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'New' Pilgrimage: Asian Connectivity Through Tourism and Awakening of National Pride¹

Sarvani Gooptu

In a book on Buddhist pilgrimage, the author Chan Khoon San, points out that a pilgrim is different from a tourist. It is important for the pilgrim to understand the mental aspects of the journey since the physical aspect is taken care of by the travel agent. A Buddhist pilgrim was supposed to visit, on the 'advice of the Buddha', the places 'where he was born, where he attained Enlightenment, where he preached the First Sermon and where he passed away into Mahaparinirvana...'² Chan Khoon San also enumerates the qualities that are required for the Buddhist during the pilgrimage, which was a 'journey of faith and devotion, development of Paramis or perfection, taking the eight precepts for maintenance of purity of mind during pilgrimage, performing pilgrimage together in a spirit of fellowship and with mindfulness or awareness.³ The new pilgrimage that I am writing about in this paper, is different from this pious journey of meritorious Buddhists from different Asian countries to the four holy places of pilgrimage in India, namely Lumbini, Buddhagaya, Sarnath and Kushinagar. Here the Bengalis travelling to various parts of Asia-Burma, Thailand, China, Japan on work or tourism during the colonial period, visit the places of Buddhist worship, with the mentality of a pilgrim. However, their action is hardly purely sacred since, as is evident from their written testimonies, they are constantly analysing their visit and invariably bring in their own nationalist concerns. Rabindranath Tagore consciously referred to East and Southeast Asia as pilgrimage places for Indians not only because of the Buddhist pilgrim spots but because it is there that the Buddhist values had been absorbed, imbibed and were still venerated, that is, where eternal Indian identity still existed.⁴

With the establishment of the British colonial rule from the mid 18th century, easier communication networks made travel smoother and over the next centuries the purpose of travel changed along with the ease. Pilgrimage and writing about them took on a new form in the newly established vernacular journals from the mid 19th century. The newly westerneducated elite in Calcutta found in the vernacular press an outlet for their innermost thoughts and values and discovered in it the means of moulding public opinion. Here the writings by these tourist/pilgrims expressed not only the pleasure of sightseeing and exploring but also a missionary zeal for acquiring and disseminating knowledge of a religion towards which they believed the country had done the injustice of forgetting. It was a pilgrimage where the deep chasm between religious and the secular travel was removed in response to a changed situation in the intellectual map of India with the rediscovery of Buddhism's birthplace.

Rediscovery of Buddhism in the 18th-19th centuries:

Buddhism acquired for Indian intellectuals a new area of pride, intangible yet strong. Intangible because Buddhism was not a reality in the lives of the Indians and so could not become a source of weakness being out of reach of all hegemonic control. This idea of Buddhism, unsullied, untainted by colonial disdain could become a source of pride in place of Hinduism which was prone to attack and vilification since the beginning of colonisation. Taking pride in the ownership of Buddhism, especially since archaeological discoveries uncovered its splendours outside the territorial limits of India where the religion seemed to

have survived so strongly as well as within where only the memory survived, was now linked to an academic enterprise of 'pilgrimage'.

The recovery of lost memories of Buddha and Buddhism was a unique trajectory and Indians eagerly and strategically joined with the British in this journey of rediscovery as a means to discover their own history and philosophy. A large amount of writing exists in Bengali on Buddha and Buddhism like Sadhu Aghorenath's Sakyamuni Charita (1882), Krishna Kumar Mitra's Buddhadev Charita (1887), Ramdas Sen's Buddhadeva (1891), Upendra Kumar Ghosh's Buddhacharita (1894), Satyendranath Tagore's Bouddhyadharma (1901), Acharya Satishchandra's Buddhadev(1904), Narendranath Bhattacharya's Buddha (1910), Baradakanta Bandopadhyay's Buddha (1910), Atulchandra Mukhopadhyay's Sakyasingha (1911), Sarat Kumar Ray, Buddher Jibon o Bani (1914), Adyanath Ray, Chhleder Buddhadev (1923), Pramathanath Dasgupta's Gautam Buddha (1927), Hirendranath Dutta, Buddhadever Nastikata (1936), Haraprasad Sastri's Bauddhyadharma (1948), and many more published in the 1950s and 60s. Rabindranath Tagore along with many others wrote articles on Buddha's life and philosophy in the various journals in Bengali which were later collated into books. At least some of them discussed the spread of Buddhism in South, Southeast and East Asia underlining the commonality of values that Buddhism brought in these countries despite the other differences. Along with the life and teachings of the Buddha, one aspect that is highlighted in the writings on Buddhism through the nineteenth and twentieth century by both westerners and Indians, is the way Buddhism provided a means of connecting countries, through ideas and beliefs as well as pilgrimage in the past and in the present. As Rene Grousset wrote in 1932, in In the Footsteps of the Buddha, 'Buddhism in bringing them (countries of the east) into contact with one another, had created a vast current of humanism, from Ceylon to the furthest isles of the Japanese archipelago.'5

New knowledge of Asia: educative mission and national pride

A new consciousness about Asia was simultaneously emerging in this period along with the ideas of universalism and humanism in the writing in the journals. At the same time the discovery of archaeological sites in different countries of Asia by the European scholars and intrepid adventurers and explorers brought connective history of religion and culture to the mental horizon of scholars and writers. The 'new' pilgrims from the eastern India began 'intellectual' and 'scholarly' pilgrimages to the various sites of Asia, and wrote about their experiences in local languages. Beyond piety their new interest was manifold- understanding the present conditions in different Asian countries, linking them to India's past and documenting the new pilgrimage experience for their countrymen.

From the 19th century acquiring knowledge and disseminating information became an important ingredient of nationalism. With the rise and spread of education among the Bengalis, awareness of foreign lands and reading about travels in them became an exciting pastime. Bengali literature and magazines are replete in translations of famous real life adventure stories in the initial phase and then travelogues by men and women travelling to distant lands. The first popular travel writings in the Bengali magazines were on western countries but gradually from the beginning of the 20th century, the focus came to be Asia. This was related to a sense of nationalism that developed in most of the Asian lands. In Bengal, the discovery of Indian political and cultural influence in south and south-east Asia through the archaeological and philological discoveries of the French and German scholars invoked a deep pride and nationalistic fervour. India was in no way inferior to their colonizers since they themselves had established a cultural colonization in many lands of Asia in the past. In the 1920s a Greater India Society was established in Calcutta where historians and philologists tried to popularise

the concept of Greater India as a cultural sphere together with the explorations of French archaeologists and writings of French Indologists like Sylvain Levi. They spoke about a benevolent cultural colonisation in ancient times in contrast to the colonisation of India and other Asian countries in the 20th century. This movement was coincidentally associated with a Pan Asian aspiration. T.A. Keenleyside referred to this as being initiated by Japan and then becoming popular in all Asian lands, as a "sense of solidarity to counter the omnipresent colonial manacles." Prosenjit Duara in his introduction to an anthology of Greater India articles stressed the role of the journal New Asia in furthering Sun Yat Sen's idea of great Asianism in 1925 at the same time as the Greater India society in Calcutta was bringing out the India- Asia linkages. ⁷ Thus intellectuals in all Asian countries were committed to playing a role in leading Asia to a new and more just world. My contention is that this educative mission in the cause of Asian connectivity was reinforced using the trope of pilgrimage, albeit a 'new' pilgrimage using both religious piety and secular- cultural motive of tourism and literary creativity as its leitmotif.

Humiliation of a Collective National Amnesia: means of recovery

Connection with Outer Asia was most evident in the rediscovery of Buddhism. Buddhism was identified as originating from India, through its living presence in the other Asian countries, Buddhism thus acquired for Indian intellectuals a new area of pride, intangible yet strong. Intangible because Buddhism was not a reality in the lives of the Indians and so could not become a source of weakness being out of reach of colonial censure. This idea, unsullied, untainted by colonial disdain and could become a source of pride unlike Hinduism which was being attacked and vilified since the beginning of colonisation. Taking pride in the ownership of Buddhism, especially since archaeological discoveries uncovered its splendours not only within the territorial limits of India but also in other parts of Asia where the religion survived so strongly, was now linked to an academic and modern enterprise of 'pilgrimage'. A number of articles described the pilgrimage by the Buddhist pilgrims to India in the past, 8 the different pilgrimage spots, their identification in the Buddhist texts and discovery by the archaeologists⁹, a list detailing the geography in the age of the Buddha¹⁰ but the great majority are about the Gautama Buddha- biographical details, his teachings and its spread and on the decline of Buddhism in India. 11 Most of the articles are written in late 1920s and 1930s when the interest aroused by the academic writings of the Greater India society on Buddhist connections in South East and East Asia was at its peak. However even as early as the 1890s the intellectual interest was piqued regarding certain pilgrim sites as is evident from some articles in Bharati which discussed the claims of the Buddhists in Mathura, long considered to be a religious pilgrimage sight of the Vaishnava Hindus. ¹² This article and others ¹³ discuss how the Buddhist links were rediscovered when the texts by the Chinese pilgrims Huien Tsang (Xuanzang) and Fa hien (Faxian) were discovered and translated by the European scholars. 'Fa Hien', writes Mukhopadhyay, 'stayed in Mathura for a month. In his written account one finds that at that time there were at least twenty Buddhist monasteries in that region where almost 3, 000 Buddhist monks lived. Besides there were three stupas dedicated to the close disciples and associates of the Buddha like Ananda, who was famed to have spread Buddhist ideals among women. The third was dedicated to the three Buddhist texts....with the passing of time, the Buddhist shrines of worship have been converted into ruins..'14 Kailash Chandra Sinha as early as 1880, wrote a serialized article on the *Travels of Hiuen Tsang in Bengal*. ¹⁵ The historian R. C. Majumdar writing for a literary magazine *Prabashi* discusses the journeys through Asia of many Chinese Buddhist pilgrims, 'who did not attain the fame of Fa hien, Huien Tsang or I Tsing, but they too were motivated by the highest ideals when they made the long and arduous journey to India.'16Appreciation of art and architecture was also connected with this enterprise as was discovery of Buddhist literary texts in different parts of Asia and writing about the journeys to the different Buddhist sites. For the Indians defying the taboo of the *kala pani* (traversing the Black waters) in going to visit the great 'sights' and writing about the impact of Buddhism of 'Indian origin' on the cultures of Asia, there was a distinct sense of national pride.

An anonymous writer in *Mahila* while describing their stay in some of the main cities in Burma says that a visit to the Buddhist pagoda Mandalay was compulsory for all visitors. In his/her words, 'We left at 5 in the morning and reached Mandalay at 3pm in the afternoon. On the way to Upper Burma one can see scattered on the valleys between hills hundreds of large and small pagodas or Buddhist temples. It was as if we had reached a forest of pagodas. ... In Lower Burma, the pagodas are often made of wood while in Upper Burma they are made of bricks. Some of the pagodas are beautifully designed. Near Mandalay we noticed some large beautifully decorated pagodas which have a golden crown.¹⁷ The Shwedegon Pagoda with its golden crest in Burma is a popular destination for all tourists. In 1902, Mrinalini Raha describes her visit to the pagoda site in an article in a women's magazine Antahpur, '...since it is a popular tourist place it is easily accessible by a tram. There is a saying that the Buddha's hair is kept at the Shwe Dagan which is fifteen hands high from the ground. One has to climb a flight of stone steps to arrive at the pagoda. On either side of the steps, Burmese women sell flowers and candles for dedication at the pagoda...Inside there is a gigantic stone Buddha image, in the meditation pose. On either side thousands of candles have been lit and Burmese holding different types of flowers are praying to the Buddha or meditating.' Raha also mentions the presence of the Mahabodhi Society next to the Pagoda trust office. 'Besides the main pagoda there are many more which contain stone images of the Buddha. In one there is the pensive Buddha in a lying position with his hands cradling his head surrounded by his disciples. There is a museum nearby where among other things are a huge bell...The Pagoda is proof of the immortal vigour of the Buddhist religion and the greatness of Buddhist pilgrimage. It is said that in 1858, during the Anglo Burmese war, this Pagoda had acted as a fort. ... I was filled with a deep regret as well as happiness after my visit to Shwe Dagan. How ungrateful the Indians are and how deeply faithful the Burmese are. The birth of the lord Buddha had purified India and due to the spread of his message of equality the country had been revolutionised, yet today with the remorseless passage of time, Buddhism has been banished from India and the lord Buddha is no longer venerated by the people of Bharat. On the other hand that Indian holyman is the only focus of veneration of crores of men and women in this faraway Burma. ¹⁹

Besides travelogues, there are essays in the journals describing Buddhists in different countries of South East Asia and East Asia, their numbers, forms of worship and ideas and philosophies. Keeping in mind the reader, these articles always focus on similarities or differences with India or they highlight important facts of socio-religious or cultural history. Narendra Dev in his article on Shyamdesh (Thailand) describes the Buddhists of Thailand as 'different from those of India (Bharat) or Tibet (Tibbat) and they follow the Buddhist rules and conventions of Burma (Brahmadesha) and Sri Lanka (Singhal). The king is not only the nation's leader, he is also their religious head. There are at least ten thousand Buddhists monasteries (viharas) in Thailand and over two lakhs of Buddhist monks residing there. The king is the administrator of all these monasteries and the monks are the king's subjects. Western influence has reduced the impact and influence of Buddhism on the daily life of the city people but in the villages Buddhist conventions and even their superstitions reign supreme. For a long time the art and literature of the country was closely tied up with Buddhism and confined to the viharas which naturally meant that art and culture was mainly religious. It is a matter of hope that today with the spread of education art and literature is also found to be developing outside the monasteries.'20

Writing on Chinese painting, Manindra Bhusan Gupta highlights the Buddhist influence on it. To show the popularity of a painter Ku-Kai Chih, Gupta uses a popular story. 'Once the painter Chih was approached for donation to build a Buddhist monastery but his promise to donate one lakh coins was scoffed at by the Buddhist monks as impossible. The angry painter requested for one month's time and locked himself up in his room. When he emerged from it after a month, it was found that he had covered the walls with a brilliant painting of the Buddhist saint Bimalakirti. Soon the news spread and thousands of pilgrims visited his home to pay homage to his creation and their donations helped Chih to fulfil his promise to the monastery.'²¹ Gupta says that Chinese painting greatly developed during the Tang dynasty (though he gives wrong dates for the period 618-709 instead of 618-907) when according to him the 'influence of Buddhism nurtured their imagination and ennobled their literature and painting. In the capital of the Tang dynasty, Luoyang there lived three hundred Buddhist monks and many domiciled Indians who were responsible for the spread of ideas of Indian civilization. Wu Tao Tzu in this period became famous for his portraits of gods and saints through a few strokes of his brush. His most famous painting was the Mahaparinirvana of the Buddha. It is unfortunate that his paintings no longer exist and copies by later painters have been used to piece together his creative genius. The London museum has a copy of this picture where the Buddha lies in salvation peace while all around are portraits of chaotic grief...One can sense the greatness of the painter even in the copy. He has painted on many Buddhist subjects like, Sakyamuni, Boddhisattva, Samantabhadra and Manjusri. ²² Gupta contrasts the paintings of this period with later paintings like that of Lee Lung Mian during the Sung dynasty who worked on Buddhist subjects but he was 'influenced by Zen philosophy.²³

Asian Connectivity through Buddhism: travel of ideas and pilgrims

One article in 1874 in Aryadarshan, has claimed for Asia the pride of being the progenitor of four main religions of the world- Hindu, Buddhist, Muslim and Christian after which they have spread to other parts of the world. 'Majority of the people of Asia are Buddhists', he claims, 'and at one time it held sway in India as well till the untiring efforts of Shankaracharya led to its exodus from India and establishment in other Asian countries.' The anonymous writer of this article however speaks of Buddhism as being a part of Hinduism on the whole though he highlights some of the differences. ²⁴ A large body of literature existing in Bengali discussing various aspects of the Buddha, often tries to find links with Hinduism, probably in an effort to establish a claim on the religion which had no follower in India of the 19th -20th century. Articles also expressed national pride when they discussed Indians and specifically Bengalis who spread the word of Buddha and helped establishment and preservation of the religion in other countries. For the writers this reiteration seemed to redress some of the humiliation that Indians were faced with when the westerners underlined through their discovery of Buddhist connections, the disdain at the collective loss of memory by the Indians. An article published in *Manashi O Marmabani* was re-published in another (*Prabashi*) the same year indicating its importance for the contemporary Bengali. It was titled Role of the Bengali in the spread of Buddhism where the author, Biman Behari Majumdar, a history scholar, lists how 'in the period from 6th century to 16th century, Bengalis helped in the spread of Buddhism in China, Tibet, Nepal, Sri Lanka etc, directly or indirectly. 25 Another article by Haraprasad Sastri in Sahitya Parishad Patrika on the Buddhist community of Bengal was republished in Prabashi in 1929 which described how Buddhism was 'swallowed by the Hindu religion...when bottled under 700 year Muslim hegemony...so Hindus and Muslims too might merge together if bottled under 700 year British colonial rule.'26 Many years later, the pride still lingered in Nirmal Chandra Sinha who wrote how honoured he was when during his visit of Tibet in 1950s he was asked by a Lama where he was from. On the reply that he was from Kata (the Tibetan for Calcutta) he was surprised by the excitement of the enquiring Lama that he had met a man from the land of Jo-Atisa as Diankara Srijnana Atisa was referred to in Tibet, where he had come 'to preach the correct Doctrine nine hundred years ago and his preaching spread from Tibet into Mongolia.'²⁷

Rabindranath Tagore the pioneering pilgrim

Rabindranath Tagore was not only one of the leading intellectuals of India but he can be credited with being the inspiration behind the intellectual movement to revive and spread universalism not only through his writing but actively, 'through the metaphor of pilgrimage'.²⁸ He became worried about the ease with which a country's nationalism could turn aggressive.²⁹ The only way this danger could be minimized was through discovering a higher nationalism uncontaminated by political or economic greed. Only spiritual or cultural links could provide a long lasting bond where exchanges were more important than influence. It was this philosophy of cultural and spiritual linkages that were stressed in the popularizing mission through the journals. He undertook 'intellectual' and 'scholarly' pilgrimages to the various sites of Asia preceded and followed by many others. For Tagore, at least 'travels were not prompted by any desire for propaganda but fulfilment of a long -time dream to understand the life force of an ancient civilization. Despite all the storms the country (he was writing about China in 1924 in this case) has faced from revolutions, invasions, civil war for centuries, the inner strength of the huge population has remained undiminished. One should come to the country to pay homage to it in the same way one goes on a pilgrimage.³⁰

Tagore like many intellectuals of his time and beyond was fascinated by the Buddha and Buddhism. He not only wrote essays³¹ in which he discussed various aspects of Buddha's teachings and philosophy but he also creatively incorporated them in his poems, dramas and songs which are immensely popular today.³² Having made a comparative study of the various religions prevailing in Asia, Tagore came to the conclusion that the 'popular concept in Asia of *Guruship* i.e. raising a man to the level of a God ...and the practice of repeated chanting of His name for salvation, started from Buddhism.'³³ 'It is Tagore also pointed out that during his visits to China and Japan he felt a connection with the people which was spiritual beyond the physical differences. He regretted that this connection with truth which still flourished in those countries of East Asia was no longer present in India. 'That is why', he wrote, 'these countries are the pilgrimage centres for modern Indians. The eternal identity of Indians is present there.'³⁴

The relevance today:

The argument of the intellectuals of this period was that the cultural pre-eminence that India had established in the other Asian countries in the past through religious, political and culture explorations could be replicated even in the present when the political element would be disregarded and cultural give and take would reinforce connectivity. Thus on this harmonious ground a strong network of the countries of Asia would be created, connected by cultural ties and a common historical past. This was a movement in which the cultural leaders of the time would take lead and a mass base would be created by uniting the common people of all the countries of Asia. This united front would be formidable and yet would be free from chauvinism that plagued nationalism. The ideological movement through the journals, to look beyond boundaries for friendship, was both, political and spiritual, nationalistic and universal. Buddhism was one of its tropes which would easily be acceptable both in India and the other countries of Asia as a bonding factor.

On one hand the movement aimed at discrediting British scholarship which had created myths about India's isolation and limited her past achievements by looking at them through the

prism of the colonial mentality. On the other hand creation of a strong public opinion, through evoking images of a golden past when India held sway politically and culturally over the Asian continent together with an outlining of contemporary linkages, would proclaim an advantage over the colonial powers through a show of cultural and historical solidarity between the nations of Asia. This linking of populations was a powerful force against colonialism. Today this thought movement could be replicated using similar yet relevant cultural tropes which would unify populations by appealing to universal interests like music, cinema, theatre, art, transnational literature, and even non-confrontational universal socio-religious meetings, fairs and most important of all facilitating movements of population for such events. The Bodh Gaya case over the years is a shining example of how insularity was overcome and a united effort was made trans-nationally by the Burmese King and then the Maha Bodhi Society set up by Anagarika Dharmapala to the preserve the site where Gautama Buddha achieved Nirvana. It is now the focal point of people from every country who come not only for religious pilgrimage but as a part of heritage tourism.

¹ Part of this research was funded by Faculty Research Grant by Education Dept. Govt. of WB.

² Chan Khoon San, *Buddhist Pilgrimage*, Kuala Lampore: no pub., 2009, p. 2.

³ Ibid pp. 2-5.

⁴ Rabindranath Tagore, Rabindranath Buddhadev O Bouddhasamskriti (Rabindranath, Lord Buddha and Buddhist culture), Calcutta: Vishwabharati Pub., 2003 (2012 reprt)

⁵ Rene Grousset, In the Footsteps of the Buddha, translated by Mariette Leon, London: G.Routledge and Sons, 1932, p. ix.

⁶T.A.Keenleyside, Nationalist Indian attitudes towards Asia: a troublesome legacy for Post-independence foreign policy, Pacific Affairs, 55 (2) 1982, pp. 201

⁷Prosenjit Duara, Foreword, ed. Kwa Chong Guan, Early South East Asia viewed from India: an anthology of articles from Journal of Greater India Society, New Delhi: Manohar, 2013, p. viii

⁸ Among others, Rabindra Kumar Basu, Gautama Buddha, Bangalakshmi, 6 (11), 1931, pp.850-874; S.P.G, Fa Hien er Tirthjatra (Pilgrimage of Fa Hien), Bharati, 6(12), 1882, pp. 561-565, 7(2), pp.65-70, 7(3), pp. 112.

⁹ One example is Bireshwar Goswami, Kushinagar, Sahitya, 9(4), 1898, pp. 227-232

¹⁰ Among others, Bimalacharan Laha, Boudhhyajuger Bhugol (Geography in the Age of Buddha, *Bharatvarsha*, 20 (1)(6), 1932, pp. 955-963.

¹¹ Swami Surananda, Bouddha Dharmamot Utpatti O parinoti (The emergence of Buddhism and its outcome), Bharatvarsha, 22 (1)(6),1934 pp. 938-939

¹² Harisadhan Mukhopadhyay, Mathuray Bauddhyadhikar (Buddhist claims on Mathura), Bharati, 16(2), 1892, pp. 119-123
¹³ Bireshwar Goswami, Kushinagar, opcit, p. 229

¹⁴ Harisadhan Mukhopadhyay, Mathuray Bauddhyadhikar, opcit., pp.122-123

¹⁵ Kailash Chandra Sinha, Hiuen Tsang er Bangala Bhraman(Travels of Hiuen Tsang in Bengal), Bharati, 4(2), 4(3), 4(4)1880, pp. 67-75, 116-125, 164-171.

¹⁶ Romesh Chandra Majumdar, Chindeshiyo Bouddhya Paribrajak (Chinese Buddhist pilgrims), *Prabashi*, 24(1)(6), 1924, pp. 792-795.

¹⁷ Anonymous, Amader Bhraman Brittanto, Burmadesh, Mahila, 12(10), 1907, 1314 B.Y., p. 259

¹⁸ Mrinalini Raha, Bharmadesher Kotha (Descriptions about Burma), Antahpur, 5(8), 1902, pp. 161-164 163

¹⁹ Mrinalini Raha, opcit., 5(8), 1902, pp. 161-164

²⁰ Narendra Dev, Shyambhumi (Thailand), *Bharatvarsha*, 12 (1)(6), 192), p. 905.

²¹ Manindra Bhushan Gupta, Chine Chitrakalar Itihas (the History of Chinese painting), *Prabashi*, 24(2)(1), 1924, p. 84 ²² Ibid. pp. 85-86.

²³ Ibid. p. 87

²⁴ Anonymous. Buddhadev O Tadubhabita Dharma Pranali, (The Lord Buddha and the principles of the religion he established), Aryadarshan, 1(4), 1874, pp. 127-134

²⁵ Biman Behari Majumdar, Bauddhya dharma Prachare Bangali (the Bengali in the spread of Buddhism), reprinted in Kashtipathar, Prabashi, 28(1)(3), 1924, pp.352-355.

²⁶ Haraprasad Sastri, Banglar Bouddhya Samaj (The Buddhist Community of Bengal), reprinted in Kashti Pathar, Prabashi, 29(2) (5), 1929, pp. 679-684.

²⁷ Nirmal Chandra Sinha, *How Chinese was China's Tibet region?*, Calcutta: Firma KLM (P) Limited, 1981, p. 19

²⁸ Sugata Bose, *A Hundred Horizons: The Indian Ocean in the Age of Global Empire*, Delhi: Permanent Black, 2006, pp. 233-271.

²⁹ Rabindranath Tagore, *Nationalism*, (originally pub.1917), Calcutta: Rupa and Company, 1992.

³⁰ Rabindranath Tagore, Chin O JapanerBhramanBibaran, *Prabashi*, 24(2) (1)1924, pp. 89-90

³¹ Rabindranath Tagore, *Buddhadev*, Calcutta: Vishwabharati Pub., 1956 (2012 reprint).

³² Rabindranath Tagore, Poems like *Borobudur, Siam, Sheshtha Bhikkha, Pujarini, Abhisar, Parishodh, Samanya Kshati, Mulyaprapti, Nagarlakshmi, Mastakbikroy, Buddhabhakti,* and plays like *Natir Puja, Chandalika, Rabindranath Buddhadev O Bouddhasamskriti (Rabindranath, Lord Buddha and Buddhist culture)*, Calcutta: Vishwabharati Pub., 2003 (2012 reprt)

³³ Rabindranath Tagore, Bouddhyadharme Bhaktibad (The Bhakti ideology in Buddhism), *Rabindranath Buddhadev O Bouddhasamskriti*, opcit., pp. 30-31

³⁴Rabindranath Tagore, Buddhadev Prasanga (On Lord Buddha), *Rabindranath Buddhadev O Bouddhasamskriti*, opcit., p. 46

The Raj, Missionaries, and Medicalisation among the Zo hnahthlak

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Abstract

'Zo hnahthlak' (lit., Zo people) in the then Lushai Hills experienced a colonial encounter that sought to 'tame the wild tribes.' The accounts of missionaries like Lorrain ((1912)1988) show how Christianity, armed with education and medicine, attracted the 'savages,' particularly in the Zo Hills. In 1894, James H. Lorrain (also known as Pu Buanga in the Mizo language) and Frederick W. Savidge (also known as Sap Upa in the Mizo language) arrived in the Lushai Hills to conduct evangelical missions. After four years, Lorrain and Savidge went on a furlough to visit their families. Robert Arthington, Jr., of 'Arthington Aborigines Mission', their benefactor, decided to stop funding their efforts among the Lushai. Mission work in Mizoram was taken over by the Welsh Presbyterians, who established their headquarters in the country's northern region. Together with Savidge, Lorrain went back to the Lushai hills after being commissioned by the 'Baptist Missionary Society' (Lorrain, (1912)1988). When they returned to the Lushai Hills, they established a base among the southern tribes. In their first mission together, they persuaded a Lushai named Khara in 1894. The Welsh missionaries reintroduced Christianity to Khara, who had lost interest in the new religion by this time, during their second phase of missionary work in 1899. The same year, the Welsh missionaries successfully converted the first Lushais, Khuma and Duma, who would steer the future of evangelism. Upon the arrival of the Baptist missionaries in Lunglei (southern Mizoram), where they established their base of operations, 125 believers answered the call to support the Mission. Welsh Presbyterians and the Scottish Baptists collaborated among the Lushais (northern tribes) and Lakhers (southern tribes). The majority of the Lushais had accepted Christ within a half-century. The Church in Mizoram is correctly described as a 'missionary church.' The presence of medical missionaries aided in proselytising the Zo people. However, their significance has been buried in colonial documents and ethnographic accounts. This paper will attempt to piece together what happened when western medicine, health care, and epidemics struck the Zo by sifting through colonial records.

Keywords: 'Zo hnahthlak', Missionaries, Health, Hospitals, Traveling dispensaries, Licentiate Medical Practitioner (LMP), Compounder, Lushai Hills

Introduction

The colonial encounter among the Zo¹ introduced western ideas about education, health and medicine, hygiene, and housekeeping, as well as an unquestioning acceptance of the superiority of the white man's belief system and lifestyle over the natives' understanding and appreciation of their world system (McCall, (1949) 2003; Shakespear, (1927) 1977; Woodthorpe, (1873) 1980). However, the white man's ideas and hegemony were met with fierce opposition. The series of border skirmishes and 'wars' waged by Zo chiefs and British initiatives to combat troublesome wild tribes are evidence of this contest over territorial claims and belief system ideas. For example, Captain Blackwood's expedition with Sylhet Infantry parties and the Armed Civil Police in 1844; Captain Lister's expedition in 1847 and 1849; the Lushai-Kuki raids in 1845 and 1847, to name a few notable events. It is worth noting that the Raj skillfully engaged and recruited/appointed small sections of the Lushai-Kuki tribes to assist them in tackling and taming the non-confirming Lushai-Kuki chiefs and bringing them into the fold of the colonial scheme of administration and regular tax regime (Shakespear, (1927) 1977; Woodthorpe, (1873) 1980). These skirmishes further reaffirmed the argument that the sole motive of the Christian missionaries and the British Raj was not just proselytisation but primarily to 'tame' the 'wild tribes' of the frontier regions and annex their land to serve the commercial interests of the British Tea Plantations in the Northeast of India (Reid, (1942) 1983; Zairema, 1978, p.1; Allen et al. (ed.) (1979) 2001; Chatterjee, 1990, p.144). Colonial economic interests constricted and eventually suffocated the local economies of the region's native tribes. For example, 'Indian rubber' was a natural resource of the Lushai and Chin Hills (Chatterjee, 1985, pp.185-86), and 'Cotton' was abundant in the Chittagong and Lakher Hills. The Chittagong Hill Tracts were dubbed 'Kapas Mahal' (Cotton Country) (Chowdhury, 2016, pp.183-224), and the Lakher Hills were an extension of the natural cotton reserve. In Mizoram, the northerner tribes (Lushai/Lusei tribes) use the Lushai term 'Lakher' to refer to one of the southern tribes, which translates as 'those who extract cotton'. The Raj's incursion into the region's hills and plains was firmly aimed at the potential economic gains from land beyond the region's borders into Southeast Asia.

The appeal of western medicine among 'primitive tribes' can be explained by the logic of 'social healing,' 'physical healing' and medicalization, tribes devoid of indigenous medical

¹ Mizo is a generic term that encompasses the diverse tribes or clans that inhabit the entirety of modern-day Mizoram and share similar culture, traditions, dialects, etc. In addition to their numerous subclans, they include the Lusei/Lushai, Ralte, Hmar, Chawngthu, Pawi, Khawlhring, Khiangte, Chawhte, Ngente, Lenthlei, Tlau, Pautu, Rawite, Zongte, Vangchhua, Punte, Paite, Fanai Pawi, Thadeo, Pangkhu They populate the territory's northern and central regions and make up the majority of the population. I use the term *Zo/Mizo* to refer to all tribes in Mizoram and neighbouring regions who accept their oneness as *Zofate* or *Zo hnahthlak* (children of the Zo people).

The majority tribes have recently advocated for a Zo identity that encompasses all 17 tribes and subclans. Those who identify as Mizo tend to impose the 'Zo/Mizo identity' on other minor tribes, including the Mara, the Lai, the Chakma, and the Reang (Bru). One of the ties that bind this Zo or 'Zomi' identity is the sentimentality of having descended from the legendary cave of 'Sinlung' ('Chhinlung', or 'covered stone cave') in the north. The origin of the term Zomi (Zo People) is the word 'Zo'. Zo is challenging to explain and has been interpreted in a variety of ways. 'Zomi' reflects the primordial connectedness of the Zo people as a single ethnic entity in their presumed historic homeland, from which they dispersed and settled in Myanmar, India, and Bangladesh as separate tribes.

knowledge had always yearned for pain relief, which western medicine provided (Moares, 1964; Zola, 1972; Conrad, 2007). In contrast to slow traditional healing, western medical science provided instant relief for physical ailments. Naturally, western medicine began to have its large following, and the Missionaries exploited this faith and ready acceptance of 'western medicine' to their advantage. For example, D.E Jones mentions in the First Years Reports that 'some are ready to believe in Christ if they are kept from illnesses' (McCall, (1949) 2003).

It is worth noting that the colonial administrators and colonial missionaries, though frequently at odds due to the nature of their goals/missions towards British India's 'wild tribes of the North East,' worked in a loose collaboration in the Lushai Hills. The loose collaboration served as a useful delineation of areas or spheres in which the two could independently prevail. The Superintendent or the political agent was considered more powerful in 'this world', while the Missionaries or the ecclesiastical agents were masters holding the key to 'that world'. The understanding of 'life on earth,' i.e., the lifeworld, and 'life after death,' i.e., either in heaven (Pialral) or hell (Meidil), defined the blueprints for the imagery of the realms of 'politics' and 'ecclesiastics' among Zo/Mizo Christians. Both White missionaries (lit., Sap) and native missionaries were thought to hold the key to the worlds of education, medicine, and Heaven. The material progression accelerated by contact with either of these two sets of colonial power was difficult for the 'Zo hnahthlak' (Zo people) to resist. Accepting the colonial educational drive and Christianity, for example, enabled the 'wild tribes' to obtain 'permanent salaried jobs' in the colonial administration or with the Missionaries. In all cases, the steady rise of salaried people among the 'Zo hnahthlak' introduced 'newer class categories' in the British sense of social stratification. It altered the traditional ordering of things and people's positions, which was largely determined by birth. The salaried class eventually shaped and positioned itself as the 'middle class,' consisting of working-class regular salaried individuals with strong Christian morals and faith, known as the 'Pathian ring' (lit., 'believers in the living God'). The British annexation of the Zo territory resulted in some structural and functional changes. In pre-colonial times, for example, the 'Traditional Elites'-the Lal (Chiefs), the Lalupas (Elders), and Village Officials—were the conduits through which religion, culture, administration, jurisdiction, economy, and politics were determined. Village officials and various types of priests (such as the Puithiam, Sadawt, and Tlakpawi) assisted the Chief in performing religious functions. Other officials, such as the Khawchhiar, Tlangau, Zalen, and Ramhual, among others, assisted the Chief in performing administrative-judicial and socioeconomic functions (Lalrimawia, 1982; Thomas, 1993; Ray, 1993; Nag, 1998, pp. 15-21). As a result of colonial contact, the twin process of systematic replacement of the 'Traditional Elites' by the 'New Elites,' i.e. the 'Black Coats'- the 'native preacher' at the ministerial level and retention of the Traditional Elites at the political-administrative level (Lalrimawia, 1982; Thomas, 1993; Ray, 1993; Nag, 1998, pp. 25-29) occurred. This, however, does not imply that the traditional elites were uprooted or displaced from their positions of authority; rather, it means that the British established a new centre of power to balance the traditional elites' hold. The Lushai Hills were administered as an 'Excluded Area' under the Government of India Act of 1935, over which the State Government of Assam had no jurisdiction. The district was administered by the Governor's extraordinary powers. There was no district representative in the State Legislature, and no political activity was permitted. As a result, the British Superintendent and Mizo Chiefs continued to rule dictatorially.

Pre-Colonial Zo Health and Healing

The Lushai² had no doctors, not even quacks,' says Suhas Chatterjee. There was nobody to assist them in the event of an emergency, such as an illness or an accident. Because the Lushais believed that any disease, accident, or epidemic was the work of the *Ramhuai* (lit., devil, evil, malevolent spirits), there was no way to stop them (Chatterjee, 1985, p.196). Prior to Christianization, the Zo worldview was permeated by animistic beliefs in both good and evil spirits, both of which needed to be repeatedly appeased through ritualised offerings and sacrifices (Lloyd, 1991, p.9). The Zo's animistic worldview was integral to their traditional understanding of health and disease. People there believed that evil spirits lived in every large tree, hill, enormous stone, and other location. These spirits caused bad weather, crop failures, and other misfortunes. In order to avoid angering the spirits that could hurt them, they were cautious about how they behaved.

The Zos had their own indigenous methods of treating, healing, and recovering from illnesses and diseases. For wounds and sores, they relied on jungle plants, shoots, roots, tubers, and so on. Salts for minor aches and pains, hot ginger, soda, and water for colds and stomach discomfort. Animal fats were used externally to treat respiratory diseases and rheumatism. The Mizos were aware of the use of animal bile as a supplementary cure for diarrhoea and cholera. When they were sick, they had no choice but to sacrifice to appease the evil spirits and heal themselves. *Khal* was one of the many sacrifices made to those spirits who were said to cause bad health and misfortune (Hluna, 1992, p.17). A *Daibawl* sacrifice was made outside of the villages to help a sick person recover. All sacrifices to the spirits were carried out by *Bawlpu*, or an exorcist. To deal with the spirit that caused such diseases and ailments, each village had a *Bawlpu* (priest or exorcist). They believed that only *Bawlpu* could determine which spirits were causing problems and what sacrifice would appease them (Siama, 1978; Zairema, 1978).

III

Sifting through the Colonial Records

In Mizoram, two different agencies established modern scientific health care facilities. The British Indian administration (the Government) was one, and the Christian missionaries were another. The history of medicine and medical care differed between the North and South Lushai Hills. Medicine (pills, syrups, etc.) became known as 'Damdawi' among the Zo, which literally means 'Heal by Magic.' As a result, Western medicine came to be associated with magic, providing instant relief from pain. The surgical dimension so strongly grasped the people's social imagery that 'Zai chuak' (to be operated on) became an act of display.

² A major Mizo ethnic group; early colonial records referred to all local tribes in the region collectively as 'Lushai'. Tribes in the area rebranded themselves under the umbrella term 'Mizo' after the Lushai Hills District had its name legally changed from Lushai Hills District to Mizo Hills District under the Change of Name Act No. 18 of 1954.

The Gospel drew the wild tribes in with its message of a powerful male God and the promise of freedom from pain in this life and the next. Naturally, the missionaries were successful in gaining the trust of the region's tribes (Chalhnuna, 2003). The Khasis were the first of the region's tribes to convert to Christianity in 1812-13, and missionary activities began in the Naga Hills in the 1840s and the Zo/Mizo/Lushai Hills in 1894-95 (Fuchs, 1973). In this sense, the Zo/Mizo were latecomers to the evangelical missions. However, the Zo Hills have had the highest success rate in terms of mass proselytisation.

To retrace the history of western medicine and health care among the Zo, one must sift through the colonial records scattered across South Asia—the laboratory where the Raj and Raj Making were experimented upon—and unearth the connections and disconnections within the same. For example, Dr. E. Christian Harr (Surgeon Captain) is mentioned as the first Civil Surgeon of the Lushai Hills in the handwritten entry in the 'Inspection Book, Champhai Dispensary 1896-1973' (Health Department, Mizoram). According to other sources, Captain Mc Leod, IMS, was the first Civil Surgeon of the Lushai Hills. According to available records, an impoverished treatment camp for labourers (kulis/coolies) was established at Aijal in 1894. In 1896, this was upgraded to a full-fledged dispensary. Following that, in the same year, Aijal Hospital with 20 beds and Champhai Dispensary with eight beds became operational. In 1920, eight more 6-bed dispensaries were established in Kolasib, Sairang, Lunglei, Champhai, N. Vanlaiphai, Sialsuk, Tlabung, Vahai, and Tuipang. The Raj maintained its monopoly through the Chin Hills Regulations of 1896 and the Inner Line Permit (Bose, 1979; Acharyya, 1984; Sangkima, 1995; Sangkima, (ed.) 2004) and gave the Christian Mission free rein to penetrate these remote areas (Ray, 1982, p. 69; Lorrain, (1912) 1988, pp.235, 259).

The Raj occupied the Lushai Hills and introduced the art of governance to the previously ungoverned in order to maintain peace along the borders and maintain order among previously unruly tribes like the Lushais living in these frontier regions. The introduction of 'Circle Administration' in 1910-1902 made it easier for the Chief and the Officer-in-Charge of the Circle to get along. Each circle administration had a Circle Interpreter who was a New Elite at the administrative level, similar to the 'Black Coats' (New Elites) at the ministerial level (Ray, 1982, p.65; Chaube, 1973, pp.18-19). The emergence of the 'New Elites' signalled the birth of a 'Middle class' (DattaRay, 1983), which had previously been conspicuously absent in traditional Zo society. Missionary educational activities fueled the formation of the 'New Elites' at the administrative and spiritual levels. Under the missionaries' sponsorship, a new class of educated Lushais emerged. This middle-class explanation is useful for understanding 'identity politics' among Mizoram's tribes. The introduction of a money economy aided the rise of the Zo society's middle class (Chakraborty, 2016, pp. 36-67).

Ordinary people were gaining new status and purchasing power, and as a result, they felt confident enough to challenge and raise their voices against the chiefs' traditional autocratic authority. Exposure to the outside world through foreign travel during the world wars opened the gates of consciousness, with ripple effects even in the Zo Hills. In the war zones of Europe and Mesopotamia, the British government recruited Zo tribes as labour forces to load military equipment and rations into train compartments, maintain the supply chain of coal to train engines, and unload train coaches. In 1917, the British conducted a recruitment drive in the

Lushai Hills, mustered the youths in Aizawl, and divided them into four labour companies. When they returned from the Great War (World War I), they were paid in cash. Many of the young people used the money to pay for their wedding. Women in the region were enthusiastic about the war returns. However, the recruitment drive for the War was not as easy as anticipated. Few areas stood firm against the British Government's call. The Thado-Kuki group, for example, openly revolted in the Hakka and Falam areas of the Chin Hills in Burma. The colonial administration used force to quell the uncivilised uprising. They forced these tribes to work on Imperial projects such as road construction (Falam Tuangpat/tlanghel), artificial lake construction (Ralkap Tili/ Soldier's Lake), Falam Cinmual football field, and so on.

The colonial documents records the slow wave of 'medicalisation' (Zola, 1972; Conrad, 2007) and taming of the Raj's once- 'wild tribes' on the Raj's eastern frontiers. With the colonial occupation of the Lushai territory, the Political Officer and the Civil Surgeon assumed control of the daily interactions in these frontier spaces (Rao in Dubey (ed.), 1978, pp. 215-232). Prior to 1898, the head of the Lushai District was referred to as a Political Officer. There were initially two political officers, one for the South Lushai Hills and one for the North Lushai Hills. Following the merger of the two districts, the district head's title was changed to Superintendent. The first Superintendent of the Lushai District, Shakespear, wielded enormous power. For example, he regulated the chieftainship's succession, appointed guardians to minor chiefs, partitioned existing villages, formed new villages, appointed new chiefs, and determined the chiefs' occupy the boundaries of villages and areas.

The Chin Hills Conference (1892) addressed administrative issues concerning newly acquired areas such as the Lushai and Chin Hills. It delegated the task of preparing the budget draft to Mr. W. Davis, the North Hills' Political Officer at the time. The estimated expenditure under the heading 'Medical' was Rs 14,652 among the five major budget heads (Police, Political, including Transport and Commissariat, Medical, Public Works, and Postal service). It also suggested that the existing Covenanted Civil Surgeon in North Lushai Hills be replaced with a Civil Surgeon from Aijal (later Aizawl) and that two Assistant Surgeons be created, one for Tlabung and the other for Lunglei (Diary of Davis, 1892).

IV

The Sway of the Raj and Modern Medicine

The health care system during the Raj needs to be understood in the larger historical, social, and economic context of South Asia. Recognizing that the ideas and practices of medicine were entwined with the colonial state's mechanisms of exploration and control is crucial to understanding the scope of the medical evangelization effort, which involved many different organizations (Arnold, 1993). In the beginning, only colonial administrators, military personnel, and the many labourers who followed the trails of the Raj and the Empire building in these mountainous frontiers had access to western medicine and health services. Medicalisation and health services were prioritised with the intention of transforming the formerly rebellious tribes into submissive Imperial subjects (Chakraborty, 2021). Medical care at the Civil Hospital in Aijal was originally only available to colonial administrators, their staff, and the entourage of coolie labourers involved in the construction of Aijal (Lalthanliana, 2008, p.165; Shakespear,

(1927) 1977, p.99). It was in 1894 that Aijal saw the opening of a treatment camp, which served to provide medical care to the area's labour force (coolie dispensary). In 1896, it underwent renovations to become a dispensary with twenty beds. Available records suggest that the British may have established the eight-bed dispensary at Champhai in February 1896, making it the earliest dispensary in the Lushai territory (Ralte, 1990, p.8).

According to the 1904 edition of the Gazetteer of Bengal and North-East India, the District had seven dispensaries and five military hospitals with room for 144 in-patients. Out of the total number of patients seen, 34,000 were outpatients, 1,200 were hospitalised, and 300 underwent surgery at a cost of Rs 14,400, all of which was covered by the Province (Allen et al., 1993, p. 467). Hospital Aides supervised these dispensaries. While doing so, the Civil Medical Officer/Civil Surgeon would conduct semiannual inspections to check on the dispensaries' overall health, including their cleanliness, water quality, medicine supply, and food distribution. Individual missionaries and medical professionals made significant contributions to the rapid spread of medicine in these borderlands. They faithfully carried out their responsibilities to both the Empire and the God. Dr. Frazer was one of the missionaries who had a significant impact on medicalisation among the *Zo hnahthlak*. During his brief tenure, Dr. Frazer preached the Gospel and built a large dispensary, for which he paid 233 pounds out of his own pocket rather than through the missions. We saw in Frazer's work how the interests of the colonial government and the interests of missionary work converged and sometimes conflicted, but eventually found ways to agreeable terms (Lloyd, 1991).

By 1922, there were a total of eight fixed dispensaries in the North and South subdivisions, with two additional 'Traveling dispensaries' serving the outlying areas. During that year, 91,196 people in the hills were treated with medication, according to records kept by Challiana (Challiana, 1923, pp. 263-264). 98,406 people were living in these hills as of the 1921 census (Census of India, 1921, Table IV, p. 26). Despite the scarcity of dispensaries on the frontier, these records reveal the scope and magnitude of colonial medical services. This may be accounted for by the buffering effects of these 'Traveling dispensaries.' The mobile dispensaries helped the Empire provide medical aid to the frontier tribes who did not welcome the white settlers.

The colonial government instituted a system of subsidising private practitioners in these areas through the Resolution on the Regulations for Government subsidised Medical Practitioners in 1937. In accordance with this plan, qualified physicians were offered a monthly subsidy from the government in addition to an initial and ongoing grant to purchase medicines and medical appliances in exchange for providing free care to the local tribes in exchange for relocating to specific villages (Proceedings of the Governor of Assam in the Local Self Government Department, No.4224, 1937). They were also given the freedom to establish their own private practices and charge whatever rates they deemed appropriate for their services.

In 1939, after the aforementioned regulation was enacted, the Lushai Hills allocated funds in their annual budget to hire a government-funded medical professional. Historically, the first Mizo doctors were Licentiate Doctors who had studied at the Berry White Medical School in Dibrugarh, Assam. In 1910 and 1916, Laltawnga, Lalhluta, and Thuama became the first

Mizos to earn their Licentiate Medical Practitioner (LMP) diplomas from this school. Twenty-five Mizo Licentiate Medical Practitioners (LMPs) worked in the period between 1911 and 1950. It was not until 1948, when the Assam Government opened the Assam Medical College that the Government of India officially allowed LMPs to enroll in the Bachelor of Medicine and Bachelor of Surgery programmes there (MBBS). Lalthanliana, Doliana, and Tlanglawma are three Mizo LMPs who have completed their MBBS degrees (Lalthanliana, 2008, p. 159).

On April 1st, 1940, the first government-funded dispensary in Lunglei's South Vanlaiphai neighbourhood opened. In the beginning of his career, Dr. Chawnghranga (LMP) worked as a government-funded doctor (Letter from Gupta, No. 1368, dated 18.4.1940). The South Vanlaiphai dispensary served its patients well; however, its medical director was recently promoted to the Assam Provincial Cadre. After a few months, without a doctor on staff, the clinic had to close until more Mizo doctors could be hired. Therefore, in addition to government-run medical facilities, a push was made as early as 1940 to employ local doctors on a subsidised basis in remote areas (Chakraborty, 2021).

Hospital work was essential in the early twentieth century as one of the primary aspects of health care provided by the colonial authority. Under British rule, the Inspector General of Civil Hospitals oversaw medical facilities across the country. Indians who had completed their medical schooling were promoted to the position of Assistant Surgeon, and the provinces were further subdivided into districts, each of which was supervised by a Civil Surgeon (Lalthanliana, 2008, p. 163). In addition, the Sub Divisional Medical Officer was given responsibility for all hospitals in the various District Headquarters and Sub-Divisions (SDMO). The holders of Licentiate Diplomas conferred by various Medical Schools occupied the bottom rung. No one other than a British officer could hold the position of Civil Surgeon or one above him. Army surgeons were traditionally promoted from the ranks of captain and major. When they were deputed to the civil service, they were given the title of 'Civil Surgeon' (Lalthanliana, 2008, p. 163).

Major J. Shakespear's construction of the 'Aijal Civil Hospital' (now Aizawl Civil Hospital) in 1904 and 1905 was a watershed moment in Mizoram's medical and health care history. Initially serving as a treatment camp for non-Mizo labourers, the colonial authorities soon realised that a new and larger hospital was required to meet the needs of the growing population. The hospital was far from satisfactory during its early construction and suffered from a lack of facilities. The main building, the outdoor dispensary, the kitchen, the godown, and an isolation ward could only house about thirty patients. In the beginning, the hospital was overseen by a senior Licentiate Medical Practitioner (LMP) Doctor. Another LMP doctor was assigned to oversee the outdoor dispensary. The Civil Surgeon's expertise was sought depending on the nature of the surgery. As the population grew and public demand increased, other headquarters dispensaries such as Champhai, Lunglei, and Kolasib were elevated to the ranks of hospitals.

The Assam Rifles cantonment hospitals in the Lushai hills also provided health services to the people in their immediate surroundings. To ensure peace and security along China's and Burma's borders, the colonial government stationed Military Police Battalions (MPB) in five strategic locations. Captain G.H. Loch established a separate unit, the 'North Lushai Hills

Military Police Battalion,' in the North Lushai hills at the end of 1893. This naturally necessitated the establishment of a hospital to meet the needs of the military. The hospital was assigned to the Inspector General Civil Hospital Charge, Assam, who is also in charge of the Assam Health Services as a whole. However, such Battalion hospitals were supervised not by Army doctors, but by Civil Medical Officer Grade Eleven (Lalthanliana, 2008, p. 182). Another military hospital was established in Lunglei in the 1940s in the south hills. The 1st Assam Rifles also established the Loch Memorial Hospital (LMH, named after Captain G.H. Loch), also known as 'Hmeichhe Damdawi in' (lit. 'Women's Hospital') in Khatla, Aijal. It was a small maternity hospital supervised by a qualified midwife. Medical doctors were repeatedly consulted in emergency situations. Due to population growth, dispensaries in Aijal and Lunglei were upgraded to full-fledged Civil Hospitals in the 1940s.

In South Lushai Hills, the Christian Medical Center Serkawn, or 'Serkawn Hospital,' was founded in 1919 and incorporated in 1923. Initially, the idea for a hospital came from a nursing school and dispensary run by a Baptist Missionary Society London missionary nurse named Miss E.O. Dicks (Pi Dawki). Dr. Hanley G. Stockley (Dr. Zomuana) and Miss Jean Stockley engaged in spreading the mission and the message among the southern tribes through their service in Serkawn Hospital (ZBCPL, 1990, pp. 268-280).

 \mathbf{V}

An Evaluation of the Hills' Medicalisation

Rev. Lorrain and Rev. Savidge wrote a new chapter in the history of education and medical work in southern Mizoram. Rev. Savidge was in charge of education and medical work from the beginning of missionary operations until the arrival of medical missionaries. Rev. Lorrain was in charge of evangelism, Sunday schools, and the Church at the same time. When the two missionaries returned to England after a four-year stay in Mizoram, they enrolled in Livingstone College in 1898-99 to study tropical diseases and tropical hygiene (Lewis, 1907, p.40). Their medical knowledge proved extremely useful in their missionary work in the South Lushai Hills.

As a result, Rev. Savidge's living quarters were converted into a dispensary. Rev. F.W. Savidge reported in the Annual Report of the BMS on Mizoram, 1901-1938, that medicines were dispensed within the dispensary to patients suffering from malaria, dysentery, chest and stomach troubles, several cases of ptomaine poisoning, worms, abscesses, and ulcers (Report for 1923, p.193). According to the Annual Report of the British Medical Society on Mizoram, 1901-1938, J. Calow of Redcar, a wholesale druggist in Yorkshire, consistently supplied Mr. Savidge with large consignments of medicines (Report for 1909, p.68).

Preaching tours were also conducted in the surrounding villages, and medical assistance was provided to the people. As a result, people's faith in the missionaries' medical assistance grew, which was reinforced by the new faith of Christianity. The two mission pioneers testified that western medicine was an important tool in converting the Zo people to Christianity (Vanngaia, 1993, p. 681). The missionaries also acted as middlemen between the government

and the people for the sale and free distribution of government quinine, with the government sending Mr. J.H Lorrain a regular supply of quinine at wholesale rates every year. According to the BMS Annual Report on Mizoram, 1901-1938, approximately seventy Sunday school superintendents became honorary agents to sell the government quinines (Report for 1915, p. 127). The profit made from the sale of each phial enabled the agents to provide it free of charge to the very poor. The missionaries also trained some Mizo boys who were sent to Christian Hospital in Chandraghona (CHC) in Bangladesh (East Bengal before the partition). Others qualified as government dispensers and compounders as well (Bowser, 1928, p.243). Miss O. E. Dicks and Miss E. M. Chapman (alias Pi Zirtiri in Mizo) were the first two BMS missionaries from England to arrive in 1919 (The Annual Report of BMS on Mizoram, 1901-1938, Report for 1919, pp. 152-153). Nurse Dicks attended to the women and children who came to her with various ailments from the beginning, some of whom travelled long distances to see her. Soon after, a small dispensary in the form of a thatched hut was constructed to distribute medicines to women and children. Other mission nursing sisters, such as Miss M. Clark and Sister E.M Oliver, arrived in the south Lushai hills between 1921 and 1923. Apart from meeting people's needs, Bible lessons, baby welfare, and hygiene classes were held. In addition, orphaned infants in need of care were brought to the missionaries and placed under their supervision.

The annual visits were still used as opportune moments by the local pastors. They would hold evangelistic services among those waiting to see the doctor, visit the patients, lead Sunday evening prayers, and even serve in the ward. To meet the needs of the people, an ante-natal clinic was established in 1930. Young mothers and their firstborn children were invited to the clinic to combine antenatal and postnatal care. Subjects such as baby care, the importance of health, hygiene, and cleanliness were taught at each clinic. The mission sisters' medical work was inextricably linked with their Gospel preaching. Services were held on a regular basis on the ward, and Mizo nurses assisted with outpatient services once a week. On Sundays, the Pastors and others would also visit the ward to speak with the patients. Combined medical tours led by mission nurses provided additional opportunities for contact with those who had never visited the mission compound.

In addition to the medications available at the mission dispensary, the missionaries would occasionally travel to the homes of those in the community who were too ill to make the trip to the dispensary, where they would give them medication and pray with them as needed. When epidemics swept through towns, the medical help provided by the missionaries was a godsend for the tribes in these borderlands. As an additional service, the government set up dispensaries in selected rural areas. However, these were in short supply, so most villagers had no way of taking advantage of them.

 \mathbf{VI}

The Ascension of the Lushai Medical Practitioner

The medical missionaries were aware that their small team would be unable to make frequent trips to the villages that were further from their base of operations. Instead, they focused on providing the locals with the proper medical education and training so that the villagers could diagnose and treat their own illnesses. In addition, the limited amount of medicine that could be distributed during these tours imposed a limit on the number of patients who could be treated simultaneously, limiting the number of people who could be helped at any given time. As a direct result of these factors, medical missionaries viewed the establishment of health centres as a crucial aspect of their work. Even if all of the dispensaries were opened, there were not enough appropriately trained medical personnel to staff them. Therefore, it was suggested that the medical missionaries identify specific members of the Zo population for training in fields such as medicine, sanitation, and public health. This would enable them to provide healthcare within their own communities, rather than relying on expensive and sometimes inaccessible colonial medical services. This marked the ascent of the Lushai health care professional trained in western medicine.

People's faith in medical missionaries and their medicines grew over time, as evidenced by the Baptist Missionary Society's Annual Reports for 1908, which stated, 'People have great faith in our drugs..... they have rather too much faith sometimes, for some imagine it is quite sufficient to have a pill in the bag they are carrying' (The Annual Report of BMS on Mizoram, 1901-1938, Report for 1905, p.23; Report for 1908, p.56). For some, simply 'putting them under their pillow instead of in their mouths' is enough to cure them (The Annual Report of BMS on Mizoram, 1901-1938, Report for 1911, p.79). Resistance to missionary medicine and health care had begun to fade over time, as evidenced by the growing number of people seeking treatment at mission stations. The Zo people had great faith in the missionaries' abilities, and their medicines (Llyod, 1991, p.31) which sparked a wave of medicalisation.

Utilizing funds from the mother church, dispensaries were established in district villages. The medical missionaries also established a nursing school in order to train locals to continue the healing work. In 1928, Dr. John Williams, LMP (also known as Pu Daka in Mizo) founded the *Welsh Mission Hospital Nursing School* on a hillock in Durtlang named Derhkentlang. Medical missionaries Dr. Gwyneth P. Roberts and Miss Gladys M. Evans (known as Pi Hruaii in Mizo) exerted extraordinary effort to bring the Nursing Training School to the remote villages (Llyod, 1991, p.281).

The Census of India, 1911 (Vol. III, p.139) also noted the presence of sweepers for every fifty villages, resulting in significantly cleaner village surroundings. Aside from that, with the need to educate the public on healthy and hygienic living practices, the colonial government adopted the practise of recruiting local people to serve as torchbearers in 1911. As a result, three people were hired: two for the Aijal division and one for the Lunglei Sub-division (Chala, 1913, p.62). Their primary responsibility was to visit the various villages and encourage and propagate the various government orders, particularly those pertaining to street sweeping and cleaning, among others. Although such government initiatives arose from the need to combat and control the various diseases that claimed people's lives, it was also believed that educating and directing the masses to live in clean environments would secure health for all in the long run.

In addition, the colonial rulers collected Personal Residence Surcharge (PRS) from residents of the two headquarters of Aijal and Lunglei. Although the purpose of the PRS was to keep the Lushais/Mizo/Zo isolated from outsiders and to control the growing population of the

towns, it was also a policy to protect or prevent the tribe from communicable or alien diseases. The government issued an order in 1927 stating that 'all foreigners entering the district must appear before the Civil Surgeon, Lushai Hills, and the Sub-divisional Medical Officer, Lunglei for examination to determine whether they are free from Kalaazar, Malaria, and other infection and contagious diseases' (Notification, The Governor-General in Council, 10th March 1932). The Sub-Inspector of Aijal and Lunglei was tasked with immediately producing all foreigners arriving or entering Mizoram.

The Khawchhiar (Village Enumerator, one of the many new hierarchies of officials established during colonial rule) was to report any epidemic to the Circle Interpreter (*Chaprasi*) of the Circle in which the outbreak occurred, stating the number of deaths and persons affected by the disease. If the outbreak occurred in Lunglei Sub-Division, the Circle Interpreter would report to the Superintendent, Assistant Superintendent, or Sub-Divisional Officer, Lunglei. Similarly, the Assistant Sub-inspectors of Kolasib and Sairang (similar to the Circle Interpreter) would report epidemic diseases in their respective posts. In such cases, the Public Health Doctor was immediately dispatched to the affected village or area to assess the people's health. The Vaccinators were yet another prominent figure appointed by the colonial government across the Zo territory.

Mizo doctors who had completed their MBBS at Medical Schools were designated as Hospital Assistants. Dr. Thuama, the first Mizo doctor to enter government service, was named a Hospital Assistant (Lalthanliana, 2008, p.168). The title Hospital Assistant was later changed to Sub- Assistant Surgeons (SAS), and then to Assistant Surgeon Grade- II. Furthermore, the position of compounder was created for those who had completed at least one year of schooling in medical schools. Mr. D. Thianga, who graduated from the *Dhaka Medical School* in 1908 (Sailo, 2013, p.3), was the first Compounder (Lalthanliana, 2008, p.168). With the prior permission of the Civil Surgeon, qualified compounders were issued passes for the sale of medicines. Passes were restricted as much as possible to those willing to sell medicines in areas where there was no hospital. Passes were issued on a circle basis where there were no Compounders to sell medicines for easy administrative control. Compounders held important positions in rural government dispensaries, right next to medical officers.

Closing Observations

The establishment of the Lushai Hills Cottage Industries by Major A.G McCall, the then Superintendent of the Lushai Hills, was an ingenious government endeavour that indirectly improved public health. It was established in May 1936 to channel Mizo indigenous weaving talent into marketable channels (McCall, (1939) 1980, p. 4; Notification No. 900. E, 1924 in Mizo leh Vai Chanchin Lehkhabu, April 1924, pp. 93-94). The government purchased 'pawnpui te' (smaller versions of Mizo quilts) from villages that were able to weave them and earn a living in the process as part of the Lushai Hills Cottage Industries initiative. The government's 'pawnpui te' was then sold in markets such as Calcutta, Bombay, and Silchar, Assam, for prices commensurate with its quality. It was also marketed in countries other than India, including the United Kingdom, the United States, Australia, and New Zealand (Liangkhaia, 1976, p. 119). One of the resolutions proposed by the Lushai Hills Cottage Industries stated that it would be the responsibility of the Chiefs, Pastors, Church leaders, and village Welfare Committees to raise

awareness among weavers about the importance of weaving 'pawnpui te' that was not only clean but also tightly woven (McCall, 1938, pp.52-53). Communities that produce at least 200 rugs per year received a 5% rebate on each rug purchased at full price by Reid House. Half of the rebate went to the Welfare Committee, with the other half going to the Chief in recognition of custom and the fact that he has had to encourage the people to become more industrious for their own good (McCall, (1939) 1980, p.276). As a result, funds were made available to Village Welfare Committees for use in the welfare of their villages. According to Dr. A.Z Choudhuri, then Secretary of the Indian Red Cross Society, Lushai Hills District Branch, 'certain chiefs such as Lalluaia Sailo, chief of Reiek village (a few kilometres west of Aizawl), used his prize money to hire a nurse in his village for women's welfare' (Letter from Chaudhuri, No 706, dated 26.2.1940). Similarly, after receiving their awards, Lalsailova Sailo, chief of Kelsih village, Neihrima Lushai clerk, Aizawl, and Chhuanvawra Sailo, chief of Muallungthu (a few kilometres south of Aizawl), made good use of it for the development of health and other welfare measures within their village (Letter from Chaudhuri, No 706, dated 26.2.1940).

Colonial encounters and the wave of proselytisation instilled a new way of life among the Zo people amidst limited health services and a severe shortage of qualified health personnel-doctors, nurses, midwives, health educators, and so on. The traditional medicine men and healers were replaced by these newly appointed native doctors, compounders, and vaccinators among the 'Zo hnahthlak'. Under the sponsorship of colonial rule in the frontier spaces, they formed an emerging class of educated Lushais (Superintendent, Lushai Hills, General Notice, 1934, p.1; Mizo leh Vai Chanchinbu, October 1936, p.191).

The natives began to see middle-class western education as a legitimate path to coveted positions in the government and government-aided services. The colonial administration's policies, backed by the goal of missionary engagement in these wild frontiers, opened new doors and allowed for the emergence of a formidable middle class. Among the 'Zo hnahthlak', Christianity thus began to be associated with medical care, education, the English language, and a more prosperous material life. The education policy created the impression that 'education' and 'Christianity' were the only paths to salaried jobs and freedom from the drudgery, toil, and uncertainty of agriculture. Having a missionary education began to signal the certainty of obtaining government jobs or any other modern salaried occupation, including but not limited to evangelical pursuits that frequently doubled as a medical professional. This permanent 'cashpaid' ('pawisa'/ 'sum chhuana' in Mizo) occupation appeared to be a ready-made solution for the semi-migratory tribes involved in the precarious *Jhum* economy (Chakraborty, 2016). Those involved in Empire building and the missionaries devised ingenious ways to alleviate the significant financial burden and generate revenue while taming the wild tribes to work for the Empire and become obedient subjects (Chakraborty in Gooptu (ed) 2020). The natives had to hold on tight to make the huge transition from 'untamed, uncivilised, children of nature' to 'tamed, civilised, children of 'Her Majesty'- the 'Kumpinu' (Chakraborty, 2021). As a result of this contact, medicine's role as a tool of social control expanded, and the 'Zo hnahthlak's daily lives became dominated by medical concerns and not limited to health concerns. This discussion of the extent of the Raj's medicalisation sheds light on the arduous process of colonial intervention and proselytisation amongst the 'wild tribes' in these frontier regions of the Empire. Significant information buried in colonial documents and ethnographic accounts has been sifted

and pieced together to reveal what occurred when western medicine, health care, and proselytism struck the Zo people.

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CHRISTIAN MISSIONARIES IN BURMA: CHALLENGES AND RESPONSES OF THE PIONEER AMERICAN BAPTIST MISSIONARY ADONIRAM JUDSON (1813-1850)

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The Catholics and Protestant missionaries had limited success in converting local people in Burma as Buddhism was deeply entrenched there. While the Burmese king welcomed the contribution of the missionaries in the field of education and sought their advice in diplomatic negotiations yet he restricted their activities in order to preserve religious support for his authority. The proselytizing acts of the missionaries coupled with their efforts at improving the health and educational aspects were mainly concentrated among the minority groups like Karens, Talaings or Mons. Their activities were caught up in the dynamics of the inherent antagonism between the different minority groups and the Burmese, Anglo Burmese War and politics of missionary societies. American Baptist missionaries like Adoniram Judson (August 9, 1788 – April 12, 1850) went to Burma and left behind an enduring legacy of missionary zeal. My paper deals with the challenges faced by Adoniram Judson in his ardent desire to spread the message of Jesus in the East that took him 160 days to reach.

Early Christians and Catholic Missionaries in Burma

The existence of a Christian community in Myanmar may be traced back as early eleventh century. They preceded the missionaries who came to Burma in the sixteenth century and the centuries that follow. Two paintings in the ancient city of Pagan, the capital of the first Burmese kingdom indicate that some Christians might have come there as early as the eleventh century or a bit later. One of the paintings is a fresco of the Cross in the cave temple of King Kyansittha who reigned from AD 1084 to AD 1113. The other painting is found in the Ko-Byauk-Gyi Pagoda in the same spot of ancient pagodas and religious edifices. The painting is, or to a great extent resembles, a depiction of "the Last Supper." There is a controversy about the origin of these Christian men.²

However, the actual existence of the first Christian communities in Burma is thought to be only in the 13th century when some expatriate Christians from Europe came along with the European traders for a better life and settled down in different parts of the country. Nicolo Conti, the famous Italian traveller visited Pegu as early as 1435. After the discovery of the route to India by Vasco da Gama in 1497, Portuguese missionaries set out for the Far East to serve as chaplains to Portuguese soldiers, sailors and settlers. The rich land of Burma attracted these Portuguese traders and they came to Burma by 1510, after having founded Goa in India as the seaport to the East.³

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Roman Catholic priests from Portugal and Italy were the first Christian missionaries who arrived in Burma before the famous American Baptist Missionaries like Adoniram Judson or Justus H. Vinton. In 1719 Pope Clement sent a mission to China led by Mezabarba, the Patriarch of Alexandria. Before his return to Europe the Patriarch appointed two priests Vittori and Calchi to Ava, Pegu and Martaban. Upon arriving in Syriam they discovered the existence of two Portuguese chaplain in charge of the descendants of their countrymen in Burma. The two priests Vittori and Calchi had no knowledge of Burmese language and hence made no attempts to convert the Burmans and did their work in Portuguese.⁴

Vittori and Calchi headed towards Ava where they met the Burmese king Taninganwe. They were given the permission to build churches and to preach their religion. Calchi built a chapel at Ava. Benedict X appointed one Gillizia as Bishop of Burma. A Catholic priest Nerini, preached his religion publicly. Roman Catholic worship was allowed to be done openly was no restrictions on religious processions. A Mon rebellion in 1745 led to a massacre of Christians in Syriam. Nerini initially fled to India but later returned to Ava and established a Church there. The Roman Catholics also have the distinction of establishing a theological college for men at Ava and an orphanage for girls at Syriam. In 1770 they had a Church at Pegu and a College at Monla. However, the Burmese Buddhist Monks or Pongyis⁵ pulled down the structures making the Catholics build a large church and a convent at Dagon (Rangoon). In July 1783, Italian missionaries, Father Sangermano and Joseph Amato, arrived at Rangoon. Sangermano stayed in Rangoon, Lower Myanmar, and all the other Italian missionaries went to the Upper Myanmar mission located in Ava, then the capital city of Myanmar (1966:19).

In 1756, King Alaungpaya of Burma brought over some French and European prisoners from Syriam and made them settle down at Ava. By the end of the century almost one thousand of their descendants were inhabiting six villages in Ava, the largest concentration being in Kyunta-yue with about one hundred villages. The priests of these villages 'conducted their services in Latin, dressed like Burmans, and were notorious for their immorality'.⁸

The Catholic missionaries who introduced Christianity to Burma in the sixteenth century had to toil hard as they had to learn to cope with difficult situations in a foreign land. Some of them even laid down their lives for their mission. However, their mission ended without winning many native Burmese converts because their main purpose was to minister to their Portuguese expansionist merchants, rather than evangelizing and converting the native Burmese to the Christian faith. Those following them in the seventeenth and eighteenth centuries did the same, again without any tangible success in their efforts of evangelism among the native Burmese.⁹

Father Sangermano stated that by the last quarter of the eighteenth century the number of Christians scattered over the entire country numbered approximately 2,000. 10 Roman Catholic mission in Myanmar did not mention about any Burmese convert. The 2,000 Christians scattered over the country might have been foreigners or people of non-Burmese indigenous groups. These Roman Catholic missions lasted about two centuries before the arrival of Protestant missionaries in Myanmar. During these two centuries, no particular resistance to Christianity by the Burmese Buddhist kings were noticeable. Rather the Burmese kings granted religious freedom to the Roman Catholic missionaries, at least to a certain extent.

The Protestant Missionaries in Burma

The Protestant Mission was pioneered in 1807 by the English Baptist Missionaries, Richard Marden and James Charter, who came from Bengal (Serampore) in India to see the possibilities of a mission in the country. Marden did not stay long in Myanmar and was replaced by Felix Carey, son of William Carey. William Carey (17 August 1761 – 9 June 1834) was one of the most remarkable English Christian Baptist missionary -- a self-taught linguist, pastor, and visionary who paved the way for the modern missionary movement. He settled down at Serampore in Bengal and is hailed as the father of modern missions. Felix Carey and Charter studied the Burmese language, translated extracts from the Old and New Testaments into Burmese and compiled a Burmese dictionary and grammar. The London Missionary Society made a brief attempt in 1810 to establish a mission in Burma and two missionaries Edward Pritchett and Jonathan Brain were sent to Rangoon for this purpose.

This mission soon failed as a result of the outbreak of war and the death of Edward Brain. Jonathan Pitchett abandoned the mission and left the country. James Charter too gave up the mission activity and left for Ceylon. Only Felix Carey stayed back in the land of Myanmar. Carey married an Anglo-Burmese woman, the daughter of Portuguese father and Burmese mother, and had two children. He was offered a position in the government affair to serve as a physician and a negotiator with England in India by the king of Myanmar. Carey eventually gave up his missionary career and entered into the service of King. He moved out of the mission house in Yangon and left for Ava where the King lived. With his departure English Baptist Mission work was terminated. James Knowles the biographer of Mrs Ann Judson the wife of famous American Baptist Missionary Adoniram Judson stated, 'When Mr. Judson arrived, Mr. Carey had gone to Ava, by order of the King. Thus had every attempt of the English Missionaries failed, and this fact seems to show still more conclusively, that God reserved for the American Baptist Churches the duty of establishing and sustaining the Burman Mission.' 12

American Baptist Missionaries

A number of American Baptist Missionaries came to Burma to spread the gospel of Christ. Among them Adoniram Judson deserves special mention. He was one of the first American missionaries who took up the mission to spread the word of Christianity in South East Asia. It was political compulsions that made him to shift his base to Burma from India. In Burma too he often faced political and religious ostracism by the Burmese people and monarchy

Born on August 9, 1788, in Malden, Massachusetts, into the home of a strict, domineering Congregational minister, Adoniram Judson was a bright child. At age 14, he was critically ill and took more than a year to convalesce. He was a voracious reader. It was about this time that he read *Embassy to Ava* by a British sea captain named Michael Symes. It undoubtedly influenced Judson later regarding his mission to Burma. By his 16th birthday in 1804, he was ready to enter college. He was a very brilliant student. His father sent him to Rhode Island College (Brown University) from where he graduated as valedictorian of his class at the age of nineteen.

After his conversion Judson continued as a regular student at Andover and became known for his devotion to the Bible. He was aware of the work carried on by William Carey the learned, and pious Professor of Oriental languages, in the College of Fort William, at Calcutta.¹³

William Carey's, publication of his Enquiry in 1792, advocating the British Baptists to support an effort to take the gospel to "those who have no Bibles, no preachers, nor many other common advantages which are taken for granted at home" impressed Judson. By the early nineteenth-century, many in America were supporting Carey's work. But Claudius Buchanan, an Anglican priest and a chaplain in the East India Company, was to have a direct and lasting influence on Judson's call to mission service.

In one of his most popular sermons, *Star in the East*, published in Massachusetts Baptist Missionary Magazine in 1809, Buchanan's urge to take Christianity to the East is revealed. The description of his passionate desire to see the translation of the Scripture into various languages motivated Judson. Buchanan writes, 'When the Gospel was first to be preached to all nations, it was necessary to give a diversity of tongues; a tongue for each nation; and this was done by the Divine Power. But in this second promulgation, as it were, of the Gospel, the work will probably be carried on by a diversity of translations, a diversity of Scriptures; a translation for each nation. Instead of the gift of tongues, God, by his providence, is giving to mankind the gift of Scriptures'. It increased Judson's reverence for Bible and fuelled his desire to translate it. Courtney Anderson, the biographer of Adoniram Judson writes, 'a civilized society in the East that was completely pagan and without the Word of God, held forth a great opportunity in the mind of Judson'. In the mind of Judson'. In the Indiana purpose to take Christianity to the East that was completely pagan and without the Word of God, held forth a great opportunity in the mind of Judson'. In the Indiana purpose the East that was completely pagan and without the Word of God, held forth a great opportunity in the mind of Judson'. In the Indiana purpose the East that was completely pagan and without the Word of God, held forth a great opportunity in the mind of Judson'.

The newly formed American Board of Commissioners for Foreign Missions consulted with the London Missionary Society and voted, on September 19, 1811, to appoint Adoniram Judson, Samuel Nott, Samuel Newell, and Gordon Hall as missionaries "to labor under the direction of this Board in Asia, either in the Birman [sic] Empire, or in Surat, or in the Prince of Wales Island or elsewhere, as in the view of the Prudential Committee, Providence shall open the most favorable door."¹⁷

Call to the East

On February 19, 1812, Adoniram and his wife Ann Judson departed for the East and arrived at Calcutta on 17 June. They were warmly welcomed by Dr. Carey and invited to visit the settlement of English Baptists at Serampore, a town about twelve miles from Calcutta, up the Hugli River. Judson during the voyage thoroughly examined the question of Infant Baptism and mentioned to his wife that he felt that the Baptists were right and he was wrong. On September 6, William Ward, another pioneer English Baptist missionary from Serampore had Adoniram and his wife Ann Judson baptised in the Lall Bazar Chapel in Calcutta. The embrace of Baptist principles by Adoniram and Ann Judson in 1812 is considered to be one of the most important events in the history of the American Baptists.¹⁸

Ann Judson in a letter to her friend in America explained why they agreed to be baptised. 'We procured the best authors on both sides, compared them with the Scriptures, examined and re-examined the sentiments of Baptists and Pedobaptists, and were finally compelled, from a conviction of truth, to embrace those of the former. Thus, my dear Nancy, we are confirmed Baptists, not because we wished to be, but because truth compelled us to be. We have endeavored to count the cost, and be prepared for the many severe trials resulting from this change of sentiment. We anticipate the loss of reputation, and of the affection and esteem of many of our American friends. ... We feel that we are alone in the world, with no real friend and on whom we can depend but God'. ¹⁹

Judson's immediately resigned their commission from the Congregational Board and wrote to the American Baptists Rev. Dr. Baldwin, of Boston, and Rev. Mr. Bolles, of Salem requesting them to use their influence to secure the cooperation of the Baptists of the United States. Dr. Marshman also appealed to Dr. Baldwin in behalf of Mr. Judson. The Baptist Missionary Society of Massachusetts was formed before 1803 and they provided financial aid to Serampore and worked together. Mr. Judson, therefore, must have known from personal observation that the Baptists of America were already engaged in the work; and Dr. Carey must have told him of the interest some American Baptists had long been taking in the missions in the East.

The East India Company was not very pleased with the arrival of the American Baptist missionaries. 'Missions will interfere with trade.....If these fanatics try to change the religion of India it will bring on a terrible race war'²¹ this was the official reaction. Within ten days of their arrival the Judsons and Newell's were summoned to Calcutta and were ordered to leave for America.²² It was no longer advisable for them to stay in Calcutta and hence they sailed to Mauritius, where they remained four months, doing missionary work among the English sailors of the garrison, and afterward departed for Madras. On reaching Madras they learnt about the order for the transportation of the American missionaries from Bombay to England, and fearing a similar fate they sailed at once for Rangoon, the principal port of the Burmese empire.

Baldwin had asked Carey about the feasibility of the Judsons' missionary work in Burma. Carey perhaps recommended Burma as his son Felix Carey (1786–1822) was already working there as a missionary. Besides, Carey believed that the Burmese government was 'not intolerant in religious things.' ²³ Foreigners living in Burma were not considered as King's subject. They enjoyed total freedom of worship irrespective of their religion, Catholicism or Protestantism, Hinduism or Islam. Their wives and children whether Burmese or otherwise enjoyed the same freedom. They had the liberty to freely preach to their co-religionists and their priests and missionaries could minister to their own people without any interference²⁴.

Life in Burma

The Judsons eventually arrived in the Burmese kingdom on 13July 1813. Felix Carey and his wife immensely supported the American missionaries to settle in Rangoon and appreciated their role as missionary co-workers. He wrote to his father some months later about the Judsons, "They are just cut out for the [Burmese] Mission,... Mr. Judson has a splendid grasp of the [Burmese] language and is the very colleague I wanted." However the missionary partnership between the Judsons and Felix Carey and his wife was short-lived as Felix had joined the service of the Burman majesty. But Felix's assessment about the Judson's was accurate as the missionary couple would eventually make a great impression as devout missionaries in a tumultuous situation. They were caught in the vortex of Anglo Burmese Wars and dynamics of court politics.

After Felix departed it seemed unlikely that the government would tolerate the work of any further missionaries. Adoniram and Ann Judson entered these foreign and unstable conditions in 1813. In the initial days no overt opposition was encountered as evangelisation was not possible until some of the language had been learned. Both were gifted linguists, but mastering the Burmese language was no easy task. 'With no punctuation, and no word, sentence or paragraph divisions, the language flowed in a seemingly identical stream. Two years of study

for twelve hours a day was needed before real Gospel work could begin'. 26

Very soon after that, Adoniram produced the first Burmese tract and started translating the New Testament while his wife Ann produced a Catechism, which summarised Christian teaching. It took them five years of interaction (1813-1818) with the local people before they saw their first conversion. She decided to wear the colourful dress of the Burmese women and to learn their customs in order to reach out to them. She formed a society of native women that met together on Sundays to pray and read the scriptures. During this time, Adoniram adopted a culturally appropriate means of communicating with the local people through the zayat. A Buddhist zayat was specially but not exclusively a place of worship. ²⁷Judson used the zayat for propagating Christianity among the local people. He also communicated with the Burmese and held worship service at the zayat. They hesitated to go to mission house but felt free coming to and worship at zayat²⁸.

Adoniram Judson began his zayat ministry in April 1818 and the very next year (1819), he baptized the first Burmese convert, a man named Maung Nau. Maung Nau visited Judson's zayat several times before he became a Christian. Over the years the numbers increased and by 1836, after twenty-three years of missionary service, there was a total of 207 Burmese Christians, It was indeed no mean achievement when we compare it with Thailand, Twenty-two American Board missionaries who had laboured for eighteen years, 1831-1849, could not make a single Thai convert. In thirty years 1833-1863, the American Baptists made only forty-five converts, chiefly among the Chinese. ²⁹ Judson's success lay in the fact that he studied Buddhism thoroughly and was well versed in the Buddhist scriptures. He explained the concept of sin to the Buddhist by adapting it to the Buddhist notion of suffering and also explained the existence of an eternal being by relating this to the Buddhist concept of nirvana. Judson was probably trying to adapt the basic tenants Christianity to Buddhist worldview.³⁰ This way he could appeal to a greater number of Burmese. Adoniram Judson had to be inclusive because Buddhism was deeply rooted in Burma. Theravada Buddhism dominated the life and culture of the Burmese people. Donald Smith wrote, 'The Burmese people cannot think of nationality apart from their religion, for it is Buddhism which has welded the Burmese together. Therefore, the idea of nationhood owes its inception to Buddhism.'31 D.E. Smith further stated, 'To be a Burman is to be a Buddhist. Therefore, to discard Buddhism is to reject the Buddhist society or the Burmese society'. 32 The kings zealously guarded it.

Judson had to work against many odds. The attempt to introduce a new religion in Burma was eyed unfavourably by the Viceroy of Rangoon. When the Viceroy was informed that a prominent Burman teacher was about to renounce the religion of the empire, he uttered the ominous sentence, 'Inquire further'.³³ In the face of threat of torture and death the group of inquirers around Judson stopped visiting him. The work came to a standstill. In this situation Judson decided to visit Ava and directly speak to the Emperor Bo-daw-pa-ya on this issue. In case he got the approval of the Emperor to propagate Christianity he could be exempted from the annoyance and persecution of the provincial heads.

Judson describes his visit and meeting with the king. He entered 'exhibiting the proud gait and majesty of an Eastern monarch. His dress was rich, but not distinctive; and he carried in his hand the gold-sheathed sword, which seems to have taken the place of the sceptre of ancient times. But it was his high aspect and commanding eye that chiefly riveted our attention'.³⁴ However, Mr. Judson and Mr. Colman returned from Ava utterly disheartened, for their journey

had been a complete failure. They were refused permission by the Emperor to propagate Christian religion among his subjects and in case any Burman renounced Buddhism and became a Christian, he would incur the displeasure of his sovereign.

The American missionaries were not encouraged to purchase land and settle down too. A little plot of land was given to him in Ava but with conditions attached. The chief Woon- gyee said, 'Understand, teacher, that we do not give you the entire owning of this ground. We take no recompense, lest it become American territory. We give it to you for your present residence only, and, when you go away, shall take it again.'35. Judson wanted to open a mission in Ava on that small plot of land handed over to him. The presence of the Emperor in Ava was reassuring for him. He was hopeful of convincing the Emperor of his mission. Mrs Judson opened a school with three girls and preached in Burmese every Sunday.

Things to take a different turn within a year. The warmth exhibited by the royals at Ava were now replaced by a cold indifference. War between the British and the Burmese seemed imminent. When war actually broke out, suspicion fell at once on all the white foreigners residing in Ava. They were suspected as spies secretly working in tandem with the English Government. On June 8, 1824, the emperor gave orders to arrest Adoniram Judson.. He along with other foreigners were immediately arrested, chained, and thrown into the death-prison. "I was seized," Dr. Judson writes, " on the 8th of June, 1824, in consequence of the war with Bengal, and in com- pany with Dr. Price, three Englishmen, one American, and one Greek, was thrown into the death-prison at Ava, where we lay eleven months — nine months in three pairs, and two months in five pairs of fetters. The scenes we witnessed and the sufferings we underwent during that period I would fain consign to oblivion'. 36

In a twenty-one-month period of incarceration during the Anglo Burmese War, he suffered from fever malnutrition and underwent a forced march. However, the courage and resoluteness of his wife led to his release in 1826. But his release came albeit with a condition. Mr. Judson was sent to the Burmese camp at Maloun to act as translator and interpreter in the negotiations of the Treaty of Yandabo with the English Government. He discharged the difficult duty so admirably, that he was afterwards thanked by the Governor-General of India Lord Amherst. Sir Archibald Campbell, commander of the expedition and Senior Commissioner at Pegu and Ava insisted, amongst other terms, upon the release of the Judsons, and they were soon under the protection of the British flag returned to their old station at Rangoon. But Ann could not forget the terrible times, she wrote 'Sometimes for days and days together, I could not go into the prison, till after dark, when I had two miles to walk, in returning to the house. O how many, many times, have I returned from that dreary prison at nine o'clock at night, solitary and worn out with fatigue and anxiety . . . and endeavoured to invent some new scheme for the release of the prisoners . . . the acme of my distress, consisted in the awful uncertainty of our final fate. My prevailing opinion was, that my husband would suffer violent death; and that I should, of course become a slave, and languish out a miserable though short existence in the tyrannic hands of some unfeeling monster' Unfortunately Ann's health had broken down by the sufferings she endured for two years to release her husband and finally she succumbed to cerebral meningitis.

Service Rendered in Moulmein

On 10 August 1827 Dr. Judson left Amherst and relocated to Moulmein ³⁸ where the other missionary couple from American Baptist Union Rev George Dana Bradman and his wife Sarah Hall Boardman were already working among the local people. On 14 November Rev. Jonathan Wade and Mrs. Wades also joined from Amherst with their whole little flock of native converts and inquirers, namely, Moung Shwa-ba, Moung Ing, Moung Myat-poo, Mah Doke, with her husband, Moung Dwah, and Ko Thah-byu, who afterward became the apostle to the Karens. Seventeen female scholars from Amherst also accompanied them. But the death of Judson's wife coupled with the reluctance of the American Christians in sending reinforcements intensified his sadness. He was given five thousand two hundred rupees by the Governor General of India as remuneration for his service at the Treaty of Yandaboo and as member of the embassy to Ava. Besides he received two thousand as presents while in Ava. He donated the full amount to the treasury of the mission.³⁹

However, after spending a year in introspection in the dense forest of Moulmein he returned to his work. The missionaries and their converts began zayat work. Mr. Judson's zayat about two miles and a half north of the mission premises, in a very populous part of the town ("a little shed projecting into one of the dirtiest, noisiest streets of the place"). ⁴⁰ Here public worship was held, followed by close personal conversation with any who desired to become acquainted with the new religion. Apart from the zayat, work at girls' school transplanted from Amherst was working successfully under the guidance of the wives of the missionaries like Mrs. Boardman and Wade respectively. A boy's school was also opened. In spite of all this work he did not lose sight of his literary labours. He continued the task of translating the Old Testament into Burmese. He had begun with the Psalms. The Board at home also wanted him to compile a Burman dictionary.

Judson at Rangoon and Prome

Judson had come to Burma with the intention of penetrating into different parts of the country and was not content to live in one place while being absorbed in work in Moulmein, Judson could not forget Rangoon where he had first set up a Church in 1813 with his wife Ann. In keeping with this spirit Ko Thah-a, one of the original Rangoon converts of Judson was ordained as pastor of the church in Rangoon and on February 21, 1830, Mr. and Mrs. Wade removed to Rangoon to continue the work there. He himself went to Rangoon. From Rangoon he went to up the Irrawaddy to Prome. At Prome initially he met with success, but after preaching in the zayats about two months, his congregations abandoned him.

Judson met with cold and rude treatment in the streets. The dogs were allowed to bark at him unmolested. It was rumoured that the Burmese king at Ava disapproved that Burman religion should be assailed in the very heart of his empire, and ordered the expulsion of Judson from Burma. This order was intended as a warning to the people, who from that time feared to go to his meetings or have anything to do with him. Accordingly, Judson set off to return to Rangoon. 'He retreated only step by step from before Burman intolerance, disputing every inch of the ground'. ⁴¹It was around this time that American Mission Board sent him a warm invitation to visit his country. It was almost eighteen years since he left his country. His health was

breaking down and he suffered personal losses too. Yet he wrote that he would "not feel justified in accepting their invitation to return home." ⁴² Perhaps he was saddened by the neglect he had faced earlier by the American mission or maybe wanted to spread the gospel throughout Burma, a mission he so wanted to accomplish.

Judson returned to Rangoon and went back to Moulmein again. The little church had been enlarged by the baptism of many Burmese, Karens, and Talaings. Two million pages of tracts and translations of Scriptures had been printed. At the close of 1831, Mr. Judson reported, on behalf of the Burman mission, two hundred and seventeen persons as baptized during the year; one hundred and thirty-six at Moulmein, seventy-six at Tavoy, and five at Rangoon.

It was mainly among the tribals like Karens ⁴³, Tailings ⁴⁴or Mon that Judson and his brethren spread the gospel of Christianity. There is no conclusive proof that Karens were enslaved by the Burmans but they were forced to do arduous jobs from time to time. The westerners were looked upon as saviours from the cruelty of the Burmans. The Tailings in the Delta region actively assisted the British invaders in the 1824-25 campaign and also suffered a lot of oppression when British forces were pulled out from Rangoon in 1826. ⁴⁵ Lower Burma Karens had also welcomed the British invaders in 1826 and when British ships arrived in Rangoon in 1852, they felt that their prayers were answered. ⁴⁶

Mission schools introduced literacy among the Christianised Karens and their annual associational gatherings brought about a national consciousness. Christianity attracted the Karens politically because it established a cultural connection with the British deliverers. Religiously it helped them to attain cultural advancements and freed them from the constant fear of evil spirits, which had traditionally infested the minds of the Karens. In 1881, a Karen National Association was formed with primarily political aims. They later played an important role in Burmese politics. ⁴⁷

Return to Moulmein

While working on the gigantic task of compiling a Burmese dictionary he decided to visit his country which he had left in 1813 in 1845. This time he was compelled to go as he had to save the life of his ailing second wife. On his return to Moulmein, he found the churches in good condition, and all the departments well supplied, while in Rangoon, and indeed in all Burma proper, there was not a single missionary. For this reason, he determined to remove with his family to Rangoon, though, as he said, "it was harder to leave Maulmain for Rangoon, than to leave Boston for Maulmain." The acting governor was suspicions and orders were given that the missionary-house should be watched, and natives who might visit it would be apprehended. This broke up the religious meetings which had been held there.

At this juncture he decided to seek permission from the emperor to continue his missionary work and had got leave from the governor at Rangoon to visit Ava for that purpose. But unfortunately the Mission in America ordered him not only to reduce the expenses of the mission but also to give up the visit to Ava, leave Rangoon and withdraw to Moulmein Judson said, . 'I thought they loved me/ he would say, mournfully, I and they would scarcely have

known it if I had died.' 'All through our troubles, I was com-forted with the thought that my brethren in Maulmain and in America were praying for us, and they have never once thought of us'. ⁵⁰

This rejection had a great impact on his health and mind. He was unwell from fever and cold and embarked for the Isle of France on the 3 April, 1850 was detained in the vessel several days before she put to sea, and eight days later on the 12th of April he died at sea. On his request, he was buried in a watery grave in the Bay of Bengal.

Conclusion

During the ten years in Rangoon, the two years in Ava, and the twenty-three years in Moulmein Adoniram Judson had accomplished a lot. The Baptized Karens numbered over seven thousand. The baptism among the Burmans were comparatively much less. At the time of his death there were sixty-three churches established among the Burmans and Karens. Besides this, not only finished the translation of the Bible, but had compiled the larger and the more difficult part of the compilation of a Burmese dictionary. He had laid the foundations of Christianity deep down in the Burman heart, where they could never be swept away. Unfortunately, his ardent zeal to spread the word of Christ in Burma was always interjected with the political and religious policies of the Burmese kings and Burmese people in general vis a vis the white people who were coming as rulers or preachers. The America Mission back at home was not willing to enter into a conflict with the Burmese kings and held him back from implementing all his dreams in Burma. However, later in recognition of his work the American Baptist Mission set up Judson College in 1894.

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¹ Zam Khat Kham, Burmese, 'Nationalism and Christianity in Myanmar: Christian Identity and Witness in Myanmar Today, A Dissertation Presented to the Faculty of Concordia Seminary, St. Louis, Department of Systematic Theology in Partial Fulfilment of the Requirements for the Degree of Doctor of Philosophy, December 2015, pp62-63.

² These Christians are supposed to be Indian Christian artists who had previously settled in Thaton of the Mon ethnic group and were taken captive later on by King Anawrahta when he conquered and ransacked the Mon city in AD 1057. John C. England, The Hidden History of Christianity in Asia: The Churches of the East before the Year 1500 (New Delhi and Hong Kong: ISPCK & CCA, 1998), p.95 Another version says that these paintings were done by is the Nestorian Christians who had accompanied the Tar Tar Chinese soldiers of Emperor Kubla Khan on his military campaign against the Burmese during the Pagan Kingdom era in Burma. Ba Khin (Hanthawaddy), Foreign Mission Organizations in Burma ("Naing-Ngan-Chya-Tha-Ta-Na-Pyu-APway-Mya" in Burmese) (Rangoon: Hantawaddy, 1963), 11.as cited in Zam Khat Kham, Burmese, '*Nationalism and Christianity in Myanmar: Christian Identity and Witness in Myanmar Today*, p. 63

³ "Brief History of the Catholic Church in Myanmar," accessed May 25, 2015, http://www.catholicmyanmar.org/About/history as cited in Zam Khat Kham Burmese, '*Nationalism and Christianity in Myanmar: Christian Identity and Witness in Myanmar Today*, p.65.

⁴ W. S. Desai, A Pageant of Burmese History, New Delhi, Orient Longman, p.234

⁵ Buddhist Priest of Burma

⁶ W. S. Desai, A Pageant of Burmese History, pp.234-235

- ⁷ Frank N. Trager, *Burma—From Kingdom to Republic: A Historical and Political Analysis*, New York: Frederick A. Praeger, 1966, p.19
- ⁸ W. S. Desai, A Pageant of Burmese History p. 235
- ⁹ Zam Khat Kham Burmese, 'Nationalism and Christianity in Myanmar: Christian Identity and Witness in Myanmar Today, p.66.
- ¹⁰ Frank N. Trager, Burma—From Kingdom to Republic: A Historical and Political Analysis, p.10
- ¹¹ Francis Wayland, *The Memoir of the Life and Labours of the Reverend Adoniram Judson*, vol. 1 Boston: Philips & Sampson, 1853, p,158.
- ¹² James D, Knowles, *Memoirs of Mrs. Ann Judson, Late Missionary to Burmah Including a History of American Baptist Mission in the Burman Empire* Boston: Gould, Kendall, and Lincoln, 1844, p.124 as cited in Zam Khat Kham Burmese, '*Nationalism and Christianity in Myanmar: Christian Identity and Witness in Myanmar Today*.
- ¹³ R. Albert Mohler Jr. ed, '*The Southern Baptist Journal of Mission*', Billy Graham School of Missions and Evangelism, The Southern Baptist Theological Seminary, Louisville, Kentucky, 2012, p.10
- ¹⁴ Ibid.
- ¹⁵ Ibid, p.11
- ¹⁶Courtney Anderson, To the Golden Shore: The Life of Adoniram Judson (New York: Little, Brown and Company, 1956), p.56
- ¹⁷ F R. Albert Mohler Jr. ed, 'The Southern Baptist Journal of Mission', Billy Graham School of Missions and Evangelism, p.12
- ¹⁸ Michael A.G. Haykin, "We Are Confirmed Baptists": The Judsons and Their Meeting With the Serampore Trio in 1812, in F R. Albert Mohler Jr. ed, '*The Southern Baptist Journal of Mission*', Billy Graham School of Missions and Evangelism, p.14.
- ¹⁹ Ibid, p.15
- ²⁰ Dr. Carey acknowledged the receipt of six thousand dollars from American Christians during the years 1806 and 1807
- ²¹ J.H.Hull, Adoniram Judson: God's Pioneer, pp.56-57
- ²² Ibid, p. 57
- ²³ Michael A.G. Haykin, "We Are Confirmed Baptists": The Judsons and Their Meeting With the Serampore Trio in 1812, in F R. Albert Mohler Jr. ed, '*The Southern Baptist Journal of Mission*', Billy Graham School of Missions and Evangelism, p.17.
- ²⁴ W. S. Desai, A Pageant of Burmese History, p. 234
- ²⁵ Michael A.G. Haykin, "We Are Confirmed Baptists": The Judsons and Their Meeting With the Serampore Trio in 1812, in F R. Albert Mohler Jr. ed, '*The Southern Baptist Journal of Mission*', Billy Graham School of Missions and Evangelism, p.18
- ²⁶ Sharon James, The Life and Significance of Ann Hasseltine Judson (1789-1826), in F R. Albert Mohler Jr. ed, 'The Southern Baptist Journal of Mission', Billy Graham School of Missions and Evangelism, p.27
- ²⁷ A zayat is a structure built beside the road to offer travelers a place for rest and shade from the buming tropical sun. It is a building with no walls but with only a roof above. It has a raised platform on which travelers can sit or take a nap or have their meals. Often there are two or three drinking water pots for the travelers to quench their thirst. Many good Buddhists erect zayats to offer rest and refreshment to the travelers and thereby gain merit for themselves. (Lazarus Fish, Reclaiming the Zayat Ministry: Witness to the Gospel Among Burmese Buddhists Myanmar Ministry, p.9)
- ²⁸ Lazarus Fish, Reclaiming the Zayat Ministry: Witness to the Gospel Among Burmese Buddhists Myanmar Ministry, A dissertation submitted in partial fulfilment of the requirements for the degree, Doctor of Missiology E. Stanley Jones School of World Mission and Evangelism Asbury Theological Seminary July 2002, p.1.
- ²⁹ Ibid, p. 10
- ³⁰ Ibid, pp.11-12
- ³¹ Donald Eugene Smith, Religion and Politics in Burma, Princeton, N. J., Princeton University Press, 1965, p.82
- ³² Ibid, p.82.
- ³³ Edward Judson, The life of Adoniram Judson, New York, Anson D.F Randolph &Company, p 143,
- ³⁴ Ibid, 153.
- ³⁵ Ibid, p.208
- ³⁶ Ibid, p.217
- ³⁷ Sharon James, The Life and Significance of Ann Hasseltine Judson (1789-1826), in F R. Albert Mohler Jr. ed, 'The Southern Baptist Journal of Mission' p.29.

³⁹ Edward Judson, Adoniram Judson: A Biography, http://www.wholesomewords.org/ as accessed on 04.01.2023 at 7 pm, pp, 65-68.

³⁸ Sir Archibald Campbell, the British Commander -in -Chief in Burma made Moulmein instead of Amherst the headquarters of his army. He regarded Moulmein as a more strategical position. Moulmein naturally attracted emigration. The missionaries considered it seemed best to transfer the mission to Moulmein. On May 28, 1827, Mr. and Mrs. Boardman came from Amherst, and took possession of a frail bamboo mission house situated about a mile south of the cantonments of the English army. The site for the mission was a lonely place near the jungles. Edward Judson, Adoniram Judson: A Biography, http://www.wholesomewords.org/ as accessed on 04.01.2023 at 7 pm, pp,63.

⁴⁰ Ibid, p.69

⁴¹ Ibid, p.73

⁴²Ibid, p.74

⁴³ Karens were sizeable minority group in Lower Burma alien in both language and culture to the Burmans.

⁴⁴ Tailings or Mons inhabited northern Tenasserim coastal areas and lower Sittang and Irrawaddy delta were also considered to be traditional enemies of the Burmans.

⁴⁵ John. Cady, A History of Modern Burma, Cornell University Press, Ithaca, 1958 p.41

⁴⁶ Ibid, pp.98-99.

⁴⁷ Ibid, p.99

⁴⁸ Judson had married Sarah Boardman, the widow of the missionary Mr. Boardman.

⁴⁹ 'A Memoir of the Life and Labors of the Rev. Adoniram Judson', D.D. By Francis Wayland, President of Brown University. Boston: Phillips, Sampson, and Company. 1853. 2 vols. 12mo in *The North American Review*, Vol. 78, No. 162 (JANUARY, 1854), Published by: University of Northern Iowa Stable URL: https://www.jstor.org/stable/40794677, accessed on 6.01.2023 at 10.45 am, p58.

⁵⁰ Ibid, p.60

Study of Wetlands in and around Kolkata: An Appraisal

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Introduction

Wetlands, like all the major landscapes in the world are an integral part of the ecosystem that provides one of the most multifaceted and biologically rich environments. Its functions are versatile and it shelters a high concentration of flora and fauna within itself. Wetlands are considered one of the most productive landscapes of the world as they perform a hydrological and chemical cycle within themselves along with containing a rich bio-diversity which is why they are quite rightfully termed as the kidneys of a landscape. Wetlands also provide favorable opportunities for practicing primary economic activities such as fishing and agriculture (Paudel, 2009). The wetlands cover around 6% of the earth's surface and are not influenced by climate. Thus it generally occupies comparatively smaller and localized stretches of land. Therefore they are found in every climatic region and on every continent except Antarctica (Sinha & Mohanty, 2002).

Wetlands have provided their services to humans in a variety of ways. Therefore they have always considered these lands as something that could be taken for granted. Wetlands have been considered for ages as less productive than riverine plains and therefore they have been used for waste dumping. Immense human pressures, rapid urbanisation, lack of knowledge, and neglect have resulted in the dying out of the wetlands. If these happen on regular basis wetlands are going to extinct from the earth's surface, disbalancing the environmental equilibrium.

Even though the general concept about wetlands states them as economically less productive, in reality wetlands provide the world's most productive environment. These are the storehouse of numerous species of common and exotic plants, birds, fish, mammals, insects, reptiles, invertebrates and a number of organisms. The wetlands act as wellsprings of exceptionally rich biodiversity. In the case of economic activities, wetlands provide a sufficiently favorable environment, water and soil conditions for agriculture. Rice, which is the staple food of almost half of the total population of the world, is cultivated mostly in wetlands. Yet they are not conserved by humans as they should be. Instead, they are filled in for construction purposes. Otherwise, they are burnt off or drained out for agricultural practices. Mostly, the wetlands are treated as wastelands. Studies done by Ramsar stated that 87% of wetlands of the world have been lost since 1700. More than 64% of wetlands in the world have disappeared since only 1900. The inhabiting species are also disappearing along with it. According to the Living Planet Index of WWF (World Wildlife Fund), 76% of the population of freshwater species disappeared between 1970 and 2010. This resulted because of the lack of proper understanding of humans about the wetlands all over the world and their importance to the environment.

Urban Wetlands

The wetlands located within an urban area or wetlands which have eventually been surrounded by urbanisation are known as urban wetlands. These wetlands include both natural and artificial ones. The nature and functions of urban wetlands differ from the regular wetlands in many ways as their functionalities as well as their physical, chemical and biological characteristics are greatly influenced and modified by anthropogenic activities. In many cases, the pressure of urbanisation is so immense upon the wetlands that they often get destroyed and finally disappear. The wetlands are drained out or burnt down and converted to use those lands for agriculture, grazing, housing or other anthropogenic purposes. Hence, the hydrology of the wetlands is altered and the biodiversity is endangered and eventually destroyed. The nutrients of water and soil are drained out or changed irreversibly and are polluted by inorganic, toxic pollutants. The air of the wetlands also gets polluted through urbanisation.

However, the urban wetlands which are used for human benefits are therefore maintained, modified and somewhat controlled by humans. The shape and size of the water body, the quality of water, vegetation, biodiversity and the overall environment of the wetlands are influenced and determined by a human. Therefore, urban wetlands differ greatly from natural wetlands as the natural ones face much less human interference than the urban ones.

Functions of Urban Wetlands:

The urban wetlands are modified to provide certain services to humans. Therefore, their functions differ slightly from the characteristic functions of the natural ones.

- Water purification: the polluted wastewater from the urban areas is usually released into the wetlands where they are left to settle down. Both organic and inorganic pollutants in the water settle down at the surface or at the bottom of the water where they are received by the bacteria, small organisms and fish as food. Thus the wastewater is filtered and purified at the wetlands.
- **Groundwater recharge:** the water at wetlands infiltrates the ground and recharges the natural groundwater table there. Usually, wetlands form where the groundwater table is closer to the land surface. Therefore, groundwater is directly linked with the wetlands which filter the waste, polluted water and recharge clean, potable groundwater supply.
- **Flood control:** wetlands work as a sponge when it comes to flood situations. In urban areas, flood is a common hazard as the materials used to build housings and roads retard infiltration of water during precipitation. As a result, all the water flows over the land as surface runoff and causes a flood. The wetlands receive the excess runoff and store it, eventually recharging the fresh water supply and groundwater table as well as preventing water-logging in the urban areas. At the time of drought also, the wetlands supply the stored water and help to fight the dry conditions.
- **Economic Benefits:** the wetlands provide a number of resources that are economically quite valuable to humans. Fish, shrimps, food, timber, medicinal plants along with

mammals, birds and other organisms have very high market value. Wetlands provide these resources in ample amounts.

• Recreation and Research: urban wetlands provide a number of recreational activities to the urban population such as fishing, hunting, swimming, boating, bird watching and so on. Many wetlands are modified by conducting beautification and building recreational parks for amusement and aesthetic purposes. This adds a great deal of revenue to the tourism industry. Wetlands have recently been subjected to great educational and research activities as these lands provide vast opportunities of studies to the researchers and students from variety of fields such as biology, hydrology, chemistry, environmental studies, agriculture, forestry, tourism and so on.

Impacts of Urbanisation on Wetlands and Ecosystem

Impact	Effect
Hydrology	 An increase in surface runoff results in increased volumes of water entering wetlands Increased erosion due to increased stormwater runoff results in greater amounts of sediment entering systems Reduced groundwater recharge, a greater range of flow rates means low flows are diminished and the occurrence of a greater number of high flow events
Geomorphology	 Decreased sinuosity of wetlands/upland edge resulting in decrease in ecotone habitat Alterations in shape and edge slopes affect water-disseminating properties
Vegetation	 Exotic and invasive species present Loss of pollinators and fruit dispersers Biogeochemical changes which impede growth Fragmentation of natural habitats
Fauna	 Species with small home range dispersal rates favored Fragmentation of aquatic habitats/loss of connectivity Absence of upland habitat adjacent to wetlands Absence of wetlands/upland ecotones Human presence disruptive of normal behavior

Source: Ehrenfeld, 2000

Objectives of the Study

- 1. To assess the status of natural and artificial water bodies throughout Kolkata and its surroundings,
- 2. To study the functional status of East Kolkata Wetlands,
- 3. To find out about the awareness and maintenance of both the local and the government has undertaken water bodies within the study area,

4. To point out the major problems associated with the water bodies within the study area.

Database and Methodology

Open source datasets are freely available satellite, topographic and statistical datasets, which aims to free researchers from official data order processes that are tedious, long, time-consuming and costly. In the present study, datasets were collected at an interval of 5 years from old to recent time, as compilation of comprehensive datasets were limited by weather conditions, sensor capabilities and data availability in the open source domain. Thus, the Landsat imageries have been collected since 1988 up to 2018 for post-monsoon period (November to February), since during this period the images were devoid of missing scan line and other noise. Google Earth images of 2010 and 2018 were used to demarcate the surveyed areas and depict land use and land cover at a small scale. The details of the datasets used in this study are presented in Table:

Datasets used in the present study

Datasets	Year	Specification	Purpose	
Landsat MSS data	November 1988	Four spectral bands (60 m spatial resolution)	Image classification	
Landsat TM data	November 1993 and December 1998 Six spectral bands (30 m spatial resolution) and one thermal band* (120 m spatial resolution) *Thermal band is excluded from this study		Image classification	
Landsat ETM+ data	February 2003 and December 2008	Eight spectral bands (six bands have 30 m spatial resolution), band 6 is acquired at 60 m spatial resolution. The panchromatic band 8 has a resolution of 15 meters. Band 1 to 4 are used	Image classification	
Landsat 8 data	December 2013 and December 2018 Eleven spectral bands (30 m spatial resolution). Bands 3,4 and 5 are used		Image classification	
Google Earth imageries	May 2010 and May 2018	Natural/True colour image (RGB)	Change detection	

All the Landsat datasets are radiometrically corrected. The images were then classified by supervised classification into six classes: water bodies, built up and four types of vegetation cover including cultivation and horticulture. Changes are determined by superimposing the layers of different time, one above the other. Spatial distribution of the water bodies at present all over KMC and its adjacent areas are observed by generating hotspot maps. 36 sites have been visited all over KMC and its adjoining areas in order to understand their present status. Areal coverage and LULC of the surrounding water bodies are determined from Google earth imageries. The primary data

are then statistically analyzed and a pictorial representation of these sites is done. The study has been based on both primary and secondary data sources.

Result and Discussions:

1. Wetlands and Water bodies of Kolkata

For any city the major challenge is water. Kolkata like any other megacity needs to supply its people with water every day and also reject wastewater from its grounds. It is mainly served by the upland flow of the Hooghly River. Water bodies and reservoirs are concealed inside the city structure (Basu & Main, 2001). In slums, they are surrounded by dense settlement and in the case of city center, they are enclosed by park areas. Only a few of these water bodies are a natural entity, others have been either dug to collect rainwater or created in response to building activity. Most of these excavations were done in the British domain (Roy et al., 2004). Even though the demand for water is increasing yet the total capacity remains mostly unchanged as the volume excavated in some areas is outweighed by the filling up of other parts. As these waters are still, they play a very isolated role in the Kolkata water system and so are called 'water at rest'.

Kolkata is affected by monsoons each year which increases the water level of the city by 1 to 5 meters and thereby causes waterlogging. In fact according to the general topology of the city the water flows in the eastern direction where the canal system is not efficient enough to handle this excess water. So to prevent this excess water from entering the houses, people dug reservoirs next to the settlement. The increase in population resulted in an increase in built-up area which in turn caused the excavation of innumerable water bodies to increase the ground level above the normal flood level. This resulted in a moderately dense pattern of reservoirs.

However with the continuously growing population and increasing land price a counteraction to the excavation process has started. Kolkata being a metropolis attracts immigrants, other than that conversion of the former village into urban settlements like Salt Lake and Rajarhat imposes pressure on the wetlands system. The pressure on land results in the filling up of the water bodies and making way for settlement zones. Also the creation of recreational parks and areas like Science city, Ecotourism Park are built on wetland landfill. Nevertheless those still existing mainly function as collectors of rainwater and have minimum active use. Thus degradation of the reservoirs occurs due to; (a) ill maintenance of water bodies (b) disposal of solid wastes and excrements (c) over nutrition results in covering of water surface by vegetation and (d) encroachment, which aggravates the situation (Adhikari, Ghosh, Rai, & Ayyappan, 2009; Kumar, Senthil Kumar, Priya, Mukhopadhyay, & Shah, 2010; Palit, Batabyal, Kanungo, & Sur, 2012; Roy et al., 2004).

Even the drainage system comprising of canals and pumping stations that links the reservoirs is at stake. The Kolkata drainage basin (about 4000 sq km) has two modes of drainage system (Kundu, Pal, & Saha, 2008). The Hooghly system works via purification plants and outfalls back into the river itself while the Kulti system distributes water to the wetlands where it is biologically treated. The underground trunk sewer line connects to 17 pumping station, all of which lie on the eastern margin of Kolkata. Still then due to lack of maintenance drains have silted up, pumping stations lack funding and monitoring. Urbanisation aggravates the situation by constructing railways, and highways which possess physical barriers to the local drainage (Sahu & Sikdar, 2008).

Illegal filling up of water bodies in areas like Garden Reach, Behala, Jadavpur was brought to notice by KMC officials. The sprawling Raghu Dakater Dighi at Cossipore and Bikramgarh jheel, the largest water body under KMC, are some of the endangered reservoirs identified. KMC is contemplating handing over Raghu Dakater Dighi to Benfish, a fisheries department wing. Water tanks that are in a severe treat of pollution include Mohan Das Tarag on Maidan, J. L. Nehru Tank at Outram Road crossing, Lal Dighi at B. B. D. Bag, tanks behind Indian Museum, on SSKM Hospital, at Rawdon Square, Duttabad under Bidhannagar Municipality, etc. Tank at Haji Md. Mohsin Sq. has been turned into a garbage dump.

Not only ponds but canals are also at risk, for example, 20 feet wide canal at VIP Road near Teghoria now looks like a creek with large portions filled up by construction waste for cars taking a shortcut. This raises flood fear in the locality. Kolkata Municipal Corporation however is taking measures to improve the urban water bodies. They are utilising the reservoirs as fisheries or for recreational purposes. Fish eats algae and prevents the growth of vegetation, thereby maintaining the reservoir in good condition. This practice has been proven successful in the East Kolkata Wetlands.

2. Changes in Land Cover and Water bodies over the Last 30 Years in Kolkata

Kolkata, located on the east bank of river Hooghly, is the principal cultural, commercial and educational hub of East India, and has the oldest operating port. It has been susceptible to change since its time of birth. Kolkata's recorded history dates back to 1690 with the arrival of East India Company. In 1850s the city had mainly two populated areas: the white town centring Chowringhee and Dalhousie Square and the black town in north Kolkata. In order to accommodate a burgeoning population much of the city that was originally a wetland had to be reclaimed over the decades. The study considers change in land use since 1988 till present.

Figure 1

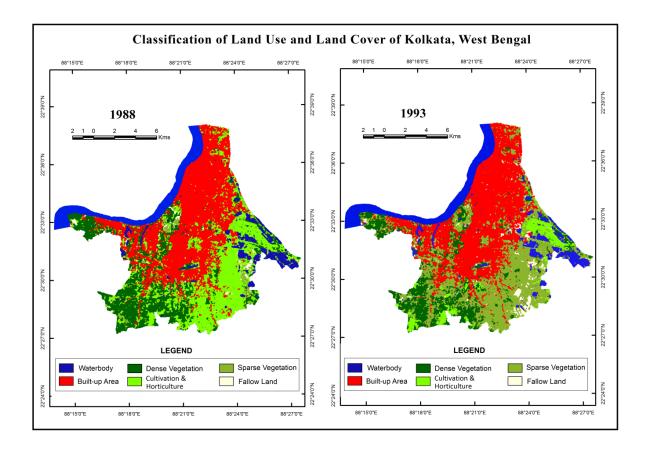


Figure 2

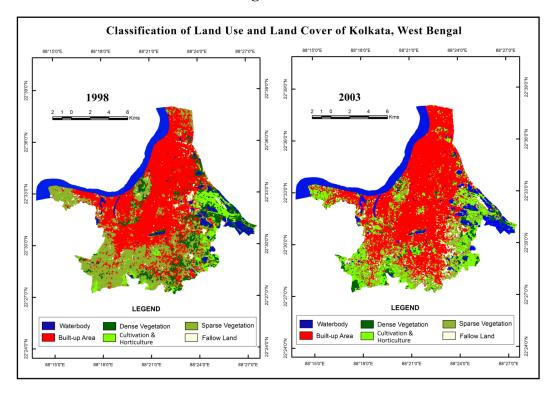
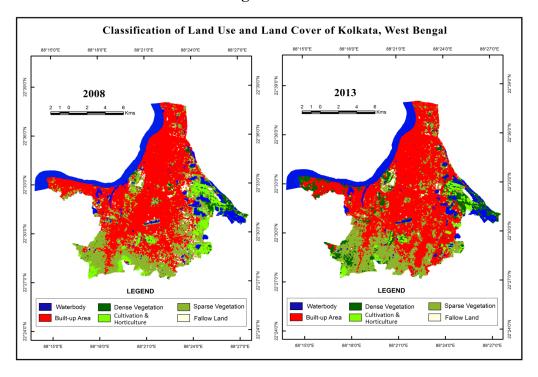


Figure 3



Kolkata, which is under the jurisdiction of the Kolkata Municipal Corporation (KMC), has an area of 185 sq. Km. In 1988, 18.08 sq. Km of the area was covered by water bodies, 83.79 sq. Km was under built-up area, 43.54 sq. Km. (dense vegetation), 21.3 sq. Km. (moderate vegetation), 10.08

sq. Km (sparse vegetation) and 6.3 sq. Km remained fallow or unused. In 1993, 13.33 sq. Km of the area was covered by water bodies, 85 sq. Km was under built-up area, 26.54 sq. Km. (dense vegetation), 10.38 sq. Km. (moderate vegetation), 43.83 sq. Km (sparse vegetation) and 6.9 sq. Km remained fallow.

In 1998, 11.35 sq. Km of area was covered by water bodies, 88.12 sq. Km was under built-up area, 18 sq. Km. (dense vegetation), 11.96 sq. Km. (moderate vegetation), 51.2 sq. Km (sparse vegetation) and 7.6 sq. Km remained fallow or unused. In 2003, 10.16 sq. Km of the area was covered by water bodies, 93.82 sq. Km was under built-up area, 8.04 sq. Km. (dense vegetation), 41.02 sq. Km. (moderate vegetation), 23.2 sq. Km (sparse vegetation) and 9.3 sq. Km remained unused.

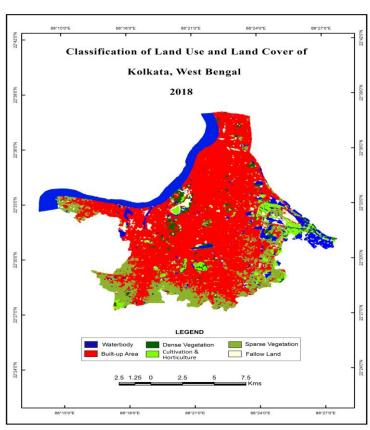


Figure 4

In 2008, 10.24 sq. Km of area was covered by water bodies, 96.76 sq. Km was under built up area, 6.83sq. Km. (dense vegetation), 14.92 sq. Km. (moderate vegetation), 43.07 sq. Km (sparse vegetation) and 12.4 sq. Km remained fallow or unused. In 2013, 10.29 sq. Km of area was covered by water bodies, 103.89 sq. Km was under built up area, 19.4 sq. Km. (dense vegetation), 7 sq. Km. (moderate vegetation), 41.2 sq. Km (sparse vegetation) and 3.6 sq. Km remained fallow or unused. In 2018, 10.24 sq. Km of area was covered by water bodies, 120.41 sq. Km was under built up area, 7 sq. Km. (dense vegetation), 8.06 sq. Km. (moderate vegetation), 30.95 sq. Km (sparse vegetation) and 7.2 sq. Km remained fallow or unused. Thus in the last thirty years with

growth of population built up area increased by 43.7% at the cost of area under water bodies which reduced by 43.36% and vegetation that was reduced by 38.58%.

Figure 5

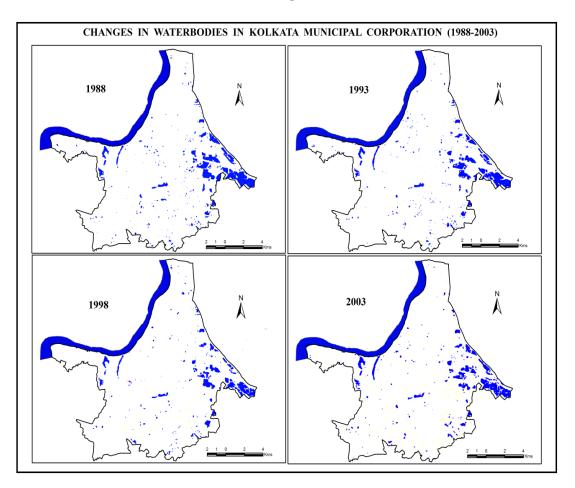
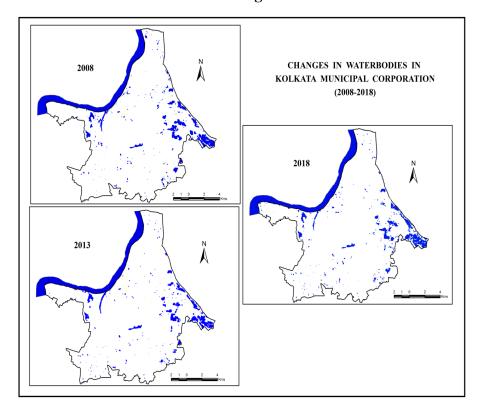


Figure 6



North Kolkata comprises the oldest part of the city and is not had much in change in these last few years. Central Kolkata is also almost balanced in nature but in some of the areas where water bodies have decreased like Kakurgachi, Tangra and adjacent areas. Places like Ballygunge, Alipore, NewAlipore, Lansdowne, Bhowanipore, Dhakuria, Gariahat, Tollygune, Lake Gardens, Golf Green, Jadavpur etc. are at constant urban expansion and creating pressure on the wetlands. The outlying areas of South Kolkata have increased to Garden Reach, Khidirpur, Metiabruz, Taratala, Budge Budge, Behala, Barisha, Kudhghat, Bansdroni, Tiljala and Garia, Suburban areas have expanded to Narendrapur, Sonarpur, Baruipur etc. Therefore there is a continuous southward expansion of urban built-up area at the cost of water bodies and vegetation. East Kolkata comprises of newly developed regions. The two planned townships; Salt Lake and Rajarhat have led to an eastward decrease in water bodies and an increase in urban settlement.



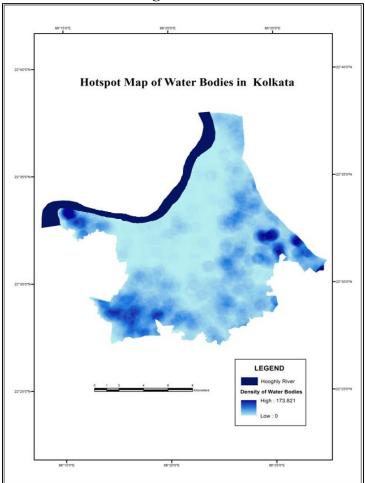
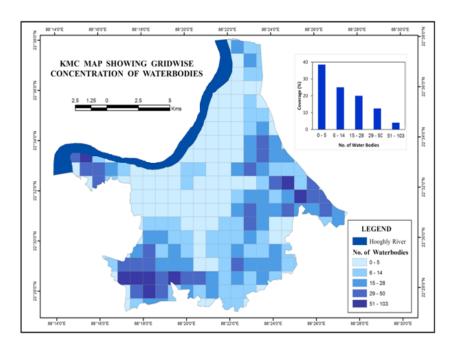


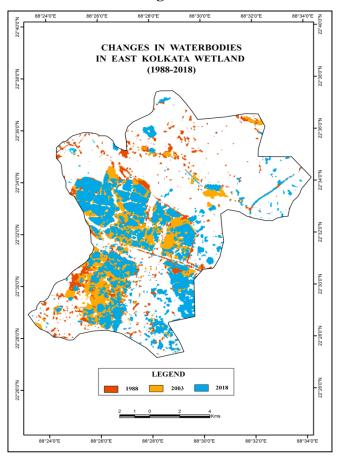
Figure 8



3. East Kolkata Wetlands

East kolkata Wetlands mainly comprises of a) Nalban, government owned fishery under fisheries department b) private ownership water bodies. Here fishing done every day but not in the private fisheries. No area shrinkage or problems observed as Cleaning of the fisheries done by Nalban Fisheries staff and in case of private ones the owner themselves do the needful. Cleaning is done twice or thrice a month. Usually the waste water comes to the fisheries through canals and pipelines. The water is kept there before opening the gates to the main fisheries for a couple of days so that the water may settle down and the fish around them may eat from the waste. After the water settles down, the comparatively clear water is then passed into the fisheries. About 150 people are engaged with the fisheries. Some are engaged in fishing while others are in guarding and other activities. Around 60 people are engaged in fishing. About 40 people guard the fisheries at night. Respondent does cattle rearing at personal level. However there is no electricity, no drinking water. They have to collect water every day from Salt Lake, Loha pool. Another problem is transportation and connectivity which is hampered during the monsoons.

Figure 9

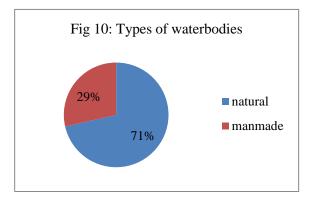


4. Field observation of selected water bodies in and around Kolkata

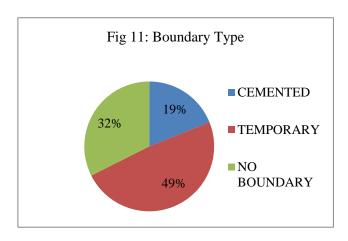
In Kolkata and its adjoining areas, there are a number of water bodies which may or may not be considered as important or useful to the surroundings, but they surely have great influence over the ecosystem and the daily life of the people of those areas. Being situated in the Urbana areas, these water bodies are highly influenced and affected by the ever-expanding urbanism. Hence, it is important to study these water bodies to understand their true nature and state and the physical, chemical and biological changes that these water bodies are going through over the years. It is also important to understand how the people living around these water bodies change their properties or adapt their lifestyles to maintain the qualities of the water bodies. Many innovative ideas are executed to keep these water bodies intact and utilize them to the maximum without affecting them too much. The study was conducted in the following selected water bodies- Nature Park Jheels, Sukanta Palli Pond at Barisha, Ramkrishna Park Pond, Nibedita Park Pond, Haridevpur Dhalipara Jheel, Shyamkhola Jheel areas, Itkhola Jheel at Rajpur Sonarpur, Patuli Jheel area, Budher Hat Jheel, Subhash Sarobar, Central Park, Dhakuria Lake area, Rabindra Sarobar Lake area, Poddar Nagar Pukur, Bikramgarh Jheel, Anandapur Jheels, Captain Bherry, Nalban Bherry, Ponds of Duttabad area, Lake Town Pond, Dum Dum Park Tanks, Purba Panchanna Gram Jheel, Chak Kalarkhal- Nazirabad Jheel, Oxidation Pond, Panchasayar Jheel and Itkhola Jheel at Kudghat.

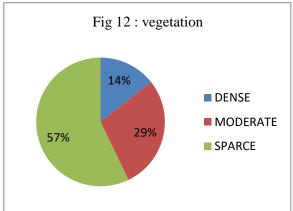
In order to understand the nature and characteristics of the water bodies within and around the study area, several aspects were taken under consideration for analyzing the current situation of those water bodies for example, the nature, shape, boundary type, usage, maintenance of the water bodies etc.

4.1 Types of Water Bodies: Among the 35 water bodies taken under consideration, 29% were completely made by humans for serving several day to day purposes whereas 71% of them were natural. However, being located in or near urban areas all the natural water bodies have also faced several man-induced modifications at some point of time.



4.2 Boundary Type: Of the total, only 19% of water bodies have proper cemented boundaries while 49% have temporary boundaries made of bamboo, log, wooden structures or solid earthen boundaries. Around 32% of water bodies have no proper boundary at all.

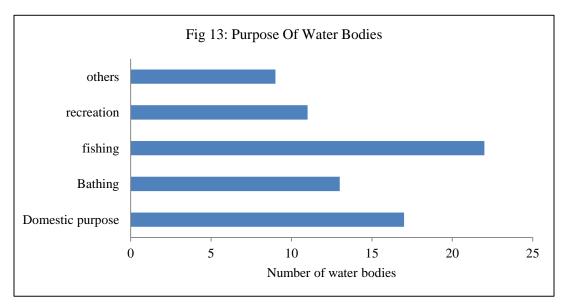




Source: Primary Survey

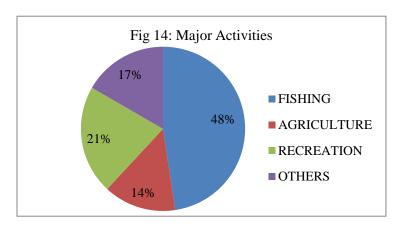
4.3 Types of Vegetation: Being located in urban areas, most of the water bodies have very low, sparse vegetation cover. 57% of water bodies have sparse vegetation, while 29% have moderate vegetation. Only 14% of water bodies are covered or surrounded by comparatively denser vegetation

4.4 Purpose of the Water Bodies: Of the 35 water bodies, fishing is the major activity done in most which are about 22 water bodies. In 17 water bodies, the water is used for serving domestic purposes. Bating and swimming is done in 13 water bodies, 11 are used for recreational purposes and 9 water bodies serve other functions such as religious activities.



Source: Primary Survey

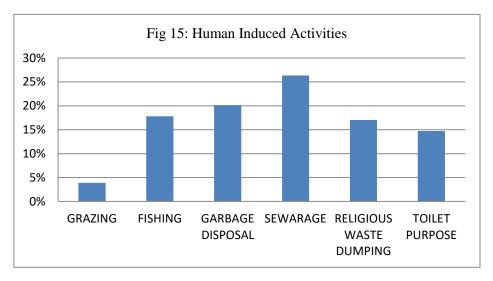
4.5 Major Economic Purposes Served by the Water Bodies: 48% of the water bodies serve the major economic purpose of fishing activities such as Nalban Fisheries, water bodies of Nature Park, Captain Bherry etc. 21% water bodies are mainly used for recreational purposes, such as Rabindra Sarobar Lake, Nature Park etc. 14% water bodies help in local agricultural activities and 17% water bodies have other uses or no use at all



Source: Primary Survey

4.6 Human Induced Activities: Humans have a major impact upon the water bodies, especially those located in and around the urban areas. The water bodies taken under this study are no exception. Out of 35 water bodies studied, 26% are used for the release of sewage water. Garbage

is dumped in 20% of the water bodies and in 17% water bodies religious garbage is also dumped. 18% water bodies are used for fishing activities. About 15% water bodies were witnessed where the banks of the water body were used as toilets and around 4% water bodies, grazing are practiced regularly.



Source: Primary Survey

Findings:

- Most of the water bodies of KMC are under threat of urban encroachment and illegal occupation,
- Some are facing problem of siltation,
- Many of them lack public awareness,
- Problem of religious and garbage dumping into the waterbodies.
- Problem of eutrophication,
- Air, water and land pollution is quite high,
- Reduction in vegetation. Only areas strictly maintained like the Rabindra Sarovar have regulated growth of vegetation.
- Those water bodies used for fishing are cleaned to some extent. Others that are utilised for domestic purpose or bathing are not properly maintained.
- Many are used for recreational purposes like Rabindra Sarovar, Nature Park etc.
- In most cases migratory/local bird activity is poor.
- Satisfactory restoration activities are seen.

Recommendation:

Wetlands play a very important role in the ecosystem and in our lives by purifying water, recharging groundwater, maintaining and sheltering bio-diversity, checking flood and drought and indirectly influencing the climate. Therefore deterioration of wetlands is bound to result in catastrophic events and natural disasters. Therefore it is our responsibility to protect these wetlands and thus protect ourselves from unfortunate events.

- The first and most important recommendation is to set proper laws for protecting the wetlands and their habitats. In our country, there are laws for forests and wildlife protection but there are no appropriate laws regarding the protection of wetlands. Therefore, many wetlands are lost due to the lack of attention of the government.
- Spreading awareness to the people about the importance of wetlands in our lives is also important. Most of the wetlands are lost due to the lack of knowledge about their significance.
 Spread of awareness to the people, especially at the local level is therefore, highly recommended.
- To protect the wetlands, regular and uninterrupted maintenance of these lands is required.
 Otherwise, the measures taken for protecting the wetlands will become pointless. Regular controls and monitoring of erosion and sedimentation must be made both by the local communities and the government. Regular cleaning and maintenance of these lands are also required.

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The Hill Kharia Ethnic Identity and Ecology in Purulia District in West Bengal

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Abstract:

The Ethnic identity of tribes have had been changed since post Aryan period to post-colonial period in India. The total number of tribal communities nevertheless is estimated to be 642, and several tribes have become extinct or merged or undergone transformation of their identity. The kharia is one of the major tribe inhabited in Madhapradesh, Odisha, Jharkhand, Chattrishgarh, Bihar, and West Bengal in India. The total population of kharia is 895000 in India. The kharia speak in Austro-Asiatic language of group. S. C. Roy (1937-56) who made an exhaustive ethnographic study, sub divided the entire Kharia into three main section on the basis of geographical location, economic pursuits, identity of Kharia, Dhelki, Dudh Kharia and Hill Kharia. The Dudh Kharia are most conscious section tribe who mainly live at Rachi to Gangpur state. They live at selected villages away from the forest and hilly area, they have relationships with their neighbourer various Hindu castes with whom they come into frequent contact. The Hill Kharia is the backward tribe who inhabits the border district of Similia range of Mayurbhani District of Orissa, Singbhum of Bihar and highland of Manbhum. In West Bengal hill Kharia are mainly found in the forested tract and scatterly distributed at Bankura and Pachim Medinipur and Cooch Behar District. Traditionally, Hill kharia belongs to nomadic tribe wondering search food occupying large territories. They were practicing shifting Hill cultivation during S. C. Roy studied. In 1984 D. Sinha studied Hill kharia hunting gathering activity and their underwent poverty. The Kharia occupational transformation took place from shifting Hill cultivation to Hunting gathering ways of pursuit, presently they are habituated to accustomed to pre-agricultural ways of life and agricultural laborer. Presently they are locally known as Kharia Sabor and amalgamate with Lodha Sabor of Pachim Medinipur. Historically there have three separate ethnic identity viz, Kharia, Lodha, and Sobar in relation to route of migration, linguistic and racial, economic affiliation. This paper is based on literature review and empirical observation. This study highlights on the Kharia migration, occupational change and ethnic identity across the time span from S.C. Roy1937 to2010 in West Bengal. The ecological force leading to changes their occupational activities and its impact on socialcultural life and ethnic identity.

Keywords: -

Ethnic-identity Kharia, pre-agricultural stage, linguistic identity, Lodha, Sabor, Social mobility.

There are total tribal population is 4406794 in West Bengal as per Census 2011 which is about 5.5 % of total population in India. The tribal population is about 5.8% constitute in West Bengal in respect to total tribal population of country. Tribal people are inhabited across the all districts of West Bengal to some extent. The tribal population are densely found at Paschim Medinipur, Bankura, Purulia, Jalpaiguri, Alipurduar, Dakshin Dinajpur, Darjeeling as per Census 2011. The Hill kharia tribe distributed in Purulia, Bankura, Paschim Medinipur and some parts Choochbehar district in West Bengal. The Hill kharia ethnic identity is concerned with forest ecology, occupational changes and repeated waves of migration of human population. The Hill Kharia tribe is amalgamated with Lodha- sabor and enlisted under scheduled tribe in West Bengal.

The human group have had been adjusted themselves with their varied ecology since immemorial time. It can be said that Human ecology has been defined in Encylopedia of Social Sciences (1959); "Human ecology deals with spatial aspects of the symbiotic relations of human beings and human institution. It aims to discover the principles and factors involved in changing pattern of spatial arrangement of population and institution resulting from the interplay of living beings in a continuously changing culture". The Ecological conditions play vital role for subsistence strategy and utilization of natural resources.

The concept of nature man sprit- complex has to be analysis in terms of cultural ecology (Vidyarthi, 1963), cultural ecology is a one of the theoretical strategies subscribed to the view point that an intimate relationship exists between cultural and its surrounding environment (Mnaa, 1981).

Honigman (1976), suggest that physical environment led to changes in the natural feature's cultural trait and necessities a new kind of adaptation. Steward (1969) feels that cultural ecological adaptation is responsible for distinctive cultural tradition. Even the functioning of a culture according to him is considered by environment condition. In 1910, Coupland wrote, "The district is now singularly destitute of wild animals and game of all descriptions. The inhabitant has cultivated after clearing of jungle, this activity has widely extended during the last 20 years.

The Hill Kharia is to be hunting and gathering tribe belong to the Proto-australoid racial stock and denudation of the jungles, even where the land is not required or suitable for cultivation. Mainly inhabit Bihar, Madhya Pradesh, Maharasta, Jharkhand, Orissa and West Bengal in India. In Purulia Hill Kharia are found in 7 out of 16 police station situated at the eastern side of district. They found in three districts viz, Bunkura, Paschim Medinipur districts contiguous with Purulia, the Kharia tribe distributed Mayurbhanj District of Orissa, Singbhum and Dalbhum district of Jharkhand . ROYS.C. (1937-56) who made an exhaustive ethnographic study sub divided the entire Kharia into three main sections on the basis of geographical location, economy identity and culture viz, The Dudh Kharia, Dhelki Kharia and Hill Kharia. The total population is about 957971. The Dudh Kharia are the most advanced and conscious section of tribe who mainly live at Ranchi to Gangpur state. They live in settled villages away from the forest and hills. They have as their neighbors of various Hindu castes with whom they come into frequent contact. They have taken to agriculture and other fruitful occupation. The Delkhi Kharia have found in Gangpur, Jaspur and Raigarh District of the central Provinces.

They have lived at settled villages and come in close contact with neighboring communities. Agriculture is main source of subsistence.

The Hill Kharia so called because they used to live in and around hilly tract depend on shifting. They are sometimes referred to as 'Pahari Kharia'. They have settled in isolated parts of villages and maintain social distance from lower caste and tribe. During S.C. Roy, studied the kharia were engaged in shifting cultivation and known as Hill kharia. The peasants among whole they lived called as Kharia, the tribe now used the mythical term as their name Sabar. The Purulia district has largest concentration of Hill Kharia in Manbazar, Hura, Bandawan and Puncha. Approximate population of Hill Kharia is inhabited 15000 (fifteen thousand) in Purulia District. The Kharia originally belong to a nomadic tribe wondering in search of food for occupying large territories. They were forest dwellers and traditionally hunter and food gatherers, who used to maintain their livelihood by collecting edible roots tubers herbs and fruits from the forest and killing the animals, they were totally dependent on the forest resources. Their life was intricately related with the forest eco – system. Their adaptation to the environment is direct and simple. Their previous mode of subsistence pattern receded due to the deforestation and ecological change.

Risley, 1891 point out the pure Kharia identity as settled agricultural tribe of Lohardanga district of Behar .He has mentioned that there is little relation with the same stock with the wild Kharia who inhabit at the crests of highest ranges in Manbhum and Tributary states of Chotanagpur and Orissa" Two points are discuss with special attention .Firstly the Kharia everywhere have not engaged in same economic pursuit across in India. The kharia have been suffered from economic deprivation severely. Sometimes Kharia are engage in subject to criminal activity like dacoits, thieves, robbers or kill others. The hill kharia stigmatized as Criminal tribe notification Act of 1871. Secondly, they are economically marginalized and socially deprived.

Dr. D. Sinha (1984), studied entitled- The Hill Kharia of Purulia-'Impact of Poverty on a hunting and gathering tribe, he describes about the economic crisis of tribe who suffered from economic deprivation severely. The hunting gathering subsistence pattern has been faced into problematic due to depletion of forest area. Due to their livelihood compulsion the kharia meet with subject to criminal activities, stigmatized as 'Criminality'. They had believed to be race of criminal and treated so by and large number of inhabitants.

In 1989 Prof. Chandi Das Mukhopadhaya – Asian Studies Vol – 7, Page No. – 63: - "The crimes and criminals among the Kharia of Purulia" – According to him, Kharia people with smaller and scattered population live in remote and isolated areas. They are still pre – agricultural stage and mostly depended on outmoded forest economy. They are solely depended on the jungle produce. At present due to denudation of the forest areas these people have been ecologically and economically displaced. The interactional pattern between the Kharia and the village peasantry has not fully crystallized. The Kharia have engaged in committed to crimes from petty thefts to bulglaries, robbers, large dacoits and even murder i.e. has tried to show that Kharia Sabar about 98% people engaged in anti- social activities.. A good number of Kharia have now been equated with the Lodhas and as such, the benefits earmarked for the PTG (Primitive Tribal Group) also accrue to them. Originally, the Kharia are supposed to comprise a single tribe almost in Orissa, Bihar, and West Bengal. There are notable cultural differences between them.

The Kharia are not only the primitive and backward. They are alleged to be notified as criminal Tribe under the criminal Tribe Act of 1924. Act was repealed in 1952 and Kharia are officially declared to "Vimukta Jati". Criminal propensity among the Kharia people deters easy and spontaneous interactive between Kharia and the villagers in general. In all villages Kharia are migrated from in different period of history either in search of employment or selection of habitat due to some social reasons. They earns from selling of fuel, sal pata, wood, seed kedu pata and other forest resources, laborers for agricultural works. They are earning activity very low and uncertain. A few of them, occupy very negligible amount of land. Due to different ecological constraints and poor economic condition of farming population the growth of the villagers have been arrested

Now most of the Kharia people deal settled life in vicinity to forest area. Their economic condition has been changed from nomadic hunting gathering to settled pre- agricultural activities. The subsistence pattern and social relation have been changed in relation to decrease of natural resource in chronic drought prone area. The ethnic identity has changed from Hill kharia to kharia and lastly kharia to sobar, now they address themselves as sobar.

Area of study: -

This study has done three villages namely Kulabahal village under Hura Block, Babujore village under Puncha Block and Pargora village of Bundwan Block. The total population of Kharia tribe 504. Being a migrated community, the Kharia of Kulabahal able to preserve very little originality, because of the easy accessibility of the Purulia Town, whereas Pargora being located as the fringe of the jungle, gives the Kharia residing here less exposure to the modern life. Pargora and Babuijore villages are located at the vicinity of forest. The total 113 kharia families have studied to collect information on socio economic life.

Materials and Methods-

The present study is based on literature review and the empirical observation carried out during July 2006 and December 2009 among the Kharia of Kulabhal village under Hura Block, Babujore village of Puncha Block, Pargora village of Bundwan Block. The literature review done through "Descriptive Ethnology"1872,(E.T. Dalton) Hill Kharia 1935, (S.C.Roy) and The Hill Kharia of Purulia 1984, (Dikshit Sinha) to explore ethnicity and transformation of livelihood activity. These study villages are selected in relation to Hill Kharia route of migration Mayurbhanj to Bundwan, Bundwan to Puncha lastly at Hura. The data have been collected by using the standard tools and technique of social Anthropology which includes observation, structure interview, household schedules and case studies have used to trace the hunting gathering mode of living and accustomed to agricultural process. Some secondary data have collected Gram Panchayate office and Police station.

Objectives: -

- To analysis the changing of subsistence pattern in the light of the ecological depletion of natural resource.
- To understand the changes of Hill kharia identity into kharia sobar.
- To evaluate the forest dwelling impact on the socio-economic life of the kharia.
- To understand about the decrease of social isolation and participation of kharia tribe various development programme implemented by Central and State Government.

Discussion on Kharia Ecology-

The district Purulia (specifically identified as one of the most backward areas of the state) belonging to the Western border of West Bengal is virtually an extension of the Chotonagpur plateau and bears a topographical feature which stand in quite contrast with the other plan areas of the state. The district is located in the humid sub-tropical climate region or comes under plateau region characterized by arid and dry zone and is specified as chronic Drought Prone Area (DPA).

The basic economy of the district is agriculture but severely handicapped due to drought condition. Because of erratic and scanty rainfall, there is frequent failure of crops leading some times to famine or near famine situation. The hilly undulated terrains put up a further constraints and substantial portion of land is a uncultivable waste. The situation worsened by poor communication system, it is not easy to reach its somewhat inferior parts, particularly during rainy season. The Rate of literacy is somewhat lower than elsewhere in West Bengal. The topography of the district hilly forested tract and undulated. There are numerous hillocks in south, forming- a continuity with the Dalma range. The district grifted with wide and scattered forests Sal, Palas, Mahua, Simul and some other forest animals. The constant erosion in the sloped area indiscreet cutting and grazing in the habitation, the forest resources now become scanty.

In Purulia the climate is generally much drier than e--astern part of the state, though from early March till the beginning of June hot westerly winds prevail and the heat during the day is oppressive. The mean maximum temperature is between 24.44° C and 21.11° C during December and February respectively. The temperature rises to 31.66° C in March and in April and in May to 39.44° C throughout the rainy season the temperature remains about 332.22° C but sometimes drops to 31.11° C in October and 28.88° C in November .

Utilization of Natural resources- They have collected wood, bamboo, branches of tree, leaf from local forest to build their house. The adult kharia men and women are collected various types of fruits, flower, leafy vegetables from forest around the season. These fruits are mango(Mangifera indica), kul(Zizyplus jujuba),jack fruit(Atrocarpus intergrifolia), Khajur (Acasia catechu), Anta (Anona reticulate), Haritaki (Terminalia chebula), Dumur (Ficus glomerata) Mahuya (Brasica latifolia) Tal (Borosus fabilifer), Kend (Paspalum scorobiculatum), Bel(Aegle mazmelos), Tetul(Tamarindas indica) Guava(Psidium guajava) and etc. They eat various fruits to satisfy their hunger, even if they spent a day without staple meal specifically in summer and rainy day. They prepared stimulant drink from mahuya flower. Beside they are collected various types leafy vegetables, herbs and sherbs viz, Mutha shak (Cyperus hexatachyus), Thankuri (Hydrocotayle ariatices), Telecucha (Momordica monodelpha), Chikni shak (Amaran thus viridis), Chimti shak (Polygonum pleium) and etc. The Kharia have hunted various types of animal and birds viz, little birds dabchick (pandubi), jungle fowl (ban murgi), Gray patridge(Titir), Hare, rat, squirrel, dhamna snake, snails, crabs and various types of minor fish from nearby stream in rainy season. They have prepared various of hunting implements forest resources like bow and arrow, pellet bow, monodent, spear, net, cage dome, barel shaped trap, triangular net, box trap, and agricultural implements like digging stick, spade, hasua, plough and jawal, leveller, sickle, denkhi, (husking pedal), busket, axe, winnowing fan, jhata, broomstick, rainy cap, khatiya which are made from local resource. They make musical instruments like large drum, side dram, singer flute, jhum jumi, mask, neckless

and some ornaments. They also prepared bullock cart from local resource .Traditionally the kharia were depended on hunting gathering mode of subsistence since colonial period. Previous mode of subsistence gradually changed due to strict forest policy and deforestation. The nomadic mode of life transformed into semi settled or permanent settlement livelihood activity.

Ethno-history of kharia Tribe - Ethnic identity of Hill kharia is very much conjectural and historically the term ethnos' has pejorative connotation .Aristotle used this term to denote natural inferiority of slaves to the citizens (Roy 1990'p-265) over the length of the time, the ancients connotation of the term has been waned off, but even them faint shade of past continues in the perception of many .There is however not general agreement as to what actually term ethnic group mean. In America normally minority groups are category as ethnic groups but in ethnic conflict the connotation of minority is by and large absent (1990). Glazer and Moynihan (1976) described as a social group which consciously shares some common and is primarily be descent basing on both (1969). Hicks and leis (1969) and other, Pathy (1988p.18) observed that "ethnic group is used in anthropological literature to designate a population which is part of a plural society and yet is large biologically self-perpetuating, shares a common cultural tradition and language, has an ascribed membership which identifies itself as being alien by nature of a real or fictitious common ancestors, and identified by other as constituting a distinct in a plural society".

According to E.T. Dalton (1872) entitled his book "Descriptive Ethnology of Bengal" describe about the mythical concept of Kharia origin. The mythical beliefs of kharia based on that they have come into earth from peacock egg. The best settlement of kharia vicinity to the southern the Koel river, one of the streams that rise on the Chutia Nagpur Plateau. The Koel river main source of the Bhramani river. Their ancestors were are lived at Rotasgarh in Patna. They quarrel their relations and into jungles wandered till they had a place, they called pora on the river, from where they spread in different direction but their settlement have much diminished in consequence of interlopers who obtain their livelihood. Many of them settled at the estrate called Biru Kalsalpur. They have like to settle in distance from the civilized society. The linguistically Kharia has been owned from Kolarian language group of Chutia Nagpur. He has mentioned that the Kharia tribes are linguistically most closely allied to the Juangs. They have distributed in Singbhum a very wild state and hilly parts of Manbhum. Later on, they have migrated to southern part of 'Koyal River'. The Kharia tribe mainly divided into three groups Dhelki Kharia, Dudh Kharia & Pahari Babanya Kharia .The Pahari Babanya Kharia has known as Hill kharia as they were practicing shifting -hill cultivation. Risley (1891) points out the pure Kharia identity of the settled agricultural Kharia of Lohardanga district of Behar. He wrote "Even now there is little left to show that come from same stock as the wild Kharia, who inhabit at crests of the highest ranges in Manbhum and Tributary states of Chotanagpur and Orissa" Two points have discussed, with special attention. Firstly, the Kharia everywhere do not engaged in same type of economic activity and secondly, barring a few, they are economically marginalized.

E. T. Dalton (1872), describes on kharia religious practices, every head of a family scarifies to the divinity for life time achievements. The head of the family firstly sacrifices fowls, the second of pigs, third of white goat, fourth of a ram of fifth of a buffalo. He is then considered superficially propitiated for that generation and regarded as ungrateful God as he does not behave handsomely to his variety of sacrifices always made in front ant hill which is un alter among the kharia of Purulia district.

In 1968, Das Amal Kumar published a brief article on the social system of the Kharia of West Bengal. It was a short profile on the family system and other social relationship among the Kharia.

S.C. Roy, 1937: 56, subdivided entire kharia tribe into three main section on the basis of Geographical location, economy identity and culture viz, The Dudh kharia, Dhelki kharia, and Hill Kharia. The Dudh kharia are more advance group, Dhelki kharia are settle agriculturist, and Hill kharia engaged in shifting hill cultivation settled at Manbhum. In 1954 Purulia district demarked from Manbhum of Bihar as district of West Bengal.

Dr. D. Sinha (1984) studied entitled The Hill Kharia of Purulia-'Impact of Poverty on a Hunting and Gathering Tribe'. He describes about the economic crisis of the tribe who suffered from economic deprivation severely. The Kharia are engaged in subject to criminal activities. As such they stigmatized as 'Criminality'. They had believed to be race of criminal and treated so by and large number of inhabitants. He has mentioned subgroup of kharia tribes (pp-11) i.e. Mura kharia, (pahira), Oriya kharia, and kharia in relation to geographical distribution. Mura kharia distributed at at singbhum district of Bihar and Purulia district of West Bengal, Oriya kharia distributed at Orissa, Kharia located at Purulia, Bankura districts of West Bengal and Dhalbhum district of Behar. In 1989 Prof. Chandi Das Mukhopadhaya - Asian Studies Vol - 7, pp- 63: "The crimes and criminals among the Kharia of Purulia. According to Prof. Chandidas Mukhopadhaya these Kharia people settled with smaller and scattered population in remote and isolated areas, still pre-agriculturist stage and mostly depended on outmoded forest economy. They are solely depended on the jungle produce. At present due to denudation of the forest areas these people have been ecologically and economically displaced. The interactional pattern between the Kharia and the village peasantry has not fully crystallized. The Kharia have engaged in committee to crimes from petty thefts to burglaries robbers, large dacoits and even murder i.e., has tried to show that Kharia Sabar about 98% people engaged in anti-social activities. A good number of Kharias have now been equated with the Lodhas and as such, the benefits earmarked for the PTG (Primitive Tribal Group) also accrue to them. Originally, the Kharia live almost West Bengal, Bihar and Orissa are supposed to comprise a single tribe, there are notable cultural differences between them. From the development point of view each of these groups could be differentiated from their counterpart. Banerjee H.N. (1962) wrote a short article on "socio-ritual status of the Kharia in the ethnic background of Manbhum" in Bulletin of the Cultural Research institute. It was an essay dealing mainly with a comparative account of different significant social custom of the three ethnic groups-viz, the Kharia, the bhumij and the Mahato of Southern Manbhum.

The Kharia are not only backward but they have suffered from criminality, Since British colonial period. They are alleged to be notified as criminal Tribe under the criminal Tribe Act of 1924 Act was repealed in 1952 and Kharias are officially declared to "Vimukta Jati". Criminal propensity among the Kharia people deters easy and spontaneous interactive between Kharia and the villagers in general. In all villagers Kharia are migrated from in different period of history either in search of employment, or selection of habitat due to some social reasons. A few of them, occupy very negligible amount of land. The growth of the villagers have been arrested due to different ecological constraints and poor economic conditions of farming population. The Hill kharia suffered from identity crisis as amalgamated with Lodha Sabor of West Bengal.

In 1872 E.T. Dalton (P.P. - 151), described about the identity of 'Savaras' that aboriginal type of population belongs to Hindu, Uriya inferior castes. They have distributed Keonjhur District of Orissa, and previously inhabited at country between the Kandh Maliahs or hilly tract and Godavery. Historian Ptolemy has mentioned in his book as 'Sabaroe'. He also mentioned that Sabaroe have belonged to great Bhunia family. According to E.T. Dalton (1872, page-152) They worship a female divinity, whom they call Bansuli and Thakuraini, no doubt same as the bloody -thirsty, she -devil revered by the Bhuiyas. The prototype of the Hindu kali every year offerings are made to goats and fowls but every ten year each community of Bendakar so far. Beside they worship to practice buffalo, goat, sheep and twelve hens. In respect to religious activity traditionally follow their worshiped custom. Beside they also practiced agricultural activity to pursuits their livelihood pattern.

In 1815 the Midnapur District demarketed from the parts of Orissa geographical land during the Governor General Marques of Hastings. The Saboraes of Paschim Medinipur has been ancient settler of this geographical. The kharia Sabor differ from the Lodha-Sabor and Sabor. The Kharia Sabor of Purulia and Sabore of Paschim Medinipur at Belpahari Zone and Lodhas of Paschim Medinipur are three different ethnic groups. The saboras of Newagram and Belphari they address themselves as Jara sabor. The Sabaroe are belong to Dravidian linguistic family, Kharia are belong to Austro - Asiatic linguistic group. The sabaroe have scatterly distributed throughout the southern tributaries of Jungal Mahal aboriginal tribe. The aboriginal tribe bearing a name often met in the Hindu classics the Suari of Pliny, the sabaroe of Ptolemy, the sabaroe commonly corrupted into sauras, or sours. The Bendkar of keonjhur, who have already excited regarding them published in the journal of Asiatic society of Bengal, are a somewhat isolated fragment of the Savaras.

The Sabars' in the Ramayan, the Mahabharata have also found the reference of Saboras in various Puranas and in Mangal-Kavyas. The Jaganath of Puri was the God of Sabaras. The authentic documents of sabaras found at Charyapada No,28 it is said like this "Uucha Uucha Pabatet to basanti sabari Bali"Asabor girl besides on the rocky mountains is moving at ease. In Charyapada no pp 50, it is described Kachuchaina Pakelarey sabarsobari Mateyla. Free translation-in time of harvesting the sabar-sabari are drunk after consuming liquou. Megathenist Greek traveler has described the existence of around Patiliputra (presently known as Patna) in his Indica. The sabar have been reffered in lok-jatrapalas of Lodha cultural zone around the Subarnareka Basin of Jargram division. In Lalita Sabar 'Pala ,Jarasaboar worshipped "Nilmadhab" symbolized as stone. Nilmadhab was a messenger of king Indradumma who married the sabor girl Lalita, reported the fact regarding Nilmadhab worshiped the king .The Hindu king Indradumma arrested Jara sabor God to the Puri later on which famous for Puri temple. In 1999, Dr. Subrata Mukherjee described in his book "Chang song" that sabores were powerful race whose origin could be traced as far back as the Aitareya Brahmna and other aboriginal tribe who spread over the country from Gangas to Godabori. And descendants may be identified with nomadic Savaras of the present day.

The Sabor inhabited at Nawagram and Belpahari block in different villages addressed themselves as Jara Sabor. The Sabor are one of the Adibasi of Munda ethnic group who mainly live in Odisha and West Bengal. During colonial period, they classed as one of the "criminal tribes" under criminal tribes notification act Act 1871, and they suffer from the social stigma and ostracism in modern times.

According to P. K. Bhowmick (1994), The sabor and Kharia life is in exotically related to the forest ecosystem. They lived in the small villages situated in accessible forest tract. Their adaptation is simple. Their level of technology is enough to cope with their gathering econmy. Presently sobar have distributed at the western part of Pachim Medinipur specifically Jhargram, Binpur, Nawagram Belphari and Banspahari. They have addressed themselves a, "Jara sabar" The western part of earliest Midnapur was under the Keonjhar district of Orissa before 1815. From this time Savaraoes of Pachim Medinapur have been ancient settler of this region. So historically the ethnic identity of Sabor is quite differ from other two ethnic group ie, Hill kharia and Lodha'. But all of three tribes addressed under common term as Sabore under West Bengal Tribal welfare dept. It is the matter of fact that the Sabore and kharia enlisted under list of Scheduled tribe as Sabor in Govt. of West Bengal. The hill kharia of Purulia and Sobore of Jhargram division are two different ethnic group in relation to route of migration. On the other hand Lodha tribe belongs to the PTG list under West Bengal Tribal Welfare dept. But in Bihar Hill kharia Hill kharia belong to PTG list under Tribal Welfare Dept.

The Lodha is one of the ex-criminal tribe in habited Paschim Medinipur West Bengal. The Lodha tribe migrated from Ludhiana of Punjab through Madhyapradesh. The word Lodha had derived from 'Lubdhak' which indicate hunter. A group Lodhas has lived at Madhyapradesh which constitutes Lodhas of Bengal. The Lodhas of M.P. migrated from Ludhiana, so they are particularly called Lodhas. The Lodhas of Paschim Medinapur migrated from Madhyapradesh. Lodhas were identified as criminal tribe in 1871 during colonial period. They were not included at that time in 1916 Calcutta notification under no-7022-23dtd 20 May. The Lodha tribe enlisted as Lodha sabor under the Tribal welfare dept Govt. of west Bengal. Therefore kharia tribes have been suffered from identity crisis in West Bengal.

Now most of the Kharia people deal settled life. Their economic condition has been changed from nomadic hunting gathering to settled agricultural activities. The material culture and social relation have been changed in relation to change of subsistence pattern. The total studied population in three village are given below as part of demography.

Demographic Aspect-Demography opens the original approach studying human societies, in recent years with use of new techniques. It is concern with population composition, literacy status, occupational status and etc. It represents demographic aspects of three village i.e. kulabhal, babujore and pargora.

Sl. No.	Age group	Male	Female	Total
1	Upto-4	26 (9.96)	25 (10.28)	51 (10.05)
2	5-9	31 (11.87)	26 (10.69)	57 (11.24)
3	10-14	32 (12.26)	23 (9.46)	55 (10.89)
4	15 -19	20 (7.66)	27 (11.11)	47 (9.27)
5	20-24	18 (6.89)	18 (7.40)	36 (7.10)
6	25-29	23 (8.81)	20 (8.23)	43 (8.48)
7	30-34	20 (7.66)	28 (11.52)	48 (9.52)
8	35-39	19 (7.27)	14 (5.76)	33 (6.50)
9	40-44	20 (7.66)	15 (6.17)	35 (6.90)
10	45-49	14 (5.36)	11 (4.52)	25 (4.93)
11	50-54	12 (4.59)	7 (2.88)	19 (3.74)
12	55-59	6 (2.29)	5 (2.05)	11 (2.16)
13	60-64	5 (1.91)	12 (4.93)	17 (3.35)
14	65+	15 (5.75)	12 (4.93)	27 (5.32)
15	Total	261 (51.78)	243 (48.21)	504 (99.98)

Analysis of Table No. – 1

From the above table, it is observed the total population of the studied villages are 504, out of them 261 (51.78%) are males and 243 (48.21%) are females. The total population has been categorized into various age groups on the basis of age and sex. The total male population is 261. Out of which 26(9.96%), 31 (11.87%), 32(12.26%), 20 (7.66%), 18(6.89%), 23(8.81%) 20 (7.66%), 19(7.27%), 20(7.66%), 14 (5.36%), 12 (4.59%) 6(2.29%), 5 (9.91%) and 15 (5.75%) are belongs to the age group of (0-4) year, (5-9) years, (10-14) years, (15-19) years and 15-190 years and above age groups. Similarly, the total female population has been categorized on the basis age and sexes and their total number is 15-191 years, (15-191) years, (15-192) years, (15-193) yea

It is significant to note that highest population is 57 belong to the age group of (5-9)yrs out of which 31 and 26 are males and females respectively. The highest age - group 65 yrs above and their number total number 27. Out of them 15(5.75%) and 12 (4.78%) are males and females respectively.

Table No.— 2

Family types among the Kharia: -

Types of Family/ Village	Nuclear Family	Joint Family	Extended Family	Conjugal Family	Broken	Single	Total
Kulabahal	22	9	5	7	2	1	46
	(19.46)	(7.96)	(4.42)	(6.19)	(1.76)	(0.88)	(40.70)
Babuijore	12	11	2	4	5	1	35
	(10.61)	(9.73)	(1.76)	(3.53)	(4.42)	(0.88)	(30.97)
Pargora	17	7	4	2	0	2	32
	(15.04)	(6.19)	(3.53)	'(1.76)	(0.00)	(1.76)	(28.32)
Total	51	27	11	13	7	4	113
	(45.13)	(23.89)	(9.73)	(11.50)	(6.19)	(3.53)	(100.00)

From the above table, it is observed that the types of family among the Kharia in the above mention villages. In this table the types of family have been categorise into 6 – group viz; nuclear family joint family, extended family, conjugal family, broken family and single family respectively. The total number of the families are hundred thirteen out of which 51 (45.13%), 27(23.89%), 11(9.73%), 13(11.50%),07(6.19%), and 04(3.53%) are belong to the family of Nuclear, Joint Family, Extended Family, Conjugal Family, Broken Family and Single respectively. The total number of nuclear family is 51 out of which by 22 (19.46%), 12 (10.61%), 17(15.04%), are belongs to the villages of Kulabahal, Babuijore and Pargorarespecti

The total number of extended families are 11 out of them 05 (4.42%), 02(1.76%), are belong to the villages of Kulabahal, Babuijore and Pargora respectively. It is also found that there are several numbers of families are conjugal and their numbers are 13 out of them 07(6.19%),

04(3.53%), 02(1.76%) are belongs the villages of Kulabahal, Babuijore and Pargora respectively. Generally conjugal family comprises of husband and wife without children. The next category is broken family where the absent of husband and wife either deceased or divorce or separated from the nuclear family. The total number of broken is seven out of them (0-1.76%) and 05(0.42%) are belong to the villages of Kulabahal, Babuijore respectively. It is significant to note that there is no broken family in the village of Pargora. From the above study it is also highlights that there are also 04 households are comprising of only single member of each family. The single household is 01(0.88%) 01 (0.88%) and 02(1.76%), are belongs to villages Kulabahal, Babuijore and Pargora respectively.

The literacy status: -

The level of literacy has been classified into 5 categories viz. illiterate, Can–Sign, Primary, Secondary, and higher secondary level of Education. The total population of the villages are 504, out of them 270 (53.57%) 104 (22.63%), 22(4.36%), and 02(0.39%) are belong to the level of category illiterate, can – sign, primary, secondary and higher secondary level of education respectively. From this table the literacy level of male members is 261. Out of them 118(23.41%), 55 (10.91), 68 (13.49%), 18 (3.57%), and 02 (0.39%), are belong to the category of illiterate, can- sign, primary, secondary and higher secondary level of education respectively. The female of literacy level is indicating that 243, out of them 152 (30.16%), 49(9.76%), 38(7.53%), and 04(0.79%), are belong to category of illiterate, can- sign, primary and secondary level of education respectively. It is significant to note that there is no female members belong to the higher secondary level of education. Nowadays due to modern impact of education through various agencies like as non-formal education, adult education and Sarba Shiksha Abhijan. The people of the villages are less interested to being a literate member of the society. A few numbers of male student are going to the outside of the village and stay at Ashram Hostel for them education.

The Land Holding Pattern: -

It is found that the landless families are 43 (38.05), out of its total land holding household. Out of 43, 17(15.04), 16(14.15) and 10(8.84) are belong to the villages of Kulabahal, Babuijore and Pargora respectively. As landless families who have no agricultural land but they made their houses in the Patta Land which are provided by the Government. Rest of household have some amount of land for agricultural purpose. The amounts of lands are categories into five groups according to their landholding capacity.

These groups are lands upto 10 katha, secondly who have 11 - 20 katha, thirdly 21-30 katha, fourthly 31-40 katha and fifthly 41 and above kathas of land. In village Kulabahal 11(9.73), 03(2.60), 04(3.53), 6(5.30) and 5(4.42) are belong to the above mention categories. In the village Babuijore the land holding capacity of the families are 11(12.38), 02(1.76), 04(3.53) and 02(1.76) are belong to the said category respectively.

It is significant to note that the category of 31-40 kathas of landholding family did not found in the village Babuijore. In the Pargora village the landholding families are 04(3.53), 05(4.42), 04(3.53), 06(5.30) and 03(2.65) are belong to the above mention category. The highest number of lands is 41 katha and above found in the above mention villages. The total number of

households are 10 out of which 05(4.42), 02(1.76), and 03(2.67) are belong to the villages of Kulabahal, Babuijore and Pargora respectively. The total landholding families are indicating that they have more less agricultural land which are mainly mono cropped land depend on monsoon rain. As a result, production of crops is various in relation seasonal variation. The production of food substances is not much adequate to fulfill their livelihood.

 $\label{thm:conditional} Table\ No.\ -3$ Occupational status among the Kharia Tribe: -

Occupational category	Agriculture & agricultural laborer	Daily & Migratory Laborer	Forest Collection	Sal leave processing Broom making	House wife and cattle raising	Students and unable	Total
Male	40(7.93)	80(15.87)	20(3.96)	9(1.78)	15(2.97)	97(19.24)	261(51.70)
Female	16(3.17)	38(7.54)	26(5.16)	15(2.97)	63(12.50)	85(16.86)	243(48.21)
Total	56(11.11)	118(23.41)	46(9.12)	24(4.76)	78(15.47)	182(36.11)	504(99.99)

It depicts that the occupational pattern of the Kharia in the district of Purulia. The total members of the Kharia population are 504, out of them 261(51.78) and 243(48.21) are belongs to male and female respectively. Majority of the people are engaged in forest related activities. It is highlighting that 46(9.12) person are depend on forest products to maintain their livelihood out of them 20(3.96) and 26(5.16) are male and females. At the same time some persons are engaged Sal-leave plate making as their profession. Out of the 09(1.78) and 15(2.97) are male and female respectively.

There are few family have agricultural lands, they are engaged in agricultural activities to produced agricultural crops for maintain their livelihood. The number of these person are 56(11.11) of its total population. Out of them 40(7.93) and 16(3.17) are male and females respectively. The younger generation those who are physically stronger they have adopted as a migratory laborer in various activities near by the town and other parts of the states. Their numbers 118(23.41) of its total population out of them 80(15.87) and 38(7.54) are male and female respectively. Beside some persons engaged in household activities and their percentage 78(15.47) of its total population. Out of them 15(2.97) and 63(12.5) percent are male and female respectively. It is significant to note that the impact of modern system of education the Kharia boys and girls are going to school for their education. The total number of students are 182 (36.11) of its total population. Out of them 97(19.24) and 85(16.84) are boys and girl student respectively.

Social Aspect of the Kharia:-

Inter and intra village relationship have in studied villages Mahato other tribal people is dominant in village social structure. The Kharia have separated hamlet distance from mahato and other scheduled caste, tribe. They have isolated from village council in respect to religious festivals. But they have formed a for chowdance and participate panchayate election. The Mahato depend upon Kharia population for agricultural laborers and household works. The kharia children and adolescent boys go to the mahato family to join 'bangal' (cow herders)

activity. The kharia sell forest fuel, sal pata, kedu pata, rope of sabai grass, minor produces to the mahato family .They have common participation in school, market, and hospital purpose.

Health status of Kharia: -

The Kharia people are suffering from various types of disease like parasite diseases epidemic and endemic disease. Children are suffering from cough and cold, Bronchopneumonia Meseals, Typhoid and parasite infected diseases. Adult male and female suffering from Filarial infected diseases Leprosy, Tuberculosis Malaria, Small Pox especially female is suffering from Anemia. The children are suffering from incidence of diphtheria, Tetanus and Whooping Cough. They are frequently suffering from small pox, dysentery and etc. owing to sheer ignorance on the part of the registering agents. The incidence of acute and Chronic diseases is more higher. The adult male and female suffer from hypertension and paralysis. Female folk also suffers from Anemia.

Incidence of diseases with seasonal variation among all irrespective of age and sex of kharia:-

Seasonal Diseases	Children	Adult Male	Adult female
1. Summer	Meseals, Fever	Fever, Small Pox	Small Pox, Headache,
			Migrane
2. Rainy	Bronchitis	Dysentery, Gastritis,	Dysentery, Amoeboid,
	dysentery, Influenza	Amoeboid	Gastritis
3. Autumn	Typhoid	Amoeboid Dysentery	Fever
4. Dew Season	Bronchitis, Fever	Rheumatism Malaria	Malaria
5. Winter	Cough and cold	Malaria, Asthma, Paralysis,	Asthma, Malaria,
		Rheumatism, Tuberculosis	Paralysis
6. Spring	Para typhoid	Paralysis	Paralysis, Small Pox

For health care service the villagers primarily depend on folk medicines. Beside at present they dependent on modern medicine / Govt. Health Service. In case of complication villagers visit the BPHC at Hura, Bundwan .Other community members contact traditional medicine practitioner for their treatment with medicinal plants and they also admired Hill Kharia regarding this activity. It is found that the consciousness about the family planning among the female members is quite high. They are very much aware about the good effects of limiting family size. They have used various types folk and vegetables medicine on basis of their traditional knowledge.

They have collected different types of medicinal plants for their ill health conditions from nearby forest.

They use various types of medicinal plants. Beside they intake Allopathic medicine and Homeopathic Medicine. There are Quack practitioners who save health care role performance. There are a sub health center within the village or outside of the village. They are gradually access to take the advantage of vaccination for their baby and family planning method. Previously antenatal care totally done at the home, Now Kharia expectant mother are hospitalized for antenatal care with the help of Panchayet, or Village Anganwadi Worker.

There have held Blind operation Sibir, Leprosy and Tuberculosis awareness camp organized by Panchayet and local NGOs.

Addiction pattern: -

They are traditionally addicted on 'Hardia' and 'Muhaalcohal. Beside they are habituated to take Biri make from local Kendupata and take Canabis. They drink alcohol at the time of ritual performances of Mahato community. It is taking as their special opportunity. Now in the Babuijore and Pargora village both male and female are regularly drink alcohol. They are drinking alcohol instead of selling the rice which is given by Panchayet Office. Even if they sale their tile from own roof of the house to buy alcohol from local people or market.

Development by NGOs-

The most significant role in rehabilitating the Kharia Sabor community and to remove criminality. Now NGOs played vital role to uphold dignity of kharia in Purulia District. There are some N.G.O., take an initiative for Kharia socio- economic upliftment in relation to their health and disease, sal pata plate making cottage industry agriculture operation and so forth. Paschim Banga Kharia Sabar Samity has been able to make enduring contribution to the cause of the Kharia Sabar through the untiring effort and commitment of its core member including its guiding spirit. Smt. Mahasweta Devi admirably assisted by the Sabar Samity Rajnowagarh village. They also take initiative for their education. Presently they are continuing one primary school. There are about 82 registered student, 30-40 students only attend the school regularly. One Kharia Sabar Hostel set up at Pargora village of Bandwan Block under State Tribal Welfare Department where 20 students are permanently stay for their education.

Development by Panchayet: -

The Government of West Bengal has initiated several schemes for alleviating the living condition of Kharia, including employment generation and provision of land and credit. Panchayet have helped to setup a Kharia house from Indira Abash Yojana. They get 30kg of rice per month to a Kharia family under Annapurna Yojana with free of cost. They get 40 kg of rice in the rate of Rs. 2.00 per kilo under Antardaya Yajona. Self Help group is formed by the Panchayet member among Kharia humlet. There are only one women group for invest Rs. 30.00 per month. Self Help Group project is formed in the village Kulabhal and Pargora. Men folk have formed a self-help group in the Kulabhal village. They used cash money in the purpose to make a broom stick, salpata plate, sabai grass rope and etc.

Joint Forest Management: -

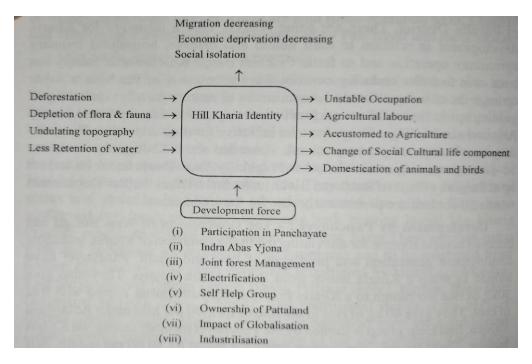
It is the participation of local people, or tribal people for forest development. It is help to engage as wage earner in various activities like tree plantation, preservation of sapling and collection forest resources. They are engaged as a Sal Pata collector, Mahua Seeds Collector and Kendupata, deposit at forest office and received Rs. 50/ per day. The forest department give training to tribal male and female for sal pata plate making. The forest dept. distribute plate making machine to the tribal villagers. The Kharia people engage as a day laborer for harvesting timber. On the other hand, the dacoit activities are control through the participation of the local Kharia people. NERGS project has implemented various activity of forest and village.

Conclusion: -

The life of the Hill Kharia was almost connected with primitiveness with the gradual depletion of the forest cover led to change their subsistence pattern. The ecological degradation creates difficulties to their secondary premitivization descending down from evolutionary scale shifting from hunting gathering economy. The Hill Kharia is one of the venerable tribe in West Bengal.

The problems are gradual depletion of natural flora and fauna and forest area. The hilly slopes and undulating topography are unfavorable situation for carried out agricultural operation. The laterite soil has less potential for water retention. They have got 'Patta land' from land revenue dept, and this patta- land are maximum non fertile and high land. (Dahi land) Agriculture is not fruitful occupation to the Kharia of Purulia district. The Hill kharia suffered from economically, socially and identity crisis. 'They are locally known as kharia sobar but in relation to their route of migration, ethnicity, linguistically they have belong to Hill kharia. They have listed in Scheduled Tribe category under West Bengal tribal welfare department and amalgamate with sobar. The Hill kharia tribe listed in PTG under Tribal Welfare dept of Bihar. The kharia tribe is quite differ from Lodha Sabor of Paschim Medinapore and Sabor of Jhargram division. The Kharia speaks in Austro- Asiatic language but Sabor speaks in Dravidian language. The Jara sobar community is ancient settler of Jhargram division as part of keonjore district. In the 1815 Midnapore district demarcated from Orissa during Governor General Marques Hasting. In Orissa the Sobar are belong to lower Hindu caste. The Lodha sobar are differ from kharia Sobar in relation to route of migration. According to some historians immigrants from united Province (Uttar Pradesh) and originally belong to Luddhiana district of Punjab. In central Provinces (now Madhyapradesh) there is a land holding class named "Lodha" or Ludhi. They adopted the appellation of Lodha the name of the place of origin (P K Bhowmick-1969 pp.12). Therefore kharia sobar, Jara sobar, Lodha sobar are three distinct ethnic group.

The Hill kharia socio- economic transformation took place from shifting hill cultivation to hunting gathering activity and lastly at pre agricultural ways of life. The Hill kharia social identity, economic deprivation gradually decreases.



The Schematic diagram for interaction with Physical and social of Hill Kharia

The Hill Kharia had been depended on shifting hill cultivation during S.C. studied (1937) and then their subsistence pattern changed into hunting gathering ways of life. The traditional subsistence pattern of economy i.e., hunting and gathering of the Kharia has been shifted to marginal cultivation. But the cultivation of main crop is not efficiently done due to small plot of land and undulating topography. Previously they had mainly dependent on food gathering economy and they partially earned their livelihood by collecting wild roots, medicinal herbs, hunting and selling of other forest produces. But deforestation of the areas has brought changes into economic life. They are trying to adjust to their activities like agriculture but it always not fruitful. They suffer from lack of money and insufficient diet. Sometimes they involve in crime to solve their economic problems. Economic crisis creates the mental depression in socio cultural life. These criminal activities create social isolation from the peasants' communities. There are two basic problems i.e., ecological condition of their habitat and small plot of cultivable land. On the other hand, displacement and unsuccessful agriculture are two factors responsible for marginal deprivation. Social isolation has been developed from the pleasantry way of life. Dr. D. Sinha wrote the economic displacement and consequent poverty as one of the causes seems to have validity. Poverty generates a sense of deprivation, which provoke the people to engage in other unsocial activities.

The root of Kharia being stigmatized as deviant lay in the colonial period. The Kharia belong nomadic tribe, wondering in search of food for occupying large territories. They were forest dwellers and traditionally hunter and food gatherers, who used to maintain their livelihood by collecting edible roots tubers, herbs and fruits from the forest and killing the animals. They were totally depending on forest resource. The Hill kharia ethnic identity have changed into kharia and kharia sabor and now only sabor. The forests were to be first denuded by the merchant, Land holders and colonial Government during the first decades. Such devaluation and categorization were a mode existing power the British Govt. Perhaps it was thus that the local administrative machinery brought Kharia under the purview of criminal Tribe Act – 1924. One done it was enforced by law and became a mode of social oppression. Thus during the first decade of the century. The Kharia being ousted from forest economy were forced to come in contact with the establishment village society for seeking shelter and occupation but in most villages Kharia were given shelter not as moral functional caste group or as normal inhabitance. Village land lords established Kharia family in tract of the village area to exploit their laborer. However, patron - client relationship home developed the homeless Kharia and landlords. Kharia was employed by the landlords when the required to make a fight one another.

Their previous mode of subsistence pattern receded due to the deforestation. They are tried to lead a settled life in the village demography and adjust themselves in the pre agricultural stage of living. But agricultural obstacle for laterite stony soil forced to them alternative means of livelihood. Now they are partially depended on forest resource, and agriculture laborer and cattle rasing. The scope of wages earning opportunity within the village as well as in the neighboring village do not adequate as against the demand. Due to poverty and lack of better income grown up boys stop school activity. Kharias boys taken to opportunity of 'Bangal' (cowherder) profession as alternative occupation. Some of the Kharia engaged at the dacoit activity and criminality. They isolated from the village peasantry due to their stigma of 'criminality'.

The Government of West Bengal and Government of India have initiated several schemes for alleviating the living condition of the Kharia in relation to their house type, agricultural land, domestic cattle and poultry, employment generation for day laborer. They are gradually trying to adjust themselves with the neighboring caste and tribe at the rural folk of Bengal in Drought prone ecology.

SUGGESTION: -

Keeping from above desiccation in view to the put forwards some ideas and problems for the development of the Kharias—

Extension services for agriculture are weak. At present small plot of land distributed among the Kharias but quality of land not good to carry out agriculture. Only 4.16% Kharias people have (31-40) Khatha of agricultural land and land less 15.47%.

Joint forest management programmed will be more strengthened to engage the Kharias people at various activities like tree plantation and preservation of sapling, collection of seeds and etc.

Free supply of high-yielding seeds and chemical fertiliser, pesticide will be attracting to the Kharias to do agriculture. Awareness is essential for horticulture activity in different season to cultivate proper vegetables and crop.

Training will be provide about cultivation at undulating topography and irrigation facilities if possible. Also training is required knowledge about cattle rising and Poultry. Subsidy of loans and free distribution of lives stock would be very fruitful for their agricultural activity.

School education of children up to Madhyamik and adult education programmed would be arranged.

Marketing facilities should be improved for supporting for supporting activities of co-operative marketing and purchase forest and agricultural produce.

Awareness camp will be arranged for community health, sanitation and modern medicine. It is essential to developed about the knowledge of traditional ethno -medicine and schooling of children.

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India's Stance on Climate Change Debates

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Abstract

One of the world leaders who has demonstrated a strong interest in climate change issues is Prime Minister Modi. Under his direction, India decided to take a more proactive, ambitious, and forward-thinking stance. The nation's Intended Nationally Determined Contributions (INDC) illustrates this. It ties India's dedication to sound economic development, civilizational ideals, and understanding generational equity and shared humanity. The goals India has willingly set are unheard of for a developing nation¹.

By 2030, India's growth would be 33 to 35 % less energy intensive than in 2005. Based on the successes of the National Mission on Enhancing Energy Efficiency, there is optimism that this goal will get accomplished. One of the largest rising economies in the world, India already has a huge global energy footprint and significantly contributes to the fight against climate change. The INDC has set a target of 175 GW of renewable energy for 2030 due to the National Solar Mission's remarkable performance.

According to reports, this capability could be attained ten years in advance. The government may increase India's goal for 2030 to 227 GW. By 2030, the goal of obtaining 40% of the nation's energy from renewable sources is expected to be met several years early. As of right now, the percentage is 21%. India is actively lowering the amount of thermal power produced by coal in its energy mix. Not many people know that the nation has a fairly high coal cess, around Rs. 400 per tonne, the proceeds of which go into a Clean Energy Fund. Additionally, India is dedicated to not erecting any new thermal facilities that are not in the ultra-supercritical category, the most effective.

¹ Dubash, Navroz K. 2013. 'The Politics of Climate Change in India: Narratives of Equity and Co-benefits'.

Introduction

Global attempts to address climate change through international agreements have been underway for nearly three decades. India has played an active role in this process. It provides India's participation in negotiations, its primary motivations, and how the climate foreign policy behavior over this entire period can best be explained by the role that India played in creating and defending the international climate regime².

The time from the Kyoto Protocol coming into effect in 2005 through the Durban Platform discussions in 2011³, including the 2009 Copenhagen Summit, when this regime was heavily contested and underwent a major transition. India's participation in the negotiations from 2011 to the momentous Paris Agreement in 2015 and its subsequent entry into force, when the current climate regime was radically transformed and placed on a new course for many. The final section tries to clarify some of the similarities and differences in India's engagement across this period.

This focuses on India's stance on climate change discussions that have affected its international standing since 2014. In particular, how does India's participation in these gatherings affect its reputation among other countries, and what are some potential solutions for assisting India in achieving economic growth and environmental protection.

India's Role In Climate Change

India was one of the first developing countries to unveil its climate change policy in 2007 to reduce emissions intensity by 20-25 percent from 2005 levels by 2020. In the 2009 Copenhagen Climate Conference run-up⁴, India made international headlines by declaring that it would not accept legally binding targets for reducing emissions unless developed countries agreed to provide financial support for adaptation measures and technology transfer to developing countries.

As part of its INDCs (Intended Nationally Determined Contributions) submission to the UNFCCC in 2010, India reaffirmed its pledge to lower its emissions severity by 20-25 percent (UN Framework Convention on Climate Change). The submission emphasized adaptation measures such as technology transfers and capacity building. It did not commit to a reduction target under the INDCs framework but said it would get discussed at COP 21 in December 2015.

² Dubash, Navroz K. and Lavanya Rajamani. 2015. 'Multilateral Diplomacy on Climate Change', in David M. Malone, C. Raja Mohan and Srinath Raghavan (eds), Oxford Handbook on Indian Foreign Policy, pp. 663–77. Oxford: Oxford University Press.

³ The Kyoto Protocol: International Climate Policy for the 21st Century. Berlin: Springer Science & Business Media.

⁴ Vihma, Antto. 2011. 'India and the Global Climate Governance: Between Principles and Pragmatism', The Journal of Environment & Development.

Weather Conditions in India

It is predicted that by 2050, India's temperature will have risen by 2 degrees Celsius, reducing agricultural productivity⁵. It will also significantly influence India's economy, as the country primarily relies on agriculture for a living.

Climate change has already impacted India; according to the National Disaster Management Authority (NDMA), at least one billion people are affected by floods in India each year (Majra, 2009).

The 2015 COP21 Summit in Paris was a landmark moment in global climate negotiations. It is only the second time in UN climate negotiations history that all countries have signed a legally binding accord. This article analyses the evolution of India's attitude towards climate change negotiations from 2014.

The Paris Agreement, ratified by 195 countries in 2015, set a goal of reducing global warming to less than 2 degrees Celsius above pre-industrial levels (the objective agreed upon in Copenhagen in 2009), or 1.5 degrees if possible. As part of this process, India pledged to cut its emissions intensity by 33-35 percent by 2030 compared to 2005.

India's participation in various Convention

- India joined the United Nations Framework Convention on Climate Change in December 2014. (UNFCCC). The move occurred months after being elected to a two-year term on the UNFCCC executive board. India was also a driving force behind the agreement at the 2015 Paris climate change summit.
- As part of its INDC promise in 2015, India pledged to lower its carbon intensity by 20-25 percent by 2020. Following the ratification of COP21 in 2016, Prime Minister Narendra Modi's government confirmed this aim. Climate change is a serious international problem.
- The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as a change in the climate related directly or indirectly to human actions that change it. In addition to the natural weather patterns seen over comparable periods⁶, the composition of the global atmosphere is also important (United Nations, 1992).
- In addition, the government has taken initiatives to reduce carbon emissions⁷. India's National Action Plan on Climate Change (NAPCC), published in 2008, outlined methods for addressing climate change through technology development, capacity building, and natural resource conservation. The Indian Ministry of Environment and Forests highlighted initiatives to reduce carbon emissions through better energy efficiency and renewable energy sources in its National Mission Plan on Climate Change (NMPC), launched in 2011.

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⁵ Anandrajah et al., 2014.

⁶ Dasgupta, Chandrashekhar. 1994. 'The Climate Change Negotiations', in I.M. Mintzer and J.A. Leonard (eds), Negotiating Climate Change: The Inside Story of the Rio Convention.

⁷ Prime Minister's Council on Climate Change (PMCCC). 2008. 'National Action Plan on Climate Change'. http://www.moef.nic.in/downloads/home/Pg01-52.pdf..

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Policies after 2014

Initiatives of the economic policies of the Modi government included industrialization, foreign direct investment, technology transfer, and India's involvement in the global labor market. Nevertheless, considering India's close collaboration with the most powerful industrialized nations in these fields, energy, and environmental issues also play a significant role.

India has started a project called "Smart Cities" to improve city planning in addition to attempts to increase the use of renewable energies. "My Clean India" campaign, which started with the Prime Minister personally sweeping a section of the streets, is among such initiatives. The Modi administration intends to spend USD 100 billion over the following seven years to increase solar energy production capacity to 100,000 megawatts. That would be more than thirty times the amount of solar energy currently generated.

There is a strong bipartisan consensus in India against external meddling in domestic matters, such as through legally enforceable agreements. India is therefore viewed as a "nation that can't say yes" globally, as has long been noted in environmental and climatic debates. India has been particularly adamant about highlighting the value of the UNFCCC's principle of Common but Differentiated Responsibilities and Respective Capacities (CBDR & RC).

This principle states that the costs of climate policy should be distributed fairly and under the nation's capabilities on the issue. The per capita emissions, historical emissions proportion, and a nation's economic strength are important factors. From India's perspective, this indicates that developed nations have a larger obligation to safeguard the environment and should take the lead so that emerging nations like India can benefit from the same chances for development as developed nations.

⁸ Anandrajah et al., 2014

India's Position in the Climate Change Debates Till 2014

India's intention to participate actively in the global discussion on climate change was evident from the beginning. India wasted little time in expressing its opinions on the subject and forming a powerful Southern alliance after the United Nations General Assembly (UNGA) Resolution 44/207, which asked member states to draft a "framework agreement swiftly," was passed in 1989.

India was successful in winning the support of the majority of developing nations for its fundamental international positions on climate change⁹ at the first gathering of its kind for developing nations in New Delhi in April 1990, the "Conference of Select Developing Countries on Global Climate Change issues".

These were first since the developed world was responsible for producing the majority of the greenhouse gas (GHG) emissions causing the problem of climate change, the developed world bore the primary duty of reducing these emissions ¹⁰.

Both advanced and emerging nations had "shared obligations" regarding climate change, according to the first draft of the Intergovernmental Panel on Climate Change's (IPCC) First Assessment Report. By making sure that the convention negotiations took place through an "Intergovernmental Negotiating Committee" that the UNGA directly oversaw to allow for "openness, transparency, universality and legitimacy".

Furthermore, it includes the "full participation" of all states (World Meteorological Organization [WMO]/United Nations Environment Programme [UNEP] 1990: 10)¹¹—instead of through other specialized forums, like UNEP or IPCC, which were being pushed by developed nations¹².

There won't be another showdown like the one between India and the EU in 2011 in Durban during the last hours of UNFCCC negotiations. There, the EU was able to rely on the support of a significant portion of the G77 developing nations (the "Durban Alliance"). But as of late, most of these nations have changed their stances¹³.

For adapting to the effects of climate change, they are especially interested in gaining long-term financial commitments and technological support. They no longer believe in the EU's leadership and effective global climate protection. Since it is still unclear what the EU is willing to contribute in 2015, their stances will be more focused on China¹⁴ and India when discussing the specifics of a deal. India may mostly rely on bilateral routes when it comes to receiving the

⁹ Ministry of Environment and Forests (MoEF). 1990. 'Greenhouse Effect and Climate Change: Issues for the Developing Countries', in Proceedings of the Conference of Select Developing Countries on Global Environmental Issues.

¹⁰ Agarwal, Anil, Sunita Narain, and Anju Sharma (eds). 1999. Green Politics: Global Environmental Negotiations. New Delhi: Center for Science and Environment.

¹¹ World Meteorological Organization (WMO)/United Nations Environment Programme (UNEP). 1990. 'Report of the Ad Hoc Working Group Meeting of Government Representatives to Prepare for Negotiations on a Framework Convention on Climate Change', Geneva.

¹² Gadgil, Madhav and Ramachandra Guha. 1992. This Fissured Land: An Ecological History of India. New Delhi: Oxford University Press.

¹³ United Nations Development Programme (UNDP). 2007. 'Fighting Climate Change: Human Solidarity in a Divided World', in Human Development Report 2007/2008.

¹⁴ Chauhan, Chetan. 2010. 'US, China Close in on Carbon Accord', Hindustan Times, December.

funding and technology exchanges required for its energy projects. India won't obstruct the negotiations as long as the international climate process doesn't restrict its options in this regard.

However, there is little evidence that India will take part in a legally enforceable climate deal that includes methods for monitoring and evaluating global climate change. This mindset also dominates the conversation around the Sustainable Development Goals in India (SDGs). Therefore, intensifying bilateral collaboration is Germany's best course of action to help India's climate protection. India has made significant efforts to combat climate change. In addition to pledging to increase its contribution of renewable energy to 40% of the total installed capacity by 2030, India plans to cut its emissions intensity by 33-35 percent below 2005 levels. The Paris Agreement has several signatories, including India.

Contributions by India to Climate Change

The International Solar Alliance (ISA), a group of 121 nations seeking to expand solar energy use, is the National Clean Energy Fund (NCEF). It provides funding for clean energy projects. The Pradhan Mantri Ujjwala Yojana (PMUY), which offers direct LPG connections to people living in rural areas, are a few initiatives India has launched to help it reach these objectives.

India has allocated \$2 billion by 2025 for global solar financing under the concessional Indian Development and Economic Assistance Scheme (IDEAS). As part of the program, associate nations are given low-interest lines of credit by India's government-owned Export-Import (EXIM) Bank. Governments that draw money encourage projects by Indian businesses and rely largely on Indian goods and services.

Likewise, India is especially sensitive to climate change due to its unique geographic location. Extreme weather, a lack of freshwater resources, and increasing sea levels are just a few of the nation's problems. India is attempting to adapt to climate change and make a difference despite these obstacles. India is combating climate change by emphasizing renewable energy sources.

Future Planning

By 2022, the government hopes to have installed 175 gigawatts (GW) of renewable energy, comprising 5 GW of minor hydroelectric projects, 10 GW of biomass, 100 GW of solar, and 60 GW of wind. India's government is sure to meet its goals and has installed more than 50 GW of renewable energy¹⁵.

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¹⁵ Dubash, Navroz K., Radhika Khosla, Ulka Kelkar, and Sharachchandra Lele. 2018. 'India and Climate Change: Evolving Ideas and Increasing Policy Engagement', Annual Review of Environment and Resources.

¹⁶ Dubash, Navroz K., Radhika Khosla, Ulka Kelkar, and Sharachchandra Lele. 2018. 'India and Climate Change: Evolving Ideas and Increasing Policy Engagement', Annual Review of Environment and Resources, https://doi.org/10.1146/annurev-environ-102017-025809

5 GW of minor hydroelectric projects, 10 GW of biomass, 100 GW of solar, and 60 GW of wind. India's government is sure to meet its goals and has installed more than 50 GW of renewable energy.

The Indian Government's Approach towards Climate Change

The world is seeing the rise of strong new voices in India's policy-making agencies about climate change, especially the intrinsic shift in the leadership's political and bureaucratic power structures on this matter¹⁷. Climate change grabbed the attention of the higher authorities from the Indian government when it started to appear more frequently in HoSG-level debates¹⁸.

Additionally, regardless of party affiliation, the nation's top political figures were more willing to take political risks than its bureaucrats and to consider and accept solutions far beyond India's normal bargaining position and status. Due to the policy changes initiated by ministers who exhibited vastly different worldviews, danger perceptions, and normative commitments on this issue than individuals typically in charge of determining Indian climate policy, this was dramatically illustrated (Michaelowa and Michaelowa 2012). It was also evident in Prime Minister Modi's more direct role in making and approving the political decisions, trade-offs, and compromises seen in the run-up to, during, and after COP 21.

The world is watching India's efforts to combat climate change. India, the second-most populous nation, is now ranked 10th globally for carbon emissions with 2.88 Gt. Prime Minister Narendra Modi introduced the "P3 (Pro-Planet People) initiative" at the World Economic Forum 2022 to showcase India's commitments to combating climate change. He emphasized the environmental issues caused by our way of living. India has stated that it will achieve zero emissions by 2070.

Modi has expressed concern about the significant challenges that climate change provides to farmers in India and most other rising nations, as cropping patterns are changing and crops are being destroyed by storms, floods, and unforeseen rainfall. In comparison to 2005, India promised to reduce the carbon intensity of its GDP by 33% to 35% by 2030.

Paris Protocol and India's Political Standing

After months of pushback, India is prepared to reconfigure its 2030 climate ambitions under the Paris Agreement. India plans to halve the greenhouse emissions created for every dollar of economic activity by the decade's end. India may reduce the economy's carbon intensity by at least 46 to 48 percent as part of its updated nationally determined contributions, or NDCs, as commitments made by nations under the Paris Agreement are known. Since the Paris Accord is the first legally binding agreement that unites all countries with a common goal to combat climate change and address its repercussions, it marks a turning point in the global fight against it.

The IPCC estimates that global emissions should be cut in half by 2030 and reach zero by 2050. The goal of Net Zero is unattainable and unfair¹⁹. However, India's goal is to achieve Net Zero by 2070. So to achieve this aim, all Organization for Economic Cooperation and Development

¹⁸ Ghosh, Padmaparna. 2009. 'I Want to Position India as a Proactive Player: Jairam Ramesh'.

¹⁷ Atteridge et al. 2012

¹⁹ De Clercq, Geert. 2017. 'France, India to Cooperate in Fighting Climate Change', Reuters, 3 June.

(OECD) nations must reduce their emissions by 2030. However, this target will not keep global warming to 1.5 degrees.

India is dedicated to combating climate change despite its difficulties.

The nation is aware that it must take measures to lessen the effects and adjust to the changing environment. India is attempting to create a more sustainable future by investing in renewable energy, enhancing energy efficiency, and taking action to adapt to the effects of climate change.

India's Leadership and Political Alliances

India has become an international leader in solar development cooperation in the present times. In addition, at COP26, India and the United Kingdom officially confirmed the Sustainable Grid Initiative-One Sun, One World, One Grid, an initiative to connect national grids for the mass transportation of solar energy. It played a significant role in forming the International Solar Alliance (ISA), which is now operational.

Significance of the Study

The entire planet has been influenced by climate change, and India is no different in this case. The nation's population is expanding at an alarming rate, increasing the need for food and water. The capability of India to produce enough food and water to meet this need is also being impacted by climate change. This essay contends that if India does not act now to combat climate change, it will get harder for the nation to feed its citizens in the future. The importance and significance of this study remain attributed to three main factors:

- The supply of water, as well as food production in India, will deteriorate as a result of climate change.
- A preliminary study has been done on the effects of climate change on agricultural output in developing nations like India.
- The long-term effects of climate change on agricultural productivity are little understood.

The knowledge regarding the climate change phenomenon in India will help young people understand and tackle the consequences related to greenhouse effect and global warming. It will also encourage them to change their behavior and adapt to the global emergencies while working towards recreating a sustainable environment for the future.

Why is this study important for India?

India, like any other nation, should keep a check on its climate change trends. Rainfall during the monsoon has decreased since the 1950s. The frequency of intense downpours has likewise increased over time. There is evidence that since the 1970s, parts of South Asia have become drier and experienced an increase in the frequency of droughts²⁰. Droughts have important repercussions. In 1987 and 2002–2003, droughts affected more than half of India's agriculture, severely reducing agricultural output.

India relies heavily on groundwater due to its agriculture, which is dominated by rain-fed farming for more than 60% of its total land area. India's groundwater resources are overused

²⁰ Paterson, Matthew. 1996. Global Warming and Global Politics. London: Routledge.

by 15%, even without climate change. Glaciers have remained stable or even larger in regions where westerly winter winds are the main source of precipitation, such as the northwest Himalayas and the Karakoram Range. These are some reasons why India should focus more on fighting climate change.

Relevance of the Study Regarding Climate Change

India is a significantly developing economy with roughly 700 million rural residents reliant on natural resources and climate-sensitive industries like water, biodiversity, mangroves, coastal zones, etc. The subject of climate change is becoming more and more important to cultures all around the world. The number of individuals affected by extreme weather events and the frequency of natural catastrophes like floods and droughts has increased significantly in India. It has worsened people's access to food and clean water and promoted migration from rural to urban regions²¹.

However, the magnitude to which climate change has impacted India's population is not fully understood by experts due to a lack of data on these topics. As a result, by analyzing the available data sets, this study sheds light on how climate change impacts people living in metropolitan areas across India.

Climate change already has disastrous impacts. In the last few decades alone:

- Extreme weather occurrences have gotten harsher as temperatures have risen.
- Antarctic glaciers meltdown.
- Cycles of forest wildfire that last for months.
- Coral reefs have lost their vibrant colors and have bleached themselves.
- Mosquitoes are spreading illness and extending their turf.

Even a half-degree Celsius increase in global temperature causes perspiration to increase, adding more water to the atmosphere. Our agriculture, health, and water sources are among the many things that are put at risk by these varying situations. There are effects of climate change on all aspects of the natural world. Disruptions in lowering carbon dioxide or other climate pollutants will have substantial, potentially long-lasting implications on rising temperatures, coastal erosion, food security, and public health.

Lowering short-lived climate pollutants, which have an atmospheric lifetime of only a few days to a few decades, can contribute to slowing the rate of global warming²² and work in conjunction with efforts to cut carbon dioxide emissions. Although India successfully created the initial climate policy and upheld it for a considerable amount of time afterward, it found it more difficult to negotiate international climate discussions in the years that followed.

India's challenge in the post-Paris phase of the negotiations will be to thoughtfully strike a balance between the necessity of securing a fair international agreement and taking real domestic climate action. It gets accomplished in a way that reduces the country's frailty and increases its chances for national welfare, green growth, and smart development in a carbon-constrained world.

²² Atteridge, Aaron, Manish Kumar Shrivastava, Neha Pahuja, and Himani Upadhyay. 2012. 'Climate Policy in India: What Shapes International, National and State Policy?'

²¹ Newell, Peter and Adam Bumpus. 2012. 'The Global Political Ecology of the Clean Development Mechanism', Global Environmental Politics.

Climate Friendly Approach

The nation strives to peak global greenhouse gas emissions as soon as feasible, creating a climate-neutral planet by the middle of the century to achieve the protracted temperature goal. In this regard, the Indian administration is off to a terrific start. \$187 million has already been paid out by EXIM Bank to nine different nations. Twenty-seven projects totaling more than \$1.46 billion have received official approval; however, each one must now undergo technical and financial reviews.

The bulk is for off-grid solar systems, in which Indian businesses are experienced, including an eight-megawatt solar system in Mauritius and a street lighting installation in Sierra Leone. On the other hand, utility-scale solar parks, including those in Bangladesh, Cuba, and Kenya, get the majority of funding in terms of value. The next stage for the government will be to deliver these, which are only currently on paper.

It is first aiding in constructing utility-scale solar parks in other nations. The ISA has begun a solar park program with India as its leader. Additionally, the Indian government has funded a project preparation center run by the EXIM Bank of India. This service provides technical help to ISA members for projects using Indian funding. Last but not least, ISA is creating strategies for low-cost private financing. The government believes that other nations should adopt its private-parks model.

The investigation of all these alternatives, and others, is done through qualitative analysis in the article, which compares India's actions to other countries in the climate change discussion. The qualitative method looks at specific instances of events or behaviour rather than forming generalizations or passing judgment based on data or statistics. This strategy reveals what the Indian government has accomplished and permits comparison with other nations' programs.

Limitations of the Study

This study's primary weakness is that it relies solely on secondary data. It implies that the validity of the information gathered from additional sources will impact the research's findings and conclusions. The second drawback is the frequent extrapolation of results from studies done in one region of India to the entire nation.

Another drawback is that a lack of data or insufficient data gathering mechanisms has left many gaps in our understanding of climate change in India. We might be able to comprehend how climate change affects India's people and economy if we can determine how to obtain higher-quality data.

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