hours of the year towards cleanliness in their surrounding areas or other places of India to really make it successful campaign. Schools and colleges have participated in the event by organizing many cleanliness activities according to their own themes.

The President of India, Pranab Mukherjee said in June 2014 while addressing the Parliament that "for ensuring hygiene waste management and sanitation across the nation a Swachh Bharat Mission will be launched. This will be our tribute to Mahatma Gandhi on his 150th birth anniversary to be celebrated in year 2019. The government is aiming to achieve an

open-Defection Free (ODF) India by 2 October 2019, the birth anniversary of Mahatma Gandhi by constructing 12 crore toilets in rural India."

Uncleanliness creates different harmful insects, bacteria, files, mosquitoes and other harmful organisms. It becomes cause of many diseases so public health, time and money will be wasted. Dust smells, it is often difficult to walk on roads nearby the huge waste bins, so public cannot stay like that for long. Many people cannot do their duties properly and fall sick; it is wastage of money and resources at national level. Unclean places do not look good, we do not feel happy and visitors do not like it.

#### **Background of Clean India Mission**

The rural sanitation programme in India was introduced in the year 1954 as a part of the First Five Year Plan of the Government of India. The 1981 Census revealed rural sanitation coverage was only 1%. The International Decade for Drinking water and Sanitation during 1981-90, began giving emphasis on rural sanitation. Government of India introduced the Central Rural Sanitation Programme (CRSP) in 1986 primarily with the objective of improving the quality of life of the rural people and also to provide privacy and dignity to women. From 1999, a "demand driven" approach under the "Total Sanitation Campaign" (TSC) emphasized more on Information, Education and Communication (IEC), Human Resource Development (HRD), Capacity Development activities to increase awareness among the rural people and generation of demand for sanitary facilities. This enhanced people's capacity to choose appropriate options through alternate delivery mechanisms as per their economic condition. Financial incentives were provided to Below Poverty Line (BPL) households for construction and usage of individual household latrines (IHHL) in recognition of their achievements. To generate awareness on sanitation, the Nirmal Gram Puraskars (NGP) were awarded to recognize the achievements and efforts made at the GP level in ensuring full sanitation coverage and achieving other indicators of open defecation free GPs. While the award gained popularity in bringing about a desire in the community for attaining Nirmal Status, there have been issues of sustainability in some awardee GPs.

The "Nirmal Bharat Abhiyan" (NBA) the successor programme of the TSC, was launched from 1.4.2012. The objective was to accelerate 11 44 11 Sonari College Academic and Research Journal

the sanitation coverage in the rural areas so as to comprehensively cover the rural community through renewed strategies and saturation approach. Nirmal Bharat Abhiyan (NBA) envisaged covering the entire community for saturated outcomes with a view to create Nirmal Gram Panchayats. Under NBA, the Incentives for IHHLs were enhanced and further focused support was obtained from MNREGA. However there were implementations difficulties in convergence of NBA with MNREGA as funding from different sources created delays.

The focus of the Strategy is to move towards a 'Swachh Bharat' by providing flexibility to State Governments, as Sanitation is a state subject, to decide on their implementation policy and mechanisms, taking into account State specific requirements. This is focused to enable States to develop an Implementation. Framework that can utilize the provisions under the Mission effectively and maximize the impact of the interventions. The Government of India's role would be to complement the efforts of the State Governments through the focused programme being given the status of a Mission, recognizing its dire need for the country.

Implementation of SBM Programme, certain approaches can be considered. The suggested approach would be to adopt the Community led and Community Saturation approaches focusing heavily on collective behavioral change. Emphasis is to be placed on awareness generation, triggering behavior change and demand generation for sanitary facilities in Houses, Schools, and places of Community congregation, and for Solid and Liquid Waste Management activities. Focus will be on Inter Personal Communication (IPC), especially of triggering of demand and use of toilets through social and behavioral change communication and house to house interventions. Since Open Defecation Free villages cannot be achieved without all the households and individuals conforming to the desired behavior of toilet use, every day and every time, community action and generation of peer pressure on the outliers are the key. Therefore behavior change communication should focus on triggering entire communities. Community based monitoring and vigilance committees are essential to create peer pressure. Delivery mechanisms would be adopted to meet the community needs, which is to be decided by the States. In the context of striving for saturation and its consequent implications, it is suggested that the planning for implementation should be the District level. There should be suitable

targeting of GPs and an appropriate district wide IEC/IPC/social mobilization campaign should be carried out.

The Government of India with help of partners like UNICEF is looking at the challenge of Open Defecation very seriously. The government has a target to make India "Open Defecation Free" by 2019 and UNICEF India is a key partner in its flagship programme to achieve this target through the Swachh Bharat Mission (SBM). In terms of communication campaigns, the WASH section provided technical support to the Government of India to develop the national Sanitation and Hygiene, Advocacy and Communication Strategy (SHACS). This strategy has been contextualized by all states that have a UNICEF presence and district implementation plans have been developed in all states ready for rollout. UNICEF is also providing technical inputs to the India chapter of the Global Inter-faith WASH Alliance (GIWA), to plan its programme of strategies including outreach to create demand for toilets.

#### Objectives of Clean India Mission

- The main objectives of SBM are removing the trend of defection changing insanitary toilets into pour flush toilets, removal of manual scavenging, proper disposal of solid and liquid wastes enhance awareness about sanitation facilitating the participation of private sectors towards cleanliness facilities.
- The basic goals of this mission are to make country full of sanitation facilities as well as eliminate all unhealthy practices of people in daily routines and improve life style.
- The completion of this mission would indirectly draw the attention
  of business investors in India, enhance the GDP growth, draw
  tourist attention from all over the world bring variety of sources of
  employment, reduce health cost, reduce death rate and reduce
  lethal disease rate and many more.
- Considering the importance of cleanliness and inculcating cleanliness from a very young age, SBM includes clean school, clean surrounding and play area, pour drinking water facilities, proper toilets, safe and clean food and personal hygiene. All students must be aware of need of cleanness and various aspects of health and sanitation. Each student can spread cleanliness

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awareness among his family members effectively and their by pave the way for a clean society as a whole.

#### Review of literature

Sanitation and Cleanliness for a Healthy Environment (2005)-in this book it has been described that Keeping clean and disposing of human waste (faces and urine) are necessary for good health. If they are not taken care of in a safe way, our faces and urine can pollute the environment and cause serious health problems, such as diarrhea, worms, cholera, and bladder infections. Many of these problems can be prevented through:

- Personal cleanliness (hygiene) -washing hands, bathing, and wearing clean clothes.
- Public cleanliness (sanitation)- using clean and safe toilets, keeping water sources clean, and disposing of garbage safely.

Many diseases are spread from person to person by germs in faces. Some experts believe health problems from poor sanitation can be prevented only if people change their personal habits, or "behaviors," about staying clean. But this idea often leads to failure because it does not consider the barriers that people face in their daily lives, such as poverty or lack of access to clean water. When behavior does not change, people are blamed for their own poor health. Safe water for washing and drinking is also important for health. So are other kinds of cleanliness such as ensuring that women have a way to keep clean during monthly bleeding. Illnesses caused by germs and worms in faces are a constant source of discomfort for millions of people. These illnesses can cause many years of sickness and can lead to other health problems such as dehydration, anemia, and malnutrition. Severe sanitation-related illnesses like cholera can spread rapidly, bringing sudden death to many people.

The Joint Monitoring Programme report, Progress on sanitation and drinking water: 2015 update and MDG assessment, says worldwide, 1 in 3 people, or 2.4 billion, are still without sanitation facilities—including 946 million people who defecate in the open. Despite increases in sanitation

globally, India has the largest number of people still defecating in the open: more than 595 million. One in two people uses a toilet.

## According to UNICEF Report (2015) on Eliminate Open Defecation, it has been found out that-

- Half of the population excretes more than 65,000 tonnes of faces outside every day.
- An even lower proportion of India's rural population uses toilets.
   About 65 per cent of people in rural areas do not have access to toilets.
- Of the more than 160 million people who have access to improved sanitation, the coverage is highly inequitable. Open defecation is actually still increasing amongst the poorest segment of the population.

 Only 11 per cent of Indian rural families dispose of child faces safely. Eighty per cent of children's faces are left in the open or thrown into the garbage.

- With 44 per cent of mothers disposing of their children's faces in the open, there is a very high risk of microbial contamination (bacteria, viruses, and amoeba) of water which causes diarrhea in children.
- India reports the highest number of deaths due to diarrhea in children under five in the world. Every year, diarrhea kills 188,000 children in this age group.
- Children weakened by frequent diarrhea episodes are more vulnerable to malnutrition, stunting, and opportunistic infections such as pneumonia. About 43 per cent of children in India suffer from some degree of malnutrition.
- The facial-oral route is an important polio transmission pathway.
   Open defecation increases communities' risk of polio infection.

According to UNICEF Report (2016) on Water, Environment and Sanitation in India, it has been analyzed that India is home to 594 million people defecating in the open; over 50 per cent of the population. With 594 million people defecating in the open and 44 per cent mothers disposing their children's faces in the open, there is a very high risk of microbial contamination (bacteria, viruses, amoeba) of water which causes diarrhea

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in children. Women, who have to collect the drinking water, are vulnerable to a number of unsafe practices. Only 13 per cent of adult males collect water. Sixty seven per cent of Indian households do not treat their drinking water, even though it could be chemically or bacterially contaminated. Hand washing with soap, particularly after contact with excreta, can reduce diarrheal diseases by over 40 per cent and respiratory infections by 30 per cent. Diarrhea and respiratory infections are the number one cause for child deaths in India. Hand washing with soap is among the most effective and inexpensive ways to prevent diarrheal diseases and pneumonia. Children weakened by frequent diarrhea episodes are more vulnerable to malnutrition and opportunistic infections such as pneumonia. About 48 per cent of children in India are suffering from some degree of malnutrition. Diarrhea and worm infection are two major health conditions that affect school age children impacting their learning abilities.

Clean India Mission aims to make India a completely clean India .Clean India was a dream seen by the father of nation, **Mahatma Gandhi** who said that "Sanitation is more important than Independence"; he also said that cleanliness and sanitation are integral parts of healthy and peaceful living.

C.H. Cooley had described two groups (1) Primary and (2) Secondary. His classic analysis of a primary group defined it in term of face to face association and co-operation, sentiments of loyalty, emotional involvements, identification and concern for friendly relations as an end in themselves, not as a means to an end. Usually the primary groups are small, but sentiment is more important than size. The primary group is the product of long and intimate interaction under formal conditions. Cooley wrote by primary groups "I mean those characterized by intimate face to face association and co-operation. The most important of this intimate association and co-operation are the family, the playgroups of children and the neighborhood or community group of elders". Both primary and secondary groups are source of socialization; however primary groups are more effective for any activity in the society.

It is frequently argued that changes in information and communication technologies (ICT) have transformed the way we perceive the word. This is proposition made famous by Marshal McLuhan (1965). McLuhan was already thinking about technology driven transformation

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of society. Society is often seen as the sum of communications that take place it, and the impact of technology on communications has therefore remained at the centre of much writing on the new age. The mass media, forms of communication directed to large audience, also socialized us. radio, television, newspapers, magazines and internet (social media-face book, twitter etc) not only entertain society but also shape public attitude, values and basic orientations to life.

Habermas in his first major publication, Structural Transformation of the Public Sphere, he traces the evolution and dissolution of what he term the public sphere. This sphere is a realm of social life where public can bring up matters of general interest; Where they can discuses and debate these issues without recourse of customs, dogma and force; and where they can resolve differences of opinion by rational argument. Habermas sees emancipation from domination as possible through "communicative action" which is a reincarnation of public sphere in more conceptual clothing.

According to the book Sanitation and Cleanliness for a Healthy Environment (2005), it has been analysis that every person and every community has a way of dealing with sanitation, even if it just means that people go into the bush to urinate and defecate. Households and communities can benet from talking about the sanitation methods that will work best for everyone. Healthy sanitation must consider the needs of children, who cannot take care of themselves. It must also ensure that women have toilets that they feel safe using and a way to keep clean during monthly bleeding. Because people have different sanitation needs, decisions about sanitation should be made by the people who will be most affected by those decisions. And because household and neighborhood sanitation decisions can affect people downstream, communities need to work together to improve sanitation for all. Community participation can make the difference between success and failure when a government or outside agency plans a sanitation program. When local people participate in sanitation planning, the result is more likely to t local needs. People have different ideas about who should clean toilets. Even in a single household, this can be a difficult problem to resolve in a way that satises everyone. It is easy to talk about participation and cooperation in the household or

community, but it can be very hard to do. And it is difficult when people who did not create a problem must x it.

#### Clean India Mission: The Role of School

Clean India Mission is a national movement. In order to achieve the long-term objectives of the mission or to make it successful, the awareness as well as co-operation is essential among all sections of people in society. All sections of people must be aware of the different social as well as the cultural schemes of the government going on at local, state and national level. The schools play an important role in making these schemes successful. Schools are better mediums to achieve the long-term objectives of the mission, because school is a significant institution where the socialization process of the children takes place. In India since the ancient times, education on cleanliness has been disseminated through the medium of schools. India is a country where people irrespective of caste, community, religion and culture live together. The educational system of India can be seen from religious perspectives-Vedic Schools, Sanskrit schools, Khalsa Schools, Madrasa Schools can be taken into account in this respect. These schools play significant roles in the dissemination of knowledge related to cleanliness through the medium of traditional educational system.

At present time, because of the advancement of modern education system, the government as well as private schools plays important roles in the socialization process of the children. These schools play important roles in making clean India mission successful. Without the co-operation of the schools, it will be difficult to spread the message of this mission to the different strata of society. There are two types of schools-1) traditional schools such as Vedic schools, Sanskrit School, Madrasa Schools 2) Modern schools including government schools as well as private schools. The role of school education are following-

- Integrate hygiene messages in daily school curriculum like morning assembly and prayers, during subject classes like mathematics, science, social sciences.
- Educate students about proper toilet use and hand washing, including washing hands before meals and after toilet use.

- Facilitate and supervise daily hand washing before mid day meal activities, supervise operation and maintenance of toilet, drinking water sources and hand washing facilities.
- Inform students about the changes they will go through during adolescence, and provide space for girls and boys to talk about menstruation and learn about menstrual hygiene.
- Encourage students to consistently use, operate and maintain school water, sanitation and hygiene facilities.
- Support children in taking an active role in keeping up hygiene practices, both in school and at home.
- Ensure that soap and water are always available at hand washing stands.
- Include supervision of water, sanitation and hygiene activities in teachers' responsibilities and performance evaluations.
- Get involved in planning, oversight and ongoing management of water, sanitation and hygiene programme in consultation with students and parents; and participation in monitoring and corrective actions.
- Organizing annual health check-ups of students and supervision of de worming medicines.
- Become role models for students by adopting critical hygiene behaviors like hand washing with soap before meal.

#### Conclusion

Clean India Mission is a national campaign. It has their relevance because well-maintained water supply and sanitation facilities in schools encourage children to attend school regularly and help them achieve their educational goals. Inadequate water supply and sanitation in schools are health hazards and affect school attendance, retention and educational performance. Adolescent girls are especially vulnerable to dropping out, as many are reluctant to continue their schooling because toilet facilities are not private, not safe or simply not available Women and girls face shame and a loss of personal dignity and safety risk if there is no toilet at home. They have to wait for the night to relieve them to avoid being seen by others. In India, open defecation is a well-established traditional practice deeply ingrained from early childhood. Sanitation is not a socially acceptable topic, and as a result, people do not discuss it. Consequently, open defecation has persisted as a norm for many Indians. In addition to tradition

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and the communication taboo, the practice still exists due to poverty; many of the poorest people will not prioritize toilets and besides, many are living in rented homes without toilets.

In order to make any mission successful, the public activity and awareness is necessary. The socialization process is most significant in public activities and awareness. Through the process of socialization, human beings learn the different ways to think, live and work in society. In the process of socialization, the primary group plays an important role, though secondary group can also participate in the process. In order to make SBM successful in Varanasi, the study of the role of primary group (family, playgroup of children, neighboring schools) in making public aware of the SBM is very relevant because such type of social scientific study will help in finding out the problems related to SBM at ground level.

Equally, community approaches that involve systematic and structured Information, Education, and Communication (IEC) and Inter-Personal Communication (IPC) elements are not yet integrated in the SBM. In the present time, the modern technologies such as radio, television, mobile, social media play a significant role in making public aware of the government policies. It will be most relevant to study the role of information and communication technology in a scientific way regarding the working of SBM..

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## THE AESTHETICS OF POSTMODERN FICTION: AN APPRAISAL

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There have been many attempts to theorise the effects and manifestations of postmodernism for literature, all usually facing problems of historical or formal definition. Although the word 'postmodernism' is often used fairly irregularly about contemporary cultural production, it is possible to distinguish two particular uses: first, as a term which indicates the contemporary cultural context as a whole, and second, as a description of a set of features which are evident in selected texts. It is often used as a periodising concept to refer to the literature which emerged in the 1960s Cold War environment and also as a description of literary formal characteristics such as linguistic play, new modes of narrational self-reflexivity, and referential frames within frames. Much postmodern fiction is permeated too with aesthetic representations of commodities and mass media entertainment.

The aim of this paper is examine the aesthetic of postmodernism in relation to fiction and to analyse how the postmodern fiction overthrows the mimetic and referential paradigms of fiction, to discuss the ways and means by which such fiction engages in a discourse on its own constitutive process.

The aesthetic of postmodernism in relation to fiction is best understood by an overview of its characteristic features and preoccupations. Postmodernist writing is often regarded as experimental in nature in the sense that it is an attempt to recategorize and redefine the practice of fiction and to rethink its history and tradition.

One of the foremost characteristics of postmodernist fiction is that it is self-reflexive and self-critical about representation. It undermines the generic assumption that a novel is referential or that it is a construction that carries a relation to society or the world at large. Instead it is variously described as self-reflexive, self-conscious and narcissistic. The idea

governing these various appellations pertain to fiction's awareness of itself as a mere structure of words, so that its nature as artifice is deliberately exhibited. Robert Alter who traces such self-consciousness of fiction to Cervantes' Don Quixote, views that the realistic concerns of novelists have become complicated and modified due to "the writer's awareness that fictions are never real things" (Partial Magic X). Linda Hutcheon chooses to describe such textual self-awareness by terms like "narcissistic" (Narcissistic 1). While Alter proposes a dialectic between fiction and reality, bringing about a separation between art and life, Hutcheon proposes that there has been a reworking of the mimetic impulse of fiction so that the shift of focus is from "mimesis of product" to "mimesis of process" (Narcissistic 5). The latter view considers that reading and writing are as much part of life as of art, for in co-creation of the fictional universe, the reader is invited to respond actively in a way that becomes part of the experience of life.

Whatever be the frames of reference taken up by critics, the self-consciousness or self-reflectiveness of the novel as analyzed by them, reveals some common factors of functioning. As early as *Don Quixote* (1605) and *Tristram Shandy* (1759-67), the reader has been invited to collaborate in the creative process by witnessing the novel's self-analyzing technique. The ways by which self-conscious fiction can draw to itself are as follows:

- ii. By the mirroring of the work itself by techniques known as interpolated tale or *mise en abyme* or internal mirrors. For example, in *Don Quixote*, Cervantes provides mirror-images of the central action, chiefly through the narration of a multiple of fictional authors.
- ii. Signalling the presence of the writer writing the novel through such devices as the ostentatious narrator. The examples range from Cervantes' multiple narrators in Don Quixote, through Fielding's self-conscious narrator who addresses the reader in Tom Jones, to the self observing narrator of Nabokov's Ada.

Thus, the story's diegesis or the act of narration becomes itself an element in its mimesis. It is seen that in these early novels, the narrative thematized and incorporated the act of diegesis into its very form. Thematisation of narrative is, another characteristic feature of postmodernist fiction. The method of incorporating the narrative process

or linguistic concerns into the fictional content varies from text to text. As noted by Linda Hutcheon, there are texts which are conscious of their narrative identity while others show a consciousness of their linguistic status. Both reveal this awareness by a thematization or allegorization within the fiction itself, which may be either clearly evident or internalized (*Narcissistic* 22-23).

An essential feature of postmodern writing is its anti-novelistic trait. As defined by Abrams, an anti-novel is "a work which is deliberately constructed in a negative fashion, relying for its effects on the deletion of standard elements, on violating traditional norms, and violating traditional norms, and on playing against the expectations established in the reader by the novelistic methods and conventions of the past" (Glossary 134).

An example of the anti-novel is Beckett's *Watt*. The novel's plot though is patterned in the order of a mathematical series yet, it breaks up in absurd tales, catalogues, footnotes verses, musical notations, stories, verses etc. Thus, the plot deliberately violates fictional norms. The plot does not consist of anything worthy of fictional content. In brief, Watt, the deranged hero takes a tram, then a train to the house of one Mr. Knott, serves the latter for an indefinite period. Thereafter, the story proceeds to reveal that Watt himself disappears. The mad narrator, Sam informs: "As Watt told the beginning of his story, not first, but second, so not fourth, but third, now he told its end. Two, one, four, three, that was the order in which Watt told his story..." (quoted in Hassan, *Dismemberment* 224).

Similarly, Sterne's *Tristram Shandy* is an anti-novel in the sense that it was written as a reaction against the established artistic norms. It employed a parody of conventions such as the causality of plots, chapter divisions, use of prefaces, illustrations and footnotes, the emphasis on moral content, adventures, suspense, the authorial power among others. Sterne in this novel makes the reader continually conscious of the conventions, exploring their limits and duplicity or questioning the reality behind the artifice. It is through this process of critiquing the literary conventions by means of parody, that self-conscious novels incorporate literary criticism into the fictional world, in the manner of "an act that is at once 'conjuration and radical probing'". Alter explains this fact, by talking about Sterne's use of the self-

conscious narrator in the above novel who draws attention to the artifice and tricks of novel-writing. The reader, he says, knows that the narrator is just a mask for Sterne himself. Yet, at times when the distance between the narrator and Sterne diminishes, the reader takes him to be real. Thereby, the novel intertwinds fabrication and criticism into its very texture.

Thus, self-critique emerges as a significant feature of these self-conscious form of novels and of all those following it. In fact, fiction belonging to this tradition engage in a discussion on theory through the practice of writing fiction.

The origins of the self-reflecting nature of fiction lies in the parodic intent as noticed in *Don Quixote*, where parody is utilized to foreground or unveil outdated or dead concepts or assumptions of genres such as the chivalric romances. Parody is thus an essential self reflexive technique to point to the status of fiction.

Parody which takes the form of ironic quotation, pastiche, or intertextuality is usually considered a central feature of postmodernist fiction. The parodic echoing of past representations of art is not nostalgic but rather ironic, revisionist or critical. Postmodern parody is "both deconstructively critical and constructively" creative in the sense that it exposes both the limits and the powers of representations of history (Hutcheon, *Politics* 89-91).

While assessing the state of twentieth century fiction, John Barth in an essay entitled "The Literature of Exhaustion" (1967) has defined exhaustion as "used-upness of certain forms or exhaustion of certain possibilities" most notably those from realistic tradition by such means as parody, internal mirroring and allegorizations. But these attempts to exhaust literary possibilities he have been unsuccessful. Barth takes the work of Jorge Luis Borges as the best model of this twentieth-century literature of exhaustion, as his work "suggests the view that intellectual and literary history...has pretty well exhausted the possibilities of novelty. His ficciones are not only footnotes to imaginary text, but postscripts to the real corpus of literature." Taking example of the 'Library of Babel' from one of Borges' stories, Barth notes that reality for the twentieth-century writer has come to resemble this infinite library where all the books that can ever be written already exist. But Barth does not dismiss the literature of his age as a mere postscript to a completed corpus, the exhaustion of possibilities is no cause for despair

or alarm. Confronted with such an "intellectual dead end" or "aesthetic ultimacy", the postmodernist writer according to Barth employs it against itself to accomplish, new human work. For example Barth's own novels like *The Sot-Weed Factor* or *Giles Goat-Boy* imitate the form of the novel by an author who himself imitates an author's role. The writer of genius can rely on his genius to create a new kind of literature when there is nothing left to create.

Postmodernism in literature and the arts has parallels with the movement of structuralism (in linguistic and literary theory). An undertaking by poststructuralists is the abandonment of the Romantic faith in the possibility of "authentic" and original utterance (Selden 380). The belief of Nietzsche that language is essentially figurative and not referential or expressive was taken up by major theorists of poststructuralism such as Jacques Derrida, Michel Foucault, Paul de Man etc. Derrida's influential essay titled "Structure, Sign and Play" put into question the metaphysical assumptions or foundational concepts of western philosophy. The concept of Logocentrism or the belief in an ultimate word, truth or reality serving as the foundation of man's thoughts and experience, is interrogated and subverted in poststructuralism and in postmodernism, too. This subversive strategy in turn reveals "the 'meaninglessness' of existence and the underlying 'abyss', or 'void', or 'nothingness' on which any supposed security is believed to be precariously suspended"(Glossary 120).

As revealed in the works of writers like Beckett, postmodernist writing is found to be epistemologically sceptical of objectivity, historicity, rational categorization of facts. The background of Beckett's thoughts or his metaphors of the human condition as revealed in his works, derive from past poets and philosophers. For instance, he is sceptical of the philosophy of Descartes "who predicted the unity of all sciences in a rational method" (Dismemberment 215). For Beckett, the Cartesian certainties have given way to universal uncertainties or doubts for he believes that "as metaphysics once yielded to the scientific method, so the latter must give way to epistemological mysteries" (216). Moreover, Beckett interprets one of the dualism of Western thought—the debate whether the divisible world of matter and the indivisible world of the mind could be brought together—by superimposing intelligence over matter or body. Matter in Beckett's world

is "alien and threatening" and therefore the "mind is set free from decaying matter; it turns endlessly upon itself, droning words, dribbling numbers" (216). Beckett's heroes, therefore are solipsistic:

His anonymous heroes solemnly perform combination and permutation, they repeat their word and vary their gestures *ad nauseam*; they add and tabulate all the trivia of existence; they are what happens to the mind when the mind has nothing to contemplate but its own symmetry, when language, caught in the paradox of its own self-denial, aspires to ratio...their story, like a surd, tends toward silent infinity. (217)

A significant feature of postmodern writings is the lack of depth so that the rhetoric of 'deep' (or 'transcendent') meaning and truth is abandoned. In the French new novel, practised by writers like Alain Robbe-Grillet, there were attempts to exclude completely the human perception or all human interference in the act of representation. Along with the exclusion of human perception, his work simultaneously moved towards absolute subjectivity so that there are no things but only perceptions of things. The third and the final step in his work was the exclusion of both things and perception, so that one is left only with language.

In postmodernism, the idea of any stable or permanent centre is interrogated. Naturally, when the idea of any stable reality disappears, the belief that there must be a firm and objective connection between the objects of perception and the words used to name them (or between the signifier and the signified) is no longer tenable. Going by the tenets of deconstructive criticism, a postmodernist text can be said to undermine its own claim to have a determinate meaning so that one is free to produce one's own meaning out of it by an activity of semantic "freeplay" (Lodge *Criticism* 89). The text displays a dissemination of meanings, or in other words, it opens itself up to an infinite play of significations, thereby making itself indeterminate in nature.

Driven by the realization that meaning is indeterminate or is indecisive, the world or reality in a postmodern text is not conceived as constructed in subjectivity but as constructed through language. Thus, language or medium becomes the sole concern or the text or in other words a renewed sense of language as a means of constructing the fictional artefact becomes the aim of the novelist.

The features enumerated above, taken together go to make up what is termed as metafiction, fiction that is engaged in a discourse about

its own making. Thus, in the words of William Gass:

There are metatheorems in mathematics and logic, ethics has its linguistic over soul, everywhere lingos to converse about lingos are being contrived, and the case is no different in the novel. I don't mean merely those drearily predictable pieces about writers who are writing about what they are writing, but those...in which the forms of fiction serve as the material upon which further forms can be imposed. Indeed, many of the so-called antinovels are really metafictions. (*Figures* 24-25).

Thus, on examining the features of postmodern narrative, it has been found to display experimentative and innovative tendencies resulting from the interrogation of all the paradigms of fiction. Such texts are seen to subvert and exploit through various disjunctive mechanics such conventional narrative strategies as plot, characterization, authoritative narrative voice, narrative closure, historical reference and even the fictionality of the world outside the text. Postmodernist narrative, therefore, does not mean the death of the novel as it has been proclaimed time and again, but a resurrection of the novel in a new vital form.

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#### Mathematical Representation of Statements: Symbolization in Predicate Calculus Mr. Tankeswar Boruah

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#### Introduction:

Two important branches of Mathematical logic are Propositional logic and Predicate logic. A statement (declaration sentence) consist of two parts subject and Predicate. The logic associated with the predicates in any statement is called Predicate logic. The area of logic that deals with predicates and quantifires (which determines quantity) is called **Predicate calculus** (or Predicate logic).

#### Objective:

The objective of this paper is to analyze how different types of statements can be symbolized mathematically by using Predicate Calculus. To established this some statements are taken and attempt has been done to symbolize them.

#### Discussion:

#### Defination1.1 Statement (proposition):

A statement is a declarative sentence whose truth value is either true or false but not both.

#### Defination1.2Predicate:

In a declarative sentence, a predicate is a word or group of words which says somethings about the subject.

For symbolization consider the statements

- 1. 4 is a real number
- 2. Cow is an animal
- 3. The mango is green

Here "is a real number"," is an animal"," is green" are predicate. We choose the symbol "P()" to denote the predicate "is a real number". Then the statement (1) can be symbolize as P(4)

i.e.P(4): 4 is a real number.

Thus P(5) and P(6) will represent "5 is a real number", "6 is a real number" which are from the same predicate P(x) that reads as "x is areal number" where x is called a variable. When

x is replaced by individual number or name it gives a statement.

#### Defination1.3 Propositional Function:

The expression P(x) is called a 1-place predicate which may be regarded as Prepositional function or Statement function where as P(4),P(c) and P(m) are statements in which x is replaced by 4,c and m.

Defination 1.4 2-place predicate:

Cosider a statement "x is greater than y". Wedenote 'G()' for "is greater than" then we symbolize the statement as

G(x,y): x is greater than y

Here G is a 2-place predicate, since two numbers are required to express the statement.

#### Defination 1.5 n-place predicate:

If P is a n-place predicate letter and  $x_1, x_2, \dots, x_n$  are names of n-objects then  $P(x_1, x_2, \dots, x_n)$  is a statement of n- place predicate.

1.A statement of the type "x is P" is written as P(x) where P is for predicate and x is the predicate variable.

2. Capital letter is used to denote predicate and small letter is used to denote number of individual objects such as P(c) and P(m).

#### Example 1.1:

Symbolize the statements .

- (a) Ram is a bachelor.
- (b) Cow is an animal.
- (c) The mango is green.

#### Solutions:

(a) Let P(): is a bachelor.

and r: Ram

Then P(r): r is a bachelor

Thus the statement "Ram is a bachelor" is symbolized by P(r)

(b) LetP(): is an animal

and c:cow

Then P(c): c is an animal.

i.e. the given statement can be represented by P(c)

(c) Let P(): is green

and m:mango

then P(m): m is green

e.i.the symbolization is P(m).

Quantifiers in Symbolizing:

Todetermine quantities of objects in a statement ,two symbols are used which are called quantifiers.

(a) Universal quantifiers:

To symbol  $\forall x$  used to mean "for all x" or "for every x" or "for any x" is called universal quantifier.

(b) Existential quantifier:"

The symbol ∃x used to mean "there exist some" or "there ieatleast one x" or "for atleast one x" is called existential quantifier.

Examples on Universal quantifier:

Example 1.2

Symbolize the statement:

- (a) All dogs are animals.
- (b) Every rose is red.

Solutions:

(a) The statement can be written as "For all x, if x is a dog, then x is an animal".

Let D(x): x is a dog. and

A(x):x is an animal. Then the statement can be symbolized as

 $(\forall x)(D(x)\rightarrow A(x))$ 

(b) The statement can be written as "For all x, if x is a rose, then x is red"

Let R(x): x is red (R)

F(x): x is rose (F)

Then we write  $(\forall x)(F(x) \rightarrow R(x))$ 

Example 1.3:

Symbolize the following statements:

- (a) All men are mortal.
- (b) Every natural number is either even or odd.
- (c) Every integer is divisible by 6 if and only it is divisible by both 2 and 3.
- (d) For any integer, there exists an integer such that their product is equal to zero.

  Solutions:
  - (a) Let P(x): x is mortal.

    and M: Set of all men then x∈M (Domain)

    Then the statement can be written as

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"For all x, x is a man, x is mortal" i.e.  $(\forall x \in M)P(x)$ or simply  $\forall xP(x), x\in M$ 

(b) Let P(x): x is a natural number
 q(x): x is even
 r(x): x is odd
 and N: Set of all natural number and x∈N
 The statement is "For every x, x∈N then x is either even

or x is odd"

i.e.  $(\forall x \in N)(P(x) \rightarrow (q(x)Vr(x)))$ or Simply  $\forall x(P(x) \rightarrow (q(x)Vr(x)))$ 

- (c) Let P(x) : x is divisible by 6 q(x) : x is divisible by 2 r(x) : x is divisible by 3 where  $x \in \mathbb{N}$  (Domain) Then  $(\forall x \in \mathbb{Z}) (P(x) \leftrightarrow (q(x)r(x)))$ or  $Simply \forall x (P(x) \leftrightarrow (q(x)r(x)))$
- (d) Let
  P(x, y): "Product of x and y is equal to 0"
  The statement can be written as
  "For every x there is any y such that product of x and y is equal

Then  $\forall x \exists y P(x,y)$  where,  $y \in \mathbb{Z}$ Or  $\forall x \exists y (xy=0). x, y \in \mathbb{Z}$ 

Examples on Existential quantifier:

Example 1.4:

to 0"

Symbolize the following sentences:

- (a) Some roses are red.
- (b) Some numbers are irrational
- (c) There is an integer which is both even and prime.

Solutions:

(a) The statement can be written as "For some x, x is rose and x is red"
 Let R(x): x is red (R) and
 F(x): x is rose (F)
 Then the statement can be symbolized as (∃x)(F(x)R(x))

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- (b) The statement can be written as "For some x, x is a number and x is irrational"
   Let I(x): x is irrational (I) and N(x): x is a number (N)
   Then (∃x)(N(x)I(x))
- (c) The statement can be written as

"For some integer x, x is even and x is prime" where  $x \in Z^+$ 

Let E(x): x is even (E) and P(x): x is prime (P)

Then  $(\exists x \in Z^+)(E(x)\Lambda P(x))$ 

Or simply  $(\exists x)(E(x)\Lambda P(x)), x\in Z^+$ 

Negation of a predicate:

If P(x) be a predicate, then  $\sim P(x)$  is another predicate obtained by writting "It is flase that" in front of P(x).

De Morgan's law:

- (a)  $\sim \forall x P(x) \equiv \exists x \sim P(x)$
- (b)  $\neg \exists x P(x) \equiv \forall x \sim P(x)$

Example 1.5

Symbolize the following:

- (a) Everybody is not rich
- (b) It is flase that for all natural number x, x+6<10 Solutions:
  - (a) Let P(x): x is a person
    q(x): x is rich where M: Set of person and xM
    The statement can be written as

"It is false that everybody is rich"

Then  $\sim (\forall x \in M)(P(x) \rightarrow q(x))$ 

- Or  $\sim \forall x (P(x) \rightarrow q(x))$
- (b) Let P(x): "x+6<10,"xN and N: Set of all natural number.

Then symbolization of the statement is

 $\sim (\forall x \in N) P(x)$ Or simply  $\sim \forall x P(x)$ .

Example 1.6:

Find the negation of the following quantified predicates:

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- (a)  $(\exists x \in D)(x+2=7)$
- (b)  $(\forall x \in D)(x+3<10)$  where D={1,2,3,4}.

Solution:

(a) As  $\neg \exists x \in P(x) \equiv \forall x \sim P(x)$ 

It follows that

 $\sim (\exists x \in D)(x+2=7) \equiv (\forall x \in D) \sim (x+2=7) \equiv (\forall x \in D)(x+2\neq 7)$ 

(b) As  $\sim \forall x P(x) \equiv \exists x \sim P(x)$ .

It follows that

 $\sim (\forall x \in D)(x + 3 < 10) \equiv (\exists x \in D) \sim (x + 3 < 10)$ 

 $\equiv (\exists x \in D) (x+3 \geq 10).$ 

#### Conclusion:

From the above discussion it is seen that in predicate calculus we can symbolize different types of statements or sentences using Logical connectives  $(\Lambda, V, \rightarrow, \leftrightarrow, \sim)$  and quantifiers  $(\forall x, \exists x)$  to predicate of the given statements.

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#### Application of Matrices in Different Fields

#### Manuranjan Konwar

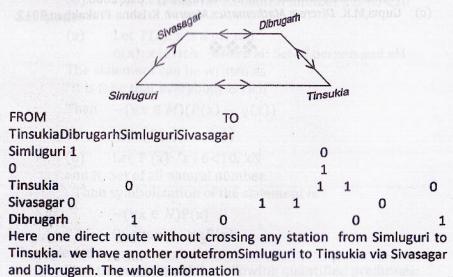
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INTRODUCTION: In beginning, matrices were related to determinants. With the passes of time, the subject of matrices comes to acquire an independent important of its own far greater than that of determinant. British mathematician Arthur Cayley (1825-95) can be credited with having formulated the general theory of matrices. The greatphysicist Eisenberg elaborated it to explain his famous" Quantum Principle " and thereby the importance of the application of matrices came into picture. There are many uses of matrices in everyday life. Matrices play an important role in different disciplines.

**Objective:** The objective of the paper is to highlight the different uses of matrices in different fields.

**Methodology:** All thedata are collected from different books and Internet. **Some application of matrices are:** 

Matrices asNetwork:With help of route matrix we can connecting four towns Simluguri,Tinsukia, Dibrugarh, Sivasagar by network of Railway lines.Considering there are no middle stations between given stations and there is no direct Railway line from a town to itself.



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is collected in the route matrix as  $\begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 0 \\ 0 & 1 & 1 & 0 \\ 1 & 0 & 0 & 1 \end{bmatrix}$ 

Matrix in Geometry: To obtain criteria for the metric classification of quadrics in a very systematic and comprehensive manner by employing matrix method. let  $F(x,y,z) \equiv \sum ax^2 + 2fyz + 2ux + d = 0$  is the general equation of a quadric surface.

Now F(x,y,z) 
$$\equiv$$
 [x y z 1]  $\begin{bmatrix} a h g u \\ h b f v \\ g f c w \\ u v w d \end{bmatrix} \begin{bmatrix} x \\ y \\ z \\ 1 \end{bmatrix}$  where Q =  $\begin{bmatrix} a h g u \\ h b f v \\ g f c w \\ u v w d \end{bmatrix}$  is the matrix

of F(x,y,z).

Matrix in Graph Theory: Matrix algebra can be used to study the structural properties of graphs. named of some matrices which are used in Graph Theory be Incidence Matrix, Reduced Incident Matrix, circuit matrix, Cut-Set matrix, Path matrix etc.

Incidence Matrix: G is a graph with n vertices, e edges and no self-loops then an nxe matrix  $A = \begin{bmatrix} a_{ij} \end{bmatrix}$ 

where  $a_{ij}=1$  , if jth edge  $e_j$  is incident on ith vertex  $v_i$  and  $a_{ij}=0$  , otherwise.

Reduced Incident Matrix: Let A(G) be the incidence matrix of graph G .  $A_f$  is known as Reduced Incident Matrix obtained by removing any one row from A.

circuit matrix: Let the number of different circuits in a graph G be q and number of edges in G be e then the matrix  $B = \begin{bmatrix} b_{ij} \end{bmatrix}$  of G is qxe where  $b_{ij} = 1$  if ith circuit includes jth edge and  $b_{ij} = 0$  otherwise., Cut-Set matrix: The Cut-Set matrix  $C = \begin{bmatrix} c_{ij} \end{bmatrix}$  is defined as a matrix in which the rows correspond to the cut sets and the columns to the edges of graph, where  $c_{ij} = 1$ , ithcut set contains jth edgs and  $c_{ij}$  and  $c_{ij} = 0$ , otherwise.

**Path Matrix:** A path matrix  $P(x,y)=[p_{ij}]$  w here  $p_{ij}=1$ , if jth edge lies in the ith path and  $p_{ij}=0$  otherwise.

Matrix in economics: matrices are used in calculating the Goss domestic products in economics with eventually helps in calculatingthe goods production efficiently Matrices are in many organizations such as for scientists for recording the data for the experiments. In statistical input output analysis of a national economy known as Leontief system matrices are commonly used.

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Matrix in Robotics and Automation: In Robotics and Automation, matrices are the base elements for the robot movements. The movements of the robots are progammed with the calculation of matrices are userows and columns. The Input for controlling Robots are given based on the calculations for matrices.

Matrix as a coding:Use of coding has become particularly significant in recent years (due to the explosion of the internet for example ) There are many ways to encrypt a massage. One way to encrypt or code a mess age with help of matrices and their inverse.

Matrix in Geology: In Geology, matrices are used for taking seismic surveys. Matrix in physics: in physics related application, matrices are applied in the study of electrical circuits, quantum mechanics and optics. On the calculation of battery power outputs, resistor conversion of electrical energy into another useful energy, matrices play an important role. In Kirchoffs law of voltage and current, the matrices are essentials. Matrix in Linear programming: Linear programming optimization uses matrices and are essential to business if we want to calculate maximum profit over a set of restrictions. matrices are used from hydroelectric power plants to caloric intake optimization. In industrial business matrices play an important rule.

Conclusion: Matrices have been found great utility in many branches of applied mathematics such as algebraic and differential equations, mechanics, nuclear physics, aerodynamics, astronomy and the theory of electrical circuits. With help of matrices a system of linear equations can be easily solved. In computer based application, matrices play a vital role in the projection of three dimensional image into two dimensional screen, creating the realistic seeming portions. In genetics, the relationship between frequencies of mating types in generation and those in another can be expressed using matrices. Dominance Matrix, Proximity Matrix and Residual Matrix are used in mathematical Psychology.

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# Militarization in the Civil and Political Society of Assam Debajani Gogoi hil Research scholar, Dept. of Political Scien

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Militarism is a set of policies, practises and cultural values which gives preference to hierarchical distributions of power, use of violent forces, masculinity etc. Militarization is a socio economic process which cultivates such military norms in the mind of the people and it is an endless job; it comes step by step and creates an illusion in the mind of the people about the needs and essentialities of the military institutions (Enloe, 2000). Militarization is not simply joining in the military it's a far more big process, it does not affect only the executive and the military (Enloe, 2000). It terribly touches every section of the society, it organises the people for the use of violence. Likewise, militarization creates a dominant philosophy in the international as well as national politics for which state and non state apparatus have become violent following militaristic approach to solve any problem. It is a gradual process which affects every sphere of life (Enloe, 2000). The process of militarization takes place through various tools and institutions.

## Militarization in the civil society of Assam

Militarization as a socio economic process, takes place in the civil and in the political society. The military values have been inculcated in the mind of the people through the militarization of food, dress, market place, school, singer and many more (Enloe, 2000). If we analyse the history, polity, literature of Assam, then we will see that the process of militarization has been taking place in Assamese society too. The civil and the political society are playing a great role in this context. The Italian thinker Antonio Gramsci in his theory of hegemony divided the superstructure of the society in to two spheres civil and the political society. Civil society is composed of all the private organism-schools, churches, clubs, journals, parties etc. According to Gramsci, civil society is the market place of ideas. The traditional and organic intellectuals play a vital role in the civil society to

convert their philosophy to hegemony. Traditional intellectuals are the people who are spontaneously regarded as intellectuals are the writer, philosopher, journalist and perhaps the teachers. Organic intellectuals are the members of the social group like engineer, managers, bureaucrats etc. These intellectual create hegemony by extending the world view of the rulers to the ruled by acquiring consent of the common masses. And the ruling classes take help of force to dominate the people who do not consent to the rule (Bates R Thomas, 1975).

The story of militarization in Assam is not new. Many pre colonial history and literature of Assam reveal such activity. The battle of Saraighta, Ahom - Mughal conflict depicts such stories of militarization in Assam where the people in Ahom regime were ready to fight for their motherland. In the Ahom regime, Paiks were there for some military purposes and to make military products such as boats, arrows, muskets etc, which prove practise of militarization in the Ahom throne. The story of Lachit Borphukon, one of the most popular characters in Assam who has been admired as the hero of the Assamese nation has said us a lot about the militarization in Assam. In 1671, Borphukon fought the battle of saraighat with the Mughal army led by commander in chief Ramsingha. Borphukon delegates the duty of making a "Garh" to his uncle as a strategy of the battle. But he did not oblige his duty properly for which Lachit had killed him arguing that "Dekhotkoi Mumai Dangor Nhoi". The inclusion of such stories in the academic syllabus of Assam portrays the process of militarization in the civil society of Assam. The spirit of Lachit has been glorified and inculcated in the mind of the people. Such stories inspire people to save their countries at the cost of life. The statue of such hero at different places reminds us the battling spirit to fight against the enemy of the motherland.

Many Assamese songs portray the sub nationalist feelings of Assamese where sacrifice, bravery, heroism have been celebrated inspiring the youths to be ready for a war. Sanjib Baruah in his article "society versus State in Assam" analyse a song of Dr Bhupen Hazarika where he says that the song "I salute Mother Assam and I dress up to go war" has a martial spirit and applauds bravery, sacrifice, heroism. According to Baruah, Hazarika's song depicts the Assamese sense of how things came to this; there are few alternatives but battle to avenge the past wrongs. It's no time to teach history lessons, it's no time to take it easy; the enemy

taunts us at our gates, leave aside your daily task and get ready for war and be prepared to lay down your lives..' The lines aware the people to be ready for the war as the enemies are knocking at the door. The period of the song was 1980 when Assamese nationalism took a radical form and organised the militant group United Liberation Front of Assam with modern weapons and trained cadre who dream of an independent Assam. Likewise state and non state military institutions use nationalism as a tool of militarization in the civil society.

## Militarizing women in Assam

Many pre-colonial, colonial, post colonial histories reveal the militarization of women in Assam. The character like Mulagabhoru, Joymoti, Konoklota, and Labhita have said us a lot about the militarization of women in the sphere of civil society of Assam. The stories like "joymoti Kunwari' reveals militarization of women in Assam. Joymoti Kunwari was the wife of Ahom Prince Godadhar singha, the story of Joymoti began in the Regime of Child king 'Sulikfa'. During the purge of Ahom Prince under Sulikfa instigated by Laluksula Borphukon, Godapani took flight and he lived under the asylm of the hill people. Then, the soliders of Ahom arrested his wife joymoti and asked about her husband. But she refused to tell a little word about him for which she had been tortured. After a lot of brutal torture she left the world. In the course of a century, Joymoti has come to mean many things to the many historians, poets, dramatists and filmmakers periodically brought her to life (rajkhowa,2015). Joymati has been imagined under the discourse of Assamese nationalism. In the drama, cinema, she has been glorified and signified as the patriotic warrior, fearless patriot, as Devi and as the Ahom princess under the fantasy of Assamese nationalism (Rajkhowa, 2015). Another popular character is Mulaghaboru who was the wife of Fraceng Mung Borpatro Gohain, has sacrificed her life in the battlefield to take revenge of her husband's death and to save her motherland. The celebration of "Joymoti Utsav" and performance of drama on the story of Joymoti kunwari signify celebration of some militaristic values like sacrifice, bravery, temperance etc which motivates the women to be a wife who can bear any torture to save her husband and her motherland. Under such nationalist discourse, women have been widely militarized which gives birth of some women

and mother who wish to dedicate themselves and their child for the country. The performance of such storties pushes many women in such nationalist fantasy and gives birth of many patriotic wives and mothers. The story or drama like kanaklota and Labhita portray the process of militarization in colonial Assam. Konoklota, an Assamese youth has sacrificed her life resisting the British govt in the colonial struggle. And such stories of Joymoti, Konoklota, Lachit, Mulaghboru have been living in the folk memory of Assam.

Like all other women, mothers are one of them who have been widely militarized. Such military institutions use nationalism to militarize and shape the idea of motherhood. Sometimes they use the idea of motherhood as the cause of their war and sometimes they reconstruct motherhood calling the mothers as an ideal and patriotic mother who sacrifice their son for the country. The poem that was written by "Dhawni kobi" Binondra Chandra baruah" "Rangoli Buhir Daan" depicts the character of Rangoli burhi as a patriotic mother. She calls her son to fight for the Ahom army against the enemy Maan. She calls "o Rongamuwa o Rongamuwa Sutal palehi Maan, jamuguri saporit girijoni marese siyort falise kaan". In such ways, through the civil society, military values have been cultivated in the mind of the people. The songs, poems, dramas, stories etc have been playing an important role in this regard, shaping the idea of nationalism, militarizing the idea of motherhood etc.

## Militarization in the political society in Assam:

The Grmascian model of political society is composed of those public institutions, the government, court, police and army which exercise direct dominion. Basically the institutions in this society use force rather than consent to dominate the society. The process of militarization has been taken place in the political society in the forms of laws, acts, operations; force etc .It affects the lives in a wide range in the national as well in the international politics. In Assam too, the process of militarization is taking place in the forms of laws, acts and through some legal processes.

The governor is one of the most important positions in a state where duties of regulating the entire socio-political circumstances have been delegated to him or her. But the post of governor has been

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militarized in the region like North-east India through recruiting retired generals as governors. Most of the governors of N.E.I are the retired leftant, and police officer (Baruah,2005). The appointment of retired police officer as governor has become somewhat sensible subject in the region. The militaristic attitudes of these governors to the society have militarized the society directly or indirectly, as they use to follow a rough and a militaristic approach to solve the problems. Recruitment of generals as governors proves how such legal process has been militarizing socio—political culture of Assam.

During some decades, Assam has been burning under the violent activities of the insurgent group. In the year of 1980, Assamese nationalism took a radical form as an armed group named United Liberation Front of Assam. ULFA started their movement against the illegal occupation and exploitation of central Govt of India arguing that Assam was never be a part of India from time immoral. In the response to the violent activities carried out by ULFA central government imposes presidential rule under the 366 of the Indian constitution and launched massive anti insurgency operation named operation Bajarang in 1991. This operation was again deployed in the name of operation Rhino and it was continued to January 1992. In April 1992 army relaunched operation in six districts and January 1992 government renounce the resumption of full scale operation against militant. Large scales of violent activities were carried by armed forces on general masses to identify the suspected militant. During the operation Rhino, Assam was placed as Disturbed area by the provision of Assam Disturbed Area Act and Armed Forces Special Power Act 1958 which provide an unrestricted power to the army forces. Under such counter insturgent operations, lot of people were being militarized. It affected the lives of the people in a wide range. Under the brutal army operations, the people of Assam have suffered a lot.

The Armed Forces Special Power Acts is the act of the Parliaments of India that grants special powers to Indian Army Forces where they can use any kind of force in such disturbed areas. The armies in such disturbed areas get full power. In such militarised circumstances under AFSPA, in Assam, the people have been experiencing lot of violence. They have to suffer lot of physical and mental tortures by the armies. Rape, killings have

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become a usual incident. The entire region is vibrating under such militarized act and a lot of human rights violations have been going on. Recently controversial AFSPA has been extended by six month in the entire Assam. Most of the people in Assam use to carry the fear of sudden visit of militaries where they seek the information of the rebel. The fear of being raped, sexual assaults, and torture always haunt them. Women's lives are highly affected in such militarised condition. Under the military paradigm their bodies and lives are being subjected to various suppressions and at the same time they are used to achieve different military objectives. They have to suffer as mothers, as rebels, sisters etc.

## **Concluding Remark**

However, in such ways, military values are being inculcated in the mind of the people through the civil and political societies of Assam. Sometimes these works of civil society celebrate and justify bravery, heroism and sacrifice and sometimes justify violence and death and martyrdom for their motherland. In such ways inculcating the spirit of nationalism and patriotism it has been tried to collect consent of the people towards the values of militarism. As Gramsci states that the common sense of the people has been intregrated with the critical philosophy which creates an ideology, and then that ideology collect consent of the people to rule the society. Likewise the commonsense feelings like nationalism, patriotism, violence have been integrated with militarism to create a hegemonic ideology in Assam. And the intellectuals have been playing a great role in this context. They collect consent of the people to the ideology through their writings and performance. At the same time some military values has been impeded in the mind of the people through some political activities using force as well as legality. In this way military ideology has become somewhat hegemonic in Assam for which the entire society circulates militarised values in their life style and prefers military and violent force to solve any socio economic problem.

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# The Significance and Contributions of Michel Foucault as a Historian

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Paul Michel Foucault's (15 October 1926 - 25 June 1984) works have been among the most discussed, debated and criticized works in the field of history. Although Foucault's work is read by anthropologists, psychologists, philosophers, literary critics and historians, however the basic impact of his work is historical. Termed as a postmodernist and poststructuralist in approach, Foucault was also an epistemologist, an empiricist and a follower of Nietzschean philosophy. Historians are divided in their view as to whether Foucault actually revolutionized the way history was studied or created total chaos and destruction of the established method. In fact many historians and thinkers that Foucault is not fit to even be called a historian. With more than half a dozen works on history to his credit most mentionable of which are Madness and Civilization (1961), The Birth of the Clinic (1963), The Order of Things (1966), The Archaeology of Knowledge (1969), Discipline and Punish (1975) and The History of Sexuality (1976), Foucault studied many fascinating issues of history such as madness, sexuality and criminality etc. Being honoured with a chair in history (History of System and Thought) at the College de France, it is evident that Foucault had a profound impact on historical studies.

About Foucault himself remarks, I am not a professional historian; nobody is perfect'. He says that though his works are studies of history but he is not a historian. He himself underlined his differences from disciplinary history as he stands apart from the generally unquestioned conceptual and methodological assumptions that define its boundaries.<sup>2</sup>

Foucault did not believe in the 'anthropocentric' view of history. Foucault is said to have revolutionised history by coining the phrase 'the death of man'. In his book 'The Order of Things' he used this phrase and explained it as 'the end of humanist concepts of man, as a creature ruled by reason and of history as a phenomenon governed by the decisions of powerful individuals. So Foucault dethroned the

anthropocentric view of history. He shared his theory of anti-humanism with other French historians like those of the Annales School, all of whom regarded history as being driven by forces far more powerful than those of any individual.

Foucault also believed that a historian could not avoid the role of a political activist. He said that all knowledge exuded power, so the knowledge produced by a historian was bound to serve political ends of one kind or another.<sup>3</sup>

Foucault claimed that most historians were traditionalists who supported the established regime of historical methodology and considered history as a progressive study of the past to the present According to Foucault there is no progressive course of history. Foucault's history is characterised by the emphasis which he puts on the present. In fact one of the markers of Foucauldian history is the dominance of the present over the past rather than vice versa as was generally the norm of history. The study of history from the past to the present is simply an illusion. Foucault says this because he views man's past not as an ordered series, but rather as a haphazard struggle and conflict. Foucault holds that an objective reality of the past can never be achieved. History is in fact a perspective knowledge which deprives the past of its hegemony over the present.

Foucault supports Nietzsche's idea of the 'genealogical view of history.' He says that genealogical history painstakingly rediscovers struggles, fragmented, subjugated, local and specific knowledge. Foucault's history was novel in its approach. Its method, themes, treatment and conclusions were a new way of viewing the past. Foucault's method aimed at merging philosophy and history. His idea of history was a critique of western civilization and its foundations based on enlightenment.<sup>4</sup>

Foucault's history was also a study of 'epistemic method' which meant conceptual thoughts relating to specific periods of history. Related to this concept is his archaeological method which relates to discourses of epistemes of a particular era or period.

Foucault has frequently been criticized by historians for what they consider to be a lack of rigor in his analyses. For example, Hans-Ulrich Wehler harshly criticized Foucault as a bad philosopher who wrongfully received a good response by the humanities and by social sciences. According to Wehler, Foucault's works are not only insufficient in their

empiric historical aspects, but also often contradictory and lacking in clarity. For example, Foucault's concept of power is "disparagingly undifferentiated". Despite rejecting objective and disciplinary history, Foucault did actually work as any conventional historian. So as J.G.Merquior explains, Foucault's historical evidence is too selective and distorted due to explanatory weakness. Foucault's theory of 'archaeological history' and its denial of continuity has also been criticized as it is said to defeat the entire purpose and possibility of studying history. Historical continuity is necessary for understanding the past. Again Foucault's idea of genealogical history fails to explain subjects such as science, economics, nationalism and democracy etc.

Foucault's historical work has had a marked if not revolutionary influence on the system of writing and studying history by changing the conventional way of thinking about history. Foucault offers a new way of thinking about history, writing history and deploying history in current political struggles. Foucault's uncommon themes and approaches have enabled historians the view the past and the present with a new outlook. His methods of 'archaeology' and 'genealogy' and his idea of 'discontinuity' his definitions of 'archive', 'discourse', 'epistemes' etc. and his framework of 'knowledge as power' have indeed extended the boundaries and understanding of history not known formerly.

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## PARENT CHILD RELATIONSHIP IN SHAKESPEARE'S PLAYS: A CRITICAL STUDY OF THE TEMPEST

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The term parent child relationship refers to the unique and enduring bond between a caregiver and his or her child. Parent child relationship has been a theme in many pieces of literature. William Shakespeare also displays this relationship in many of his plays. His plays like As YouLike It, King Lear, The Tempest, Henry IV etc shows the parent child relationship. This paper aims to provide a close analysis of the parent child relationship in Shakespeare's play The Tempest. William Shakespeare's The Tempest apparently looks simple but like most of his other plays it is replete with a number of themes and multiple layers of meaning. It would be a great injustice to the play if it is discussed merely on the basis of is plot alone, as the play is open to various interpretations from the point of view of colonialism, post colonialism, feminism etc. Parent Child relationship is an important theme in the play and a broader analysis of this theme can help in exploring the ideas of legitimacy, power, inheritance and gender presented im the play.

As far as parent child relationship in the play is concerned it is the relationship of Prospero and Miranda which is most prominent and therefore it provides for a broader analysis. Unlike any normal father- daughter relationship, Prospero and Miranda's relationship seems to be somewhat complicated. In my opinion, the complicacy is seen on the part of Prospero. Miranda, like any normal daughter, loves her father sincerely and devotedly. In the absence of her mother, Miranda had been brought up solely by Prospero from as early as three years of age. Prospero played the role of both father and mother for her, gave her a better education than those given to other princesses and also gave her true love and affection. Inhabiting with Prospero in the island, Miranda never had the privilege to witness any other person

in her life except her father. Thus for Miranda, Prospero was her entire world, both literally and metaphorically.

Miranda's genuine love for her father is seen in the very opening lines in the play, where she endearingly addresses Prospero as my "dearest father". In the same scene we see Miranda giving full attention to her father's narration of the past events of his life and even expressing her sincere grief at her father's sufferings. Thus Miranda's love and respect for her father id true and unquestionable. But the same cannot be perhaps said of Prospero. Prospero no doubt loves Miranda but his love for her is tinged with a colour of selfishness. Throughout the play, we see Prospero involving Miranda in his strategy to recover his usurped kingdom from his brother Antonio. As a part of the strategy, Prospero narrates the past incidents of his life to Miranda only after bringing his enemies to the island through the tempest so that he can mentally prepare her for her meeting with Ferdinand. Even the meeting between Miranda and Ferdinand and their ensuing love relationship was something that did not happen naturally or coincidentally but was a pre-planned arrangement of Prospero. Prospero know that if Miranda, who is the rightful heir to the Duke of Milan, is married off to Ferdinand, then Ferdinand would become the king of both Naples and Milan by way of this marriage, thereby ruling out any future possibility of Antonio's claim over the throne of Milan. In the midst of all this plans and strategies Miranda, in a way, is used as a pawn by he father to realize his vengeance upon his usurpers. Prospero colonizes Miranda's mind and even without her knowledge compels her into doing what he wants her to do. After arranging the meeting between Ferdinand and Miranda, Prospero pretends to show his objection towards their marriage initially, when he sees then falling for each other too easily. Prospero then pretends to put obstacles in their love, in order to measure Ferdinand's genuineness and depthness of love for Miranda for he feared that "too light winning" of Miranda may," make the prize light". Prospero pose himself as a tyrannical father when he prevents Miranda from speaking in favour of Ferdinand. He even rebukes her in harsh terms, when Miranda asks him to have pity on Ferdinand, saying thus:

Silence! One word more

Shall make me chide thee, if not hate thee (Act I, SC ii, 35) Prospero's behavior towards Miranda is thus subjected according to the requirement of his strategy. As are sult we see Prospero behaving in different manner at different times with Miranda: sometimes bestowing his love and affection upon her through his words and sometimes even being a little stern toward her. Acquisition and legitimization of power has an important role to play in the assessment of Prospero-Miranda relationship. Prospero's ultimate motive to usurp the kingdom of Milan and Naples and he is well aware that it is only through his legitimate daughter that he can serve this purpose. Prospero confirms the legitimacy of Miranda when in reply to her question, "Sir are you not my father?" Prospero replies,

Thy mother was a piece of virtue, and She said thou wast my daughter; and thy father Was Duke of Milan, and his only heir And princess; no worse issued. (Act I, Sc ii, 55)

Another parent child relationship in the play is that of Sycorax and her son Caliban. A broader analysis of this relationship would be difficult because the mother figure is physically absent in the play. We came to know about Sycorax only through Prospero when he gives an account of her life while reminding Ariel about his past existence, Prospero briefly narrates how Sycorax was once banished from her native country and she came to this island pregnant with her child Caliban. The play provides only this much information of Sycorax, however she is referred only a couple of times in the course of the play by both Prospero and Sycorax. Legitimisation of power also works in the case of Caliban. Caliban asserts his right over the land on the ground that the island belonged to his mother and as such he is the legitimate owner of the island. This assertion of Caliban could have served as an appropriate blow against the allegations of Prospero regarding Caliban's legitimate right over the island. Prospero deliberately raises a question on the virtue of Sycorax by saying Caliban that he was "got by the devil himself". When it is certain that Prospero could not have possibly known who Caliban's father was for he arrived at the island much later after Sycorax had died. Prospero's misrepresentation of Caliban's parentage is a part of his strategy to prove Caliban as an illegitimate child and thereby refuting Caliban's right over the island.
Sonari College Academic and Research Journal || 83 || The king of Naples Alonso and his son Ferdinand presents a superficial kind of relationship. After the shipwreck Fedinand is safely harbored on the island alone as per Prospero's orders. Thereafter he is seen lamenting over the supposed death of his father for he very quickly conjectures that his father has drowned in the sea alongwith the other members of the sea. In Act II, we see King Alonso similarly surmising the death of Ferdinand and mourning over the loss of his son. However the lamentation of both Ferdinand and Alonso for each other seems somewhat superficial. The fact that both Ferdinand and Alonso comes to a conclusive point regarding each other's death without any strong evidence perhaps hints at the shallowness of their love for each other.

Mother figure is entirely absent in this play and this accounts for the patriarchal dominance over the children especially daughters like Miranda. The concept of absent mother is present in most of his plays. Mother image does not appear in his most plays.

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## Nutritional Status of Rural Primary School Going Children: A Cross-Sectional Study in the Jorhat District, Assam

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#### Introduction:

Human resource is a key input in the development process of a country. The foundations of man's physical, mental and social development are laid in early childhood. Children are the budding human resources and future citizens of a nation. Healthy and literate children are not only assets but also the stepping-stones to build a strong and prosperous nation.

Nutrition is an integral component of health and well being of all individuals. Good nutrition enables one to lead a socially and economically active life. Major determinant of health status in an adult is his nutritional status in childhood. Childhood is a period of the active growth and school- aged children passes the active growing phase of their life. During the adolescent growth spurt body requires lot of nutrients which should be stored in the body during childhood and if body stores are deficient it can result in adverse health consequences like growth retardation, scholastic backwardness and reduced work capacity. In this sense nutritional status of children is an important issue of study.

There is a growing concern over the child health all over the world with rapid economic growth and social changes. The most important nutritional problem in the world today is the Protein Energy Malnutrition<sup>1</sup>. The problem is more severe in third world countries affecting children of all ages especially the under-fives. Nutritional deprivation is rampant in children of school age particularly primary school children ranging in magnitude from 20 % - 80 %.

Of the numerous problems facing our country on health front, growth of children and elimination of malnutrition among the children is the most dominant issues. According to the National Family Health

Survey, the proportion of underweight children remained virtually unchanged between 1998-99 and 2005-06 (from 47% to 46% for the age group of 0-3 years). Undernutrition levels in India remain higher than for most countries of sub-Saharan Africa, even though those countries are currently much poorer than India, have grown much more slowly, and have much higher levels of infant and child mortality (Deaton and Drèze, 2002).<sup>2</sup>

Studies conducted at micro-level in different parts of India have also revealed the prevalence of various forms of malnutrition among Indian children. Study done by Navaneethan et. al 3 among 810 school going students of Vellore, Tamilnadu belonging to the age group of 11-18 years revealed that 83% of students were underweight for their age. Vandana et. al4 studied 200 rural school going children of 7-9 years in Hisar district, Haryana and found that 55.5% were underweight and 54.11% of the children were stunted. Medhi et. al5 among the children of tea garden workers of Assam found that prevalence of wasting, stunting and underweight was 21.2%, 47.4% and 51.7% respectively among the children in the age group of 6-8 years. As against these high figures, Chowdhary et. al6 from Puriliya, West Bengal reported figures of underweight 33.7%, wasting 29.4% and stunting 17.0%. Again, Mukherji et.al7 found the significant difference in the prevalence of under-nutrition more among male children than females.

To address the problems related to malnutrition prevalent among primary school going children, Government of India has launched School Health Programme under which services like health check-up, treatment of minor ailments, health education, and micronutrient supplementation and immunization services are offered. Besides, the National Programme of Nutritional Support to Primary Education, popularly known as Mid-Day Meal Scheme (MDMS), was formally launched in the year 1995 with an objective of giving boost to universalisation of primary education by increasing enrolment, attendance and retention, and also improving nutritional status of children in primary classes studying in Government, Local Body and Government-aided schools, which is one of the major ongoing child health oriented programme of Govt. of India. At present, instructions are given under this programme to provide cooked mid-day meal with

an energy content of 450 calories and protein content of 12 grams at primary stage and an energy content of 700 calories and protein content of 20 grams at upper primary stage.

Children of the age group 612 years accounts to about 1/5th of the total Indian population. Since deficient physical growth is naturally reflected in their sub-optimal mental achievement, the assessment of nutritional status of this segment of population is essential for making progress towards improving overall health of the school age. Among several measurements of nutritional status, anthropometry measure is one of the most useful method. Anthropometry quantifies body mass, provides a semi-quantitative estimate of the components of body mass, particularly the bone, muscle and fat compartments and provides information regarding nutritional status. Growth monitoring by anthropometric measurement during childhood and adolescent period, is not only an important health indicator but also a predictor of various morbidities in the community. With this background, this study was conducted with the objective to assess the nutritional status of school going children by anthropometric measurements. Objective:

This study was taken up with the objective of assessing the nutritional status of rural school going children of 6-10 years.

Materials and Methods:

This school based cross-sectional study was carried out in the Jorhat district of Assam. The Uttar Balama Cluster of Jorhat district has been purposively selected for the study. Three (3) out of total fourteen (14) schools that comes under the cluster in concern have been selected for further investigation. After obtaining authorized consent from the management, the schools were visited and the data were collected using readymade proforma. All children between 610 years of age as determined using school records were included in the study. It was decided to restrict the study mostly to children who have not yet attained their puberty to avoid discrepancies caused by pubertal growth spurts. A total of 150 students within the age group of 6-10 years were, thus, selected for the purpose of study.

Primary data collected from the school has been presented through statistical tables. For proper interpretation of data, statistical tools like simple percentages, mean and standard deviation have been used.

For assessing the nutritional status of children, three anthropometric indices has been considered-weight for age, height for age and Body Mass Index (BMI) for age, which are considered as good indicators of nutritional status. BMI was calculated as weight in kg divided by square of height in metre. These indices were derived as Z scores or standard deviation units (as recommended by WHO, 1986) of the International standards or references, i.e., growth references of the U.S. National Centre for Health Statistics (NCHS).8 Children who fall more than two deviations below the reference level are considered as undernourished, while those who fall more than three standard deviations below the reference level are considered to be severely undernourished.

## **Anthropometric Measurements:**

Age: The age of the children were determined using school records. Weight: The weight of the child was recorded with the help of weighting machine with precision up to 100 grams. The weight of the study subjects was measured with minimum clothing, standing on the weighting machine bearing equal weight on both feet. Accuracy of the weighting machine was checked before taking measurements by measuring a known weight.

Height: The height was measured while the child was standing by the side of a wall upright with heels close to each other and arm hanging by the side of the body. The height was measured from head to heels by an ordinary measuring tape.

Table: 1 Anthronometric indices and cutoff points

Indicator	Cutoff point 6-10 years				
Anthropometric variables					
Stunted	Height for Age	<-2SD			
Underweight	Weight for Age	<-2SD			
Wasted	Weight for Height or BMI for Age	<-2SD			

## Findings and Discussion:

## Demographic Profile of Study Subjects:

A total of 150 children are studied belonging to the age group 6 to 10 years. Out of the 150 students, 84 (56.0%) are boys and 66 (44.0%) are girls. The sex wise age distribution of the study subjects has shown in the table 2.2. Among the 150 children, 44 (29.33%) are

belonging to approximately 6 years of age, 32 (21.33%) are belonging to 7 years of age, 36 (24.0%) are belonging to 8 years of age, 20 (13.34%) are belonging to 9 years of age, 18 (12.0%) are belonging to 10 years of

Table: 2 **Demographic Profile of Study Subjects** 

Age	Boys			Girls	Total		
(in Years)	No.	Percentage	No.	Percentage	No.	Percentage	
6	23	27.38 %	21	31.82 %	44	29.33 %	
7	15	17.86 %	17	25.75 %	32	21.33 %	
8	22	26.19 %	14	21.21 %	36	24.0 %	
9	13	15.48 %	7	10.61 %	20	13.34 %	
10	11	13.09 %	7	10.61 %	18	12.0 %	
Total	84 :	100.0 %	66	100.0 %	150	100.0 %	

Source: Field Survey Data

Mean Height and Weight of the Study Subjects:

The numbers of boys and girls in each single years and their mean height and weight with standard deviation is given in table 3.Results show that boys are heavier than girls except for the age group of 7 years, in which girls are slightly heavier than the boys. Similarly, the mean height of boys exceeded the mean height of girls in all age groups. The mean height and weight of children are found to be comparable to the findings of studies from similar socio-economic conditions conducted by Medhi et. al<sup>5</sup> and Singh and Sengupta.<sup>9</sup>

Table: 3 Statistical Constants of Weight and Height among Study Sub-

			Jecus				
Age	BOYS			GIRLS			
Years) Children		Weight (Kg.)	Veight (Kg.) Height (Cm.) No. of Children		Weight (Kg.)	Height (Cm.)	
		Ciridien	Mean ± SD	Mean ± SD			
6	23	16.12 ± 1.56	106.49 <u>+</u> 5.35	21	15.90 ± 1.81	104.52 ± 5.01	
7	15	18.05 ± 1.92	116.21 <u>+</u> 6.19	17	18.23 <u>+</u> 1.93	114.43 ± 5.74	
8	22	20.62 ± 2.67	120.40 ± 6.93	14	19.72 ± 2.90	119.72 ± 6.32	
9	13	21.95 ± 4.62	125.59 ± 7.41	7	20.52 ± 3.34	124.03 ± 6.69	
10	11	23.84 ± 3.46	128.92 ± 8.28	7	23.37 ± 3.06	128.84 ± 7.87	

Source: Field Survey Data Measurement of Nutritional Status: Among various problems encountered in school age children, malnutrition accounts for the majority. Malnutrition refers to a number of diseases each with a specific cause related to one or more nutrients, protein, iodine, Vitamin-A or iron. In the present context malnutrition is synonymous with protein-energy malnutrition, which signifies an imbalance between the supply of protein and body's demand for them to ensure optimal growth and functions. This imbalance includes both inadequate and excessive energy intake. The former leading to malnutrition in the form of wasting, stunting and underweight or undernutrition, and the latter resulting in overweight and obesity or overnutrition. The problem which mostly hits the developing countries is under-nutrition.

Since, it is wisely said that only a healthy body can harbor a healthy mind. It is imperative that these disorders in children are efficiently and timely assessed and corrective measures employed accordingly. Assessment of nutritional status in school children is one such endeavor. To examine the nutritional status of primary school going children of rural areas, three indices have been considered-height for age, weight for age and weight for height or BMI for age. Each of these indices provided somewhat different information about the nutritional status of children.

Nutritional Status in terms of Height for Age:

Children who are more than two standard deviations below the median of the reference population in terms of height for age are considered short for their age or stunted. The percent in this category indicates the prevalence of chronic under nutrition which often leads to chronic diarrhea. Stunting typically associated with inadequate food intake resulting from poor feeding practices or from the lack of sufficient food as well as existence of adverse environmental conditions for an extended period of time. This height for age index is a measure of the long-term effects of under nutrition and an indicator of growth retardation. The sex wise distribution of children in terms of height for age has been presented in the following table 4.

Table: 4

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## Nutritional Status according to Height for Age

Age		Boys		Girls			
in Years	Normal	Moderately Stunted	Severely Stunted	Normal	Moderately Stunted	Severely Stunted	
6	18 (78.26%)	3 (13.04%)	2 (8.70%)	14 (66.67%)	5 (53.81%)	2 (9.52%)	
7	11 (73.34%)	2 (13.33%)	2 (13.33%)	10 (58.82%)	5 (29.42%)	2 (11.76%)	
8	18 (81.82%)	3 (13.64%)	1 (4.54%)	7 (50.0%)	6 (42.86%)	1 (7.14%)	
9	12 (92.31%)	1 (7.69%)	-	5 (57.14%)	2	-	
10	9 (81.82%)	2 (18.18)	-	7 (100.0%)	-	19-	
Total	68 (80.95%)	11 (13.10%)	5 (5.95%)	43 (65.15%)	18 (27.27%)	5 (7.58%)	

Note: Normal: > -2 SD; Moderate: Within -2 and -3 SD;

Severe: < -3 SD

Source: Field Survey Data

Table 4 shows the distribution of children according to height for age both in absolute numbers as well as in terms of percentages. It can be seen from the table that 80.95 % boys and 65.15 % girls are normal. Regarding the proportion of stunted children, moderately stunted boys are found to be 13.11% while 5.95% of them are found to be severely stunted. The problem of stunting is found to be more in case of girls than the boys as 27.27% of total girls are moderately stunted and 7.58% are severely stunted. The overall prevalence of stunting among boys is 19.04% (16 out of 84) while it is 34.85% (23 out of 66) among girls.

In case of boys highest proportion of normal are fall in the age of 9 years (92.31%), while all girls of 10 years are found normal (100%). Lowest proportion of normal boys is in found in the age 7 years (73.34 %) and that of girls is found in the age of 8 years. The number of normal children does not seem to follow a definite pattern of increase/decrease throughout the age groups of children. In all the age group normal boys are more than girls.

Nutritional Status in terms of Weight for Age:

Weight for age is a composite measure which takes into account both chronic and acute under nutrition i.e. long term deprivation from required food intake as well as recently developed nutritional deficiency.

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Children who are more than two standard deviations below the median of the reference population in terms of weight for age are considered as underweight. The percentage distribution of children according to weight for age has been shown in the table 5.

Table: 5
Nutritional Status according to Weight for Age

Age		Boys			Girls	
in Years	Normal	Moderately Underweight	Severely Underweight	Normal	Moderately Underweight	Severely Underweight
6	17 (73.91%)	5 (21.74%)	1 (4.35%)	16 (76.19%)	3 (14.29%)	2 (9.52%)
7	11 (73.33%)	4 (26.67%)		14 (82.35%)	2 (11.77%)	1 (5.88%)
8	16 (72.73%)	5 (22.73%)	1 (4.54%)	10 (71.43%)	3 (21.43%)	1 (7.14%)
, 9	12 (92.30%)	(7.69%)	-	5 (71.43%)	2 (28.57%)	-
10	9 (81.82%)	2 (18.18%)		6 (85.71%)	1 (14.29%)	
Total	65 (77.38%)	17 (20.24%)	2 (2.38%)	51 (77.27)	11 (16.67%)	4 (6.06%)

Note: Normal: > -2 SD; Moderate: Within -2 and -3 SD; Severe: < -3 SD Source: Field Survey Data

Perception of Table 5 reveals that a total of 77.38 % boys and 77.27 % girls are normal with a highest of 92.30 % in age of 9 years in case of boys and 85.71% in age 10 years in case of girls. The proportions of moderately underweight are 20.24% and 16.67% for boys and girls respectively. Highest proportion (26.67%) of moderately underweight boys falls in the age of 7 years. Severely underweight children are found in the age of 6 and 8 years among boys and 6-8 years among girls. The problem of severely underweight is more in case of girls as 6.06% of total girls are belonged to this category while the proportion of boys under this category is only 2.38%. The overall prevalence of underweight is almost same for both boys and girls with an approximate percentage of 22%.

Nutritional Status in terms of Weight for Height:

The weight for height index measures body mass in relation to body height. This is the Body Mass Index for age derived as body weight in kilograms divided by body height in meters squared. Body

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mass index is generally considered as the best indicator of fatness or thinness. Children who are more than two standard deviations below the median of the reference population in terms of height for age are considered to be wasting. The percent in this category indicates the prevalence of acute under nutrition. The information on weight for height or BMI for age of study participants has been furnished in the table 6.

Table: 6
Nutritional Status according to Weight for Height

Age in Years	1947	Boys		Girls		
	Normal	Moderate	Severe	Normal	Moderate	Severe
6	17 (73.91%)	5 (21.74%)	1 (4.35%)	16 (76.19%)	4 (19.05%)	1 (4.76%)
7	12 (80.0%)	2 (13.33%)	1 (6.67%)	13 (76.47%)	3 (17.64%)	(5.88%)
8	19 (86.36%)	3 (13.64%)		12 (85.71%)	2 (14.29%)	-
9	11 (84.62%)	2 (15.38%)	11-	6 (85.71%)	1 (14.29%)	-
10	10 (90.91%)	(9.09%)		7 (100%)	-	-
Total	69 (82.14%)	13 (15.48%)	2 (2.38%)	54 (81.82%	10 (15.15%)	2 (3.03%)

Note: Normal: > -2 SD; Moderate: Within -2 and -3 SD; Severe: < -3 SD Source: Field Survey Data

The data presented in the table reveals that out of total 84 boys, 69 (82.14%) are normal and out of total 66 girls, 54 (81.82%) are found to be normal. Highest numbers of normal boys are found at the early age of 10 years with a proportion of 90.91%. The proportion of normal boy reveals an increasing trend along with the increase in age of the child. Highest numbers of normal girls are found at the age of 10 years. The prevalence of moderate wasting among boys is found to be 15.48% while the same is 15.15% for girls. Prevalence of severe form of wasting is 2.38% among boys and 3.03% among girls. The overall prevalence of wasting among boys is found to be 17.86% (15 out of 84) and among girls is 18.18% (12 out of 66). Further, it is observed that prevalence of wasting tends to fall with the increase in age of the child.

It has been found that the rates of overall prevalence of stunting, underweight and wasting among the studied children are 26.0%, 22.67% and 18.0% respectively. Prevalence of different patterns of malnutrition indicates that nutritional status of rural children of Assam was not different from those from other parts of India. However, as the proportion of stunted children is found to be comparatively higher than the other two forms, it can be said that under-nutrition among the children is mostly due to long term deprivation. Higher prevalence of underweight and stunting also found by Medhi *et.al* <sup>5</sup> among the Sonowal Kachari children of Assam, however, the rate of prevalence was higher than the findings of this study. A comparatively lower prevalence of wasting (18.0%) than other two forms reveals that malnutrition due to recent causes is not substantial in the study area. Further, no gender difference was observed in the prevalence of malnutrition among the children.

It was also observed during the interrogation period that MDMS is being implemented halfheartedly with least consideration being given to guidelines from the concerned ministry. The selection of children, food quality, food quantity and continuous supply remains a major issue in the program.

## Suggestion and Conclusion:

Majority of school going children in the study area were normal on the basis of three nutritional indices (weight for age, height for age, weight for height). However, malnutrition of different types with their severe intensity too found at the same time among the identified malnourished children. As school health services play an important role in the development of every child by providing comprehensive care of the health and well-being of children during the school years, therefore, on short term basis measures like proper selection of children, continuous nutrition education in schools for encouraging judicious use of locally available foods, supervision of mid day meals to children at schools and uninterrupted supply of cooking material would go a long way to improve the nutritional status. On long term basis implementing nutritional monitoring of school children as part of school health program, improvement in school environment can be instrumental in bringing a much needed improvement.

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## Silences and Pauses in Harold Pinter with Special Reference to Pinter's *The Dumb Waiter*

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In literature, words play one of the most crucial roles, as without words we are unable to form a world. Just like the words, silences too have their own power and position. Both saying something and remaining silent have its own significance. Silences and pauses is most crucial aspect of Pinter's plays. Silences and pauses play a dominant role to express a particular situation in a more vibrant manner in Pinter's play. The play which has been selected for the study manifests this aspect to a great extent.

Pinter is more challenging as a dramatist. The Dumb Waiter(1960) is a well-known single act play by the playwright. It should be noted that the majority of his plays are set in a single room. Suspense and ambiguity are two major characteristics of his plays. Harold Pinter is the one whose portentous pauses and dramas of defensive aggression left audiences with a chilling sense of unidentifiable menace. In most of his plays the dramatic situations initially appear familiar and realistic, but an undercurrent of anxiety and hostility runs through the action. He is one of the most prestigious English playwrights of the 1950s and 1960s. Although Pinter's style is difficult to comprehend without an understanding of Beckett, Pinter is not an imitator. He surrounds the stage with Beckett's void and blankness, but the action itself is realistic. Pinter's characters and situations are suffused with a sense of something being "not quite right," of some sinister mystery playing itself out and never revealing itself to us, the audience. Pinter forces his audience to refocus their attention on the stage, rather than on any personal reflection inspired by metaphor. Drama has significant ability to resist attempts to describe in action in narrative terms alone. The question appropriate to drama is "what is happening now" as much as "what will happen next?" in the sense that drama is an enactment that resides in real time, whatever its fictional construction might be.

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In Harold Pinter's work, the infamous pauses, excruciating silences, and the proclivity for tableaux are instances of delay when the forward motion of events is held and something unspoken happens. Such silences create atmosphere and mood, to be sure, and they may indicate something about the character, but they are also part of a signifying structure. In the play The Dumb Waiter silence occurs for the first time when Gus leaves the room and Ben reads the newspaper. Then we again see silence after the effort of flushing the lavatory. There was also silence after Ben's reference to the newspaper and it says about the old man who crawls under a lorry. In the play we see pauses for the first time during Ben and Gus' discussion when Ben was referring to the story of the newspaper when a girl of eight had killed a cat. Ben ponders over the matter. He takes this matter seriously and it is evident from his responses. But Gus changes the topic. He often says to Ben that he wants to ask him something. But Ben doesnot give importance." I mean, you come into a place when it's still dark, you come into a room you've never seen before, you sleep all day, you do your job, and then you go away in the night again.

"Pause."

These lines are important. These lines are told by Gus to Ben. Again silence occurs when Ben talks about himself. Gus is not happy with the kind of accommodation they are living in. Silence was there before Gus was going to say him that he wanted to ask him something and Ben ignores him everytime.

BEN (putting his legs on the bed). Oh, for Christ's sake..

GUS. No, I was going to ask you something.

He rises and sits on BEN's bed.

BEN. What are you sitting on my bed for?"

Ben feels irritated by the 'damn questions' of Gus.It is sure that Ben and Gus are in a café. When Gus asks Ben questions, again there is silence.Gus guesses what are the things that they may have upstairs and there were silence.

"Why did he send us matches if he knew there was no gas? Silence."

We have also noticed that when their eyes meet there is pause. When he reads the newspaper and there is again a pause. The play even ends in long silence and staring at each other. Thus, we see in the play Pinter uses the strategy of pauses and silences with the help of which he has been able to make a distinction between illusion and reality

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and a lot of significances. These devices control the spatial and visual dimension of the play over and above the written text. The difficulties that characters experience with language are underlined by the pauses and silences in dialogue.

Pauses and silences play a major role in the use of dialouges. When there are pauses or silences during a conversation marks the end of the topic or conversation and in Pinter these two elements menifest itself in a dominant way. Pauses are also indicative of what is going on. When a pause is there the audience peoceeds with caution. Pinter uses dramatic pause to give a dramatic impression. In Pinter most of the time we see silences when dramate tension is extremely high or to menifest the psycholgical state of the character. In this particular drama also we see that when Gus asks Ben some uncomfortable questions silece is there. In a way we can say that sometimes silences and pauses may be able to make reader understand about the psychology of the characters and what is going on their mind. In this case silene occurs to show that Ben doesnot have an answer for this question. As instance:

"why did he send us matches if he knew there was no gas? Silence."

GUS, Well, WHO'S GOT IT NOW?

Silence

Gus again asks a question to ben and there is pause.

"GUS. Hey, Ben.

BEN.What?

GUS. What's going onhere?

Pause."

So in this play we see most of the times pauses and silences occur after a question. Pauses and silences create a kind of rhythm in Pinter. This play is also not an exception. Therefore, Pinter uses silence and pause to show the conflict and tension among the characters. He proves that we can communicate through meaningful silences. This silent communication is much stronger than that of the general communication. So silence holds its own meaning in Pinter. It has its own significance. He also uses this device to say that human beings don't say important things that is why in the crucial times when the audience expects a character to speak he remains silent. Silence also hints at the absurdity of human behavior from this point of view.

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In *The Dumb Waiter* Ben's most prominent response to Gus' constant questions about the nature of their jobs is silence. It should also be noted that the play ends as Ben trains his gun on Gus in a long silence. So silence becomes so meaningful in the case of this play. In a sense, the looming presence of Wilson is the most dominating silence in the play. We do not see the physical presence of this character Wilson but it is through Ben and Gus we come to know about his presence and we also come to know that he is the one who sends messages to Gus and Ben through dumb waiter and speaking tube. His mysteriousness is one of the major aspects of the play. Wilson performs an off-stage role similar to that of Godot in Beckett's Waiting for Godot.

Therefore, pauses and silences in Pinter's plays become important elements in exhibiting the uniqueness of Pinter's play. This play is also a unique one because of these elements. Silences help to create a rhythm in his plays. It becomes an effective linguistic tool for Pinter. Finally, we can say that Pinter is expert in rhythmic exhibition of pauses and silences as it is exhibited in almost all his plays. His uses of dialogues are also very brilliant and influential. Because of the pauses and silences, the readers try to understand his plays very minutely and carefully. The language of Pinter's stage direction is also extremely significant; "Pause" and "Silence" are his most famous directions. "These are aggressive silences—a deliberate refusal to speak, to engage with another character." Pinter wants to ensure through silences that a lot of things in life can be spoken through silences. Silences can be a fruitful way of communication. It would not be wrong to say that he has been successful in his standpoint to a great extent. The most important things of life remain unsaid and it is communicated through silences.

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# ROLE OF ICT ON QUALITY IMPROVEMENT IN HIGHER EDUCATION

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The aim of education is to develop human being as a resource through all round improvement of personality, so that he or she can participate in the growth process of the society or the country as a whole. Higher education occupies a special position in the educational system of any nation because it is the apex of the entire educational structure and thus, it influences all levels of education. Higher education aims to disseminate knowledge, to develop the aptitude to use ideas and information, to plan and manage their own learning, to develop the student's ability to test and generate ideas and evidence, to facilitate the individual development of students. Of late, Information and Communication Technologies (ICT) have become commonplace entities in all aspects of life. In the field of higher education ICT plays a significant role in its overall quality improvement. ICT is largely used in teaching, learning, and research activities of higher education. The aim of this paper is to analyse theoretically about the role of ICT on quality improvement and overall progress of higher education in contemporary scenario. The paper also tries to focus on the intelligent use of ICT in higher education level to enhance the prospective of students and to exercise proper development of human resources.

#### 1.0. Introduction

Education is said to be the backbone of a nation. It is the primary source of knowledge and knowledge enlightens human mind and thereby brightens the hope of the country in different sphere of human culture. It is the key factor for human development with intellectual growth and an inspirational attitude. According to Will Durant, "Education is a progressive discovery of our own ignorance". So to envisage new ideas and to incorporate those into action education functions as a stepping stone. Through formal, informal and non-formal mode, education provides multidimensional knowledge and information

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to cope with the fast changing day to day activities. In India the educational structure is 10+2+3+2 where 5 years of higher education (3+2) occupies a vital position to transform each human being into a human resource with quality of productivity and eminent knowledge. Of late, ICT has been playing a strong role in improvement of overall teaching and learning process. ICT helps the inputs (teacher, students, classroom materials, equipments of teaching, method of teaching etc.) to make sure of maximum qualitative and quantitative output of students' learning.

## 2.0. Objectives of this study

The main objectives of this study are-

- 2.1. To provide a brief concept of ICT and Higher education.
- 2.2. To focus on the role of ICT on quality improvement in Higher Education
- 2.3. To suggest some measures for useful application of ICT in Higher Education.

#### 3.0. Methods of the study

In this study, basically descriptive method has been used for discussion or highlighting of the main features. The data have been collected from secondary sources such as scholars' views written in different books, qualitative books, journals, periodicals and from internet, and provided in this paper after through self analysis.

## 4.0. Concept of Higher Education and ICT

Education provides the skills for, "learning to know, learning to live together, learning to do, and learning to be." Higher Education is the primary agent of transformation towards sustainable development and escalation of people's capacities. Higher education occupies a special position in the educational system of any nation because it is the apex of entire educational structure and thus influences all levels of education. Higher education is also called tertiary, third stage or post secondary education, normally taken to include undergraduate, vocational education and training imparted by colleges and universities. Generally colleges, polytechnics and technical institutions, colleges of health, agriculture, and nursing school form the cluster of higher education. In India, education system has the honour of having one of developed and the largest higher education system in the entire

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world. Higher education in India has evolved in distinct and divergent streams with each stream monitored by an apex body indirectly or directly controlled by Ministry of Human Recourse Development. The aim of higher education is entire development of a human being. It aims to disseminate knowledge, to develop the capability to use ideas and information, to plan and manage their own learning, to develop the student's ability to test and generate ideas and evidence, to facilitate the personal development of students. In India there are 677 Universities and 35,539 Colleges. Out of 677 Universities 43 are Central Universities, 295 are State Universities, 154 are Private State Universities and 130 are Deemed Universities.

The Information and Communication Technology (ICT) is a novel concept infused widely in our day to day life. In the context of higher education ICT refers to the modern gadgets used to gather knowledge and to communicate promptly. These are the tools and resources used inside or outside the classroom to meet the challenges of higher education, i.e. accessibility, equality, and quality. ICT is aptly used to perform multidimensional tasks in the educational system through the application of the technological devices, such as Radio, Television (Broadcasting technology), Telephone, Computers and the Internet. It helps the students and the teachers to determine the learning concepts, process of learning and time and place of learning. Blurton defined ICT as 'diverse set of technological tools and resources used to communicate, create, disseminate, store, and manage information.' In higher education ICT deliver and conduct its services through E-learning or online learning, open and distance learning through Teleconferencing, video-conferencing, web-based conferencing, and audio-conferencing.

## 5.0. Role of ICT on quality improvement in Higher Education

Education performs a great role in the process of Human Resource Development. In the entire ladder of education Higher education has occupied a special position. There are different types of activities included in higher education level, namely, Teaching, Training, Research and Extension work. Education is the key to human civilization. It is the determinant of social progress and intellectual maturity. Proper education can be imparted only in a proper teaching-learning atmosphere. In higher education it becomes very exigent to provide up to date education using modified and novel ideas in the teaching-learning system. ICT in higher

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education change the approach of learning from teacher centred to student centred learning system wherein the teachers are the facilitators, coachers and mentors. ICT may provide the following scopes in higher education—Tele-Education System—It is the application of space technology in education. An integrated network system comprising of EDUSAT, Broadband and V-SAT networks helps in bringing virtual class rooms in a multi class environment with scamless two-way interaction between the teachers and students in a collaborative environment.

Virtual Learning Campus (VLC) -Virtual Learning Campus or VLC is an approach that divides the responsibility of building, commissioning and running the different systems and Information Infrastructure for education like Broadband, EDUSAT and ERNET services, Synchronous class room environment, Asynchronous knowledge interaction environment, Servers and Portals, E-learning & Digital library, ERP management solutions etc. under centers of specializations in different Institutions in different disciplines. Students in any college may access the services over the web. The college itself needs to maintain basic e-learning and library portals for convenience and providing convenient access to information.

Virtual libraries and digital learning-Teachers and students must be able to get information quickly and conveniently. Distance education requires virtual libraries. It provide text, video, audio, and other formats for teaching and learning and support digital learning. They collect and organize information and help the users to use the right information at the right time.

Distance Learning-It is a type of education, where students work on their own at home or at the office and communicate with faculty and other students via e-mail, electronic forums, video conferencing, chat rooms, instant messaging and other forms of computer-based communication. It is also known as open learning. Most distance learning programs include a computer based training (CBT) system and communications tools to produce a virtual classroom.

Wireless connectivity (wifi) - wireless campus benefits both students and teachers. Wireless environment will help faculties to mould the future workforce, improve campus efficiency, streamline operations and enable real time connectivity through any device. Students will benefit through expose to technology and expect services such as video

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conferencing, virtual class rooms and social media access through high speed internet connections.

Hence, ICT turns out to be significant as ICT is the most acclaimed and sought-after concept of the 21st century. Appropriate utilization of ICT will definitely change the scenario of higher education improving the quality, accessibility and equality. In this context some important aspects are as follows:

- i. ICT helps to create new environment in traditional or chalk and talk system of education.
- It opens a door of multiple sources knowledge for the teachers and the students.
- ICT helps to fulfil the principles of Instructional technology (IT) and Learning Technology (LT) to improve the teachers' efficiency, teaching environment and learners' achievement.
- iv. ICT is useful not only for the traditional learners but also for the non-traditional learners to acquire relevant knowledge through internet.
- v. Use of ICT in the classroom stimulates the teaching-learning environment and enhances its productivity and efficacy.
- vi. ICT can be eleverly used to reduce the troublesome business of monitoring and management of educational and administrative activities.
- vii. ICT makes sure of knowledge at anytime, anything, and anywhere. Introduction of digital classroom and audio-video conferencing system in higher education provide opportunities to the learners to get world class knowledge and information staying in a backward locality.
- viii. ICT has a great role in higher education to bring changes in examination and evaluation system. New technologies and techniques of evaluation make this process more authentic, inexpensive.
- ix. Another role of ICT in higher education is coordination between potential institutions, alumni network and other social organization. It helps in the process of future placement of the students and overall social progress.
- x. Quality of higher education mainly depends on quality of faculty. Adequate and intelligent use of ICT by the faculty
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- can help in providing quality education, knowledge and information to the learners. These quality input beget quality output of the institution or developed human resource.
- xi. Quality research work can be done through proper use of ICT in higher education.

It is a difficult work to discuss the role of ITC in quality improvement in Higher education in a limited space because ICT has multidimensional ever-changing and recurring characteristics.

# 6.0. Some suggestive measures for useful application of ICT in Higher Education

Information and Communication Technology has brought a vast change in higher education system. But due to weak planning, management and inadequate infrastructure the ICT becomes useless and headache to the teacher, learner and as well as the administrators. The main challenges faced by higher education institutions in application of ICT are-

- i. ICT need high cost of acquiring, installing, operating, maintaining and replacing of its tools and equipments.
   So proper maintenance and skilled instructor is very necessary.
- ii. If ICT does not help the students to meet their challenges and fulfil their needs, then it creates lots of problems. So before using the ICT in the classroom review of student's needs and availability of contents and information is very necessary.
- iii. Involvement of each teacher and students in application of ICT in higher education is the basic requirement of its success.
- iv. Selection and customizing of content is very important for effective use of ICT in higher education.
- v. Acquiring knowledge through ICT is facing challenges in higher education because in the initial period the stakeholders are not trained about the changes which ICT brings.
- vi. Lack of infrastructure to accommodate the technology, weak supply of electricity, network availability and lack

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- of awareness towards technical equipments and its utilization are some crucial problems related with adequate use of ICT in higher education.
- vii. Despite the rapid progress in ICT and its application in higher education institutions, some institutions are still accustomed with traditional learning practices causing lack of motivation, knowledge and awareness among teachers, students and administrators.
- viii. Selection of appropriate technical device related with teaching method, course contents, manageable by time, availability for each student in the class and efficient teacher for conducting all these devices are another concerning area for successful use of ICT in higher education.
- ix. Misuse of ICT is another challenge for better use of ICT in higher education.

#### 7. 0. Conclusion

Learning is an active and never ending process. In this globalization and digital era ICT helps to build the higher education sector as a repository of multidisciplinary knowledge and subjects and builds a strong strategy to counter the shortage of faculty. ICT applications provide higher education institutions with a competitive edge by offering enhanced services to the students and faculty, driving greater efficiencies, creating enriched learning experiences, and consequently produce developed human resources and overall quality improvement of Higher Education.

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## In search of Ethnic Identity among the Plains Tribes in Assam: A Study based on Deori

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Abstract: The problem of 'identity' emanating from the ethno-cultural consciousness of the ethnic groups has been one of the central issues in Indian politics in general and northeast India in particular. Assam being a mosaic of diverse tribal groups is not free from it. In Assam, plains tribes are majority in comparison to the hill tribes. The main Plains tribes are Bodo, Mising, Sonowal Kachari, Tiwa, Deori, Rabha, Hojai etc. At the initial period, all of them contributed their shares in the formation of greater Assamese society. But after independence, the question of identity became prominent for them as they felt themselves underdeveloped in comparison to the others. On the other hand, the hill tribes also got the opportunity to take part in local Autonomous Administration under the Sixth Schedule of the Indian Constitution to preserve and protect their identity, culture and development. But the plains tribes of Assam were left from the Sixth Schedule of the Indian Constitution. Subsequently, the plains tribes of Assam were become organized and articulated their demands in various ways under the constitutional provision. In view of this, the paper will make an attempt to analyze the historical background of the identity movement of the plains tribes with special reference to the Deori community in Assam.

Key Words: Identity, Culture, Development

#### Introduction:

The search for separate identity of the ethnic groups in Assam is not a new phenomenon. It is because; the demographic composition of the

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state is diverse with existence of different ethnic groups having historical background, language, culture, traditions and beliefs. It is interesting to note here that these ethnic groups were very much aware about their self-identity. They wanted to maintain their respective identities on the basis of their lingo-cultural traits. Likewise, the Plainsmen belonging to a number of smaller ethnic groups of the Mongoloid origin, who later came to be known as the Plains Tribal intended to protect their identity on the basis of language, religion, culture, tradition etc which they have recognized as their "identity symbol". These Plains Tribes have been pressing either for the creation of separate autonomous council or autonomous state and inclusion of the same into the Six Schedule of the Constitution of India.

It is well – known to us that the constitution of independent India provided two schedules for the development of tribal people or administration of tribal areas i.e., the Fifth and Sixth schedule. The Fifth Schedule provides for the formation of the Tribal Advisory Council in all other states except North-East India. On the otherhand, the Sixth Schedule makes provision for the formation of Autonomous District Council in the hill tribal areas of North-East India. The plains tribes of Assam such as Bodo, Missing, Tiwa, Rabha, Deori, Sonowal Kochari, Thengal Kachari have been left out these two schedules. So, identity concern among these groups has prominent since long back.

The movement for identity assertion among the different tribal groups became more forceful due to their backwardness in all spheres of their life. It can be mentioned here that the plains tribal of Assam maintained an independent system of government under British rule. But, under national government, they failed to occupy a prominent place in the caste Hindu dominated society and remained socioeconomically, educationally and politically backward. As a result they began to feel neglected within the Assamese society. Hence they felt the urgent need of organizing their respective group on the basis of their ethnic identity. They in fact, realized that unless they become organized and articulated capable of assert their rights vigorously, the issue of identity assertion would be remain futile. It however, leads to the formation of number of socio cultural and political organizations among the plain tribes of Assam. These organizations formed by various plains tribal groups tended to protect their separate identity by using

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the technique of autonomy movement under the Six Schedule of the Indian Constitution. Eventually, some of these groups went to the extent of launching autonomy movement as well as demanding separate state as a measure of protecting their identity. In view of these, this paper makes an attempt to examine the cause of identity assertion among the plains tribes with special reference to the Deori of Assam.

## Objectives:

The objectives of the seminar are as follows:

- (i) To describe the historical background of the Deori tribe.
- (ii) To explore the causes which induced for the identity assertion of the Deoris of Assam.
- (iii) To investigate the linkage in between the identity assertion and autonomy movement.
- (iv) To examine the various phases of autonomy movement of the Deori.

## Methodology

The study is mainly based on historical and analytical method with the application of the primary and secondary sources. The field survey was used for the generation of the primary sources. The relevant government report and document, pamphlets, Memoranda submitted to the government by various organizations of the Deori, proceedings of the different meetings and conferences of the socio-cultural organizations, local dailies are used as primary sources. The interview with the affected people and leaders of the Deori Autonomous Council, knowledgeable persons and concerned government officials are also included.

Besides, the relevant Books, Journals, Articles, Periodicals are utilized as secondary sources to uphold the findings of the study.

## Search of Ethnic Identity of the Deori :

The Deori is one of the major plains tribes of Assam who belongs to Tibeto-Burman family. It is found that the people of this groups migrated from their original place to the North-Eastern part of India and settled in different parts of Sadiya. At present, they are mostly inhabiting in the

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foothill areas of Arunachal Pradesh and bank of river Barnadi, Tengapani, Patarsal and the river Dibong. The present population of the Deori is about 2,17,357 which is concentrated in the district of Lakhimpur, Dhemaji, Sibsagar, Jorhat, Dibrugarh, Tinsukia and Sonitpur.<sup>3</sup>

During the British rule, the imperialist ruler systematically followed a policy of discrimination against the tribes including the Deori in matters related to employment and deprived them of the fruits of development; as for example, Bhimbor Deori passed civil service examination but the interim government did not appoint him. Not only the Deori but also other plains tribes had similar problems during the colonial period. Consequently the emerging educated elite of different tribal groups, rightly or wrongly, began to feel that they were being deprived of their due share of administrative jobs and other privileges. 4 Keeping this fact in mind the elitist section of these tribal groups urged the need of organizing their respective communities so as to remove their backwardness in all spheres of life. For that purpose they formed a common platform for all the tribal communities of Assam named Tribal League (1933) under the leadership of Bhimbor Deori, 5 This organizations came forward with the demands such as adequate representations in the provincial legislature, recognition of minority rights, reservation in government jobs, reservation of seats in educational institution, special measure for development of the distinct language and culture and removal of social inequalities etc. With the constant pressure and demand of the Tribal League, the Government of India Act, 1935 reserved four seats for the plains tribes of Assam during the colonial period. In the meanwhile, the emerging Deori elite i.e Gopal Ch. Deori, Dadhiram Deori, Phonindra Deori, Jugeswar Deori, Bhimbor Deori and Monbhal Deori etc. also realized that they are markedly different from the Assamese caste Hindu who has been the dominant section of the Assamese society. This realization leads to the formation of an organization named 'Deori Sanmillon' (1935) under the leadership Bhimbor Deori to fight for the cause of their upliftment. 6This organization has been pleading for socioeconomic upliftment of the community till independence of the country.

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Even after the decades of independence, the Deori elite increasingly feel that they remained much more backward than other section of the

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society. They blamed that the upper-caste elite of the state were mainly responsible for their backwardness. On the other hand, some serious situation had taken place in the politics of Assam which were instinct the Deori people to search their identity. These were the language movement of Assam, medium movement, Assam accord and the problem of immigration. Therefore, the Deori elite coming to understand that without organizing themselves they cannot preserve and develop their language and cultural heritage which is conceived as identity symbol. As a result, they became organized on the basis of their identity symbol which culminated in the formation of number of socio-cultural and political organization among the Deoris. These include: All Assam Deori Students' Union (AADSU, 1959), Deori Sahitya Sabha (1965), All India Deori Youth and Student Association (1992), All Assam Deori Mohila Somittee (1992), All Assam Deori Autonomous Demand Committee (1994), Deori Sanskritik Sangha (1998), Deori Pujari Sonmillan (1998). It is mentionable that all of them have more or less similar objectives. But few of them became defunct in due course of time. However, the aims and objectives of these organizations reveal that there has been a continuous feeling and anxiety among the Deoris, i.e., deprivation of them from due share of administrative jobs, political power and other avenues of life. They felt that the question of maintenance of distinct identity has been linked with all round development of the community and vice-versa. It is the reason why the Deori people used autonomy movement as a means to fulfill the manifold aspirations of their community. They had firm belief that their distinct identity could be preserved only through the establishment of Autonomous Council or Separate State.

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The Autonomy Movement of the Deori has passed through several phases. The first phase is characterized by the creation of political consciousness among the Deori people. The political consciousness was, indeed, infused by the leaders of the Tribal League. In this context, the name of Bhimbor Deori deserves mention. It is said that Tribal League, as a common political platform of all the plains tribes of Assam, tended to expert political pressure over the government and national political parties to fulfill their expectations. As a part of the fulfilment of Tribal League's demand the Deori community was recognized as one of the plains tribes of

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Assam in 1935. 9 it is important to mention here that to accelerate their demands, the Tribal League leaders formed another organizations named Plains Tribal Council of Assam in 1967. The basic objective of PTCA was the socio-economic welfare through participation in politics. 10 In the meantime on 30<sup>th</sup> January' 1967 the then Prime Minister Indira Gandhi announced that Assam would be reorganized on federal basis. This declaration gave new fillip to the political aspiration of the Deoris of Assam. But it remained immaterialized. Thus they felt deprived of special privileges enjoyed by other hills tribes of Assam. Therefore, they demanded separate political unit i.e., the Autonomous Council for the fulfilment of their political, social and economic aspirations as means of preserving their distinct identity.

On the basis of the inspiration drawn from other plains tribes of Assam, the All Assam Deori Student Union demanded recognition of their language in 'Sadiya Conference', 1982. 11 The AADSU submitted a memorandum to the then Prime Minister Indira Gandhi on June 1982 in which they chartered their twelve points demand on various subjects like autonomous status, recognition of language and socio-economic upliftment etc. 12 The movement started by AADSU became more forceful when it was supported by two other Deori organizations namely 'All Assam Deori Autonomous Demand Committee' and 'All Assam Deori Sanmillan'. As a result of prolonged struggle launched under the joint leadership of AADSU, AADAC and AADS, an accord was signed between the leaders of these three organizations on the one hand and chief Minister of Assam Mr. Tarun Gogoi, then Plains Tribal Development Minister Mr. Bharat Ch. Narah and additional chief secretary of Assam S. Kabilan on the other on 4<sup>th</sup> March 2005. 13 This memorandum of settlement popularly came to be known as 'Deori Accord'. The 'Deori Accord' was reached with the objectives to provide maximum possible Autonomy within the framework of the Indian constitution. 14 It created a Deori Autonomous Council within the state of Assam which is the apex council consisting of satellite areas of village council. 15 Deori Autonomous council would consisted of twenty elected members out of which two would be nominated by the government of Assam. 16 After that Deori Autonomous Council formed under the leadership of Amrit Prabha Deori and Rana Prasad Deori, both were hailed from the rival group within the Deori community. 17 They were called rival as they believed that Deori was a

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branch of chutiya.  $^{18}$  It is notable here that AADSU and other articulate section of the Deori were not satisfied with the leadership of the newly formed Autonomous council 19 and demanded the government its dissolution. As a result the council was dissolved according to the decision of the high court. However, the council was reformed under the leadership of Pitambor Deori and Mahesh Deori on 16th September 2007. 20 After its formation, the DAC executed a host of developmental programmes like road construction in Deori inhabited areas, electricity facility in Deori villages, distribution of CI sheet, water supply facility, loan facility for small scale industries owned by the Deori youth etc. 21 But the common Deori people and the various organizations of the Deori claimed that DAC would not be able to fulfill the expectations of the entire the common people<sup>22</sup>. The working of Autonomous council also invites criticism from those sections of the community for whose benefit council was created. 23 The commonly labeled criticism is the misuse of funds. Some people within the Deori community complained that the funds for the welfare of the community have been using by the chief executive and the executive members at their own discretion without any transparency.<sup>24</sup> Huge sum are spent in salary, T.A, and vehicle hire by these functionaries. 25 It is the reason why AADSU and other section of Deori community are not happy at the working of the DAC. . The AADSU even claimed that the Assam government seems to be intended in using adhoc DAC as a means of power politics by keeping the pro-government members in power. 26 On the other hand the nominated members of the adhoc DAC refuted the complain labeled against by saying that the working DAC is very much satisfactory. <sup>27</sup> Hence there is no need of dissolution of the council. But the council was dissolved by the Government and the election of the DAC was held on 7th June, 2010. After declaration of result on 11th june, 2010, the new DAC was formed under the chairman chief of Amrit Prava Deori and chief executive member of Bhairob Deori. The council was continuously in chair up to in the month of june, 2016. The election of the Deori autonomous council held on 15th December, 2016. And the BJP led council was formed at Deori Autonomous Council.

## FINDINGS AND CONCLUDING OBSERVATIONS:

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- 1. The consciousness for maintaining a distinct ethnic identity has occupied the entire political scenario of Assam.
- 2. The Deoris are one of the major plains tribes in Assam.
- 3. They want to protect their separate ethnic identity on the basis of language, culture,

religion, tradition and historical background which have been used as an identity symbol of the community.

- 4. The factors which are mainly responsible for the identity movement of the Deori i.e the emergence of middle class of the Deori, arrogant nature of the Central Government as well as the State Government, land problem and socio-economic factors such as language, historical background, unemployment, economic condition, realization of backwardness and deprive feeling of the Deori people.
- 5. They formed number of socio-cultural organizations to raise their demands.
- 6. The Deori people as well as the articulate section has been used the technique of autonomy movement to assert their distinct identity.
- 7. After a prolong struggle, an accord was signed between representatives of the Government of Assam and the Deori organizations. This accord is known as "Deori Accord". As a part of this accord an autonomous council was formed unde the leadership of Amrit Praya Deori,
- 8. After that the council was reformed under the leadership of Pitamber Deori. But the general people of the community always complain that the Deori people are not benefited in real sense of the term. The leaders of the council misuse the government allocated fund for their personal interest.
- 9. So, it becomes clear that the autonomous councils are said to have formed by a particular section of the community for the sake of their personal interests for which the general people are incapable of understanding the puzzling power politics.

In conclusion, it can be said that the DAC is become a separate identity of the Deori people of Assam. But, there is urgent need of close monitoring of the works done by the DAC. It is mainly because the council has faced the allegation of misuse of government fund. If the council wants to survive, then it is necessary to work on the part

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of the former in a more transparent way. Self interest should be replaced by the interest of the community as a whole for socio-economic and political upliftment of the entire Deori people.

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## A STUDY ON THE USE OF ICT IN TEACHING-LEARNING PROCESS IN HIGHER SECONDARY SCHOOLS AND COLLEGES WITH SPECIAL REFERENCE TO SONARI

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Now-a-days, information and communication technology (ICT) has become gradually more important to schools, colleges and universities, There are wide of research exists to explore and study the use of ICT in the teaching and learning process. This research examines how ICT is applied in the classroom of Higher Secondary level and colleges in Sonari, Charaideo district from the perspective of students of the institutions. This study aims to the impact of ICT in teaching-learning process, the students' perception of ICT use in the classroom and to seek out my fundamental difference in Government and private Higher Secondary schools and colleges. The research adopted survey method to data gathering, using questionnaire to gather data from students and tenchers. The evidence was then analyzed based upon the original questions outlined. The research does suggest there is capacity in the skills of teachers and students to employ ICT effectively. There is some support and recognition of the benefits associated with ICT use and there are some teachers who recognize the importance of ICT in developing more constructivist methods in the classroom. The research therefore implies to effectively implement ICT in classroom.

#### 1.0 Introduction

Information Communication Technology is a modern science of gathering, storing, manipulating, processing and communicating desired types of information in a specific environment. ICT is an extended term for information technology(IT) which stresses the role of unified

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communications and the integration of telecommunications, computers as well as necessary enterprise software, storage and audio-visual systems, which enable users to access, store, transmit and manipulate information. The term ICT is also used to refer to the convergence of audio-visual and telephone networks and computer networks through a common cabling system or link system.

ICT has no universal definition, as "the concepts, methods and applications involved in ICT are constantly evolving on an almost daily basis". In broad terms ICT covers any product that will store, retrieve, manipulate, transmit or receive information electronically in a digital form, e.g. personal computers, digital television, email. Information and Communication technology refers to all the technology used to handle telecommunications, broadcast media, intelligent building management systems, audiovisual processing and transmission systems and network based control and monitoring functions.

## 2.0. Statement of the problem

The present study is "Use of ICT in Higher Secondary Schools and Colleges in Teaching-Learning process with special reference to Sonari".

## 3.0. Objectives of the Study

- 1. To examine the contributions of ICT to improving students' perception of their attainment.
- 2. To find out the significance difference between Government and private institutions while using Information-Communication Technology.
- 3. To study the impact of ICT in teaching-learning process.

## 4.0. Significance of this Study

Today is the era of science and technology. Today's global era is characterised by rapid advances of technology and expansion of knowledge and information. Therefore there is a need to get access to this information communication technology. Education should meet the needs and demands of variety of learners and therefore ICT is very much important in meeting

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this need. It is considered that this study is potentially of considerable importance, for a number of reasons:

- 1. It will help to support policy makers and also teachers in developing ICT use within the schools.
- 2. It will provide an opportunity to compare the views of teachers, students and policy makers on ICT use.
- 3. It will help to improve the quality of the student learning experiences and make the education available to a broader spectrum in the country.
- 4. It will help to eradicate the problem of the barriers of time and space.

#### 5.0. Review of Related Literature

This study will assess and evaluate the level and nature of ICT use in Higher Secondary schools and colleges in Sonari, Charaideo district. This chapter will review the literature related to the use and impact of ICT in teaching-learning process in Higher Secondary schools and colleges in Charaideo district.

Cox et al. (2003) undertook a review of the research and then conclude that ICT had indeed had a positive effect on attainment in National Curriculum subject areas. They qualified this assertion by stating that it was not just the everyday use of ICT as a tool, but the skillful use of ICT by the teacher, when linked to careful pedagogical strategies enhancing classroom communication. In order to get the best use of ICT teachers have to be aware of ICTs range and features as a resource and should be deeply versed in ICT techniques. This conclusion was confirmed by Somekh and Davies (1999) and Sutherland(2005). They assert that the skillful use of trained practitioners is absolutely key to higher attainment. ICT offers a range of key features including speed, automation, capacity, range, provisionally and interactivity (Beauchamp (2012;3).

## 6.0. Hypotheses

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In order to testing the above objectives the following hypothesis were formed-

- 1. The perception of students is improved by the help of ICT.
- 2. There is a difference between Government and private institutions while using Information-Communication Technology.
- 3. Information-Communication Technology positively influence in teaching —learning process.

#### Research Questions

To address the research objectives, the study seeks to answer the following questions:

- 1. How confident are teachers in using ICT in the teaching-learning process?
- 2. How do students use ICT in the classroom?
- 3. Are there any differences between teaching and learning in Government schools and private schools in terms of their use of ICT in the classroom?

# **Definition of the terms used in the study ICT:**

The full form of ICT is Information Communication Technology. ICTs are diverse set of technological tools and resources used to communicate and to create and disseminate, store and manage information. ICTs are potentially powerful tool for extending educational opportunities in teaching and learning process.

Teaching – Learning process: A combined process where an educator assess learning needs, establishes specific learning objectives, develops teaching and learning strategies, implements plan of work and evaluates the outcomes of the instruction.

#### Sonari:

Sonari is district headquarter of Charaideo district. It is located on the nearly 500 year old "Dhodar Ali" built by the Ahom kings. At present, it is a commercial centre, important town of eastern Assam, renowed for its cultural, academic and co-curricular activities. The educational institutions

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which have catering needs of nearby villages and tea gardens, such as Sonari College, Sonari Commerce college, B.P.B.M H.S. School, P.K.B. Girls' H.S. School, Sonari Town High School, Sonari Junior College, Elite Academy, Sukapha Academy, Dibyalata Academy, St. Joseph High School, Hajee OMMAcademy, Sankardev Sishu Niketan, Sonari Jatiya Vidyalaya, etc.

## 7.0 Research Methodology

As the problem of the study is descriptive in nature, the researcher used survey method to achieve the objectives of the study. In this chapter, the researcher will discuss the objectives, the target population, sample and the reason for selection of specific data collection tools. For this purpose the researcher has developed a questionnaire and also the analysis techniques associated with the methodology.

## Population:

The population of the present study includes all the Higher Secondary Schools and colleges in Sonari, Charaideo district (Assam) are together treated as the total population and after that a sample is selected to try and make it representative for the present study. The majority of the schools are of Assamese medium.

## Sample:

To conduct the study, 3 Higher Secondary schools, 2 colleges and 3 junior colleges are selected as a sample. The samples include the head of the schools, and students of the institution. It has been taken care of that the samples represent the entire population. A questionnaire which is contained 10 questions is given to the students.

## Tools used in the present study:

For collection of data a questionnaire is developed by the researcher. There are 10 close type questions in the questionnaire which are asked objective in nature. These questions had limited choice of answering. The respondents had to answer either in 'Yes' or 'No'.

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Through these questions the researcher tries to study the use, advantage and impact of ICT on teaching learning process in Secondary schools.

#### Collection of Data

A systematic procedure has followed in collection of data for the present study. The data collection for the present study was started in the month of May 2017. The researcher has personally distributed the questionnaire to students for which the researcher has visited all the sample schools. The researcher has tried to establish a good rapport with the students. While distributing the questionnaire required instruction was given so that they can answer the questions within a specific time limit. All this was possible because of the kind co-operation of the students. After receiving the complete questionnaire they are checked by the researcher. Majority of the students responded clearly and frankly and completed the questionnaire.

## 8.0. Analysis and Interpretation of data

In the present study the analysis of data is gathered through a help of questionnaire constructed for the students. The data collected are analyzed and interpreted and tabulated. The interpretation of the data has been given in term of percentage.

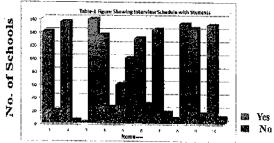
Table 1 shows the express viewed by the students regarding use of ICT of ten Higher Secondary schools taken as sample.

SL.	Boms	Respondent		Perc	Percentage	
Nο		Yes	No	Yes	No	
1	Regarding the use of ICT in schools.	140	20	87.5	12.5	
2	ICT makes teaching more interesting	155	5	96,87	3.12	
3	ICT decreases students' motivation	1	159	0.62	99.38	
4	ICT changes the learning climate in the classroom	135	25	84.37	15.63	
5	Regarding Government fund providing for technological equipment	60	100	37.5	62.5	
6	Practical utility	130	30	81.25	18.75	
7	Impact of ICT on teaching learning process	143	17	89.37	10.63	
8	ICT makes more difficult to control class	8	152	5	95	
9	Teachers- students encouragement	145	15	90.62	9.38	
10	Regarding Applicability of ICT in Educational Institutions	150	10	93.75	6.25	

The above table shows that 87.5% students response that there is an importance of ICT in educational institutions and 96.87% students feel that ICT makes teaching more interesting, 99.38% students

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deny that ICT decreases students' motivation, 84.37% students realize that ICT changes the learning climate in classroom.62.5% responses that their institutions are deprived from government fund. 81.25% students feel the practical utility of ICT in educational institutions. 89.37% students response that there is a positive impact of ICT in teaching learning process. 95% students deny that ICT makes more difficult to control class. According to the above table, 90.62% students feel that ICT encourages both teachers and students.93.75% students agree that ICT is very applicable in educational institutions.



#### 9.0. Findings and Discussion

The major findings of this study are as follows-

- 1. Most of the institutions opined positively regarding the importance of ICT in educational institutions. These institutions have the facility of technology.
- 2. Almost 97% schools feel that the teaching-learning process is more fruitful and interesting because of the use of ICT. It decreases the bo
- 3. It is found that ICT does not decrease students' motivation. It creates students' motivation and interest in the classroom.
- 4.84.37% students realize that the ICT changes the learning climate in classroom.
- 5. 62.5% feel that their institutions are deprived from government fund. There is an importance of government fund providing for technological equipment. Maximum government fund is provided to Govt institutions. Almost all Private institutions are deprived from govt. fund.
- 6. Maximum institutions feel the practical utility of ICT in educational institutions.
- 7. Maximum students' response that ICT influence positively in teaching-learning process. Today is the era of science and technology. Therefore ICT is very much important in teaching-learning process to cope up with the technological field.
- 8. Maximum students deny that ICT makes more difficult to control class.

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9. Maximum institutions are encouraged by ICT.

10. It is found that ICT is very applicable in educational institutions.

#### Discussion

Information and Communication Technologies have recently gained groundswell of interest. ICT change the face of education over the last few decades. This study focuses the applicability and impact of ICT in teaching —learning process. The objectives and research questions mentioned in this study are—

The first objective is to study to examine the contributions of ICT to improving students' perception of their attainment. After interpreting the responses it is clearly perceived that the perception of students is improved by the help of ICT.

The second objective is to find out the significance difference between Government and private institutions while using Information-Communication Technology. From the findings, it is clear that there is a difference between Government and private institutions while using Information-Communication Technology.

The Third objective is to study the impact of ICT in teaching-learning process. From the findings it is clear that ICT positively influence in teaching—learning process. It makes teaching-learning process more interesting and fruitful.

#### 10.0. Conclusion

The research suggests that there is a capacity in the skills of teachers and students to employ ICT effectively on fundamental or technical level. The research implies the failure of Government to effectively implement of ICTI the classroom. With emergence of technology especially in the field of education have open a new horizon for learners. The use of ICT and its application influence positively in teaching and learning process. With the present study of Higher Secondary schools in Sonari, Charaideo district and the suggestions made here in above if implemented it is hoped that it will bring improvement to an extent and help change the scenario towards betterment.

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# Folk Songs of the Deories in Assam: An Analytical Study Dr. Anita Konwar

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## Introduction:

Assam, one of the north-eastern states of India is a land of many cultures, tribes and religions. The culture of Assum generally refers to a composite and complex phenomenon that includes the cultures of the various tribes that make Assam their home. Each plain tribe of Assam has traditional knowledge, unique in its own way. Knowledge has an important role in tribal tradition as it reflects the different aspects of tribal society and culture. Deori or Deuri people are one of the major ethnic tribes and well cultured people of Assam, India. They historically live in the "upper plains" also called as the hinterland of the Brahmaputra Valley. The Deori tribe belongs to the Sino-Tibetan family of Mongoloid stock (as is generally the case of Northeast people). In the ancient times of Ahom and Sutiya kingdoms, the Deoris used to serve as priests in the temples of the kingdoms and therefore the origin of the name is "Deori". The tribe has maintained their racial traits, languages, religion and folk tales, beliefs through centuries. The Deori people follow indigenous faith. They worship their ancestors; Kundi-Mama, Boliya Baba (pisadema) and Tameshwari (pisasi). They also worship the Hindu deities. Deoris are very religious people. Since antiquity, Deori people worshiped God by singing hymns and holy songs.

## Analysis:

The Folk songs of the Deories specially refers to "Aaborobo" song and "Hasuti" Song. Many people especially the Borgonya people consider the "Hasuti" songs as "Huwai Rangoli songs" because "Hasuti" song is begun with "Huwai Rangoli" Song. Both these folk songs are especially sung on the occasion of Bohag Bihu. Deori young girls and boys welcome the advent of Bohag Bihu by organizing Bihu

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at night in village after village or in every locality one month prior to Bohag Bihu.

Besides "Aaborobo" songs and "Hasuti" songs, the Deories have their own "Husori Bihu" songs, "Deodhani Dance" songs at Deoghar, Bihu songs sung at the end of "Husori" Bihu and "Bohag Bihu concluding songs". There are traditional rules among the Deories that these songs cannot be sung anywhere at any time. Because these songs have deep connection with "Deoshaal" and "worshipped deities". All Deori Bihus are celebrated in relation to "Deoshaal" and "worshipped deities". So the Deories say-"Bihu puja is first priority, then comes Bihu for public". Prior to Bihu puja, it is forbidden to rejoice or sing Bihu in the locality. Deories call Bihu as "Bishu" in Deori language and it is said that the Assamese "Bihu" has originated from the word "Bishu" in the past.

In the past "Aaborobo song" was totally sung in Deori language. In the "Dibongia clan" the song is still sung in Deori language in spite of the inclusion of some Assamese words. But in Tengaponiya and Borgonya clan, apart from the opening song, the remaining songs have become Assamese. These two groups have forgotten their own language. These "Aaborobo" songs are especially heard among the Tengaponiya and Dibongia clan but its influence is less among the people of Borgonya clan. Two three main singers initiates the Aaborobo songs and rest of the girls repeats the main song. At the time of singing and dancing, all the girls proceed in circular motion keeping the rhythm of legs harmoniously. The main singers sing in high tone at the end of a particular song and the rest of the girls also sing in the same tone along with the main singers. After that the main singers starts the next "Aaborobo song" and the rest of the girls repeat it.

The tone and movement of legs may not be same for each "Aaborobo" song. Especially the movement of the legs depend on the main singer and the rest of the singers. The main songs of the "Aaborobo" songs are as follows:

- 1) Aaborobo nahanga jabar bache ye hai
- 2) Ye moruwa (mauwa) hemadoi ye hei
- 3) Ghatoi ye hei ye heiya

Baarik lahaya hiparoloi jao hei

4) Tholo bengena thoi aahe, tholo bengena tholo

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5) Jhopa kikire kike edang dang

Moina belele dakiya charam oi hei

There are differences between "Aaborobo" songs of Tengaponiya clan with that of the Dibongia. The words and pronunciation have also become different in many cases.

## Hasuti or Huwai Rangoli Songs

The "Hasuti" songs are also created for rejoicing and making merriment during the Bohag Bihu and like the "Aaborobo' songs, the "Hasuti" songs are also sung on the occasion of Bohag Bihu. The Hasuti songs are equally favourite of the young girls like the Aaborobo songs which are sung in Bihu performed at night in the month of Chaitra. The Hasuti songs are sung throughout the night till the morning. If the Aaborobo and Hasuti songs are sung, they must be sung from the beginning to the end, it must not be left half-sung. This rule is for only girls. The Hasuti songs can be sung by young menwomen, girls-boys, old men-women during the Bohag bihu. To begin the song, there are three main singers and the rest of the singers follow them. The gestures made in the Hasuti bihu has similarities with the Punung songs of the Adivasi tribe gaalong, miniyoung and padams.

The "Rahila" songs of the Deories are also a part of the "Hasuti" songs. Samples of the main songs of Hasuti or Huwai Rangoli songs are given below:

- 1) Huwai Rangoli Ye Hei
- 2) Hansuti E Ro Rajai (aajai) Umolo Goi
- 3) Huwai Lo Sorogor Tora
- Sai Thak Oi Nilogor Pora
- 4) Huwai Lo Dhan Kher Sai
- Oti Senehore Bohagor Bihukhan Hatate Molongi Jai
- 5) Huwai Lo Ro,

Dehi Mur Oi Bihure Batori Ko

In Bohag Bihu, when money is collected by singing Hasuti songs or Husori songs the following lines are sung as concluding songs:

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- 1) Huwai Lo Koiyang Burhi, Saraikhan Mukoli Hol Oi Sarai Sapai Koli
- 2) Dhan Dhan Ehoi Ki Ehoiye Hoi

The second line is sung to bless the host and after that the Bihu ends at the yard of the host.

The Bohag Bihu of the Deories starts at the "Devamandir" or "Deoghar" with worshippings on the first Wednesday. People cannot start Bihu without worshipping at 'Deoshaal' the place of worship. The celebration of Husori Bihu of the Deories has a significance with Deori religion. This Husori bihu is a different part of Bohag bihu. The Deori people under a Devamandir or Deoshaal" are considered to be one unit or people of same village and celebrate Husori bihu together. Usually the Husori bihu is celebrated in every three year. If necessary, the rule may be violated taking the permission of 'Deodhani". Deori people cannot celebrate Husori bihu in different "Devamandir" or "Deoshaal" because Husori is celebrated around their own Deoshaal. The same way people of different caste cannot celebrate Husori in Deori village.

In order to celebrate bihu the leading old persons of the village discuss with the priest of the temple and other members. The leading young men are also invited to the meeting. In this discussion, Husori bihu committee is formed so that the bihu can be celebrated smoothly. Among the old men, the president and the finance secretary are selected and from among the young men, secretary and if necessary assistant secretary are appointed. After that, among the young men "Tekelas" are appointed so that these "tekelas" can bring the village people to Husori bihu in time. Besides this, if necessary, the head singer is appointed for Husori who can sing "Bihunaam". The head singers are honoured with "Basual" and "Cheleng-chadar" and Tekelas are felicitated with "Phulam gamocha" so that they can help in conducting the Husori bihu smoothly. The secretaries of the committee are also felicitated with "Phulam gamochas".

Besides this, a person entitled 'Jhalakhowa' is appointed. This person is a helping hand to the secretary. The secretary orders to submit the rice, betel nut-leaf and gamocha, cheleng-chadar to jhalakhowa. The secretary and jhalakhowa hands over everyday collection of Husori bihu to the president as well as the finance secretary of the committee.

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The Deori people starts bihu at the Deoshaul on the first Wednesday of Bohag month if that day is not "Amawasya". The Deori people do not begin bihu puja in Amawasya. In that case bihu is postponed to the next Wednesday. Bihu on this Wednesday is considered to be the bihu of worshipped deities. The bihu for men starts from the next day that is Thursday. In the morning of Wednesday, the cattle are bathed with grinded lentils, turmerics and in this way "Goru bihu" is celebrated. On Thursday and Friday, all people celebrate bihu together. Bohag bihu is the bihu of merry-making. In that period, the world of nature becomes colourful with beautiful flowers. On Thursday and Friday, apart from 'Deo nacha' biliu the Deori people celebrate bihu at the yard of Deo-ghar. It becomes a matter of rejoicing for the audience to watch bihu of the girls, bihu of the daughters-in-law, bihu of the old women, the young boys and adult men. Deodhani dance is seen only when "Deo" possesses someone. For the "Deodhani" dance the young, adult men sing Deodhani songs by playing cymbals, dhols etc. After the Deodhani dance, people rejoice the rest of the day by singing and dancing bihu. In big Deori villages the Bohag Bihu seems to last for a period of two weeks. On the day of Bisu Uruwaba (Ending Ceremony of Bohag Bihu) Midi Girachi of Dibongiya Clan, Boliya Baba of Tengaponiya Clan and Kesai Khaity of Borgonyan Clan are blessed to all the villagers for whole year and people seem to be very glad to dance with him/her. The Deodhani Dance is a very important and essential part of the Bohag Bihu. Dr. Moheswar Neog opines that Deodhani is a holy female dance or a god's woman. However, during the Bohag Bihu, no man is allowed to go into the Than wearing colourful clothes.

#### Conclusion:

The Deori tribe of Assam has a rich culture and tradition. Most of the 'Aaborobo' songs are composed round the "Deoshaals" or the worshipped deities. Apart from that, the culture, customs, way of life of the Deoris are also reflected in these songs. The "Aaborobo" songs are considered to be the premonition of inviting the deities to Bohag Bihu. There is a prevalent myth among the Deories that these songs are sung for the blessings of the deities. Aaborobo songs are much popular

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among the Dibongia and Tengaponiyas, the same way the Hasuti songs are equally popular among the Borgonya and Tengaponiyas.

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## Isolation and Characterization of PHA Producing Bacteria from Sewage Samples of Assam

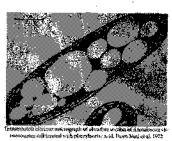
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#### Abstract

Polyhydroxyalkanoate (PHA) is a family of naturally occurring polymers which is reportedly produced by more than 75 genera of gram-positive and gram-negative bacteria. Although the industrial production of this bioplastic commenced decades ago, its large scale production is still debilitated by factors such as rate of production by the bacteria and the raw materials for its production, which finally elevates the production cost. The present thrust in this area is to isolate bacterial species which have a high turnover of PHA with minor expenditure. Sewage and sewage sludge samples are rich sources of microflora which offer a nutrient limited habitat to the individual organisms. Under these conditions of stress, native organisms develop a metabolomics which efficiently convert vital nutrients into essential macromolecules, and in this case a storage polymer of industrial significance i.e. PHA. In this pilot study an attempt was made to isolate indigenous bacterial with ability to produce the polymer.

#### 1.Introduction

Although bioplastics have been proposed for several decades to replace the petroleum-based plastics due to their less dependence on fossil fuels



and environmental impact, no general agreed definition of concept of bioplastics is available. Some bioplastics are non-biodegradable while others like starch plastics, cellulose polymers are. Sometimes extra additives may be added to these bioplastics to improve their stability and functionality. These additives may

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be neither biodegradable nor derived from renewable resources. The third type of bioplastics is polyhydroxyalkanoates (PHA) which are directly produced by microorganisms (Nuti et al., 1972). They are made from 100% renewable resources without additives and fully biodegradable, enabling a so-called bio-based-to-biodegradable (or cradle-to-cradle) life cycle. Therefore, PHA can be considered as the only fully bio-based and biodegradable plastic.

#### Polyhydroxyalkanoates

Polyhydroxyalkanoates (PHA) is a family of naturally occurring, linear, aliphatic polymers with diverse structures produced by more than 75 genera of gram-positive and gram-negative bacteria biopolymers with diverse structures. Since it was firstly discovered in Bacillus megaterium (Lemoigne, 1926), myriad types of bacteria in soil, activated sludge, oceans and extreme environments have been reported to be capable of synthesizing PHA(Steinbüchel and Valentin, 1995). Although PHA were found associated many different types of ecological functions, such as sporulation and germination, exopolysaccharide production and endurance under environmental stress, the most general accepted function of PHA is the intracellular storage compounds as carbon and energy source. PHAs are produced by microbial fermentation of carbon-rich substrates (sugars, lipids, and their derivatives, respectively) in an environment of low oxygen concentration and limited supply of essential nutrients such as phosphorous, nitrogen, sulphur, magnesium, etc. Under such stringent conditions, the carbon sources are assimilated, converted into hydroxyalkanoates (HA), and finally polymerized into high molecular weight compounds. The microbes accumulate PHA as water insoluble, granular, intracellular inclusions in the cytoplasm, forming about 90% of the total cellular weight. The molecular mass of PHA ranges from 50,000 to 1,000,000 Da depending upon the conditions and microorganisms in which they are produced (Madison and Huisman, 1999). PHA is an excellent storage compound because of its presence in the cytoplasm, even in large quantities, it does not disturb the osmotic pressure of the cell. PHAs are viewed under a transmission electron microscope, the granules appear as electron transparent, discrete, spherical particles with clear boundaries. PHA granules can also be stained with

Sudan Black B and more specifically by NileblueA exhibiting a strong orange fluorescence.

PHA can be classified as short, medium, or long chain length PHAs. PHAs created from 3–5 C atoms are called short-chain-length (SCL) PHAs with 6–14 C atoms are called medium-chain-length (MCL) PHAs

## Microbial synthesis of PHA

PHA can be synthesized either by chemical means or by biological approaches. Biosynthesis of PHA is conducted by microorganisms grown in an aqueous solution containing sustainable resources such as starch, glucose, sucrose, fatty acids, and even nutrients in waste water under 30–37°C and atmosphere pressure To harness the full potential of microbial systems for PHA production, it is necessary to modify and metabolically engineer the already existing biochemical pathways in particular microorganisms to ensure the maximum yield of PHAs. New pathways can be constructed by genetically modifying suitable microorganisms. Likewise, with the use of inhibitors, unnecessary pathways can be shutdown. Such manipulations need to be carried out with much thought to achieve maximum PHA production in the shortestpossible time using cheap and readily available carbonsources

## 2. Materials and method

## Isolation of bacteria from sewage samples

Glass wares and the growth media were sterilized prior to work by autoclaving for 15 to 20 minutes @ 121° C° (15 lbs). Used cultures/biohazards were autoclaving for 1 hour @ 121° C (15 lbs) for decontamination.

The microbes were inoculated on Luria agar media (LA) also known as the LB Agar consisting of Luria Bertani (LB) broth (Himedia; Cat No. LQ118-50X10ML) supplemented with agar (Himedia; Cat No. RM026) and the E2 Minimal media were prepared to culture the samples. LB media was used as it permits fast growth and good growth yields for many species. The E2 minimal media is rich in salt and allows the change of the carbohydrate source in accordance to the preference of the target inoculum. It has been used to mimics essential nutrient stress which induces production of PHA

## Colony characterization

## Colony Morphology

Colony morphology is important attribute as different species of bacterium produce very different colonies thus facilitating characterization. A colony is defined as a visible mass of microorganism all originating from a single mother cell. Morphological characterization was done using the following parameters: form, size, colour, margin and consistency.

#### Gram staining

#### Principle involved

A differential stain of great value which subsequently became known as Gram stain was discovered by Christian Gram. The process of Gram staining includes the following essential steps: heat fixing a bacterial smear on a microscopic slide, staining successively with a basic dye-Crystal violet and then with a dilute iodine solution (mordant). The preparation is then decolorized. Gram positive bacteria resist the decolourization with the solvent and remain stained as deep blue-black. Gram negative bacteria are rapidly and completely decolourise. They are stained with a counter stain such as Saffranine

## Identification of PHA inclusions in vivo Sudan Black B staining

## Principle involved

Sudan Black B ( $C_{29}H_{24}N_6$ ) is a non-fluorescent, relatively thermostablelysochrome (fat-soluble dye) diazo dye used for staining of neutral triglycerides and lipids which accumulate after growing the bacteria over a period of time. It is a slightly basic and thus combine with acidic groups in compound lipids thus staining them in the process. Under bright field microscope, granules of PHA are revealed as blue colour granule against a pink colour cytoplasm.

## Nile Blue A staining

## Principle involved

Nile blue A is a basic oxazine dye which is soluble in water and ethyl alcohol. The oxazine form of the dye (Nile pink) is formed by the spontaneous oxidation of Nile blue A in aqueous solution or by refluxing

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Nile blue A with sulphuric acid. This stain is considered as a more specific stain for PHB than Sudan black.

#### Qualitative analysis of DNA

Qualitative analysis of bacterial isolates were carried out after bacterial DNA extraction by agarose and PAGE gel electrophoresis and by PCR mplification

## Ribosomal Intergenic Spacer Analysis (RISA)

Ribosomal Intergenic Spacer Analysis (RISA) is a technique which is used to identify and analyse the microbial community by amplifying a region between small subunit 16S and large subunit 23S rRNA called the intergenic region. Specific primers are used that target the conserved regions between 16S and 23S. RISA fragments are generated from the most dominant bacterial species in a given sample. The major function of the Intergenic spacer region is structural but some portion of this region can also code for tRNAs. The taxonomic value of this ISR lies in the length and the nucleotide heterogeneity

## DNA sequencing and phylogenetic analysis

The sequencing of purified 16S r DNA fragment was performed with an ABI Prism Big Dye Terminator Cycle Sequencing Ready Reaction Kit on a ABI Prism 377 DNA Sequencer (Applied Biosystem) at a commercial company. (SciGenom Sequencing Facility, India).

The sequences of 16S r DNA genes were uploaded in the (Ribosomal Database Project) RDP database.

Genetic relationships were determined by the neighbour-joining method with the Mega 6 program using nucleotide sequences of the 16S r DNA gene

#### 3 Results

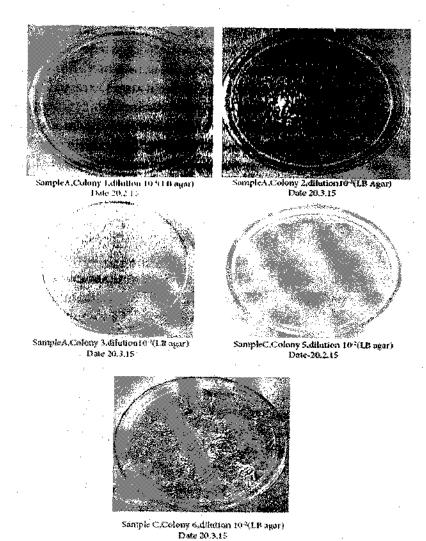
## 3.1. Sudan staining of samples



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Sudan Black B staining was done for all samples in slides and observed under the microscope. Out of 20 colonies isolated and stained, 6 positive isolates were found which showed bluish black staining. This was a preliminary test for identification of PHA accumulating bacterial colonies.

Figure 3.2 Sudan positive isolted colonies



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These colonies were subcultured and preserved temporarily under -20°C for future use.

3.3 Table 3	3; Colony	character	intics of sold	cted colon	ies on LB aga
Colony	Form	Colour	Margh	Surface	Grre
Colonyl	Circular, irregular	оридие	ontire	Raised, sticky	
Colony2	Circular, irregular	opuque	Futire, wavy	Flattened, powdery	
Colony3	circular	opaque	Pathe, wavy	Flattened, powdery	20
Colony4	circular	opaque	क्षसीव्	Flattened, sticky	1
Colony5	Filamentous,	opaque	Phillip, Pilangolous	Flattened, powdery	
Colony6	Filamentous,	opaque	Lottire,	powdery :	2-7 (245 A)4 (000000000000000000000000000000000000
	rhizoid		Alamentous		

Figure 3.4 Staining with Nile BlueA

The 6 positive isolates were further stained with Nile blue A, which is the confirmatory test for identifying PHA production. An orange fluorescence was observed for all the Sudan positive isolates after staining.

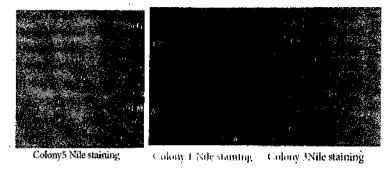


Figure 3.5 DNA extraction from mixed bacterial culture

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The image below depicts extracted DNA as seen after resolving in a 1.5% agarose gel.

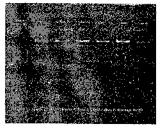


Figure 3.6Agarose Gel electrophoresis of 16srDNA amplification. The 430 bp 16S rDNA amplicon was resolved in a 2% agarose gel against a 100 bp DNA ladder. The bands for each isolate can be seen in the images below.



## 3.7 Phylogenetic analysis

## 3.7.1 Alignment of sequence with reference database.

We attempted sequencing of all the six 16S rDNAamplicons, however only three gave satisfactory results. Sample 1, sample 3 and sample 6 were lost during trimming as their sizes were below 200 bp threshold. The rest of the 3 sequences were uploaded to the RNA Database Project (RDP release 11, update 4:: May 26, 2015). After uploading, the sequences were available under the myRDP profile. After analysing with "Seqmatch" we got the following identities of our isolates

Resultsfor|sample.5 8F

DOMAIN: Bacteria
PHYLUM: Firmicutes
CLASS: Bacilli
ORDER: Bacillales

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FAMILY: Bac	illaceae	
GENUS: Bac	illus	
S000005079	0.9950.9861395	Bacillusthuringiensis; WS2617, Z84585
S000005826	0.9950.9861393	Bacillus cereus; ATCC 27877; Z84581
S000006577	0.9950.9861395	Bacillusthuringiensis; WS2626; Z84588
S000008107	0.9950.9861396	Bacillusthuringiensis; WS2618; Z84586
S000008663	0.9950.9861397	Bacillusanthracis;Sterne;AF290552
S000011557	0.9950.9861358	Bacillus sp.;JJ#1;Y15466
S000012518	0.9950.9861397	Bacillusanthracis; Vollum; AF290553
S003807776	0.9950.9881383	Bacilluscereus; CH-13; KF151160
S004450793	0.9950.9881386	Bacilluscereus; AUChE413; KM598765
S004168652	0.9950.9881294uncu	ulturedbacterium; nck214h12c1;KF095870

#### Resultsfor|sample.4\_8F

DOMAIN:	Bacteria	
PHYLUM:	Firmicutes	
CLASS: Bac	illi	•
ORDER: Bac	illales	
FAMILY: Bac	illaceae	•
GENUS: Bac	illus	
S000005079	0.991 0.988 1395	Bacillus thuringiensis; WS 2617; Z84585
S000005826	0.991 0.988 1393	Bacillus cereus; ATCC 27877; Z84581
S000006577	0.991 0.988 1395B	acillus thuringiensis; WS 2626; Z84588
	0.991 0.988 1396	Bacillus thuringiensis; WS 2618; Z84586
S000008663	0.991 0.988 1397E	acillus anthracis; Sterne; AF290552
	0.991 0.988 1358	Bacillus sp.; JJ#1; Y15466
		acillus anthracis; Vollum; AF290553
	0.991 0.990 1383	Bacillus cereus; CH-13; KF151160
8004450793	0.991 0.990 1386 E	lacillus cereus; AUChE413; KM598765
unclassified_	-	
5004168652	0.991 0.990 1294 u	ncultured bacterium; nck214h12c1; KF095870

#### Resultsfor|sample.2\_8F

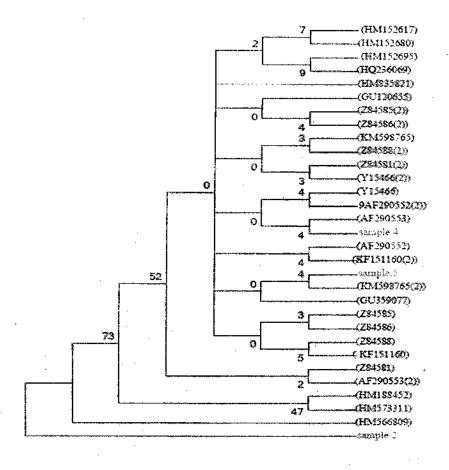
DOMAIN: Bacteria
PHYLUM: Firmicutes
CLASS: Bacilli
ORDER: Bacillales
FAMILY: Bacillaceae
GENUS: Bacillus
S001745448 0.955 0.780 1432 Bacillus sp. EWF34; GU120655
S001935541 0.955 0.780 1399 uncultured bacterium; 1G10; GU359077

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S002199758	0.955 0.780 1402	uncultured Bacilius sp.; Filt.29; HM152617
S002199821	0.955 0.780 1431	uncultured Bacillus sp.; Filt.93; HM152680
5002199836	0.955 0.780 1435	uncultured Bacillus sp.; Filt. 108; HM152695
\$002226854	0.955 0.780 1223	Bacillus cereus; SP7; HM188452
\$002231093		Bacillus sp. DB07(2010); HM566809
S002231463		Bacillus cereus; HM573311
S002234931	0.955 0.780 1435	Bacillus cereus; TAT2-12; HQ236069
S002268450		uncultured bacterium; nby549h07c1; HM835821

## 3.7.2Phylogenetic tree

All the above (29) near neighbour isolates selected by Seqmatch along with the 3 samples were aligned and a phylogenetic tree was grown using MEGA.



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## Figure 3.7.2 Molecular Phylogenetic analysis by Maximum Likelihood method

The evolutionary history was inferred by using the Maximum Likelihood method based on the Kimura 2-parameter model [6]. The tree with the highest log likelihood (-514.6627) in shown. The percentage of trees in which the associated taxa clustered together is shown next to the branches. Initial tree(s) for the heuristic search were obtained automatically as follows. When the number of common sites was - 100 or less than one fourth of the total number of sites, the maximum parsimony method was used; otherwise BIONJ method with MCL distance matrix was used. A discrete Gamma distribution was used to model evolutionary rate differences among sites (5 categories (+G, parameter = 0.0500)). The rate variation model allowed for some sites to be evolutionarily invariable ([11], 25 83 13% sites). The tree is drawn to scale, with branch lengths measured in the number of substitutions per site. The analysis involved 31 nucleotide sequences: Coden positions included were 1st+2nd+3rd+Noncoding. All positions containing gaps and missing data were eliminated. There were a total of 403 positions in the final dataset. Evolutionary analyses were conducted in MEGA5 [21].

#### 4. Discussions and conclusion

We had isolated 20 colonies from different sewage samples, out of which 6 colonies were found to be positive for PHA accumulation. However after sequencing of the 16S rDNA, convincing results were obtained for 3 samples only. Phylogenetic analysis of the Asamples indicated that they all belong to the genus Bacillus. One of our samples (sample 2) appears to be a novel strain and thus needs further characterization. Our observations correlate with several previous reports wherein the production of PHA has been reported. For instance Bacillus sp. CFR67 accumulating PHA using corn starch and other agro-industrial waste as a substrate was reported by Shamala et al. The production of PHA using Bacillus species was also reported by Kumar et al. Bacillus as emerged as a robust organism that can withstand adverse environmental conditions. Other ideal features that could make bacillus ideal for industrial production of PHA include facts such as possession of single membrane which could ease downstream

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processing as PHA granules are accumulated intracellularly, fully sequenced genome and natural competency which could facilitate strain improvement efforts and finally bacillus are not major pathogens to humans. Growth parameters such as temperature (25-32°C) and pH (6.8-7.2) were favoured as our aim was to isolate bacteria which had increased biological activity without the need of specialized conditions. Although our study doesn't document PHA accumulation scientifically, during staining procedures we observed that bacterial accumulation of PHA increases from 48 to 72 hours of incubation, and declines on further incubation. We corroborate our observations to the microscopic method of Ostle and Holt (1982) wherein the intensity of fluorescence changed with incubation period.

PHA holds the key to a greener planet. Although our study suffered from several limitations we believe that we can contribute significantly towards the development of the technology in the days to come.

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## Assamese Section

# জ্যোতিপ্ৰসাদ আগৰৱালাৰ 'ৰূপালীম' নাটকৰ বিষয়বস্তুৰ এক বিশ্লেষণাত্মক অধ্যয়ন

## ৰঘুনাথ কাগয়ুং

সহকাৰী অধ্যাপক, অসমীয়া বিভাগ, সোণাৰি মহাবিদ্যালয়, সোণাৰি

#### ১.০ অৱতৰণিকা

আধুনিক অসমীয়া নাটকৰ স্দৰ্থক লেখতল'বলগীয়া নাটাকাৰগানিয়ে ও ল জ্যোতিপ্ৰসাদ আগৰৱালা। যথাৰ্থ ক'বলৈ হ'লে তেৱেঁই আধুনিক অসমীয়া নাটকৰ পাণ পান্ধাগান জ্যোতিপ্ৰসাদ আগৰৱালা ৰচিত নাটকসমূহ হ'ল- শোণিত কুঁৱৰী, কাৰেঙৰ লিখিবী, বালালীম, লভিতা, খনিকৰ, নিমাতী কইনা বা ৰূপকোঁৱৰ, সোণপখিলী, কনকলতা তাক দুখন নালাৰ কোঁৱৰ। এই ন খন নাটকৰ ভিতৰত কনকলতা আৰু সুন্দৰ কোঁৱৰ নাটক দুখন সংস্থা অৱস্থাত পোৱা নাযায়। বাস্তৱিকতে দুয়োখন নাটকৰে একোটা অংকহে পোৱা যায়।

অসম্পূৰ্ণ নাট দুখনি বাদ দি জ্যোতিপ্ৰসাদ আগৰৱালাৰ বাকী মাত্ৰনা নাট্ৰক প্ৰকাশভংগীৰ দিশৰ পৰা দুটা ভাগত বিভক্ত কৰিব পৰা যায় - কাব্যধৰ্মী আৰু নাট্ৰদ্বনা নাট্ৰক কইনা বা ৰূপকোঁৱৰ আৰু সোণ্পখিলী নাটক দুখন কাব্যধৰ্মী আৰু বাকী লাট্ৰন নাট্ৰদেই নাট্যধৰ্মী।

জ্যোতিপ্ৰসাদ আগৰৱালাৰ নাটকসমূহৰ ভিতৰত 'ৰূপালীম' নাটকখন নাটকখন নাটকানৰ পৰা তাৎপৰ্যপূৰ্ণ। ইয়াৰ ভিতৰতো অগতানুগতিক প্ৰকাশভংগী আৰু চিডাক্তান নাটকান্তান নাটকান্তান নাটকাৰ উপস্থাপন 'ৰূপালীম' নাটকৰ মনকৰিবলগীয়া দিশ। 'ৰূপালীম' নাটকৰ আন লক্তাক্তান্তান দিশ হ'ল ইয়াৰ অনবদ্য চৰিত্ৰ চিত্ৰণ। চৰিত্ৰৰ বৈচিত্ৰ্য আৰু বৈচিত্ৰ্যপূৰ্ণ চিনিএশ মন্ত্ৰমন্ত্ৰীণালা 'ৰূপালীম' নাটকৰ দেহৰ অন্যতম ভূষণ।

## ১.১ অধ্যয়নৰ পৰিসৰ, পদ্ধতি, গুৰুত্ব, সামগ্ৰী আৰু উদ্দেশ্য

এই অধ্যয়ন কৰ্মৰ পৰিসৰ জ্যোতিপ্ৰসাদ আগৰৱালাৰ 'ৰূপালীম' নাটনৰ নিস্যান্ত্ৰন্ধনি বিশ্লেষণতে সীমাৰজ থাকিব। প্ৰস্তাৱিত বিষয়টি আলোচনা কৰিবৰ বাবে বিশ্লেষণাথাক অস্যান্ত্ৰন্ধতিক বাচি লোৱা হৈছে। সময়ে সময়ে তুলনামূলক অধ্যয়ন পদ্ধতি আৰু সমীক্ষাক্ত্ৰক অস্যান্ত্ৰ পদ্ধতিক বাচি লোৱা হৈছে। জ্যোতিপ্ৰসাদ আগৰৱালাৰ 'ৰূপালীম' নাটকখনক অস্যান্ত্ৰন্থ সুখ্য অধ্যয়ন-সামগ্ৰী হিচাপে নিৰ্বাচন কৰা হৈছে। জ্যোতিপ্ৰসাদ আগৰৱালা আৰু তেওঁৰ নাটকৰ বিষয়ে লিখা লোখা আৰু গ্ৰন্থসমূহক অধ্যয়নৰ গৌণ সামগ্ৰী হিচাপে গ্ৰহণ কৰা তেছে। আন নাটকবোৰতকৈ জ্যোতিপ্ৰসাদৰ 'ৰূপালীম' নাটকৰ বিষয়বস্তু অগতানুগতিক। সেইয়ে নাটকখনৰ

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বিষয়বস্তুৰ সম্পৰ্কে গভীৰ অধ্যয়ন-গৱেষণাৰ প্ৰয়োজনীয়তা আৰু গুৰুত্ব নথকা নহয়। জ্যোতিপ্ৰসাদ আগৰৱালাৰ 'ৰূপালীম' নাটকৰ বিষয়বস্তুৰ অনালোচিত দিশসমূহ উন্মোচিত কৰাই এই অধ্যয়ন-কৰ্মৰ মূল লক্ষ্য আৰু উদ্দেশ্য।

#### ২.০ ৰূপালীম নাটকৰ বিষয়বস্তু

ৰূপালীমৰ কথাবস্তু কল্পনাপ্ৰসূত। নাটকখনৰ পটভূমি হৈছে অসমৰ পূব সীমান্তৰ এখন পৰ্বতীয়া জনজাতি ৰাজ্য। এই ৰাজ্যখনতে বস্বাস কৰে ৰুকমী নামৰ এটা পৰ্বতীয়া জনজাতি। তেওঁলোক বৌদ্ধ দৰ্শনত বিশ্বাসী। প্ৰাচীন ঐতিহ্য আৰু পৰস্পৰাৰ প্ৰতি তেওঁলোকৰ আছে অগাধ বিশ্বাস আৰু শ্ৰদ্ধা-ভক্তি। নাৰীৰ মৰ্যদাক তেওঁলোকে জাতীয় সম্পদ আৰু গৌৰৱ বুলি ভাবি আহিছে। প্ৰান্তদেশ তেওঁলোকৰ গাতে লাগি থকা এখন চহকী দেশ। এই দেশখন ধন-ঐশ্বৰ্যৰে ভৰা এখন সমৃদ্ধিশালী দেশ। শিল্পী মনোভাবাপদ্দ পৰাক্ৰমী বীৰ মণিমুগ্ধ এই দেশখনৰ অধিপতি। প্ৰান্ত দেশ আৰু ৰুকমী ৰাজ্যৰ দ্বন্দ্বৰ ভিত্তিতে ৰূপালীমৰ নাট্যবস্ত নিৰ্মাণ কৰা হৈছে। ৰূপালীমৰ কথাবস্তু, চৰিত্ৰ আৰু পৰিবেশ কাল্পনিক। নাটকখনৰ পটভূমিও কাল্পনিক।

জ্যোতিপ্ৰসাদ আগৰৱালৰ অমৰ সৃষ্টি ৰূপালীম।ই এখন কাঞ্চনিক নাটক। জ্যোতিপ্ৰসাদ আগৰৱালাৰ কল্পনাপ্ৰৱৰ্ণ মনৰ অনুপম প্ৰকাশ ৰূপালীম নাটকত দেখিবলৈ পোৱা যায়। ৰূপালীম নাটকত জ্যোতিপ্ৰসাদৰ সৌন্দৰ্যপিয়াসী মনব দিগ্বলয় উল্যোচিত হৈছে অতি প্ৰগাঢ় ৰূপত, যিয়ে নাটকখনক প্ৰদান কৰিছে এক আটিল আৰু নিটোল ৰূপ।

ৰূপালীম নাটকৰ বিষয়বস্তু সাতটা অংকত বিভাজিত কৰি উপস্থাপিত কৰিছে। কোনোটো অংকৰে দৃশ্য বিভাগ নাই।নাটকখনৰ কাহিনী চিন্তাকৰ্ষক আৰু মন প্ৰশা।নাট্যবস্তুৰ উপস্থাপন অনুপ্ৰম আৰু অনবদ্য।

নাট্যবন্তুত বর্ণনা কৰা মতে, অসমৰ পূব প্রান্তত সভ্য, বৌদ্ধ ৰাক্মী জনজাতিসকলে বসবাস কৰে। 'বলিষ্ঠ পীত বৰণীয়া', 'কুৰি বছৰীয়া দেখিলে মোহলগা', 'চিত্র-বিচিত্র কাপোৰ পিন্ধা', ৰাক্মী যুৱক মায়াব'ই অন্তৰেৰে ভালপাই 'ওঁঠ দুটা মিচিকি হাঁইৰে বোলোৱা', 'বসন্তৰ কুঁইপাতৰ দৰে কুমলীয়া' ৰাক্মী ছোৱালী ৰাপালীমক। 'পৃথিৱীখনলৈ জোনৰ যিমান মৰম আছে' ৰাপালীমৰো মায়াব'ৰ প্রতি সিমানেই মৰম আছে। দুয়োৰে আছে দুয়োৰে প্রতি তীব্র আকর্ষণ। এজনে আনজনক এৰি খন্তেকৰ বাবেও থাকিব নোৱাৰে। ৰাপালীমে সদায় মায়ব'ৰ কাষত মায়াব'ৰ হৈয়ে থাকিব বিচাৰে। মায়াব'ই আকৌ 'পুৱতিৰ পৰা গধুলিলৈ, গধুলিৰ পৰা পুৱালৈ' তেওঁৰ কাষত ৰূপালীমক থকাটো বিচাৰে। সেয়ে ৰূপালীমক মায়াব'ই বিয়া কৰিবলৈ মন মেলে। কিন্তু তেওঁলোকৰ প্রেম আৰু বিয়াত সন্মতি জনোৱা নাই ৰূপালীমৰ বুঢ়া বাপেক জুনাফাই। ৰূপালীমৰ বুঢ়া আপু জুনাফাৰ মনৰ অহমিকা ভাবেৰে ৰূপালীম নাটকত কাহিনীৰ বীজ ৰোপণ কৰা হৈছে। জুনাফাই মায়ব'ক এটা অদ্ভুত চৰ্ত ৰাখি ক'লে, 'নিজে এটা বাঘ মাৰি তাৰ মূৰটো মোৰ আগত দিবি, তেতিয়াহে তাই তোলৈ দিম'। জুনাফাৰ চৰ্ত মানি মায়াব' চিকাৰলৈ ওলাই গ'ল। তিনি দিন তিনি ৰাতি বাঘ এটাক অনুসৰণ কৰি বাঘৰ মূৰটো কাটি আনি মায়াব'ই জুনাফাক দিলে। কিন্তু সেই সময়তে প্রান্তদেশৰ সেনাপতি ৰেণথিয়াং সেই ঠাইত

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আহি উপস্থিত হয় আৰু বাঘৰ মূৰটোৰ গৰাকী তেওঁতে নুলি দানী কৰে। মায়াব'ই বেণণিয়ান্তন কথাৰ প্ৰতিবাদ কৰাত দুয়োৰে মাজত হতাহতি হয়। বেণণিয়ান্তে সৈন্যন্ত্ৰৰ সহায়ত মায়াব' আৰু জুনাফাক আহত কৰে। বাঘৰ মূৰটো কাটি অনা বাবে মায়ব'ই যে নাণালীমক পোহপাল দিব পাৰিব সেয়া জুনাফাৰ বিশ্বাস ওপজে আৰু ৰূপালীমক মায়াব'ল দিয়া হ'ব নুলি জুনাফাই মায়াব'ৰ আগত মনৰ ভাব প্ৰকাশ কৰে। তেনে সময়তে প্লাজদেশৰ আঁগপতি মনিমুক্ত কোঁৱন তাত উপস্থিত হ'ল।

দাতাই দিলেও বিধাতাই নিদিয়ে', মায়াব'ৰ ক্ষেত্ৰতো সেন্নাই হ'ল। মানাব' আৰু ৰূপালীমৰ বিয়াত প্ৰতিবন্ধক হিচাপে থিয় দিলে প্ৰবল প্ৰতালী লাক্ৰদেশৰ আলিলাত মালমুন্ধ। মণিমুন্ধ ৰূপালীমৰ সৌন্দৰ্যত মুন্ধ। ৰূপালীমৰ কমনীয় দেহৰ আন্দৰ্যতে মালমুন্ধক কাৰি কৰালী কথাত মানমেৰে ৰাজ্যন্তিতো বল প্ৰয়োগ কৰি লৈ আনে। মায়াব'ই ইয়াৰ প্ৰতিবাদ কৰাত ৰেণ্ডিয়াজে চালুকেৰে মায়াব'ক প্ৰতাল কৰি নাকে-মুখে তেজ বোৱাই দিয়ে আৰু বুঢ়া জুনাফাকো হাতত ধৰি মান্দ্ৰিয়াত নাটিত লগাই দিয়ে। লাজে-অপমানে জুনাফা আৰু মায়াব'ই দুয়ো ডিঙিত ধ্বাধাৰিকে কেলাই কেলাই আছি বজাই কৰমী ৰাজ্যৰ ৰাজকাৰেঙত প্ৰৱেশ কৰে আৰু বুঢ়া জুনাফাই মণিমুন্ধল অনাম্য আৰু অনাচাৰ কথা ৰুকমীৰাজক বিৱৰি কয়। লগতে বল প্ৰয়োগ কৰি তেওঁৰ জীয়েক বলোলীমক লৈ যোৱাৰ কথাও ৰুকমীৰাজৰ আগত প্ৰকাশ কৰে। জুনাফাৰ কথা শুনিও ৰুকমী বাজালৈ বিলম চলাই লাল মোৱাৰাৰ কথাই ব্যুক্ত কৰি জুনাফাৰ ৰাজকাৰেঙৰ পৰা বাহিৰ হ'বলৈ নিম্মেণ দিয়ে।

কাকমীৰাজ দুৰ্বল হ'লেও তেওঁৰ ভনীয়েক ইতিভেন কিন্তু দুৰ্নল নহনা ক্ষানালান। বিনাদপ্ৰিয়, মদ্যলোভী ৰাকমীৰাজ ভীৰ-কাপুৰুষ হ'ব পাৰে; এগৰাকী সুৱজীৰ স্থানীৰ স্থান কৰা তেওঁৰ দৃষ্টিত সাধাৰণ কথা হ'ব পাৰে, কিন্তু ৰাকমীৰাজৰ ভনীয়েক ইতিভেনৰ দৃষ্টিত নাইনক্ৰালা সাধাৰণ হ'ব নোৱাৰে। ককায়েক ৰাকমীৰাজৰ দৰে ভনীয়েক ইতিভেন জীল, দুৰ্নলী আৰু ভয়াতুৰ নহয়। ইতিভেন সাহসী – ৰাজ্যৰ যুৱতীসকলৰ সতীত্ব ৰক্ষাৰ প্ৰতি স্থানা সচেত্ৰনা ককায়েক ৰাকমী ৰজাৰ বিচাৰ আৰু ৰায়ৰ প্ৰতি ইতিভেন অসম্ভন্ত। ৰাকমীৰাজন 'ত নালাল বিচাৰ হোৱা নাই' বুলি প্ৰতিবাদ কৰে আৰু ককায়েকক সিংহাসনৰ পৰা নমাই ইতিভেন আজিল বিচাৰ হোৱা নাই' বুলি প্ৰতিবাদ কৰে আৰু ককায়েকক সিংহাসনৰ পৰা নমাই ইতিভেন আজিল মণিমুগ্ধৰ বাক্দন্তা। তৎসত্ত্বেও তেওঁৰে ৰাজ্যৰ আন এগৰাকী নিদেষী সাধানণ স্বতীক সতীত্ব নাই কৰিবলৈ কৰা মণিমুগ্ধৰ দুৰাকাংক্ষাক প্ৰতিবাদ কৰাৰ মানসেৰে ৰাকমী ডেকাসকলক লগত লৈ প্ৰান্তদেশ আক্ৰমণ কৰিবলৈ উদ্যাত হ'ল। ইতিভেনে বান্তনী বাজান সেন্দ্ৰেস দেখি ৰাক্মী ৰাজ্যৰ বীৰ ডেকাসকল অনুপ্ৰাণিত হ'ল। ইতিভেনে বান্তনী বাজান সেন্দ্ৰিশালী পৰম্পৰা, সমৃদ্ধিশালী অতীত ইতিহাস আৰু ৰাকমীৰ প্ৰাচীন গৌনৱ ঘোষণা কৰি থকা পূৰ্বপুৰুষসকলৰ মহান মৈদামবোৰৰ কথা কৈ ৰাকমী ডেকাসকলক প্ৰেৰণা দিয়ে আৰু পুৰণি শৌৰ্য-বীৰ্যৰ কথা মনত পেলাই ৰাকমী ডেকাসকলক জাতীয় চৈতনাৰ ভাৱেৰে উদ্বান্ত

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কৰে। ইতিভেনে ৰাকমী ৰাজ্যৰ সৈন্য-সামস্ত লৈ মণিমুগ্ধৰ ৰাজ্যত প্ৰৱেশ কৰে আৰু আন্ধাৰৰ সুযোগ গ্ৰহণ কৰি প্ৰান্তদেশৰ ৰাজকাৰেং আক্ৰমণ কৰে। প্ৰথমাৱস্থাত প্ৰান্তদেশৰ সৈন্যসকলে শত্ৰুসৈন্যৰ আক্ৰমণ তলকিবই পৰা নাছিল। কিন্তু পিছ মুহূৰ্ততে ৰেণথিয়াঙৰ নেতৃত্বত প্ৰান্তদেশৰ বিশাল সৈন্যদলে ৰূকমী সৈন্যৰ ওপৰত জঁপিয়াই পৰে। প্ৰান্তদেশৰ সুবিশাল সৈন্য-সামন্তই তেনেই নগণ্য সংখ্যক ৰূকমী সৈন্যক পৰাস্ত কৰিবলৈ বেছি সময় নালাগিল। পৰাজ্বিত ৰূকমী ৰাজ্যৰ সৈন্যসকলক বন্দী কৰা হ'ল। মায়াব'ই কাৰঙেৰ পৰা ৰূপালীমক পলুৱাই নিবলৈ সক্ষম হয় যদিও প্ৰান্তদেশৰ প্ৰধান সেনাপতি ৰেণথিয়াঙে সৈন্য-সামন্ত লগত লৈ ৰূপালীম আৰু মায়াব'ক বিচাৰি ওলায় আৰু অৱশেষত দুয়োকে পুনৰ বন্দী কৰি ৰাজকাৰেঙৰলৈ লৈ আনে।

মায়াব', ইতিভেন, জুনাফা আৰু ৰাকমী ডেকাসকলক বন্দী কৰা হ'ল। 'ৰুকমী ৰাজ্য ৰাতিৰ ভিতৰতে পুৰি ভস্ম কৰা' বুলি মণিমুগ্ধই ৰেণথিয়াঙক নিৰ্দেশ দিলে আৰু কয় যে --'এখনো গাঁও যাতে বাকী নাথাকে। যা, মই খিৰকীৰ পৰা ৰূকমীৰ কাৰেং দাহ কৰা, জুইৰ ৰঙা 😁 নীলা শিখাবোৰ দেখিব লাগিব।' মণিমুগ্ধৰ নিৰ্দেশ পাই ৰেণথিয়াঙে ৰূকমী ৰাজ্য ধ্বংসম্ভপত পৰিণত কৰিলে ৷

ৰূপালীমৰ ৰূপ-সৌন্দৰ্য পান কৰিবলৈ মণিমুগ্ধ উত্ৰাৱল হ'ল। মণিমুগ্ধই ভালদৰে জানে যে, মায়াৰ্ব ইহে ৰূপালীমৰ প্ৰণয়প্ৰাৰ্থী। তথাপিও মণিমুগ্ধই ৰূপালীমৰ শৰীৰ আৰু মন উপভোগ কৰিব বিচাৰে। ৰূপালীমৰ সৌন্দৰ্যত বুৰ গৈ কামনাৰ জুইকুৰা নুমুৱাব খোজে, সেয়ে, নিশা নিজৰ অভিপ্ৰায়ৰ কথা ৰূপালীমক মণিমুগ্ধই ব্যক্ত কৰে। আৰু ইয়াকো কোৱা হয় যে -যদিহে ৰূপালীমে নিজৰ শৰীৰটো উপভোগ কৰিবলৈ মণিমুগ্ধৰ হাতত গতাই দিয়ে তেতিয়া বন্দীশালৰ পৰা মুকলি কৰি দিয়া হ'ব ৰূপালীমৰ প্ৰেমাস্পদ মায়াব' আৰু মৰমৰ পিতৃ জুনাফাক। অন্যথা, যদিহে মণিমুগ্ধৰ প্ৰস্তাৱত ৰূপালীম অসন্মত হয় তেতিয়া ইতিভেন আৰু ৰূকমী ডেকাসকলৰ লগত বাপেক জুনাফা আৰু প্ৰিয়তম মায়াব'কো হত্যা কৰা হ'ব। ৰূপালীমৰ দেহ দানৰ বিনিময়ত পিতৃ জুনাফা আৰু প্ৰিয় মায়াব'ক বন্দিত্বৰ জীৱনৰ পৰা মুক্ত কৰা হ'ব বুলি মণিমুগ্ধৰ মুখত শুনি ৰূপালীমে মনে নিবিচৰা সত্ত্বেও মণিমুগ্ধৰ অসম্ভৱ প্ৰস্তাৱত সন্মতি জনালে। ৰূপালীমৰ কাৰণে মায়াব' আৰু জুনাফাতকৈ ওপৰত কোনো হ'ব নোৱাৰে। সেয়ে, তেওঁলোকৰ মুক্তিৰ বিনিময়ত নিজৰ শৰীৰটো মণিমুগ্ধৰ হাতত গতাই দিবলৈ তেওঁ প্ৰস্তুত হ'ল।

ৰূপালীমৰ সন্মতি পোৱাৰ লগে লগে মণিমুগ্ধই ৰূকমী ৰাজ্যৰ সৈন্যসকলক বন্দী জীৱনৰ পৰা মুকলি কৰি দিবলৈ নিৰ্দেশ দিলে। ইতিভেন, জুনাফা আৰু মায়ব'ক মুক্তি দি সকলোকে পুনৰ ৰূকমী ৰাজ্যলৈ ঘূৰি যাবলৈ অনুমতি প্ৰদান কৰা হ'ল।

নিশাৰ গভীৰতা বাঢ়ি যোৱাৰ লগে লগে মণিমুগ্ধৰ সৌন্দৰ্যানুৰাগী সাংস্কৃতিক মনৰ দুৱাৰখনো লাহে লাহে মেল খাবলৈ ধৰিলে। যাৰ শাৰীৰিক সৌন্দৰ্য পাণ কৰিবৰ বাবে মণিমুগ্ধাই ইমান দিনে আতুৰ হৈ আছিল, সেই ৰূপালীমে যেতিয়া মণিমুগ্ধৰ ভয়ংকৰ প্ৰস্তাৱতো সন্মতি জনালে, লগে লগে মণিমুগ্ধৰ মনৰ কলুষিত দৈহিক বাসনা আৰু কুৎসিৎ ভাববোৰ আঁতৰিবলৈ ধৰিলে আৰু সংস্কৃতিবান মনৰ দ্বাৰখন লাহে লাহে খোল খাবলৈ ল'লে। গভীৰ আয়োপলব্ধিত মণিমুগ্ধৰ মন পৰিশোধিত হ'ল

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আৰু ৰূপালীমূৰ ওচৰত খন্মা নিচাৰ মানগুখাই গ্ৰামালীমূক মৃদ্ধ কৰি দিলে।

ৰূপালীমে মৃতি লাভ কৰিলে স্বৰ্গাল সভাবৰ্তন কৰে আৰু তেওঁৰ সভীত্ব অক্স থকাৰ বিষয়ে ৰুকমী ৰাজ্যৰ অন্যানাৰণৰ ক্ষানাল দত্ত কৰে। কিন্তু ৰুকমী ৰাজ্যৰ জনসাধাৰণে তেওঁৰ কথাত পতিয়ন যাব নোৱাশিলে। কক্ষীৰ দৰ্শাশাৰণ মানুহৰ দৃষ্টিত ৰূপালীম অস্তী, পাপী আৰু ৰূকমী জাতিৰ কলংক। নাক্ষা জিলোকাৰ সংগ্ৰীত্ব এটা ডকাইতৰ চৰণত উপহাৰ দি তাই আকৌ ঘূৰি আহি দেশৰ সংগ্ৰান্ত কাদক কৰিব খোজে বুলি ইতিভেনে ৰূপালীমক তিৰস্কাৰ কৰিলে ৷ ইতিভেনে গাক্ষী কিৰোকাৰ প্ৰসম্পৰাগত সতীত্বৰ প্ৰাচীন গৌৰৱৰ কথা মনত পেলাই ৰূকমীৰ জনসাধাৰণক কালাকীকৰ বিৰুদ্ধে উচটনি দিলে। অৱশেষত, ৰূকমীৰ ৰাইজে ৰূপালীমক এটা খুটাও লাখলৈ গাফ কৰি গোটোই গাটো জৰীৰে মেৰিয়াই খুটাৰে সৈতে বান্ধি থ'লে। ইতিভেনৰ নিৰ্দেশক কঞ্চিলেইটাই ৰাপৰ্গীমৰ গালৈ কাঁড় মাৰি বিদ্ধ কৰে আৰু ৰূপালীমক চিতাত উঠাই আই স্মলাই লাৰি মাৰে। এমাই ৰূপালীম নাটকৰ বিষয়বস্তু।

## ৩.৩ উপসংহাৰ

জ্যোতিপ্ৰসাদ আগৰৱালাৰ 'ৰালাৰীম' গাটকৰ বিধয়বন্ধৰ সামগ্ৰিক আলোচনাৰ অন্তত এই সিদ্ধান্তসমূহত উপনীত হ'ব পৰা মায় ।।। 'ৰাগালীয়' নাচকৰ কথাবন্ত কল্পনাপ্ৰসূত। ৰাপালীয় নাটকত জ্যোতিপ্ৰসাদৰ সৌন্দৰ্যশিষাৰ্দী। দলৰ দিগ্ৰদাণ উল্মোচিত হৈছে। ৰূপালীমৰ মৃত্যুৱে নটিকখনক কৰুণ ৰসাত্মক কৰি ওলিলে । শিষ্যাক্ষ্যৰ চিন্দাকৰ্যক উপস্থাপনেই ৰূপালীম নটিকৰ প্ৰাণবস্তু। সেয়ে সৰহসংখ্যক আলোচনে কলালীক্ষক ক্ষেমতিপ্ৰসাদৰ শ্ৰেষ্ঠ বাটক আখ্যা দিব বিচাৰে। এইক্ষেত্ৰত মহেন্দ্ৰ বৰাৰ মধনা লাগিধান্য ধাগা। 'চেপ্ৰতীয়েৰৰ নাটকসমূহৰ ভিতৰত হেমলেট যিদৰে উৎকৃষ্টতম, জ্যোতিশ্যাদ্যৰা নাম্বাদ্যুহৰ ছিত্ৰত কাৰেঙৰ লিগিৰী সেইদৰে উৎকৃষ্টতম। কিন্তু, তেওঁৰ শ্ৰেষ্ঠতম নাদক কান্ত্ৰাল বাল স্বাগলে, ছেক্সপীয়েৰৰ ক্ষেত্ৰত যিদৰে কিং লিয়েৰখনলৈ আঙুলিয়াই দেখুলবা হল, শ্বেমাক্সসাদৰ ফেব্ৰতো সেইদৰে বোধকৰো ৰূপালীমলৈ আঙলিয়াই দেখুৱালেতে শুদ্ধ একৰৰ কাৰ চপা হ'ব।'

কাব্যধর্মিতা, গীতিধর্মিতা আৰু টোজিক দললে পূর্ণ ৰূপালীম নাটকৰ কাহিনীয়ে মানৱ মনৰ বাৰ্তা বহন কৰিছে বুলি ক'ব সাৰি। কসাসীম নাটকত ৰূপান্তবৰ মাজেৰে পাশৱিক শক্তিৰ পতন দেখুৱাই সমাজলৈ এক দলকাক দিল আৰু ক্ষত বাৰ্তা প্ৰেৰণ কৰিবলৈ সমৰ্থ হৈছে।

## ৪.০ গ্রন্থপঞ্জী

- ১) বৰুৱা, প্ৰফুল্ল কুমাৰ (১৯৮৩): ভোগতিশ্যাদৰ নাটিশ, কৰাছাটী, পূৰ্বাঞ্চল প্ৰকাশ।
- ২) বৰুৱা, প্ৰহ্লাদ কুমাৰ (২০০৩); লেলাকি মুৰ্বীণা, কুকীল প্ৰকাশ, গুৱাহাটী, বনলতা।
- ৩) ভৰালী, শৈলেন (১৯৯০) নাটিক আৰু অসমীসা নাটিক, অবাহাটী, বাণী প্ৰকাশ।
- 8) শর্মা, সত্যেন্দ্রনাথ (২০০৫): অপ্রধীয়া নাটি সাহিত্য, গুরাহাটী, সৌমার প্রকাশ।



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## সাধুকথাসমূহ সমাজ জীৱনৰ দাপোনঃ গ্ৰাম্য পুথিভঁৰালৰ সজাগতা আৰু সাধুকথাৰ চৰ্চাই বিদ্যায়তনিক দিশত শিশুসকলক দিক্দৰ্শন কৰিবলৈ সক্ষম হ'ব - এক সামগ্ৰিক চিন্তা।

## নিজুমণি ঢাংমাই

সহকাৰী গ্ৰন্থাগাৰিকা, সোণাৰি মহাবিদ্যালয়

#### প্রস্তারনাঃ

সাধুকথা লোকসাহিত্যৰ এক বিশিষ্ট অংগ, ইয়াৰ প্ৰতিপালক মূলতঃ লোকসমাজ। নাটকীয়তা, অভিনয় আদিৰে পুষ্ট সাধুকথাসমূহ সময়ৰ পৰিবৰ্তনৰ লগত কিছুপৰিমানে সালসলনি ঘটিলেও মূল সাধুকথাৰ জঁকাটো অবিকল নাপত বৰ্তী থাকে। কাৰণ সাধুকথাত সমাজ জীৱন প্ৰত্যক্ষভাৱে ৰক্ষিত। অন্যান্য সাহিত্যত সমাজন পৰা আহবিত ভাৱবীজৰ লগত এক্যেজন ব্যক্তিৰ চিন্তা আৰু ভাৱ কল্পনাৰ সংযোগ সাগদেৱে সাহিত্য**লৈ পৰ্যবেক্ষিত হয়। কিন্তু সাধুক**থাত সমাজৰ পৰা পোৱা কৰ্ম আভজতা, সমাজব লোকৰ দ্বাৰা ভাৱ-কল্পনাৰ সংযোগ সাধিতহৈ সমাজৰ ধাৰাই প্ৰতিপালিত েসাহিত্যক্ষপত গতি কৰে ! ফলম্বৰূপে সাধুকথাই একোখন সমাজ, একোটা জ্বাতিৰ জীয়া প্ৰতিভাৱি কঢ়িয়াই লৈ ফুৰে। সাম্প্ৰতিক সময়ত চিন্তাবিদসকলে মানৱসমাজৰ সন্তাত্তিক বিশেষত্ব বিশ্লেষণৰ বাবে সাধুকথাক গুৰুত্বপূৰ্ণ সমলৰূপে ব্যৱহাৰ কৰিছে। আন্হাতে সাধুকথাসমূহক **এটা জাতিৰ ইতিহাস চৰ্চাৰ উৎসৰূপে গণ্য কৰি** ন**ৈ**ক চোৱাৰ প্ৰথম প্ৰয়াস কৰে জাৰ্মানীৰ <mark>খ্ৰীম ভাতৃষয়ে। ৰোমাণ্টিক জাতীয়তাবাদৰ প্ৰৱক্তা য়োহা</mark>ম গটফ্রিত হার্ভাবে ১৭৭৮-৭৯ চনত প্রকাশ কৰা জার্মান লোকগীতৰ সংকলন এখনৰ দ্বাৰা অনুপ্রাণিতহৈ য়াক আৰু ৱিলহেশ্ম গ্রীম নামৰ দুজন ভাতৃদ্বয়ে জার্মানীৰ লোকজীৱনৰ ভাষা সম্প্রক্তি অধ্যয়ন কৰিবলৈ লৈছিল। অধ্যয়ন কালত জার্মানীৰ ভিতৰুৱা গাঁও এখনৰ তিৰোতা এগৰাকীৰ মুখত শুনা কাহিনী কিছুমানে দুয়ো ভাতৃকে লোক সাহিত্যৰ এই গুৰুত্বপূৰ্ণ বিভাগটোৰ সংৰক্ষন আৰু মূল্যায়নৰ বাবে আগ্ৰহী কৰি তোলে। যাৰ ফলশ্ৰুতিত Kinder-und-Hausmarchen নামৰ জার্মান সাধুকথাৰ বৃহৎ সংগ্রহটোৱে প্রকাশ লাভ কৰে। প্রকাশৰ প্ৰায় সমান্তৰালকৈয়ে বিভিন্ন ভাষালৈ অনুদিত হোৱাৰ লগতে বিশ্বৰ বৌদ্ধিক জগততো ব্যাপকভাৱে চৰ্চ্চ লাভ কৰিলে। গ্ৰন্থখনিৰ আলমতে লোক সংস্কৃতি চৰ্চ্চৰ ন ন তত্বই বিকাশ লাভ কৰিবলৈ ধৰিলে। তদানীন্তন সময়ৰ পৰা সাম্প্ৰতিক সময়লৈকে সাধুকথাৰ চৰ্চ্চা অব্যাহত আছে। সাধুকথাৰ কাহিনী, গাঁঠনিক ৰূপ, নন্দন তাত্বিক সৌন্দৰ্য, সাধুকথাৰ পৰিভ্ৰমন, সাধুকথাত প্ৰতিপালিত সমাজ-মানৱ মনস্তত্ব আদি বিভিন্ন দিশত ব্যাপক চিন্তা-চৰ্চ্চ হৈছে। ভাৰতবৰ্ষ তথা

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উত্তৰ-পূৰ্বাঞ্চলত লোকসংস্কৃতি চৰ্চ্চাৰ বাবে শুণান শানেয়। চলাটাজন পশ্চিমীয়া দেশৰ পৰা অহা ব্ৰিটিছ প্ৰশাসনিক বিষয়া, তেওঁলোকৰ পাত্ৰী আগনা মীয়ান নিজ্ঞানীসকলে। তেওঁলোকে ভাৰতবৰ্ষৰ বিভিন্ন ঠাইত কৰ্মৰতহৈ থাকোতে কোনাডাইক অধ্যানৰ ভিত্তিও কিছুমান Monographজাতীয় গ্ৰন্থ প্ৰণয়ন কৰিছিল। এনে গ্ৰন্থসমূহ কেন্দ্ৰোলোক বিভিন্ন জনগোষ্ঠীৰ পৰিচয়, সমাজ গাঁথনিকে ধৰি সামগ্ৰিক আভাস একোনা দাঙি ধাৰাজন। জদুপৰি তেওঁলোকে জনগোষ্ঠীসমূহৰ মাজত প্ৰচলিত সাধুকথাসমূহ ইংবাজীলৈ জ্জানা কৰি বিভিন্ন পানিকাত প্ৰকাশ কৰিছিল।

অসমীয়া ভাষাত সাধুকথাৰ বিদ্যায়তনিক চচ্চাৰ ক্ষেত্ৰত নাচন্টীয়া হ'ল লাজানাথ বেজবৰৱাদেৱ। তেওঁ পাশ্চাত্যৰ আধুনিকতাৰ পোহৰত অসমৰ লোনসংক্ষাত্ৰৰ দ্বাদানসমূহক ন– কৈ মূল্যায়ন কৰিছিল আৰু তেঁওৰ সাধুকথাসমূহ তিনিখন লাগত মংখাক্ষত হৈ আছে । যাজাত নিজান আৰু প্ৰযুক্তিনৰ্ভৰ জন-জীৱনত মানৱীয় প্ৰমূল্যবোধক উত্তৰণৰ দিশটোৰ প্ৰতি লগত নাল নিজান আৰু প্ৰযুক্তিনিৰ্ভৰ জন-জীৱনত মানৱীয় প্ৰমূল্যবোধক উত্তৰণৰ দিশটোৰ প্ৰতি লগত নাল নিজান আৰু প্ৰযুক্তিনৰ্ভৰ জন-জীৱনত মানৱীয় প্ৰমূল্যবোধক উত্তৰণৰ দিশটোৰ প্ৰতি লগত নাল নিজান আৰু বেলেগ ভাষাৰ পৰাও অসমীয়া ভাষালৈ সাধুকথাৰ অনুবাদ কৰি অসমীয়া গাঢ়তাৰ কৰিলে চহকী কৰাৰ লগতে পাঠকৰ অন্তৰ জয় কৰিবলৈ সক্ষম হৈছে। কুৰি শতিকাত আনি নিজালন কৰিছে অধিক উন্নতি লক্ষ্য কৰিছে। কাৰিকৰী আৰু চমকপ্ৰদ আৱিষ্কাৰে আমাব জীৱনালন নালন কৰিছে আৰু মানৱ প্ৰজাতিৰ অপৰিহায় অংগস্বৰূপে পুথিভঁৰাল হৈ পৰিছেজনসংযোগৰ অন্তৰ্ভন বলিষ্ঠ মাধ্যম। পুথিভঁৰাল কেবল চিত্ত বিনোদনৰ মাধ্যম নহয়, শিক্ষা আৰু জ্ঞান আহলা মললো ক্ষেত্ৰতে পুথিভঁৰালে আমাক সহায় কৰিছে। পুথিভঁৰালৰ সঞ্চিত হৈ থকা গ্ৰন্থৰাজি প্ৰয়োজনালে জ্ঞান বিকাশত সহায়কৰূপে ব্যৱহাৰ কৰাটোৱে পুথিভঁৰালৰ অন্যতম কৰ্তব্য। প্ৰয়োজনীয় উপকৰণৰ সমাৱেশ ঘটাই কম সময়ৰ ভিতৰতে আগ্ৰহী পাঠকৰ ক্ষেত্ৰত্বল পৰিতৃপ্ত নলা পথিভঁৰালৰ দায়িত।

অৱশ্যে এটা কথা মনত ৰাখিব লাগিব যে, পৃথিভঁৰালৰ লগত তিনিটা মূল গোট সংযোক্ত থাকে- কিতাপ-পৃথিভঁবাল- পাঠক। আনহাতে ৰাজ্যিক পৃথিভঁবাল সঞ্চালকালয়ৰ পৰিচালনাত চৰকাৰী ব্যৱস্থাত গ্ৰামা পৃথিভঁবালৰ সংগঠন আৰম্ভ হৈছে।ইতিমধ্যে উন্নত ধৰণেৰে সজোৰা অনেক গ্ৰাম্য পৃথিভঁবাল স্থাপিতহৈ গাঁও অঞ্চলত থকা পঢ়ুৱৈ সমাজৰ উপকাৰ সাধন কৰিছে। গ্ৰাম্য পৃথিভঁবালসমূহত এনেধৰণৰ কিতাপ-পত্ৰ থাকিব লাগে যিবোৰত আমাৰ জাতীয় জীৱনৰ সামাজিক, অৰ্থনৈতিক আৰু সাহিত্যিক প্ৰমূল্যৰ অবিকৃত ছবি ফুটি ওলায়। উৎসৱ, তিথি, স্থাধীনতা দিৱস, গণতন্ত্ৰ দিৱস, সাহিত্য দিৱস, শিশু দিৱস আৰু নানান সাংস্কৃতিক সভাসমিতি পৃথিভঁবাল চৌহদতে আয়োজন কৰি আৰু এইবোৰক উপলক্ষ হিচাপেলৈ বিভিন্ন প্ৰতিযোগিতা পাতি নৱপ্ৰজন্মক উৎসাহিত কৰিব পৰা কাৰ্যসূচী হাতত লব লাগে। মুঠৰ ওপবত গ্ৰাম্য পৃথিভঁবাল সকলোৰে আদবণীয় মিলনৰ স্থলস্বৰূপে স্বীকৃতি পাব লাগে। শিশু অৱস্থাতে পৃথিভঁবালৰ লগত পৰিচয় ঘটাই কিতাপৰ সোৱাদ দিব পাৰিলে ছাত্ৰ বা ছাত্ৰী এগৰাকীৰ সমগ্ৰ জীৱন পৰিক্ৰমাটোৱে আকৰ্ষনীয় হ'ব।

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#### ২। লক্ষ্য আৰু উদ্দেশ্য ঃ

- (ক) সাধুকথাৰ প্ৰচাব আৰু প্ৰসাৰতাৰ ওপৰত গুৰুত্ব আৰোপ কৰা।
- (খ) সাধকথাসমূহ লোকসমাজৰ ধ্যান ধাৰণা, জ্ঞান গভীৰতাৰে আলোকিত। <mark>মানুহ</mark>ৰ জীৱনৰ সঞ্চিত অভিজ্ঞতাবাজি ইয়াৰ মাজত উদ্ভাসিত। সেয়ে গোলকীকৰণৰ যুগতো শিশুসকলক সাধুকথাই জীৱনৰ প্ৰতিটো খোজতে কেনেদৰে সহায় কৰে সেই সৰ্ম্পকে আলোচনা কৰা ৷
- (গ) সাধুকথাসমূহ সজীৱ আমোদজনক আৰু পোনপটীয়া হোৱা বাবে শিশুসকলৰ চিন্তনৰ আৱশ্যকতাৰ ওপৰত যথেষ্ট সহায়ক হয়। সেয়ে গ্ৰাম্যপৃথিভঁৰালৰ জৰিয়তে সাধুকথাৰ চৰ্চ্চা উপলক্ষ হিচাপেলৈ শিশুসকলক গ্ৰন্থাগাৰমুখী কৰি তোলা। ৩। গৱেষণা পদ্ধতিঃ

আলোচিত পত্ৰখনি প্ৰস্তুত কৰোতে প্ৰাথমিক আৰু গৌণ দুয়োবিধ উৎসৰ পৰা সহায় লোৱা হৈছে। তাৰোপৰি বিভিন্ন লেখকৰ লেখনি তথা আলোচনীৰ পৰাও সহায় লোৱা হৈছে। ৪। আলোচনাৰ মূল বিষয়ঃ

সাধুকথাই সমাজ জীৱনক নিমেহিভাৱে বিশ্লেষন কৰাৰ বাবে সাধুকথা চিৰকাল সন্মানৰ, আদৰৰ হৈ থাকিব। ইয়াত সাধুকথা মানে সজ কথা বা সাধু-সন্তৰ উপদেশ বাক্য বুলি ভাবি আহিছে। ইয়াৰ পৰা এইটো স্পষ্টকৈ বজিব পাৰি যে এইবিধ মনোজ্ঞ মৌখিক উপকথাৰে পুৰণিকালত জ্ঞানবৃদ্ধসকলে লোকৰ আৰু নিজৰ ল'ৰা-ছোৱালীক সজ উপদেশ আৰু নীতি শিক্ষা দিছিল। আনহাতে সাধুকথা বা লোককথাবোৰ লোক-মনৰ প্ৰতিচ্ছৱি। সাধুকথাত লোক বিশ্বাস, কল্পনা চিন্তা আৰু আদৰ্শ সঞ্চিত হৈ থাকে। সেইবাবেই আজিকালি পাশ্চাত্যদেশসমূহত লোককথা বিলাক শ্ৰেণীবদ্ধ কৰি বৈজ্ঞানিক প্ৰণালীৰে অধ্যয়ন কৰিবলৈ যত্ন কৰা হৈছে। শিশু মনৰ উপযোগী লঘু কল্পনাত্মক কথাবিলাক Fairy Tales বুলি নামাকৰণ কৰি Sagas আৰু Marchen এই দুটা ভাগত ভাগ কৰিছে।

অসমীয়া সাধুকথাবিলাক জন্তু সম্পৰ্কীয়, অলৌকিক, টেটোন আৰু সৃষ্টি সম্পৰ্কীয় বুলি ভাগ কৰিব পাৰি। সাঁথৰ সাধু নামৰ এটা শ্ৰেণীতো ভাগ কৰিব পাৰি। আচলতে একোটা সাথৰৰ অন্তৰালত একোটা কাহিনী থাকে-

> শিয়াল সুৰুযমুখী কাউৰী ৰাজপক্ষী ভেকুলী পাত্র: গণকে পাই জোলোঙাত ভবালে মাত্র ছাই লেটি-পেটি চাৰি কাণ কটা;

চৈখ্য ভূৱন দেখুৱালে চিলনীৰ বেটা।

এটা চেঙেলী মাছ খালৰ পৰা আনি আনটো খাললৈ বানেদি জপিয়াই গৈছিল। এনেতে

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**এটা শিয়াল আহি তাক খাব খুজিলে। শি**য়ালটোক সুকলগুৰী বুলি কোৱাত দি আৰু দিজে। সেইদৰে কাউৰীক ৰাজপক্ষী, ভেকুলীক পাত্ৰ পূৰ্ণি কৈ সাধিক চাৰিক ক্ষান্ত কাৰ্ড জোলোভাত ভৰাইলৈ গ'ল। আনহাতে ঘৰত বুঢ়ীয়ে ছাই সানি, কাল কাটি শাধিক লোকোতে চিলানীয়ে পাল মাৰি নিলে। এনেকুৱা সাঁথৰ সাধু অসমীয়াও অনেক আছে।

অসমীয়া সাধুকথাবোৰ থলুৱা, সংস্কৃতৰ পৰা অস্ত্ৰ আৰু বিচাৰী মূলৰ বুলিক তিনিটা ভাগত ভগাব পাৰি। থলুৱা সাধুবোৰৰ চৰিত্ৰ, পৰিৱেশ সকলো অধনৰ চলতি লুৰাণ কলাবেপৰা পঞ্চতন্ত্ৰ, হিতোপদেশ আদিৰ প্ৰচলন থকাত এই সাধুনগোনোৰ কৰা বালাৰ কোনিয়াবা নতুন **ৰূপ লৈছে। কিছুমান সাধুকথাৰ মূল জঁকাটো আকৌ ম**ধ্য লচিয়া না ইণ্টানোলন বিভুৱান কাতিনীৰ **লগত মিলে। লোক কথা বিলাকত জীৱ-জন্তুৱে মানুহৰ দৰে** কথা লাভেন লাভৰৰ । শিয়াল, কাউৰী, বান্দৰ, মেকুৰী, বাঘ আদি জন্ত বিশেষভাৱে উল্লেখযোগ্য | কিছুলাৰ সাধুকৰা সংগ্ৰীকক বা আধিভৌতিক শ্ৰেণীৰ। তেজীমলা তেনে এটা সাধুকথা। চেকীত সুনি লুকি খোৱা চিত্ৰত এজোপা লাও হ'ল। লাৱে কথা কয়। সম্থিৰা হ'ল; সুম্থিৰাই কথা কয়, ফল ফ'ল, ফলা লাছ হ আকৌ শালিকা চৰাই হ'ল। তেজীমলাৰ বাপেকে ক'লে- যদিহে মোৰ জী কেলাৰুলা কা তেনেহলে নিজৰ ৰূপ ল। লগে লগে শালিকা চৰাই তেজীমলালৈ ৰূপাঞ্জাৰত হ'ল। কেইবাৰে তেজা আৰু তুলা, পানেচৈ, চম্পাৱতী, চিলনীৰ জীয়েক এই শ্ৰেণীৰেই সাধুক্ৰা চলনীকৰ ঘটনাৰে ভৰা এই শ্ৰেণীৰ সাধুকথায়ো পুৰণিকালৰ মানুহৰ কল্পনাশক্তি আৰু নিশাসৰ কলাই প্ৰতীয়মান কৰে। কিছুমান সাধুকথাৰ কাহিনী সৰু অথচ ৰসাল আৰু খুছটীয়া। এইবিশ সাধুকথাৰ চৰিত্ৰবোৰৰ কাৰ্যকলাপ বিসংগতিপূৰ্ণ। এই বিসংগতিয়েই হাস্যৰসৰ মূল। সাতভাই নামুনন লিটিকাই, কুকুৰীকণা জোঁৱাই আদি এই শ্ৰেণীৰ। ইয়াৰ চৰিত্ৰবোৰ সাধাৰণতে মানুহন। মানুহন পৰিৱেশত কাহ্নীয়ে গঢ় লয়। জাতিটোৰ হাঁহিৰ খোৰাক যোগাব পৰা চৰিত্ৰ আৰু কাৰ্য-চলালে ইয়াত ঠাই পায়। সমাজত এক শ্রেণী মানুহ আছে যাৰ বুদ্ধি- বৃত্তি, স্বভাৱ, চৰিত্র আনকৈ এক।ঠি চৰা। বিপদত নাকটো মোহাৰিয়েই বুদ্ধিটো উলিয়াব পৰা মানুহ এইবিধ। এইবিধ মানুহে আনক ঠগে বুদ্ধিৰে। অসমীয়া ভাষাত এইবিধ সাতঘাটৰ চেঙেলী, টেটোন , টেটন আদি নামেৰে আখ্যা দিছে। টেটোন তামুলী, টেটুন, লটকণ, অজ্ঞলা আৰু টেটোন আদি এই শ্লেণীৰ সাধুকথা। আনহাতে কিছুমান সাধুকথা লেজুৰ দৰে দীঘল; ইটো ঘটনাৰ গইনালৈ সিটো আগবাঢ়ি গৈ থাকে। অ' ফুল অ' ফুল নফুল কিয়– গীতজাতীয় সাধুটো এই শ্ৰেণীৰ। গীত সাহিত্যৰ আদিম ৰূপ। সেইবাবে সাধুকথাৰ মাজে মাজে গীত জাতীয় কথা পোৱা যায়। চম্পাৱতীৰ সাধুটো -

> "হুৰ হুৰ বটা চৰাই মোৰ ধান নেখাবি তোক দিম গোটা কৰাই ধানো খাম পতানো খাম চম্পাৱতীক বিয়া কৰাই ঘৰলৈ যাম।"

সেইদৰে তেজীমলা সাধুটোত-

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## "হাতো নেমেলিবি ফুলো নিছিঙিবি কৰে নাৱৰীয়া তই পাট কাপোৰৰ লগত মাহী আয়ে খুন্দি থৈছে তেজীমলাহে মই।"

সাধুকথাবোৰ জনজীৱনৰ প্ৰতিচ্চৱি। এটা জাতিৰ মনৰ, সমাজৰ, লোকবিশ্বাসৰ আৰু বৃদ্ধি-বৃত্তিৰ বাতৰি সাধুকথাত খুন্দ খাই আছে। পৃথিৱীৰ সকলো জাতিৰ সাহিত্যৰ বুৰঞ্জীতে সাধুকথাৰ স্থল আৰু মূল্য বৃহত ওপৰত।

গ্ৰাম্য পৃথিভঁৰালৰ উদ্দেশ্য হৈছে জনজীৱনৰ লগত পৃথিভঁৰাল সেৱা অন্তৰংগ কৰি তোলা। আনহাতে কোনো শিক্ষাই স্বয়ং সম্পূৰ্ণ নহয়। সেইবাবে ব্যৱহাৰিক জীৱনত সন্মুখীন হোৱা বিভিন্ন সমস্যা সমাধানৰ বাবে দৈনন্দিন পঢ়াশুনা কৰা, সাহিত্য-সংস্কৃতিৰ বিভিন্ন সমলৰ সৈতে পৰিচিত হোৱা নিতান্ত দৰকাৰ হৈ পৰিছে। বিদ্যালয় বা কোনো শিক্ষানুষ্ঠানে এজন ছাত্ৰক কেৱল পাঠ্যক্ৰমৰ নিৰ্দিষ্ট শিক্ষাহে প্ৰদান কৰে। এই নিৰ্দিষ্ট শিক্ষাপাঠ যথেষ্ট নহয়। ইয়াৰ বাহিৰেও অনেক শিক্ষা আছে যিবোৰ পৌৰাণিক সাধুকথা গীতমাতৰ মাজেৰে আয়ত্ব কৰিব পাৰি। গ্ৰন্থ অধ্যয়ন আৰু সাধুকথা গীতমাতৰ মাজেৰে এজন ছাত্ৰৰ বৃদ্ধি বিচাৰ সম্পন্ন সিদ্ধান্ত, উচ্চমানৰ ৰুচি, আকৰ্ষণীয় ব্যক্তিত্ব আৰু দায়িত্ববোধ আয়ত্ব কৰিবলৈ সুযোগ পায়। ৫। সাধুকথাৰ চৰ্চ্চই শিশুসকলৰ ভবিষ্যত দিনত কেনেদৰে দিক্দৰ্শন কৰেঃ

সাধুকথাসমূহেই হৈছে শিশুসকলৰ অন্যতম প্ৰধান আকৰ্ষন । শিশুসকলে গ্ৰন্থাগাৰত পঢ়াৰ মানসিকতা গঢ়ি তুলিবলৈ হ'লে দেশ-বিদেশৰ সাধুসমূহ পঢ়াৰ সুবিধা কৰি দিব লাগিব। কাৰণ সাধুকথাৰ জয়িয়তে শিশুৰ মনস্তত্ত্বত বিচৰণ কৰি তেওঁলোকৰ এটা গ্ৰন্থস্পৃহা মন গঢ়ি তুলিব পাৰিলেহে ভৱিষ্যতে তেওঁলোক অধ্যয়নমুখী হ'ব। বৰ্তমান গ্ৰাম্য পুথিভঁৰালসমূহ কেৱল পুথিভঁৰালহৈ থকা নাই। বিশ্বায়নৰ যুগত পথিভঁৰালসমূহ ই-লাইব্ৰেৰীলৈ (e-library) পৰিবৰ্তন হৈছে। গ্ৰাম্য পুথিভঁৰালৰ সজাগতাৰ বাবেই জনসাধাৰণে এই ক্ষেত্ৰত উন্নয়নমুখী পদক্ষেপ লোৱা প্ৰয়োজন। সাধাৰণতে শিশুৰ মন কল্পনাপ্ৰৱন আৰু অনুসন্ধিৎসু । তেঁওলোকৰ মনটোৱে নতুন কিবা এটা জনাৰ প্ৰৱণতাই কেৱল সাধুকথাৰ মাজতেই আৱদ্ধ কৰি নাৰাখে। আজিকালি মোৱাইল-কম্পিউটাৰৰ প্ৰচুৰ ব্যৱহাৰে হাতৰ টিপতে পোৱা পৃথিৱীখনৰ লগতে ভিন্নস্বাদ খেলে (Video Game) তেওঁলোকক অস্থিৰ কৰি তোলে। সেয়েহে পুথিভঁৰালসমূহত শিশু উপযোগী ই-বুক (e-book) পঢ়াৰ সুবিধা কৰি দিব লাগে। আমাৰ সমাজত প্ৰচলিত সাধুকথাসমূহ সমাজৰ স্বভাৱজাত জীৱনধাৰাৰ উপাদানৰ লগতে নানা ভৌতিক-অভৌতিক, লৌকিক-অলৌকিক, বাস্তৱ-অবাস্তৱ, নানান উপাদান অশুঃনিৰ্হিত হৈ থাকে। শিশুসকলৰ সুস্থ সামাজিকৰণৰ বাবে মানসিক উৎকৰ্ষ সাধন কৰাটো একান্তই প্ৰয়োজন হৈ পৰিছে। সাধুকথাৰ চৰ্চ্চাই কণ কণ শিশুসকলক পৰিয়ালৰ কাষ চপাই অনাৰ লগতে শ্ৰদ্ধা-ভক্তিৰ ভাৱ জন্ম হোৱাত সহায়ক হয়। ইয়াৰ উপৰিও তলত উল্লেখ কৰা দিশসমূহৰ ওপৰতো সাধুকথাই প্ৰভাৱ বিস্তাৰ কৰে -

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- কে) নৈতিক মূল্যনোগ, নাজি শিক্ষা, লাভ্য অস্ক্রম প্রণা অকণ্মান সময়ৰ বাবে আঁতবাই নি কল্পনাৰ জগতত বিচৰণ শ্লাব মূৰিণা দিয়ে।
- (খ) সাধুকথাবোৰে নাজিৰ নোণশাক্তা নিৰাজ শাৰিখাম, সূত্য-দুখ, আশা-আকাংক্ষা উপলব্ধি কৰাত সহায় কৰে।
- (গ) সাধুকথাৰ চটোৰ মোনোটা বিজ্ঞানক কল্প কল্পন্ত, পাপ-পূণ্য, ন্যায়-অন্যায় ধাৰণাৰ জন্ম হয়।
- ্ঘ) মানৱীয় ভার-অনুভূতি, শেষ দল কলা লাগি ভাব অনুভৱৰ লগতে ত্যাগ, পৰোপকাৰ আদি গুণবোৰৰ বিকাশ গ্ৰা।
- (৩) সাধুকথাৰ চচ্চাৰ দাৰা কথাকালী কৰাৰ আৰু দুনৰ হয়।
- (চ) সাধুকথাত উৰণ,গুৰণ,গুজন,জন্ম ক্ৰাচ্চ প্ৰদ্ৰনা স্মানৰ প্ৰতি দয়াশীল **হ'বলৈ শিক্ষা** দিয়ে।
- (ছ) সাধুকথাত থকা দৃষ্ট বুদ্ধি, ধুকানিদ্বালৰ শিক্ষা নিজাকৈ চিন্তা কৰাৰ সুযোগ দিয়ে। সামৰণিঃ জ্ঞানৰ বিজ্ঞোৱণৰ মৃগতে জ্ঞানত লাই এটা অমায়নপুষ্ট মন গঢ়াত সহায় কৰে। এনেদৰে জ্ঞান চৰ্চা আৰু গ্ৰন্থ অধ্যয়নৰ কৰিল কৰিল। বৃদ্ধিৰ জীৱ অনুভূতি জাগ্ৰত হয়। অৱশ্যে এইক্ষেত্ৰত গ্ৰাম্য পুথিভঁশাল্যমূহ ভণ্ডৰত কাৰ্যান দুলাৰক্ষিত আঁচনিৰ প্ৰয়োজন। আমাৰ দেশত পুথিভঁৰাল সম্পন্টিয় প্ৰতিন নত কৰা আখাৰ খাব পাঞ্চলসমূহত ব্যাপকহাৰত উন্নতি হোৱাৰ লগতে পুথিভঁবাল পানালভা চকত ভাত গল দানগড়ে এটা গ্ৰাম্য পুথিভঁৰাল স্থাপন কৰিবলৈ হ'লে গাঁওখনত এদল তা- ক্ৰমত কুলাকৰ ক্ৰয়োজন আৰু তেওঁলোকৰ উদ্যোগত পুথিভঁৰালটো হব লাগিব সাজিবনৰ নাচ কৃতিৰ ভিক্তালক্ষা। কোনো জাতি, ধর্ম আৰু সম্প্রদায়ৰ ব্যক্তিগত স্বাৰ্থ তাত থাবিল নালাখিল ক্ৰিক্টিল ক্ৰিন্ত গ্ৰান্ত প্ৰাৰ্থ জনকল্যাণকামী কৰিবলৈ <mark>নিৰপেক্ষভাৱে তদাৰক কৰা কেন্ত্ৰণ ক্ষতিনাক লাক্ষন কৰিব লাগিব। ৰাজহুৱা তথা ব্যক্তিগত</mark> দান বৰঙণি, চৰকাৰী অনুদান আদি দুৰুল কৰি বিভিন্ন সনুষ্ঠান আয়োজন কৰি পুথি প্ৰদৰ্শনী, কলা-কৃষ্টি প্ৰদৰ্শনী, পুথি উত্যোদন, ফৰী ক্ষাৰ্থ জন্ম এন্ধৰণা, প্ৰতিটো সপ্তাহৰ শেষৰ দিনটোত কিছুমান ছাত্ৰ-ছাত্ৰীৰ সুবিধাণে পালোচনট ল সহ মচলন কৰাৰ লগতে অনেক সজ উপায় আছে যিবোৰৰ যোগেদি পুথি সংগ্ৰহ দক্ষণ কৰাৰ কিন্দান আৰু উপ্সাহীলোকৰ অভাৱ নহলে প্রাম্য পুথিভঁবালে গাঁওসমুক বসনাপ্র ব কল্লে পৃথিভগীনে সলনি কৰিবলৈ সক্ষম হব। সাধুকথাসমূহ লোকসমাজৰ জিলাৰ স্মান্ত ক্ষান্ত ক্ষান্ত কিন্দ্ৰ লিভ কোনো ঘৰ নাই।সমগ্ৰ বিশ্বখনেই সাধুকথাৰ ঘৰ। কল্পনাবিলাসী লিখনে অধুক্ৰণত আৰুশ্ৰোমৰ লগত নিজৰ মনোজগতৰ চৰিত্ৰসমূহৰ অদ্ভূত সাদৃশা বিচাৰি বাচে চন্দ্ৰক কৰে এবং এবং এবং এই কান্দোন আদিয়ে সৃষ্টি কৰা বিভিন্ন সমস্যাৰ সমাধান বিচাৰি আৰুক্তাৰ এই চৰি ক্ৰম্পুৰ্ক মাজত ভূমুকি মাৰে। শিশুৱে সাধুকথাৰ মাজেৰেই নিজনে প্ৰবিদ্যান বিজ্ঞান কৰা কৰা কৰা কৰা সাধুকথাবাৰে শিশুৰ মানসিক স্বাস্থ্য অটুট ৰাখি স্বল চৰিত চিত্ৰত কল্পত কল্পত কলাৰ পানাৰ পাৰে। সাম্প্ৰতিক সময়ত যৌথ পৰিয়াল ব্যৱস্থা লুপ্তহৈ পৰাৰ বাচ চালনক কনুকলা কলালৈ কলা আঠতাৰ দৰে আত্মীয়জন নোহোৱা হোৱাত শিশুসকলে এট বিষয় বিভিন্ন প্ৰায়ণৰ বৰা ব্যাধাণ হৈ পৰিছে। অৱশ্য এনে

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সময়তে ৰাজহুৱা গ্ৰন্থাগাৰসমূহৰ লগতে কৃষ্ণকান্ত সন্দিকৈ ৰাজ্যিক মুক্ত বিশ্ববিদ্যালয়ে সাধুকথাকে আদি কৰি অসমৰ লোক–সম্পদসমূহ সংৰক্ষণৰ বাবে এক সুদূৰপ্ৰসাৰী পদক্ষেপ লৈছে।

## সহায়ক গ্ৰন্থ ঃ

- ১) গগৈ, লীলা ঃ অসমীয়া সাহিত্যৰ ৰূপৰেখা, বনলতা, গুৱাহাটী (২০০৮)
- ২) ড° বৰুৱা, বিৰিঞ্চি কুমাৰ ঃ অসমৰ লোকসংস্কৃতি, বীনা লাইৱেৰী, গুৱাহাটী (২০০৫)
- ৩) ড<sup>০</sup> দাস, নাৰায়ন ঃ অসমীয়া সংস্কৃতিৰ কণিকা, ২০০৬
- ৪) ড<sup>০</sup> দেৱীৰাভা, মলিনা ঃ অসমৰ জনজাতি আৰু সংস্কৃতি, অসম সাহিত্য সভাৰ দ্বাৰা প্ৰকাশিত।
- ৫) দৈনিক জনমভূমি ঃ দেওবধীয়া আলোচনী বসুন্ধৰা, ৩০ এপ্ৰিল ২০১৭



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