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Editorial

North-east, described as the 'Ashta Lakshmi' of our country by Prime Minister Modi, is a land of rich natural, human, social and cultural resources. The region has its own story of evolution in its social, cultural, economic spaces for veneration, examination, contextualisation and comprehension. ICSSR-NERC has been at the forefront of promoting social science research and undertaking socially useful research in this part of the country. Our journal 'Man and Society' has been an important planform to narrate, chronicle, examine, study, interrogate and research these myriad transformations. The current issue of the journal which includes seven articles and one research note contributed by young and experienced researchers is an expression of the above stated objective. There are two articles in this volume which through their literary presentations critically celebrate the socio-cultural life of the people in the region. The articles on gastronomic tourism and public infrastructure provide insightful analysis of the relevance of these two economic activities in the current and future development practice of the region. Another article on spatial inequality in human development brings out the unequal distribution pattern in terms of human development accessibility in the region along with the evidences of convergence. These findings have their obvious implications for policy making in the region. The article 'Arunachal in North East Economic Zone: An Assessment' suggests to enhance the scale of cooperation with other states of North-east by improving her level of technologies and augmenting her trading strength so as to be able to compete successfully with the rest of the country first and then the world at large. Finally, another well researched article 'A Cross-Sectional study of North-East Region of India: Strengthening National Integration through National Cadet Corps (NCC)'chronicles and analyses the relevance of NCC in integrating the Northeast with the rest of the country.

We are confident that researchers, developmental practitioners and policy makers would find these articles and research notes relevant. I take this opportunity to thank the members of my editorial team, members of the editorial advisory board, copy editor Ms. K.I. Lyngdoh and the concerned office staff Mr. Romauldo M. Pasi and Mr. Temberly R. Kharbani for meticulously working at various stages of examining and processing of these articles. I also thank 'Eastern Panorama Offset' for undertaking the printing job of this issue with dexterity and sincerity.

Bhagirathi Panda Editor

Folklore, Ethnobotany and the Construction of the Ethnic Self: Reading Arupa Patangia Kalita's *The Cursed Fields of Golden Rice*

Dharmendra Baruah*

Abstract: Ethnobotany emerges as central to literature dealing with Bodo life as well as to the narrative construction the Bodo ethnic self. This paper seeks to examine instances of ethnobotanical expressions in *The Cursed Fields of Golden Rice*, a short story written by Arupa Patangia Kalita and translated from Assamese into English by Ranjita Biswas. It aims to explore how in the given story intergenerationally inherited ethnobotanical lore does not remain a mere backdrop to the main plot, but is transformed into a key site of regaining and recovering a much needed sense of identity. While doing so, the paper also examines how the story succeeds in celebrating relatively underexplored dimensions of resource management practices of the Bodos.

Keywords: Ethnobotany, identity, loss, dislocation, symbol, resource

Ethnobotany is often viewed as the investigation of the biological, including the ecological, bases of interactions and of relationships between plants and people over evolutionary time and geographical space (Bye, 1985). In other words, ethnobotany is the investigation of the interaction between plants, people and culture (Jones 1941; Arvigo and Balick 1998; Balick and Cox 2005). However a more dynamic interpretation comes from within the discipline itself. As Bye puts it, with emerging contexts, older data and ideas take on new meanings. How people recognize a resource, how they value it in the short and long term, and how they manipulate it are questions raised in an ethnobotanical study (Bye: 375). Conventionally, the focus of ethnobotany have been the material and symbolic use of plants in collective life. Some of the material sites of ethnobotany are- the use of plants as food, medicine, construction material, and other livelihood imperatives (Kitalong, 2011). In other words, the ethno-cultural significance of plants/ flora derives from their use as sources of food and drink, stimulants, body

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care and adornment, construction material, firewood and cordage, as musical expressions, as seasonal indicators (Mandia, 2004). It also includes other plant-related beliefs and practices, (111), shamanistic use of plants in songs (113). It is important to note also the affective use of plants as mediums expressing personal emotions such as longings, figurative songs (114), courting songs (114) etc. The other main emphasis has been on the study of the symbolic use of plants in collective life. It includes not only ritual and religious use of trees (Kitalong, 75), its therapeutic use to energize or heal (67), but also the ceremonial/ritualistic use or what is viewed as 'plant-ritual complex' (Mandia, 97). The importance of plants in ethno-cultural lives is most evident in the form of ubiquity of plant-related beliefs and practices as well as plant-inspired songs (115), in ethnic landscapes such as that of the Bodos.

This brings to the fore the affective or emotive dimension of plant-use. Taking this view of ethnobotany as an affective/ emotive and metaphoric exercise, this paper moves on to explore the material and metaphoric ethnobotany in the story. It not only looks at those ethnobotanical expressions in the text which are obvious, but also the usually under-examined issue of these as metaphors of identity. The paper situates Bodo ethnobotanical heritage within the larger issue of identity. It argues that the corpus of ethnobotany in the text does not remain limited to usually highlighted/ familiar usage of plants in domains such as food, beverage, costumes, ornamentation, medicine etc. Rather, the text brings to the fore the centrality of plants in the (re)-formulation/restoration of a lost sense of the Bodo ethnic self. To this extent, one can say, the present reading significantly deviates from those long-standing taxonomic frames and episteme— these with an inherent preoccupation with documenting, listing, inventorying plant use in ethnic landscapes— towards a culturally, ontologically informed view of ethnobotany as identity. This is done primarily with the help of theoretical ideas that are not always from what could be termed as material, physical or taxonomic ethnobotany but from domains which despite their apparent lack of relevance to the discipline, have significant potential to lead to fuller and more meaningful ethnobotanical understandings. This shift in focus derives from the debate as to the broad-basing of existing epistemic

frames of ethnobotany towards some sort of inter-or trans-disciplinarity. As John C. Ryan observes in his paper "Cultural Botany: Toward a Model of Transdisciplinary, Embodied, and Poetic Research into Plants" (Ryan, 2011), the increasing mechanization and technologization of our view of the natural world, the ensuing divide between the humanities and natural sciences and a certain kind of plant-to-human sensory disjunction demands that the schism between objective (technical, scientific, reductionist) and subjective (emotive, artistic, relational, multi-sensory) forms of knowledge collaborate (123). Due to its technical orientation, mainstream ethnobotany offer limited theoretical promise for embodied and poetic research into human and plant interactions. As a variant of 'taxonomic botany' (125), ethnobotany is undergirded by universalizing, sensory limited visual structuring of the natural world. Referring to the German philosopher Johann Wolfgang von Goethe, Ryan reiterates the need of a fuller integration of 'plant poetics' and botanical science, so to say-a synthesis of 'poetic and scientific sensibilities that would provide a way of experiencing nature both symbolically and scientifically simultaneously' (124-125). Ryan cites cultural botany/ecology as a potential transdisciplinary approach to reexplore interactions of humans with flora as an 'everyday' and 'embodied' performance (123). This foregrounds other overlooked aspect of ethnic plant-use—the embodied/bodily cultural engagements with flora and the many interdependencies between plants and humans from multi-sensorial perspectives (123). The limitations of existing ethnobotanical approaches have also been brought to the fore by Kay E. Lewis-Jones in her article "People and Plants" (2016). Jones observes how plants as subjects/beings are always in the margins of institutional knowledge-production regimes. Drawing attention to the role plants play in 'world-making' (1), that is in sustaining both ecological and social worlds, Lewis-Jones calls for an immediate rediscovery of plants as agents in our world. Ethnobotany of the future must recognize that plants are world-making, dynamic, modes of being. In fact, as pointed out by lewis-Jones, instead of being viewed as passive and peripheral, plants should be viewed as 'plant-beings' or as 'plant subjectivity' (3), as they are more entangled in symbolic and material interactions with humans.

The present paper derives from the imperative to redefine existing models of ethnobotany in terms of priorities, scope, orientation and outcome. Another focus of the paper is resource management among the Bodos. In fact, the plant-folklore of any ethnicity is inherently embedded in its resource management regime. The paper is premised on this mutual embeddedness between botanical lore and resource management practices of the Bodos as illustrated with examples from the text under review. As the paper argues, the story illustrates interesting ways how ethnobotanical expressions, in certain situations, function as an existential urgency rather than as material needs. The restorative or therapeutic function of ethnobotany is a known thesis. However, adequate light have not been thrown on the way ethnobotanical beliefs, lore influence the (re)-shaping of sense of self, especially in contexts of crisis and conflicts. The forced migration of an unwilling ethnic subject, from her ethnic habitus to an alien landscape and the ensuing existential upheaval generates such a context.

Before moving on, it is useful to briefly look at some of the other critical/ theoretical ideas that inform the study. The overall theoretical framework adopt from critical interdisciplinary, transdisciplinarity, the environmental and ecological humanities, ecocriticism, and cultural ecology. One useful starting point is to look at the implication of space and identity—that is, the spatial manifestation of private and collective selves, particularly in ethnic landscapes. As pointed out by Anath Ariel de Vidas in his study "What Makes a Place Ethnic? The Formal and Symbolic Spatial Manifestations of Teenek Identity (Mexico)" (2008), identities in general and these of ethnic selves in particular, are founded on some kind of spatial manifestation. In other words, identities are founded on formal and symbolic space-markers. Whereas the formal often corresponds to social and political markers such as boundaries and borders, the symbolic enables the ethnic subject to evade the constraints of immediate spatial and temporal context (161-191). In fact, ethnic identities are founded on this merging between the material and the metaphoric. As De Vidas observes, material identity-markers such as corporeal, musical, domestic spaces—in ethnic societies— mutate into cultural-metaphysical symbols, to create what could be viewed as 'ethnic space' (170, 177), the foundation of any ethnic identity. Any ethnic space

is founded on certain kinds of boundaries (167)-sometimes formal/physical but always cultural/metaphysical or so to say—ontological. Some other settings/ sites of ethnic space are- loyalty to a collectively shared vision of a community, myth of origin (177), space of the ancestors (178), musical spaces (179), corporeal space (180), the domestic space (182) etc. What marks these settings is the ethnic way to re-semanticize the material into the symbols of an autochthonous heritage. The symbolic construction of boundaries encompasses the social interactions with cultural others and more importantly, denotes a historical consciousness. The material-symbolic ethnic/community spaces are sustained through specific customs wherein what is viewed as obvious assumes a deeper and multi-layered symbolicexistential resonance, usually overlooked in conventional ethnobotany. It is important to note that to an ethnic subject, this ritualistic-symbolic space often serve to provide emotional attachment and refuge from a rather hostile external world (175). The present paper illustrates this dimension of Bodo herb-folklore as an ethnic space. Herb folklore of an ethnic group is not only its autochthonous heritage but also a site to host its collective historical consciousness. At the same time, it is also an important cultural marker to validate the ethnic self. To this extent, indigenous plant-use practice and lore, both are best viewed as sites of ethnic identity construction. The present paper illustrates how an ethnic subjectivity is not only entrenched in Bodo herb folklore, but also an inherited ethnic consciousness that sustains it.

It is obvious that symbolic meaning-making is central to any ethnic space. It will not be inappropriate to term this symbolic meaning-making as ethnocultural semiotics. Given the centrality of symbolic self-performance in both the formation of ethnic identity and the consciousness that sustains it, it is imperative to recognize and explore the semiotic, cultural and ontological import of what is viewed as ethnobotanical lore. As already suggested, use of plants within ethnic communities are either material or symbolic/ritualistic which in this paper is referred to as metaphoric. However, the metaphoric-symbolic use of plants is also usually viewed in terms of the restoration of corporeal well-being and also as a matter of custom, whereas a fuller understanding of plants is not only visual only but 'multisensory'

(Ryan, 125), syncretic, culturally integrated and sensuously heterogeneous. Ethnic plants-lore such as those of the Bodos are enfolded within bodily experiences and physical needs, and have emerged from what Ryan terms as 'multisensoriality' (125), manifest as the stories and "hearsay" of regional locales and seasonal particularities of nature and culture. These make ethnic plant epistemologies situated, variable, self-determined, and corporeally affective. Ethnic plant-lore emerges as the best site for a fuller integration of poetics and botanical science through what might be called a certain kind of "floral poetics" (Berthold 2004: 206) that exceed disciplinary boundaries and becomes a transgressive vision of the environment and plants in which science and poetics, as conventionally quarantined disciplines, intermingle.

This paper deviates from this long-standing taxonomic frames in linking ethnic plant-use—both lore and performance—to the issue of loss and regain of ethnic self-identity. As a narrative based on Bodo life and lifeways, Arupa Patangia Kalita's story *The Cursed Fields of Golden Rice* is suffused with elements and expressions from both the material and cultural lives of the Bodos. However, this paper retains its focus in exploring how ethnobotanical heritage serves to reinforce, restore and reiterate the ethnic self in a diasporic context. The protagonist, a simple, illiterate but sympathetic and kind-hearted Bodo village girl Mainao finds herself in an alien landscape, is emotionally and psychologically upset and again and again returns to the autochthonous ethnobotanical lore she inherits from her *Abou* [which means 'grandfather' in Bodo language] to regain her lost self. Ethnobotany, in the story, emerges as a tool to re-root the self in a challenging landscape and is loaded with metaphorical resonance. In a way, this corroborates the metaphysical import of ethnobotany.

The protagonist of the given story, Mainao always returns to what she has inherited from her grandfather's knowledge of folk herbs. The inherited herb folklore becomes a part of her being and consciousness. While increasingly alienated in the metropolitan ambience of Delhi, where her lover turned husband Hari works as a bureaucrat she is left with nothing to fight back the forces of alienation. It is her inherited herb folklore which she resorts to in order to negotiate the difficulties arising out of physical

and cultural alienation. To this extent, ethnobotany emerges as a site and symbol of Bodo ethnic identity in an alien setting. This illustrates the larger point made in this paper, that is—the imagination and use of plants are not restricted to the domain of the material/corporeal but also existential/metaphysical in terms of recovery of ethnic subjectivity.

The Cursed Fields of Golden Rice is a short-story originally written in Assamese by the noted Assamese writer Arupa Patangia Kalita and translated into English by Ranjita Biswas. It appears in the collection of stories Written in Tears (2015).

The narrative deals with the love story of a Bodo boy Hari and Mainao, an ordinary Bodo village girl working as a housemaid at Hari's home. It also deals with the challenges and hardships faced by them in chasing their dreams and the ensuing disappointments. 'Mainao' in Bodo language refers to the goddess of wealth, Lakhi (51). It is also significant that the name of the central male character is Hari, also known as Alfred, a name given to him by his Missionary school teacher from south India, father Jonathan. However, Hari prefers to retain it as his school-name and not elsewhere (51). The story is set in a village in a Bodo hinterland, Botabari. As the story begins, an overjoyed Hari returns to his village home with Father Jonathan from Guwahati after collecting his matric results. Father Jonathan, the teacher in the village 'venture' school, is the one who spots the hidden potential of Hari as a bright but deprived student. Hari's exceptional results once again proves true the faith that Father Jonathan has on his academic brilliance. Hari's father was least bothered about Hari and his stepmother does not even feel like giving him some rice with salt. "Till about seven years of his life, the boy had spent playing and doing nothing in particular. It was Father Jonathan who almost forced him to come to school (48)." As both return to their homes exhausted, as the journey from the town to Botabari, their village itself is a challenge because of bad roads. Despite his exhaustion, Father Jonathan continues to urge upon a reluctant Alfred to pursue further studies in a town college. Alfred on the other hand, is aware of the financial implication of this and is aware that he is not in a position to continue his studies.

As Alfred reaches home with a hungry stomach and feels it churn with hunger, he imagines how Mainao must be waiting with a plate of rice for him and how happy she would be to hear his results. He also visualizes how protective and affectionate Mainao is towards him always. Mainao does not only look after Hari's material well-being but also offers him emotional support when he is in crisis. Their mutual affection morphs into love and a conjugal union. Hari, on being insisted by Mainao, returns to his college to complete his education leaving behind a pregnant Mainao in the village and in the company of her *Abou* [grandfather] old Boloram. As Hari continues his studies in the town, Mainao despite the child in her womb transforms herself into a pillar of support to Hari. She not only sustains herself by looking after her household, by selling out home-made edibles nearby the main road, raising crops, weaving traditional shawls and raising and selling out home-grown pigs and hens. As Mainao gives birth to their son whom she names as *Daokhi* [which means chicken chit in Bodo], and Hari names him as Siddhartha, their world changes. As Botabari rejoices the arrival of a new road, it also is unsettled by the appearance of the militants and soldiers. Haunted by the warning issued by the rebels that he should no more be a selfish-minded student and rather join their camp and also by concern for Mainao and Daokhi, Hari forsakes his urge to pursue an honours course in English. Amidst all this turmoil Hari joins a school attached to the village church as a tutor, an assignment he loses when the school is closed for an indefinite period. Like most of the village men, Hari works as a labourer breaking stones for road construction leaving Mainao upset. As they struggle to survive and the thought of going to college becomes a long-lost dream, Hari is visited by Prof. Bordoloi of the town college. Prof. Bordoloi's insistence forces Hari to return to the college. Bordoloi also extends his help in the form of a monthly cash amount to be given to Hari, but also arranging a buyer in Jonali, a co-operative worker who agrees to buy and market clothes weaved by Mainao. Hari, after graduating with English Honours, goes to Delhi to join his post as a junior bureaucrat and returns to Botabari only to discover that Abou had died and Mainao is in the grip of malarial fever. Mainao, who is expecting the arrival of a baby-girl soon, is taken to Delhi to stay with Hari in a flat, leaving behind their household in the custody of Hari's father. However, Mainao finds this new place alienating and unfriendly because of the indifferent and self-seeking attitude of city-people. She sinks into depression and gives birth to a stillborn, making her depression more acute. Unable to restore her well-being as well as sense of security despite the best of western medicines, Hari is left with no other option, but to take her back to her ethnic home. Unfortunately, upon return they see that there is no living trace of the home, Mainao had crafted. The hens and picks have been feasted upon by these mysterious gun-bearing boys, the 'jungle party'. Their home had been reduced to a 'mound of debris' (113). Mainao faints. The next morning, the villagers escort the family back to the train station to return to Delhi.

The Cursed Fields of Golden Rice is a lively narrative of love, loss and identity. As a story set in a Bodo material and socio-cultural landscape, it celebrates every aspect of Bodo lifeway, their material-cultural artefacts, their folklore, folksongs, folk-rituals and so on and so forth. However, this paper restricts its analysis exclusively on the obvious and implicit expressions of Bodo ethnic plant-lore or so to say—herbal folk-lore and its centrality to a certain kind of consciousness— so to say, a Bodo ethnic consciousness. To this extent, the expressions of plant-lore in this story could be seen as a site and symbol of Bodo ethnic self.

To begin with, the extensive use of plant-metaphors in the story foregrounds the important ethno-cultural role of plants in Bodo society. It is quite obvious the way Father Jonathan's facial colour is compared to the 'colour of the *dark thereju berry*' (45: emphasis added) in the very beginning. "Father Jonathan's face, the colour of the dark thereju berry, had taken a purple hue now" (45). This use of plant-metaphors is also obvious when Alfred in a moment of intimacy, is seen perceiving Mainao as a replica of 'Phulmuthi', the exceptionally beautiful heroine of the celebrated Bodo folktale. "Phulmuthi had become a young woman. Her face was like the wide leaf of tora grass...her nose was like the sharp thorn of a ghora kagzi lemon tree, the calves of her legs were like the bamboo shoot stalk, the neck was like that of a deer, the eyes were like the brown eyes of a pigeon. With her voluptuous breasts, slender fingers and long straight hair,

she looked like the heroine of the folktale" (49: emphasis added). These analogies are extensive as seen elsewhere, "That day Mainao really turned into a Phulmuthi on earth. Her green mekhela pushed up and her calves, strong and toned like unsheathed bamboo shoot lay exposed, her long hair covered her face like the wild leaves of the tora plant" (49-50: emphasis added). In fact, Mainao is always presented, in the story, in terms of some green-metaphors derived from the immediate natural ambience and hence with substantial ethno-cultural import. "When she heard a bird singing, saw a moon or a butterfly, her voice trembled like the whistling wind passing through tora grass shrubs. She knew so many songs... she would only laugh, her body shaking with laughter like *jhow grass* swaying in the wind" (53: emphasis added). Tora grass is a recurring metaphor in the story and it reflects the indispensability of tora grass in almost every Bodo ritual. Again "when she told the story, streams of tears would flow down her cheeks, which were like the skin of the sour ou fruit with its thick smooth layers (53:emphasis added). When she is sad, "her lips trembled like the whistling wind crossing through the tora grass shrubs (54). When he shares their first intimate moment in the middle of the night, under a peepal tree, her slim body trembles like the leaves of a tora plant (55). As the writer puts it: "As he tried to put the chain around her neck the loose knot of her dokhona came undone. Moonlight was now painting designs not on her clothes but on her body like a bamboo shoot without the skin" (55: emphasis added). The sense of fulfilment and the metaphor used by the writer brings to the fore the centrality of plants, not only as food but also in the domain of music and culture. "His heart was singing like the ciphun flute made of hollow Bamboo" (55: emphasis added). This is an instance of the multiple use of bamboo in Bodo ethnic life.

The narrative also brings to the fore the importance of botany in shaping the Bodo folk-imagination and lore. As Mainao is someone entrenched in the Bodo ethnic-lore, Hari/Alfred appears to her as 'Alari Dambra' the folk-hero. The birth tale of Alari Dambra points to the proximity of plants and humans as visualized within Bodo ethno-cultural imaginings. As Mainao say, "You are Alari Dambra— Alari of unparalleled qualities. You were found by your mother *inside the betel-leaf and betel-nut of heaven*. The

maidens Asagi and Baisagi cried begging in front of Baobuli, god of wind, saying they wanted to marry you" (49). As Mainao narrates to Hari, her beloved, the birth-tale of Alari Dambra, the importance of betel tree as a 'cultural keystone' plant of the Bodos becomes evident. She says:

The forest of *bota trees* were burnt down, your mother swept the floor of ash. There she found *betel leaf and betel nut* from heavenly abode. She thought of sharing it with her husband, but forgot about it and they remained in the bag. And you were born there. Your mother hid you. She offered *betel nut and leaf* to the young men and women from heaven, and on their red spit, she sat and told the villagers that she had given birth to a boy (50: emphasis added).

The copulation of Hari and Mainao and her impregnation is described in the story in terms of the Alari-Dambra myth, reiterating the larger cultural importance of betel nut in the community. "Mainao's ears filled with the screeching sound of mice in old woman Ahem's clothes bag; she kept the betel-nut and leave from heaven to eat with her man. Her dokhona was stained by the red-spit from the betel nut and betel leaf that old man Ahem had given to dozens of young men and woman" (56). One cannot overlook the ways betel-nut and leaf pair serves as both a conjugal and reproductive metaphor. This draws attention to another unexplored use of plants and plant-metaphors within Bodo ethnic botanical belief-system or, so to say—Bodo ethno-plant lore. Betel nut is both a plant and a fertility or reproductive symbol in this lore. This explains its larger/implied ethno-botanical import of plant products such as betel as a symbol of love and honour. It becomes an essential symbol of Bodo identity.

There are also other expressions of the herb-lore as well as dimensions of the extensive plant-use regime of the Bodos. Some of these relate to the material domain and hence, are quite obvious. For example, betel nut with a leaf is used to welcome and treat guests (57), that is, used as both ritualistic tool and as edibles. This also applies to the basil plant. It is evident the way the basil plant at the pedestal of Bathou is honoured and worshipped (57). Similarly, the 'cerja' [a violin-like musical instrument of the Bodos], played by old Boloram, and the 'thorka [a clapter] made of bamboo', to which his

voice is compared are derived from plants. The 'zumai' [rice beer of the Bodos], prepared by Mainao and served in the feast (57), as well as to the 'saoris' working in her paddy fields (62), the bamboo cot on which Hari sleeps (60), the green bamboo strips woven into walls as enclosures for the chickens and the pigs (63), and also to make cottages, the flute of Nara grass played when the first harvest is brought home and praises of goddess Lakshmi are sung (66), the use of bamboo for making biers for the dead (71)- re-illustrates the extensive use of local botany amongst the Bodos. We see plants such as bamboo being used not only as food or housing material but also in other miscellaneous ways. As the scope of the paper does not allow going into the details of the details of these practices, I focus only on their cultural use. Bamboo and banana plants have their uses in death-rituals as well. A departed soul is led to the "cremation ground with a bamboo stack wrapped with ewa thread nine times around it. The bodies of the young unmarried men lay without the customary banana tree planted towards their heads indicating a companion on the way to the other world. At the place where the bodies of the two women were left, raped, and killed, nobody planted a peepul tree branch chanting a mantra" (72). Plants are vital not only for the living but also for the dead. People also chew 'sukuta greens' [dried leaves of jutes, also known as 'narzi' and say 'thu, thu alai balai—we have left you forever" (72).

Food is another important focus of cultural ethnobotany. The present story also illustrates this important dimension of Bodo ethnic life. When an exhausted Hari walks towards Mainao, "She had kept the rice hot; with it was served banana tree pith stuffed in a hollow of bamboo stalk and then roasted over a charcoal fire, mashed dry fish and a fish curry with chopped gourd and tempered with ginger juice" (51: emphasis added). This reveals the indispensability of plants such as banana and bamboo in the everyday life of the Bodos.

However, the most powerful but implied expression of the role of plantlore in shaping Bodo ethnic consciousness could be seen in the way Mainao is rooted in this lore. Every aspect of her life is embedded in the plant-lore she has inherited from her Abou. Every crisis in her life makes her return to

the material and ritualistic performance of this lore. She applies grinded raw turmeric on the wounded hands of Hari (75). "If her son suffered from even a small infection, to shoo away the bad omen she would collect milk from a black cow, and putting it in a banana-leaf cup, chant a mantra like she had learnt it from Abou" (68). Her use of plants as ethno-medicine is seen elsewhere. "If Daokhi vomited sometimes or had loose motion, she would go even farther with her rituals. As soon as the evening set in, she would bring a half-broken wok, put mustard seeds, dry chillies, and with a stick from a bamboo broom chant "(68). Interestingly, this plant- based rituals also becomes for her a means to vent out her anger, resentment, and helplessness (75), when she faces another crisis in the form of the military closing off the road to the chowk, leaving her absolutely helpless. She feels as if a curse is there on all of them. Her dependency on her ethnic plant-lore becomes the most obvious when she falls victim to alienation and depression, once she travels to stay in Delhi. Mainao feels that a 'khetra' [an evil spirit] has taken over her and is chasing her till death. Her only recourse, as it appears to her, is to return to the ethno-botanical lore inherited from her grandfather.

Janki's mother had been afflicted by *baghnisar*, the spirit of the tigress. She used to roar like a tiger and then fall unconscious. Abou had treated her with the juice of the *bhedeli creeper which* Mainao had grounded and squeezed out of the leaves herself. Then she had packed a duck's egg in banana-leaf and hung it as offering to the unknown and had also offered aroi rice, a brown-coloured coin and sprigs of basil leaf. Janki's mother had recovered and given birth to a healthy son (88: emphasis added).

On another occasion she also is haunted by the way how "Abou had drawn the image of a man with ash on a *banana leaf*; on both sides of it, nine spots were drawn with vermillion, then a fire was lit with a bunch of dry grass, the stalks from *era* and *dimoru* plants" (89: emphasis added). This is a ritualistic remedy/ therapy for a pregnant women under the spell of the *khetra*. It belongs to the domain of medico-religious use of plants in the Bodos. Eventually she also decides to perform this puja to appease the evil spirits chasing her. Unable to perform this Mainao sinks further into her web of depression.

The text also highlights the inherent beauty of resource management regime of the Bodos and the important role played by the women. Mainao is not only an accomplished homemaker, but also an entrepreneur and a self-sustaining woman. Despite being an orphan, adopted by Boloram and sheltered by the father of Hari, she emerges as an independent woman who not only proves herself but sustains Hari in all his crisis. The handkerchief, shawl she gifts to Hari is her artefact. As she tells him, "The money for buying the thread and wool comes from my own pocket; I sold two of my pigs" (53). She also manages the paddy field and brings a successful harvest home apart from looking after the chicken coop and pigsty. What is important is the spirit of camaraderie among the villagers. The villagers come to work as 'saori' [the Bodo custom of helping others in sowing and harvesting crops selflessly] in Mainao's field when Hari is in the city. Once the granary is full, Mainao thinks of managing Hari's exam fees.

At least there would be no dearth of rice through the year, even if it was a coarse variety. Hari's exam was four months away; by that time she could sell the piglets from the white pig to manage the exam fee. The eggs from the coop paid for the salt and oil. She would have to start weaving the warm shawls earlier this time. She must keep some money for herself too; there were only few months left for the delivery (65: emphasis added)

This brings to the fore the domestic resource management practices—that is, economic or livelihood practices—of the Bodos and their skills such as animal raising, and handloom practices. The entrepreneur in Mainao could be seen in the way she creates her own business space and sells home-made tekeli pithas and zumai at the chawk (72).

To conclude, Arupa Patangia Kalita's story *The Cursed Fields of Golden Rice* brings to the fore almost all the key attributes of ethno-botanical lore of the Bodos. Despite being a work of fiction, it succeeds in throwing sufficient light not only on the material and metaphoric herbal lore of the community, but also the different nuances of its performance. To this extent, it is best viewed not only as successful floral poetics but as a classic example of a new model of culturally informed ethnobotany—that is, literary-cultural ethnobotany.

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An Analysis of Development Status quo and Convergence of Spatial Imbalance in North-eastern Region of India

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&

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Abstract: Ideally, a country's development should be evaluated in terms of whether the development process generates the benefits and opportunities for its people and improves the level of well-being. Since all socio-economic policies and programmes are ultimately aimed at improving the quality of people's lives, therefore, evaluation of all such policies should be done on the basis of their ability to generate human capabilities. Inclusive development goals can be achieved only by bridging the different divisions that plague the economy like differences between regions and states; rural urban divide; divide between the sexes and between social groups. North-eastern India has been confronting the challenge of accessing economic growth opportunities and transmitting economic growth to social capabilities. It is in this context the present study tries to analyze spatial inequalities that exist across the states of North-eastern India so far as human development is concerned. Data collected from secondary sources on relevant indicators and using UNDP methodology, the study analyses the status of human development across North-eastern states. Moreover, the study uses descriptive statistics, β convergence and concludes that the region witnesses unequal distribution pattern in terms of human development accessibility along with the evidences of convergence over successive time frame.

Keywords: Human Capability, Human Development, Inequality, Convergence, North-eastern Region

1. Introduction:

In recent decades the development paradigm has been shifted from economic growth only to sustainable human development. Studies show that countries with low economic growth should prioritise human development programs

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and the numerical measure of "sustainable human development" must be established to analyze human well-being.¹. It is therefore extremely essential that no backward region should be trapped in the cycle of human deprivation and hinder development plans. The targeted socio-economic policies, efficient delivery system, governance, and the efficiency of spending that ensures expansion of human capability should be given top priority so as to achieve higher level of human development even without significant increase in per capita income².

Inclusive development goals can be achieved only by bridging the different divisions that plague the economy like differences between regions and states; rural urban divide; divide between the sexes and between social groups. An evidence of divergence in human development front among states may lead the entire region into a vicious circle of underdevelopment. So, the issue of uneven and spatial inequality even in terms of human development should properly be addressed to attain the inclusive development in real sense³.

Over the last three decades composite human development index (HDI) of diverse indicators has been considered as a useful tool in measuring the human development status of both developed and underdeveloped economies. In the context of North-east India, the studies justify that the region is highly trailing behind in human development attainment compared to other states within the country and the high human deprivation of its population has been reflected in low human development attainment in this region.⁴ So, the existing studies witness that no particular attempt have been taken to address the spatial inequalities and convergence issue of human development so far as the North-eastern states are concerned. So, the present paper tries to examine - i) the status of human development and spatial imbalance across North-eastern states, ii) the issue of convergence of spatial imbalance across North-eastern states in human development front. The present study focuses on Non Income Human Development Index (NIHDI). It is usual that income inequality that persists in terms of NSDP across states may widen spatial disparities in the attainment of development index, so the present study adopted was the Non Income Human Development Index

(NIHDI), introduced by United Nations Development Programme (UNDP) 2010, to examine the spatial imbalances across North eastern States in terms human development attainment.

2. Conceptual Framework:

2.1. Human Development:

The term "human development" gets its conceptual basis in the works of Mahbub ul Haq, Amartya Sen and others. As an extensive development approach, the term human development is defined as a process of widening people's choices that signifies values. It stresses on expansion of human capabilities and human freedom that enable them to: live long and healthy lives, be knowledgeable and have access to resources for a decent standard of living, as well as participate in community life and decisions that affect their lives. Human development goes beyond income per capita in conceptual framework. In turn, it identifies the role of people in development by assessing factors like human dignity, freedom, and human functioning. Human functioning and capabilities are being reflected in Human development. Human development removes the factors of human deprivation and social discrimination which restrict the abilities to, and deny the possibilities or opportunities to, participate in normal economic and social activities. There can be as many dimensions of human development as there are ways to expand the choices of individuals. The prime indicators of human development vary over time and across countries as well as within a country.

2.2. Non-income Human Development Index:

UNDP in its first report⁵ introduced the concept of HDI as a composite measure of economic progress and human welfare. The Human Development Index (HDI) is the average of the achievements of three dimensions, namely the health dimension, the education dimension and the income dimension. The HDI combines these three indices with equal weightage and becomes a composite index. Since 1990, the UNDP has been reporting annually the HDI for a large number of countries. On several occasions UNDP has revised the formulation of the HDI in its post 1990 reports. The UNDP

has introduced new indices to measure human development in its Human Development Report 2010. One such measure is the Human Development Index without Income termed as Non Income Human Development Index (NIHDI). Unlike HDI, NIHDI focuses only on non-income dimensions of health and education.⁶

3. Data Source and Methodology:

The study is carried out by pooling Time-Series (from 2003 to 2011) and Cross-Section (North-eastern states) data from secondary sources. The period prior to 2003 could not be used because Data related to Gross Enrolment Ratio (used to estimate Intensity of Formal Education) prior to 2003 for NE region is not available. Data related to Infant Mortality Rate (IMR) have been collected from Planning Commission, *Data for use of Deputy Chairman*, Planning Commission, Government of India; 10th April 2012⁷. To estimate State wise Intensity of Formal Education, data on Gross Enrolment Ratio (I-V) have been collected from State Report Cards, NUEPA. For State wise Total population figures, Census of India 2001, Population Projection for India and States 2001-2026 has been consulted.

3.1. Construction of Non-income Human Development Index:

The present study tries to explore widespread unanimity to consider human development as non-income dimensions of well-being, viz., Infant mortality rates linked to longevity for health attainment measure; and adjusted intensity of formal education to capture educational attainment.

Following UNDP (1999) methodology, the present study has computed Non-Income Human development Index (NIHDI) for North-eastern states. Having defined the minimum and maximum values (see Table 1), the subindices is normalized as follows:

$$Health\ index = \frac{\textit{Maximum Value - Actual Value}}{\textit{Maximum Value - Minimum Value}}$$

Education index =
$$\frac{Actual\ Value\ - Minimum\ Value}{Maximum\ Value\ - Minimum\ Value}$$

After normalization of dimension indices, the composite index of

development for the j^{th} state has been computed as follows:

$$NIHDI_{j} = \frac{(\textit{Health Index}) j + (\textit{Educational Index}) j}{2}$$

Table 1: Goalposts for Calculating NIHDI

Indicators	Maximum Value	Minimum Value
Infant Mortality Rate (IMR)	70	810
Adjusted Intensity of Formal Education (estimated) (AIFE)	15	910

3.2. Convergence Test:

In order to investigate whether β convergence is taking place in respect of human development parameter among the North-eastern States for the time period 2003 - 2011, the following equation has been formulated as done by Young et al (2006):

$$\log (Y_{it} / Y_{it-1}) = \beta_0 + \beta_1 \log(Y_{it-1}) + u_{it}$$
 (1)

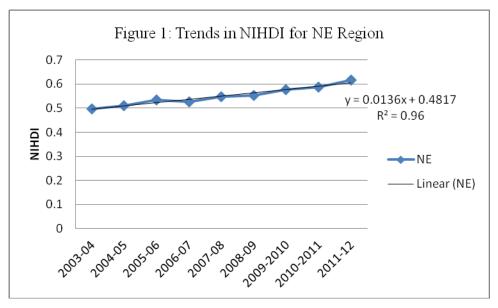
Where, Y_{it} is the value of the variable across North-eastern states at time period t and Y_{it-1} is the value of the variable across North-eastern states at time period t-1. β_i s are the parameters and u_{it} is the random disturbance. The estimated coefficient of the explanatory variable will show whether β convergence is taking place or not. If the estimated coefficient is negative and significant, absolute β convergence is said to take place 10 . A negative value of estimated coefficient of the explanatory variable (β_1) implies an inverse association between the growth in the variable and its initial value. This would suggest convergence among the i^{th} observations over time.

4. Results and Discussion:

4.1. Performance of North-eastern States in terms of Human Development:

State-wise performances on human development in North-east India during the period 2003-04 to 2011-12 are presented in Table 2. The North-east

region has recorded about 23 per cent increase in NIHDI from 0.498 to 0.615 during the period 2003-04 to 2011-12. The region witnesses an annual average percentage increase in NIHDI of about 2.6 per cent over the period. Overall, the North-eastern region has been improving performance on human development attainment in the recent past (Figure 1).



Source: Table 2

However, though NIHDI value of the Northeast region has increased several fold over the years, yet the region witnesses uneven human development across its States. Table I reveals that North-eastern states have been categorised into two equal groups on the basis of the region's scoring of NIHDI. One group, viz., Manipur, Mizoram, Nagaland and Sikkim attains NIHDI value more than the region average, while, the rest, i.e. Arunachal Pradesh, Assam, Meghalaya and Tripura, comprising another group that scored lower than the region average value of NIHDI. Human Development Report of Northeast States (2011) also witnesses similar status of inequalities across the states. Moreover, it is worth noting that Assam was witnessed as the least scorer throughout the period¹¹. Except in 2003-04 and 2010-11, Nagaland has topped in NIHDI ranking having the highest score of 0.799 in 2011-12. Thus, the best performer state registers a huge shortfall of about 20 per

cent while the poorest state, in terms of NIHDI, has a shortfall of about 89 per cent throughout the period of 2003-04 to 2011-12. For the other states, the shortfall in NIHDI persists between these two ranges which seem disturbing in both regional as well as national perspective. Moreover, standard deviation value also indicates that spatial inequality exists across the states in terms of human development attainment though it reduces over the period.

Table 2: Trends of NIHDI for North eastern States over the period 2003-04 to 2011-12

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009- 2010	2010- 2011	2011-12
Arunachal Pradesh	0.476 (6)	0.445 (5)	0.404 (7)	0.389 (7)	0.439 (7)	0.477 (6)	0.512 (6)	0.52 (6)	0.545 (6)
Assam	0.108 (8)	0.247 (8)	0.277 (8)	0.265 (8)	0.300 (8)	0.341 (8)	0.414 (8)	0.398 (8)	0.432 (8)
Manipur	0.721* (1)	0.590* (4)	0.609* (4)	0.652* (3)	0.658*	0.656*	0.671* (3)	0.684*	0.695*
Meghalaya	0.353 (7)	0.406 (7)	0.522 (5)	0.437 (6)	0.447 (6)	0.456 (7)	0.455 (7)	0.437 (7)	0.453 (7)
Mizoram	0.694* (2)	0.672* (2)	0.656* (2)	0.654* (2)	0.701* (2)	0.585* (4)	0.599* (4)	0.582 (5)	0.616* (4)
Nagaland	0.564* (3)	0.696* (1)	0.695* (1)	0.697* (1)	0.720* (1)	0.696* (1)	0.711* (1)	0.713* (2)	0.799* (1)
Sikkim	0.529* (5)	0.609*	0.637* (3)	0.635* (4)	0.651* (4)	0.694* (2)	0.688* (2)	0.748* (1)	0.783* (2)
Tripura	0.537* (4)	0.417 (6)	0.468 (6)	0.485 (5)	0.468 (5)	0.523 (5)	0.561 (5)	0.613* (4)	0.602 (5)
North East	0.498	0.510	0.533	0.526	0.548	0.553	0.576	0.587	0.615
Standard Deviation	0.20	0.16	0.14	0.16	0.15	0.13	0.11	0.13	0.14

Note: Asterisks imply States' scores higher than North east average; Numbers in parenthesis indicate NIHDI ranking

Source: Author's Calculation

4.2. Estimating β convergence for the States of Northeast Region in terms of Human Development:

Table 3 examines β -convergence¹² following equation (1), in order to know the disparity in terms of non-economic indicators, viz, NIHDI has widened or narrowed down over time across the states of North-east region. The prediction of the hypothesis is that other things being constant, lagging poor economies manage to catch up in the long run as it would tend to progress faster than rich economies. The OLS technique is related to the concept of β -convergence where the states of Northeast India are said to be consistent with β -convergence if negative relationship exists between the variable of interest and its subsequent growth rate over the next several years.

Table 3 Results of Regression Analysis for examining β convergence

Note: a)	Values in	brackets	represent	't' va	alues; b)	* (
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	, ,
Variable/ Items	Estimated Coefficients/ values
Initial log(NIHDI)	-0.221* (-2.875)
Constant	-0.061** (-2.431)
R ²	0.11
F statistics	8.26*
DW	2.09
N	71

indicates

significance at 1% level, ** indicates significance at 5% level.

Source: Author's estimation based on Secondary Data

The results of regression analysis of NIHDI have been plotted in Table 3. The slope estimate (-0.221) is found to be significantly negative, that supports the notion of β-convergence in non-income human development index across North-eastern states during the said period. In other words,

disparities in terms of human development among the North-eastern states have narrowed down over time. It seems that on average backward states managed to increase their NIHDI faster compared to developed states. It is a good sign for the region as the less developed states have succeeded in improving human capabilities and hence, human development. The result addresses the issue of convergence and catch up hypothesis.¹³.

5. Conclusion:

The present study finds that North-eastern states witness a huge shortfall in development front as reflected in non-income human development index. There has been high degree of disparity across states as reflected in the index values. However, empirical result of \(\beta\)-convergence shows the evidence of a good sign for the region as the less developed states have succeeded in improving human development and spatial disparities among North-eastern states have narrowed down over time. The study reveals the fact that as human development is found to be a product of accumulated benefits that accrue to the region from investment on social sector in the form of education and health, so investment on social sectors has to be encouraged in this tribal populated region. Increased access to services for poverty reduction, health as well as educational attainment, and provisions for lowering other spatial deprivations will surely reduce spatial inequalities and augment human development. So, the policies and programmes are to be formulated and implemented in such a way that expansion of human capability can ensure right to development in this backward region.

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Endnotes:

- ¹ Costantini and Salvatore (2005); Mbaku, 1997; Alvan, (2009)
- ² Singh and Nauriyat (2006)
- ³ Neogi (2010); Roy and Bhattacharjee (2009)
- ⁴ Nayak, 2005; Mahajan (2009); Human Development Report of North East States (2011)
- ⁵ HDR 1990
- ⁶ Attari et al.(2018)
- ⁷ http://planningcommission.gov.in
- ⁸ The maximum and minimum values for IMR refer to the highest and the lowest IMR in the region. IMR is the highest (i.e.68) for Assam and lowest (i.e. 11) for Manipur.
- ⁹ The Intensity of Formal Education is estimated as weighted average of the enrolled students from class I to class V (where weights being 1 for Class I, 2 for Class II and soon) to the total enrolment in Class I to Class V. This is adjusted by proportion of total enrolment to population in the age group 6-10. The maximum and minimum values for AIFE are 14.16 (Tripura) and 10.83 (Meghalaya) respectively. Accordingly, maximum and minimum values for concerned parameters are adjusted.
- 10 Sala-i-Martin, 1996
- ¹¹ Human Development Report of North East states, 2011
- ¹² Sala-i-Martin, 1996
- ¹³ Solow-Swan model, 1955, 1956

The Prospect of Promoting Gastronomic Tourism in Meghalaya:

A Review

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Abstract: Gastronomic Tourism is the type of tourism that involves tourists eating local food and engaging in local food related activities. Food forms an important part of any culture which is also evident in the Khasi culture of the Khasi tribe of Meghalaya. The Khasi culture is an attractive tourism product with its dances, festivals, attires, religious practices and so on, however, Khasi food is not yet celebrated as a cultural tourism product. Tourists who visit Meghalaya often miss out on eating Khasi food because of many reasons which are mentioned in this paper. This paper employs content analysis and anecdotal approach towards achieving the objective of projecting the prospective aspects of gastronomic tourism promotion in Meghalaya. Therefore, Khasi food has the prospect to be promoted as a cultural tourism product of Meghalaya which would consequently allow gastronomic tourism in Meghalaya to be branded as an image and promoted for tourism development in the state.

Keywords: gastronomic tourism, prospect, Meghalaya, Khasi culture, Khasi food

1. Introduction

Tourism is said to be one of the largest contributors to the growth and development of many countries in the world. The tourism sector accounts for 10.4% of the global GDP and 319 million jobs (10% of total employment in 2018). In the views of the UNWTO General Secretary, Pololikashvili (2019), there is a rise in the middle class in emerging economies; there are technological advances, new business models, affordable travel costs and smooth visa processes and most importantly a 5% rise in the international tourist arrivals in 2018 which reached the 1.4 billion mark (2 years before it was predicted to do so) and the Asia and the Pacific Region

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recorded for highest growth in arrivals in 2018 with 7% growth. In South Asia, destinations like Iran, Nepal, Sri Lanka and India have seen double digit growth in international tourist arrivals by 19% (UNWTO, 2019). Pololikashvili (2019), further commented that the tourism export earnings have reached a figure of USD 1.7 trillion and this figure has helped and is still helping destinations to create more and more tourism jobs with more focus on innovation and entrepreneurship. As a link to innovation and entrepreneurship, tourism has branched out in many forms giving rise to more unique travel experiences. One of these forms include the celebration of local food in the form of gastronomic tourism.

The trend today is that most people are travelling not for sightseeing and other cliché activities but the influence of social media has made them sought after unique and special interest activities with gastronomy being one of them. More and more tourists in the world are looking for concrete learning experiences, and in this endeavour the gastronomic experience, in highly diverse ways, is playing an increasingly prominent part (UNWTO, 2012). Gastronomic tourism is a type of tourism which involves the travel to places for tasting, experiencing and relishing the local food and cuisines. This is special interest tourism and it is gaining a lot of popularity all over the world. According to Hall & Sharples (2003), local food is important because of its taste, image, freshness, experience, quality and also because what, why and how one eats says something about oneself, why one travels and the society one lives in. Food represents a significant part of the culture of a region because it is evidence for intangible heritage (Updhyay & Sharma, 2014). Initially, when people traveled to other places (apart from their place of origin), they would crave for their own type of gastronomy since they were unaware of the uniqueness of local/regional food. For example, an Indian travelling to Italy would prefer Indian food in Italy rather than Italian food. However, with the growing significance of culture and traditions through local cuisines and delicacies, many tourists today are increasingly adventurous in trying out 'non-home' food. Therefore, as there is a strong connection between food and identity, food becomes an important aspect in promotion of tourism (Richards, 2002) and a cultural ingredient that positively presents a destination (Jones & Jenkins, 2002).

According to Karim (2006), visitors are attracted to a destination when it offers authentic and attractive food and in this way the destination will take the advantage of using food as the main attraction and developing marketing strategies with food as the focus. This is possible because unlike other travel activities and attractions, the gastronomy of a destination is regularly available all-round the year, any time of the day and in any weather (Richards, 2002). Therefore, this paper seeks to:

- 1) Present a review on previous researches on gastronomic tourism and successful marketing strategies of other countries in terms of gastronomic tourism.
- 2) Explain through content analysis how the gastronomy of Meghalaya particularly that of the Khasi tribe is an attraction and is exotic to many tourists.
- 3) Suggest ways to promote gastronomic tourism in Meghalaya.

2. LITERATURE REVIEW

2.1. Gastronomic Tourism

Gastronomy is "the art of selecting, preparing, serving, and enjoying fine food" (The Encyclopaedia Britannica, 2000 as cited in Amira, 2009). Gastronomy is the study of the relationship between culture and food and someone who is seriously involved in gastronomy is often involved in tasting, preparing, experiencing, experimenting, researching, discovering, understanding, and writing about food, and, usually but not exclusively, about wine (Kivela & Crotts, 2005). There is a relationship between gastronomy and tourism because tourists cannot travel without eating at destinations where they are staying or visiting. Gastronomic Tourism is the activity of eating and drinking local food and wine along at destinations in order to embrace and capture unique experiences which would reflect the local culture as well. To travel with the interest and motivation for food at different destinations is known by many names like food tourism, culinary tourism, gourmet tourism, food and wine tourism, gastronomic tourism and so on (Henderson, 2004). Food tourism or Culinary Tourism can also be referred to as gastronomic tourism as a niche area of tourism.

(Hjalager & Richards, 2002: Hall, et al., 2003; Hall & Mitchell, 2005a, 2005b). Gastronomic tourism applies to tourists and visitors who plan their trips partially or totally in order to taste the cuisine of the place or to carry out activities related to gastronomy (UNWTO, 2012). According to Green & Dougherty (2008), culinary tourism or gastronomic tourism is based on integrating tourism with unique local and cultural food systems as a means to promote economic development. This kind of tourism highly depends on exceptional dining experiences and food quality plus the cultural aura at destinations. Therefore, when a destination is attractive based on unique culinary attributes and local cultural heritage, then that destination becomes a food tourism destination for food travellers (Beltrán, et al., 2016). When it comes to 'local food', tourists may eat it if they want to have a cultural experience (Sims, 2009). Culture is an important part of tourism and food is an important part of culture (du Rand, et al., 2003). Therefore, Gastronomic Tourism is a subset of Cultural Tourism (Scarpato, 2002; Karim, 2006; Chaney & Ryan, 2012; Sahin, 2015) because food represents a part of the culture and traditions of the local people in different places. In the opinion of Hillel, et al. (2013), food is a symbolic power of cultural identity and it stands at the heart of gastronomic tourism. According to Shenoy (2005), the unique local food or cuisine of an area can be used as a distinctive resource for marketing in order to get more visitors. Many countries today focus on their unique local gastronomy culture which helps them in promoting their region so as to incur economical returns that lead to regional development, protecting and sustaining local culture and meet the tourist demands of today (Sahin, 2015).

2.2. Gastronomic Tourism and Culture

According to Scarpato (2002), a meal involves food choices, customs, manners and traditions which collectively form a cultural artifact. This evidently shows that food and culture are mutual in nature. With the increase in globalization in today's world, food is the only intact product that culturally differentiates among regions and communities and which is an important keystone of cultural identity (Delamont, 1994). Food culture is considerably important as a part of the total cultural product of an area and many countries have incredibly unique food cultures which account for the

tourist experience along with the culture, heritage and hospitality of the area (Beer, et al., 2002). Festivals, dancing and cooking are the cultural elements which are mostly used in tourism (Schlüter, 2012). Therefore, when people dine together, their eating results in a shared cultural experience (Chung, et al., 2016). Up to the 1970s-1980s, gastronomy tourism centred around dining at 3 star restaurants only particularly in France but today it is focusing more on experiencing different cultures (Santich, 2004) and hence, it was only till the mid-1990s that it was discovered by the researchers that there is a strong link between food, culture and tourism (du Rand and Heath, 2006). According to Sims (2009), local food acts as the enhancer of visitor experience especially in terms of culture and heritage. In the words of Okumus, et al., (2007), authentic experience and cultural knowledge is gained when outsiders and locals have food together because local cuisines represent a core element of the destination's intangible heritage (Guruge. 2020). Guruge (2020) further added that tourists who are eager to eat and experience local cuisine, refrain themselves from eating at international hotels and fast food chains like McDonald's, KFC, Pizza Hut etc.

According to Schlüter (2012), the intangible cultural heritage of a community is very delicate especially when there are changes within the society and travel habits brought about increasing exposure to mass communication which results in cultural homogenization that threatens local traditions. This is predominantly evident in Latin America where junk food like McDonald's hamburgers from the United States is getting adapted to local tastes. Therefore, it is very important that cultural pride and identity are essential ingredients in a place in order to survive for a long time and increasing interests in culinary tourism may actually help in sustaining old traditions which are in the course of disappearing. This case is true for Meghalaya because with the spread of globalization in terms of food, the indigenous heritage and identity of Khasi food is threatened by the dominating influence of fast food chains and other types of cuisines which have even made the locals adapted to their tastes. Therefore, it is only through the celebration, promotion and sustainability of Khasi food through gastronomic tourism that will prevent it from disappearing from the culture, identity and pride of the Khasi people.

2.3. A Guide to Gastronomic Tourism Marketing

As evident from the above literature, local food holds an important position in a destination's image especially in relation to tourists seeking novel experiences and in order to combat the increasing effects of globalization on local food and local businesses, the only way is to initiate advertising, marketing and promotion of local food. Many countries have already advanced in their gastronomic tourism marketing strategies and are doing well because they have projected their own unique cultural identity via local food. They have taken advantage of their unique resource and have used it for attracting tourists from all over the world. Kivela & Crotts (2006) also agreed to this fact that destinations with advantageous ingredients to support a gastronomy tourism strategy possess resources which include unique and/or multiethnic cuisine, creative chefs, unique marine and agricultural products, unique culinary heritage, and so on. Therefore, one cannot picture Italy without pasta and pizza and one cannot picture Asian countries without noodles, dim sums and street food and so on. Therefore, whenever tourists want to have novel gastronomic experiences, they have already pictured the places they are going to with the local foods associated with them. Tourists who often re-visit a destination for its food and allied attributes are influenced mainly by the gastronomic marketing techniques of the destination. Destinations that often project their local and indigenous culture and heritage through food and culinary arts, are bound to receive more tourists especially tourists who are 'food-trotters' or 'searchingfor- new- and- unique- local- food- trotters'. Gastronomy experiences are powerful tools for marketing the destination (Kivela & Crotts, 2005).

Gastronomic marketing in tourism comes in three different ways: serving food in restaurants, organising food feasts or festivals where food plays a major role in tourist marketing and sale of canned or packed foods (Ardabili, et al., 2011). The pictures and information in marketing media and marketing tools could facilitate in promoting positive images of destinations. Now the communication tools used in culinary marketing were diversified, including brochures, pamphlets, internet, advertising initiatives, radio, TV and printed material (du Rand, et al., 2003). The internet had developed rapidly during recent years and could be used as an effective advertising and promotional

tool, not least in the tourism and hospitality industry (Wan, 2002 as cited in Su & Horng, 2012). Therefore, Richards (2002) said that tourists often placed considerable emphasis on how they feel at a destination, and how they experience what the destination offered (the marketing techniques and offers used to attract tourists), by carefully selecting that special restaurant and/or food that might fulfill a particular personal desire. Recently the researches regarding advertisements and marketing tools which were applied to culinary tourism development mainly contained the exploration of brochures and web-sites and media can be applied largely in marketing gastronomy (Su & Horng, 2012).

2.4. Khasi Food

The Khasi tribe of Meghalaya consumes Khasi food which is indigenous and culturally linked. According to Nongbri (2006), Khasi food is defined by simplicity since times immemorial and rice or Ja is the staple food (Meghalaya Basin Development Authority, 2016; Govindasamy et al., 2018; Blah & Joshi, 2013; Nongrum & Dohtdong, 2018). Rice or Ja is cooked in many ways and the most famous one is jadoh (flavoured rice cooked with pork/chicken viscera). The Khasis rely mainly on agricultural produce like maize, millet, roots like potatoes, sweet potatoes, yam, beetroot, carrots etc, on pulses like beans and soyabeans, on vegetables and leafy vegetables like mustard leaves, radish, turnip, pumpkin, tomatoes, cabbage, peas etc. Most of the Khasi snacks are also made from raw or cooked rice (steamed, baked or fried) namely putharo (steamed rice pancake similar to Uttapam of South India minus the oil), pukhlein (fried rice snack mixed with jaggery), pumaloi (steamed rice snack similar to idli of South India), pudoh (steamed rice snack stuffed with pork meat inside), pusla (steamed rice snack on leaves), pusyep (steamed rice snack similar to idli of South India), jashawlia (sticky rice), punei (steamed and fried black sesame snack), rymbai-ja (boiled beans) and so on. Apart from rice, the Khasis are also fond of meat (especially pork and beef), vegetables (especially wild and green vegetables like jamyrdoh and thied jamyrdoh (chameleon plant and roots), sla tyrso (mustard leaves), pashor kait (banana stem), jalyngiar (common sowthistle), jatira (Oenanthe linearis), khliang syiar (centella), lungsiej (bamboo shoot), jarain, jangew, jathang, jamyrdoh, jajew, jada,

tyrkhang, lapong, sheng etc. and so on), dried fish (*ktung and tungtap*) and chutneys (*tungrymbai*- fermented soyabean chutney, *pudina*- mint chutney, etc).

The different fruits consumed by the Khasi people include orange/mandarin, pineapple, mango, banana, papaya, indigenous fruits like *sohphie* (mirica), *sohphienam* (mirica cerifera) *sohphoh* (Khasi pear), *sohpyrshong* (carambola), *sohphan* (jackfruit), *sohshang*, *sohbah*, *sohbrap* (passion fruit), *sohphlang*, *sohlangdkhur* (mulberry), *sohmylleng* (gooseberry) etc.

The Khasi people also consume a lot of domesticated meat like chicken, duck, pork, beef, fish, mutton, rabbit and wild meat like deer, squirrel, *japieh/dohpieh* (paddyfield frogs), crab, dried fish and many wild birds. The Khasi people also eat insects like *niangphlang*, *nianglong*, *kber*, *niangtaser*, *niangryndia* (eri-silkworm) etc.

These Khasi food items are a representation of the tradition and knowledge of food and food preparations that were passed down from the ancestors to the present generation. They symbolise the culture and nutrition that are naturally beneficial for the community/tribe. Therefore, these traditional foods and food preparations must be preserved so that the indigenous knowledge and ethnicity via food will not be lost (Blah & Joshi, 2013). Traditional food knowledge preservation results in two important things- cultural and heritage preservation and healthy food habits.

Popular Khasi cuisines include:

- 1) Jadoh: Rice cooked with chicken stock/pork stock/chicken or pork entrails along with onion and ginger paste, turmeric, salt and black pepper.
- 2) *Jastem*: Rice cooked with onion and ginger paste, turmeric, salt and black pepper along with some vegetable oil.
- 3) *Jadoh snam*: Rice cooked with chicken's/pig's blood mixed with water along with onion and ginger paste, turmeric, salt and black pepper.
- 4) *Dohsyiar kylla/Dohsyiar Mylliem*: Local chicken cooked with mustard oil, onion-ginger-garlic paste, turmeric, salt and black pepper. Mylliem is a village in Meghalaya famous for this chicken recipe.

- 5) *Doh jem*: Chicken/Pork entrails cooked with mustard oil, onion-ginger-garlic paste, black sesame paste (optional), chillies (optional), turmeric, salt and black pepper.
- 6) *Doh sniang neiiong*: Pork cooked with onion-garlic paste, black sesame paste, chillies (optional), turmeric and salt.
- 7) *Dohkhlieh*: Boiled pork head cut into small pieces and mixed with onion, ginger, chillies and pork brain.
- 8) *Doh masi shain*: Minced beef balls mixed with onion-ginger-garlic paste, salt and black pepper cooked in mustard oil.
- 9) Doh masi thylliej: Beef tongue cut into small pieces and mixed with onion, ginger, chillies and salt.
- 10) Tungrymbai: Fermented soya bean chutney
- 11) Tungtap: Fermented fish chutney

3. NEED FOR THE STUDY

Globalization is a phenomenon by which events, decisions and activities on one part of the world usually have a profound impact on individuals and communities in other parts of the world (Giddens, 1990). Globalization has immensely contributed to increased economic returns, richer socio-cultural exchanges, technological advancements and environmental conservation methods and all these factors have a significant impact on tourism.

Hall & Mitchell (2002) said that it is only beginning to be comprehended that the features of globalization have deeply affected tourism and gastronomy. According to Mak, et al. (2012), globalization can affect the local gastronomic identity and image and can lead to the consequence of lack of 'sense of a place' for locals and tourists. The rising popularity of fast food like KFC, McDonalds, Subway, Burger King and so on has impeded the attraction of the unique local food and cuisines at various destinations. As a result of this, globalization in the food industry has a great influence on the culinary supply at destinations which consequently influences tourist food consumption (Mak, et al., 2012).

Finding a fast food restaurant is very easy in every city. For those who do not have time to eat especially for the tourists who are on tour, fast food seems to be the safest and fastest option and it is cost friendly. This creates a problem at destinations wherein the local food does not become an option for tourists especially if the local food is 'Slow Food' and when the local food is dominated by these fast food chains. Most regions in Meghalaya also faces this problem. The tourist inflow to Meghalaya has increased over the years because of the many exotic tourism resources that are constantly being explored from time to time. There are many niche areas with great potential which the state can focus on in the aspect of tourism promotion. One of these areas is Cuisine Tourism (Meghalaya Tourism Policy, 2011). Cuisine Tourism, Food Tourism, Culinary Tourism and Gastronomic Tourism are synonymous. Khasi food is exotic but despite this, it is not still branded as an image of Meghalaya for tourism purpose. The reason lies with globalization and the lack of awareness about the importance of sustaining Khasi food among the locals and also among the tourists.

According to Meghalaya Tourism (n.d.), delicious cuisines are best explored as part of Meghalaya's cultural diversity apart from festivals and historical landmarks. Although Khasi food is unique and represents an important part of the Khasi culture, no initiations have been made to properly project it as tourism product that motivates tourists to visit Meghalaya. According to Dixit & Mawroh (2019), Khasi food has been featured in many media and social media platforms like 101 India, NDTV Good Times, Hunger Knocks, The Ticket to Travel etc by the tourists who have experienced Khasi food and found it memorable but they were only personal experiences not meant for promoting and marketing Khasi food as a tourism product. The Meghalaya Basin Development Authority (2016) has made a comprehensive report on the role of entrepreneurs in sustaining local indigenous foods and food systems and on helping farmers establish their businesses. For this report, this government department interviewed a food expert who is the Chairman of the North East Slow Food Agrobiodiversity & Society (NESFAS), Mr. Phrang Roy, about the local and tourist demand for local indigenous cuisines in Meghalaya and Mr. Phrang Roy responded that the average tourist visiting Meghalaya who is not knowledgeable about

the place would definitely not taste and eat local food. Furthermore, Mr. Phrang Roy commented that the state should not be happy with 'quantity' tourists but with 'quality' tourists who are willing to spend their money on local foods and local products. Another factor for hindering tourists to eat Khasi food is hygiene according to Mr. Phrang Roy. He said that the Tourism Department should encourage food establishments to maintain hygiene otherwise tourists coming from nearby areas like Guwahati usually pack their own food, eat at the destination, throw it there and return home. This is a big problem in terms of promoting gastronomic tourism in Meghalaya. There should be measures as to maintain hygiene in the food establishments and make the local indigenous food appealing to the tourists through proper promotional tools. Mr. Phrang Roy further added that the initiative of NESFAS to set up Mei-Ramew cafes and Chef's Alliance which cook and serve local indigenous foods in hygienic conditions has made an impact on the local communities and visitors to the state.

Eateries or local food stalls/ joints are still very less for grabbing the attention of the tourists visiting Meghalaya. In Shillong, the Khasi food is somehow overpowered or overshadowed by other cuisines like Chinese or Indian cuisines. While there are many Chinese, Indian and Multi-Cuisine restaurants in Meghalaya, there are still very less local food outlets (The Meghalaya Basin Development Authority, 2016). In today's urban context, traditional food in mostly not included in celebrations such as weddings, parties etc. People prefer other types of cuisine such as Chinese, Indian, Continental, etc (MLCU, 2012). The entry of modern food has also affected the image of the indigenous Khasi food because they are prepared instantly with very less time consumption. According to Lala (2014), globalisation has caused people to shift their food habits and food cultures from local traditional foods to fast foods and cooking. This can be seen in the increasing demand for modern food like pizzas, burgers, noodles, cakes, etc which are not inherent to the Khasi food systems. When asked about North Indian food and traditional food of Meghalaya, Mr. Phrang Roy is of the opinion that North Indian food and foods like McDonald's burgers and Maggi (which are unhealthy) are publicized all over the world and consumers automatically prefer them due to constant branding and advertising however when it comes

to the traditional food Meghalaya, which is healthy, consumers refrain from eating it because of a specific and unique taste caused by fermentation and with inadequate advertising, it remains unpopular even in the state itself (The Meghalaya Basin Development Authority, 2016). Traditionally many local people did not hold their own cuisine in high regard, and often viewed it as not being sophisticated enough and definitely not something a tourist would want (Kapner, 1996). A study was conducted by Nongrum & Dohtdong (2018) which focused on the changing consumption of traditional food of the rural people of the Khasi and Jaintia Hills and they found that most rural folk in these areas consume modern or fast food like juices, soft drinks, potato chips, chocolates, sweets, wai wai, maggi, bread, biscuits and other salted snacks which are evidently cheaper than traditional Khasi food. In some shops, chinese fast food like noodles, dumplings, etc are being sold. These people understudy were also found to consume traditional food on a weekly or a monthly basis whereas they consume modern/fast food on a daily basis. As a result of this, many indigenous Khasi food items are becoming extinct (Dixit & Mawroh, 2019). In order to prevent this, there must a start of recognizing Khasi food as an important part of the cultural tourism product and accordingly increasing the awareness of its indigenous and unique richness among the locals and consequently transpiring it to the outside world via tourism promotion.

4. METHODOLOGY

This paper is purely a narrative or review of the prospective aspects to be implemented for the promotion of gastronomic tourism in Meghalaya. Therefore, the methods of content analysis and anecdotal approach (personal observation and exploratory) were used in order to define themes that are appropriate for achieving the objective of gastronomic tourism promotion in Meghalaya. Content Analysis was used on a document report published by NESFAS in the year 2015-16. Codes were taken and themes were created from the ideas presented in an event called the Indigenous Terra Madre (ITM) which was held in Meghalaya in 2015 and this event was documented in the above report. Themes from the content analysis have provided viable prospective opportunities for promoting gastronomic

tourism in Meghalaya. An Anecdotal Approach was also employed for initiating prospective gastronomic tourism food spots and trails in relation to Khasi food in Meghalaya. The anecdotal approach has taken findings of the Meghalaya Basin Development Authority (2016) which has aroused the elicitation of developing prospective gastronomic tourist food trails and spots in and around Meghalaya. The findings have helped in highlighting the importance and potential of Khasi food as a tourism product. **Figure 1** explains the conceptual framework of this paper.

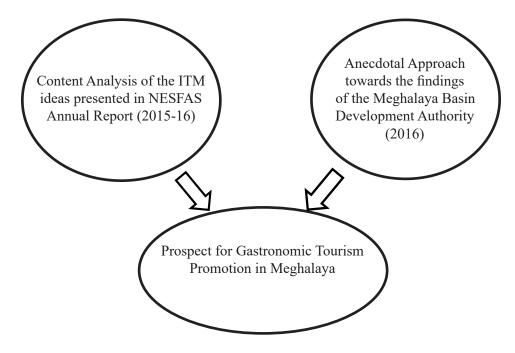


Figure 1 Conceptual Framework of the study (Source: author)

5. FINDINGS AND DISCUSSION

5.1. The Indigenous Terra Madre (ITM) 2015: A Content Analysis

According to Welcome to our world (2007), slow food was started by an Italian food activist Carlo Petrini in a small Italian town called Bra in 1986. It was initiated with the aim of supporting and defending good food, starting eno-gastronomic (food and wine) pleasure and living a slow pace of life. Slow food believes in the new gastronomy which is the gastronomy that educates,

gives freedom of food choices, allows for living well to the maximum and uses the local resources available. "Slow Food is committed to protecting traditional and sustainable quality foods, primary ingredients, conserving methods of cultivation and processing, and defending the biodiversity of cultivated and wild varieties. Slow Food protects places of historic, artistic or social value that form part of our food heritage, acknowledging the history and culture of every social group as it interacts within a broader network of reciprocal exchange "(Welcome to our world, 2007, p. 3). The Slow Food International, a global non-governmental organization, was started in the year 1989 as a means to protect and enhance the indigenous and local food cultures and traditions and work against the rising popularity of fast food culture all over the world by educating the locals and outsiders about the importance of origins and heritage.

A detailed documentation of the NESFAS Annual Report (2015-16) presented that in the year 2015, the 2nd Indigenous Terra Madre (ITM) was held in Meghalaya and it was locally called International Mei-Ramew (IMR 2015) and 'mei-ramew' means 'mother earth' in the Khasi language. The event spread across 5 days from 3rd to 7th November, 2015 and it was initiated by The Indigenous Partnership for Agrobiodiversity and Food Sovereignity (TIP) in Rome, Italy, Slow Food International, UN Agencies and other global supporters with the North East Slow Food Agrobiodiveristy and Society (NESFAS) as the host of the event. The event was attended by 606 delegates from 62 countries representing 230 indigenous communities. The ITM 2015 programme included the inauguration, plenary and thematic sessions on food and food systems, taste workshops, butchery training, public campus programmes like film festival, photo exhibitions, musical performances and speakers' series, field visits to 9 host villages and food festival held at the Sacred Grove at Mawphlang village, Meghalaya. The closing food festival on the last day of the event was attended by more than 70,000 rural and urban locals.

"The aim remained to showcase indigenous traditional knowledge, evolving skills and sustainable practices that safeguard natural resources and contribute to a resilient food system that promotes a more humane future for a diverse world. ITM 2015 became a platform for these food communities

to interact and engage with scientists and policymakers as they reflect on the theme, The Future We Want: Indigenous Perspectives and Actions. This international event served as an occasion to celebrate the wonderful cultural and biological diversity of indigenous communities as expressed in their songs, dance, dress, folklores and food systems that have evolved through generations of close interaction with nature. The traditionally marginalised voices, such as youth, women knowledge holders, the physically challenged, and indigenous farmers, pastoralists, hunter gatherers, remote dwellers and fisher folk, who would actively participate in the deliberations. The event was possible by the consistent efforts of the international alliance".

(NESFAS Annual Report, 2015-16, p. 23)



Figure 2 The various organizers, sponsors and supporters of the ITM 2015 held in Meghalaya (Source: NESFAS Annual Report, 2015-16)

Figure 2 shows the different organizers, sponsors and supporters of ITM 2015 held in Meghalaya. As a part of the review of this paper, this event has given an insight to the researcher on how it was and can be a promotional tool for initiating gastronomic tourism in Meghalaya. This event exclusively focused on celebrating, showcasing, educating and promoting local indigenous food of North East India, particularly that of Meghalaya, to the global delegates, participants and attendees. This definitely paved the way for introducing the concept of gastronomic tourism in Meghalaya. Content

Analysis was employed to analyse and decipher the ideas from the event ITM 2015 as documented in the NESFAS Annual Report 2015-16 which produced themes for the purpose of highlighting the prospect of promoting gastronomic tourism in Meghalaya. Content Analysis is the process of analyzing written, verbal or visual communication messages (Cole, 1988). **Table 1** explains the ideas taken from the event ITM 2015 and themes that were created through content analysis which consequently explains the prospect for gastronomic tourism promotion in Meghalaya.

Table 1 Ideas/Themes taken from the ITM 2015 (NESFAS Annual Report, 2015-16) for prospective gastronomic tourism promotion in Meghalaya (compiled by the author)

Sl.No	Ideas from the ITM 2015	Prospect For Gastronomic Tourism Promotion In Meghalaya		
1.	Government support	The Department of Tourism is one of the government departments that aided the ground activities of NESFAS during the event and the can be a great advantage in the future because through its support and initiative gastronomic tourism in Meghalaya can be promoted.		
2.	International partnerships	Successful alliance between The Indigenous Partnership for Agrobiodiversity and Food Sovereignity (TIP), NESFAS and the Government of Meghalaya during the event which can help project and promote Khasi food at the global platform.		
3.	Celebration of traditional and indigenous food	The Chief Minister, Dr. Mukul Sangma encouraged the welcoming of the international indigenous communities, celebrating the confluence of culture and science and celebrating traditional food and flavours from all over the world during this event. This paved the way for recognising traditional food as very important for the state. Moreover, according to the Slow Food International (2015), the ITM 2015 celebrated the local indigenous food theough shared meals, food tastings, workshops, demonstrations, pop up restaurants and fine dining experiences.		

4.	Branding and advertising	The Tourism Department of the state along with NESFAS arranged for the ITM/IMR 2015 as a brand and advertisement for visitors coming through Guwahati Airport, Assam by setting up a kiosk for providing information relating to the event and for convincing the visitors to attend it. This was clearly in terms of promoting the event and many visitors have visited and attended the event in Meghalaya which has paved the way for their knowledge about the local indigenous Khasi food which is the start of the gastronomic tourism journey in Meghalaya.
5.	Focus on providing local indigenous food	The ITM 2015 focused on catering to the delegates and visitors by providing them with local indigenous and tribal food. This can positively be taken as an initiative to start serving tourists visiting the state with local tribal food and cuisines.
6.	Traditional food display	During the event, the NESFAS Cooks' Alliance from ten villages displayed traditional food to the international delegates. The traditional food included wild edibles, salads, chutneys, snacks, meats and so on and this has educated the delegates about the richness of local food which can be a revisit factor for the delegates to Meghalaya.
7.	The Ark of Taste	During the event, a catalogue called ,The Ark of Taste' was documented. This catalogue contained the edible plants and animals, recipes and preparation methods that are on the verge of extinction in the traditional food system. This catalogue can be a sustainable tool for preserving Khasi food and methods of cooking and this can done by promoting them effectively.

8.	Khasi Cuisine 2.0	During the event, the NESFAS Cooks' Alliance, Chefs Osbert Rynjah, Daniel Syngkon and Artet Kharsati of food establishments Little Chef, The Jade Room and Alelang respectively came together to redefine Khasi cuisine in an experimental way by creating new recipes and mostly using local ingredients that can attract locals and visitors of the event. These recipes proved successful because they have given a new aesthetic appearance and taste to the Khasi cuisine which can be accepted worldwide. Unfortunately the Khasi cuisine 2.0 is still lacking in the current Shillong restaurant scene but with proper promotional methods, the new appearance and taste of Khasi cuisine can be factors for attracting tourists to the state.
9.	Promotion through media and communications	During the event, the media and communications team included the Department of Information and Public Relations (DIPR) of the Government of Meghalaya, local media companies, newspapers, international and national communication experts, press conferences, posters, kiosks, advertisements, local TV channels, All India Radio and social media. All these media and communications companies effectively publicised and promoted the slogan "eat local, grow global". This kind of promotion can be used for promoting gastronomic tourism in Meghalaya through these media and communications companies.
10.	Awareness and education about local food	ITM 2015 paved the way for providing awareness and education about local food, nutrition and farming to the locals so that they themselves would not be ignorant of their own food system. Once the locals become aware of the importance of local food, they can effectively promote it to outsiders.

11.	Tastes of Mei-Ramew	As a preparation for the ITM 2015, NESFAS hosted a food event along with the support of the Directorate of Tourism, Meghalaya. This event resulted in the knowledge of how ,cuisine and hospitality' can be promoted through the catchphrase "help local producers help our economy". "Mr. Phrang Roy, Chairman NESFAS addressed the gathering on 'The cuisine & hospitality of a destination — an important aspect in the quality of the holiday experience" (p.32). Mr Artet Kharsati, a resource person of the event, also spoke about hospitality and food innovation. These initiatives can be properly utilised as a means of gastronomic tourism promotion in the state.
12.	The Shillong Declaration and echoes of the ITM 2015	After the event, the Shillong Declaration was made for what has been learnt and what needs to be done in future. It focuses on continuing to create a platform for the exchanges of ideas and experiences for protecting sustainable food systems, indigenous peoples and networks protection, transmission of traditional food knowledge and protection of culture and heritage which can be used as the main attributes for gastronomic tourism promotion in Meghalaya. The ITM 2015 became a benchmark of expectations and comparisons and the reason being that from then onwards, the state has taken baby steps in initiating and enhancing local indigenous food to the outside world.

Source: Compiled by the author based on NESFAS Annual Report, 2015-16.

5.2. The prospective gastronomic tourism spots in Meghalaya with special reference to Khasi Food: An Anecdotal Approach

Khasi food is particularly common in Shillong, the capital of Meghalaya and in and around East Khasi Hills District. These two geographical locations have been taken considering the higher number of tourist arrivals to these

areas and it should not be mistaken that Khasi food can be found only in these locations. Furthermore, for the purpose of providing prospective gastronomic tourism spots in Meghalaya, these locations have the potential to strengthen the gastronomic identity of Meghalaya because of the frequent tourist visits to these locations. The gastronomic spots are already in existence since before but because of improper and inadequate projection and promotion, they remain known only to the locals. Since information about these spots is not yet been publicized for tourism purpose, tourists who are gastronomy enthusiasts have visited these spots only with the help of local guides. Their personal articles, blogs and vlogs clearly show that they were taken to these gastronomic spots by local guides through custom itinerary. This means that none of the travel agencies or tour operators organizing tours in Meghalaya offer specific tours to these gastronomic spots to the tourists.

An anecdotal approach was employed to devise the prospective gastronomic tourism spots and trails in Meghalaya which can be explained in **Table 2**.

Table 2 An anecdotal matrix of the prospective gastronomic tourism spots and trails in Meghalaya (compiled by the author)

Sl. no.	Name of the Food Outlet	Location	Food served	Prospective gastronomic trail
1.	Dukan Ja and Sha (Meghalaya B a s i n Development Authority, 2016)	(East	means tea. Local food s e r v e d comprises of jadoh, dohsyiar, d o h j e m , d o h k h l e h ,	'Ja and Sha' gastronomic trail which includes

2.	Restaurants serving Khasi food and snacks (Meghalaya Basin Development	In and a r o u n d Meghalaya	Different types/menus of Khasi cuisine and snacks	Khasi Cuisine Restaurant Trail: 1. Police Bazar, Shillong (restaurants like Red Rice, Trattoria, Ja and Sha, 3 Olives)
	Authority, 2016)			2. In and around Shillong (restaurants like You and I Arts Café, Jadoh, Alelang, Café Shillong Heritage, Roots Shillong, Hotel Poinisuk)
				3. In and around Meghalaya (Sao Aiom of Ri Kynjai Resort in Ri Bhoi District)
3.	Local Khasi Food Stall/ Dukan Ja and Sha (Meghalaya B a s i n Development Authority, 2016)	Bara Bazar/ Iewduh, Shillong, Meghalaya	Authentic Khasi Cuisine and snacks	Dukan Ja and Sha Trail: Mrs. I. Dkhar's Ja and Sha outlet which is the most famous for serving authentic Khasi cuisine and snacks at the heart of the Shillong's market (Iewduh). Mrs. I. Dkhar believes in serving only Khasi cuisine because according to her, the non-locals are also fond of it as well and most importantly, she believes in preserving the Khasi food and culture which would be a boon for attracting tourists to the place (Meghalaya Basin Development Authority, 2016)

4.	Local food	In and	Authentic Khasi	Meghalaya is yet to set
	stalls at	around	food and snacks	up local food stalls at
	tourist spots	Meghalaya	menu (can be	tourist spots. Although
		(especially	on pre-order	a few are present, they
		areas of	basis for lunch/	are not prominent
		tourist	dinner given the	in attracting tourists
		interest in	location of the	to try and eat Khasi
		the East	tourist spot and	food. Proper banners/
		Khasi Hills	the accessibility	promotions are needed
		District	to food markets/	at tourist spots so that
		where	ingredients)	tourists will not feel the
		Khasi		need to pack food or
		food is		order non-Khasi food.
		authentic)		

Source: Compiled by the author based on gastronomic tourism spots and trails in Meghalaya.

6. Conclusion

Examples and ideas of gastronomic tourism promotion in different countries/ destinations have influenced Meghalaya to promote Khasi food in its inherent cultural nature; however, the extent of the same is not yet in the books of tourist activities in the state. This paper, although lacking in empirical evidence, projects the prospective scenario in Meghalaya through content analysis and anecdotal approach (observation and exploratory) compilation of facts and potential aspects of gastronomic tourism promotion in the state. The state requires food experts especially those in the expertise of knowing about Khasi food ingredients and how to cook Khasi food and it is through them that more information can be disseminated to tourists or guests visiting the state. Even though a prominent institution like NESFAS has been able to teach, train and spread the information about the importance and authenticity of Khasi food and preserving its cultural trait, it is not yet enough in terms of gastronomic tourism promotion. Many local chefs are trying to bring innovative ideas with regards to Khasi food on a plate and their initiatives and ideas can be a prospect for gastronomic tourism in the state. Culinary Tourism or Gastronomic Tourism marketing plays an important role in influencing tourist motivations to travel to a destination for engaging in culinary/gastronomic activities offered by the destination (Mawroh, 2017).

Therefore, it only requires a push for advertising and marketing the unique image of what Khasi food has to offer to the tourists in relation to sight, pleasure and most importantly the taste. According to Su & Horng (2012), the information of cultural infusion and reducing the hindrances of local food experiences are extremely important to the marketing strategy draft. With the growing influence of social media, Khasi food can be aggressively promoted and the Department of Tourism, Government of Meghalaya and other major stakeholders can use it as a platform for attracting tourists to the state to try and eat Khasi food. Prominent marketing and promotional strategies must be implemented in order for the state to explore its niche tourism areas and one of them is Gastronomic Tourism.

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A Study of the Role of Public Infrastructures in Economic Growth of Assam

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Abstract: Using a balanced panel data of 23 districts from 1999-00 to 2017-18, an investigation has been carried out to analyze the role of public infrastructures in economic growth of Assam. Results show that public infrastructure has contributed positively towards economic growth of Assam in the long-run. Similarly, economic and social infrastructure has also found to contribute positively to economic growth of Assam only in the long-run. These findings support the view that low investment on infrastructure development is one of the reasons for slower economic growth of Assam. However, it also indicates that Assam can achieve higher economic growth by investing heavily on its infrastructure. Although, impact of social infrastructure is larger, but economic infrastructure is relatively quicker in responding to discrepancies in the long run relationship with economic growth. Therefore, it becomes equally important to invest on both economic and social infrastructure to attain stable economic growth for Assam.

Keywords: Public Infrastructure, Economic Infrastructure, Social Infrastructure, Economic Growth

INTRODUCTION

Assam is considered among the underdeveloped states of India in terms of per capita income (a measure of economic growth). Per capita income of Assam was ₹ 53745 in the year 2016-17 (Government of Assam, 2020), which was around 65 percent of per capita income of India (Reserve Bank of India, 2019). Again, Assam was at the 12th rank among the 15 major states of India in terms of per capita income. One of the prime factors for economic underdevelopment of Assam is low level of investment. It is a well known fact that investment is very much crucial for economic development.

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Higher level of investment is also important to sustain economic growth, particularly in developing economies. However, private investors are reluctant to make investments in Assam due to poor infrastructure levels. According to Finance Commission Report (2000), Assam's rank was 13 in terms of infrastructure development among the 15 major states of India. Only Madhya Pradesh and Rajasthan were the states which are relatively underdeveloped than Assam in terms of infrastructure facilities. Due to lower level of private investment, dependency on the government investment increases to promote economic growth and to improve standards of living of people. But an economically backward state like Assam is also constrained by limited financial resources available to fulfill its investment requirements. Therefore, to improve the investment environment to attract more private investment into the state, it is essential to develop infrastructure facilities in the state. Therefore, the present study has been undertaken to analyze the status of public infrastructure of the districts of Assam from 1999-00 to 2017-181 and how it is contributing towards economic growth of the state. The rationale for studying the issue at district level is that disparities have been witnessed even within Assam, and across its districts. Due to these reasons, it is essential to have a detailed analysis of infrastructure development at district levels so that appropriate provisioning of infrastructures could be made according to the specific requirements of the districts.

THEORATICAL BACKGROUND AND LITERATURE REVIEW

Development literature has recognized the importance of infrastructure development to promote economic growth in any country or region (Rosentein-Rodan, 1943; Hirschman, 1958; Rostow, 1960; Mellor, 1976; Rao, 1980). Certain level of infrastructure is crucial, not only to promote economic growth but also to hold the superstructure of the economy to sustain that growth (Rostow, 1960). It also explains backwardness of the regions or countries which are deficient in infrastructure (Reinikka & Svenson, 2002). Therefore, infrastructure development is a necessary or a pre-condition to attain economic growth in an economy (Rao, 1980). Primarily, infrastructure enhances productivity of other factors of production like labour and capital (excluding stock of infrastructure). Basically, it acts

as an intermediate input in the production process which is not directly productive but increases productivity of other factor inputs. Improvement in productivity of factor inputs or higher profitability attracts more private investment into the economy (Eberts, 1990; Agénor & Neanidis, 2006). These effects of infrastructure stimulate aggregate demand and aggregate supply in the economy and as a result facilitate economic growth (Kessides, 1996).

However, the effects of infrastructure development are not as simple as it is mentioned above. These effects are wide ranging and interconnected. In most abstract form, the evidences mostly revolve around the relationship between public capital investment (a proxy for public infrastructure) and aggregate output. Many studies found statistically significant positive relationship between public capital investment and aggregate output (Aschauer, 1989; Munnel, 1990a, 1990b; Easterly & Rebelo, 1993). However, the magnitude of this relationship tends to reduce as the unit of observation changes from national to regional level, advocating for the operation of economies of scale.

Public capital also has an important relationship with private capital. Since, increased availability of public infrastructure can improve marginal productivity of private capital and consequently, promotes economic growth (Eberts, 1990). Therefore, public and private capital can be seen as a complement, not as a substitute for each other. However, inadequate availability of public infrastructure can act as a hurdle in the path of economic growth as it retards private investment (Reinikka & Svenson, 2002). Therefore, Infrastructure can be regarded as a pre-condition for attracting private investment and higher economic growth.

Public infrastructure development can also be used as a macroeconomic stabilisation tool (Kessides, 1996). Investment on public infrastructure can raise employment and purchasing power, which through its multiplier effect can be handy at the times of slackening demand or depression. But these effects are short lived and can be realized immediately after investment is made (Duffy-Deno & Eberts, 1989). However, public investment on

infrastructure can also have detrimental impact on private investment if these investments are financed by debt financing or foreign borrowing due to crowding out effect (Kessides, 1996; Agénor & Moreno-Dodson, 2006). This is not conducive for economic growth. Therefore, investment on public infrastructure to deal with depressionary situation is productive only when it is financed through a sustainable source.

Empirical evidence on infrastructure-growth nexus also confirms that there is a strong relationship between infrastructure development and economic growth (Aschauer, 1989; Munnel, 1990; World Bank, 1994). But when similar studies was undertaken at smaller geographical units such as at state level, output elasticity is less than what it was found at the national level (Munnell & Cook, 1990). Public infrastructure can also have an additional indirect effect on labour productivity (Agénor & Neanidis, 2006). Again, just like physical infrastructure, social infrastructure has also contributed significantly towards economic growth (Sahoo & Dash, 2012; (Sahoo, Dash & Nataraj, 2012). There are certain instances where social infrastructure is getting higher marginal benefit and greater net rate of return than that of economic infrastructure (Goel, 2003). Therefore, social infrastructure is equally important along with economic infrastructure for economic growth of any country or region. Moreover, there is optimal level of infrastructure provisioning which maximizes growth of a country. Above or below this optimal level, infrastructure provisioning can have detrimental or favorable impact on long run income or output (Canning & Pedroni, 2004).

DATA SOURCE AND METHODOLOGY

The study is based on data collected from secondary sources. The required data on public infrastructures have been collected from various reports and publications such as Statistical Handbook of Assam, Economic Survey of Assam and Infrastructure Statistics of Assam 2014-15. Data on per capita net district domestic product (PCNDDP) has been collected directly from the Directorate of Economics and Statistics, Government of Assam.

To show the status of public infrastructures in the various districts

of Assam, composite indices have been constructed using min-max normalization procedure. The Min-Max procedure of normalization is as follows (UNDP, 1990):

$$I_{x} = \frac{x - x_{min}}{x_{max} - x_{min}}$$

Where, X_{min} and X_{max} are the minimum and maximum values the indicator 'X'. To compare development of public infrastructure among the districts over the period of study, the maximum and minimum values of the public infrastructure in the districts are considered over time (see Appendix 1). This will give the real picture of growth of public infrastructures. Moreover, creation of indices using Min-Max procedure provides the values for the index within the range from 0 to 1.

From the variables considered under each broad group (see Table 1), one composite index has been constructed, namely, economic infrastructure index and social infrastructure index using geometric mean of normalized values of each infrastructure variable. Lastly, the overall public infrastructure has constructed by combining these two composite indices.

Again, Districts have been categorized as developed, moderately developed and less developed based on their relative status in the three composite indices. Categorization of the districts has been done using the following criterion:

- \triangleright Developed: $X \ge Mean + 0.5S.D.$
- \blacktriangleright Moderately Developed: Mean + 0.5S.D. \gt X \lt Mean 0.5S.D.
 - ➤ Less Developed: $X \le Mean 0.5S.D.$

Where, X represents index value.

To check inter-district disparities across the districts in public infrastructures, coefficient of variation (C.V.) has been calculated using following formula:

Coefficient of Variation (C.V.) =
$$\frac{Mean}{Standard\ Deviation} \times 100$$

The C.V. values have been calculated separately for each year, so that it can be observed whether districts have conversed or they have diverged

in a particular infrastructure over the years. Again, changes in the relative position of the districts have been examined using Spearman's rank correlation.

To examine the relationship between public infrastructure and per capita net domestic product of the district of Assam, a panel regression model has been constructed. A panel regression analysis provides more degrees of freedom and deals with the problem of multicollinearity (Baltagi, 2005). Some panel models also accounts for regional heterogeneity, i.e., the parameters are allowed to differ across the panels (Pesaran, Shin & Smith, 1999). Therefore, using a panel data model can provide more efficient estimate of the impact of public infrastructures on economic growth in Assam.

Since, panel data incorporates both cross section and time series data, therefore, it is important to test whether the underlying time series is stationary² or not. Usually, unit root tests are used to check stationarity of a time series which test for existence of a unit root. Existence of a unit root is a characteristic of non-stationary variable. For this study, two panel unit root tests have been used Pesaran and Shin (IPS) test and Im, Levin, Lin and Chu (LLC) test to show the robustness of the results.

VARIABLE LIST AND MODEL SPECIFICATION

Basically, different public infrastructures have been categorized under two broad groups, namely, economic infrastructure and social infrastructure as shown in Table 1. Based on existing literature, different infrastructure variables have been distributed into these two broad groups, according to the nature of relationship of the infrastructure with economic growth. Road, power, irrigation, bank branches and credit-deposit ratio have been clubbed under economic infrastructure. Educational and healthcare infrastructure has been considered under social infrastructure. Details of infrastructure variables are given in Table 1. Again, per capita net district domestic product (PCNDDP) is used to show the level of economic growth of the districts of Assam.

Table 1: List of Infrastructure Variables and Their Measurement

Groups	Infrastructure Variable	Measurement	
	Road	Roads Per Hundred square Kilometres.	
	Road	Roads Per Lakh Populations.	
	Power	Percentage of Village Electrified.	
	Irrigation	Gross Irrigated Area as a Percentage of Gross Cropped Area.	
Economic	Bank Branches	No. of Bank Branches Per Hundred square Kilometres.	
Infrastructure		No. of Bank Branches Per Lakh Populations.	
	Credit-Deposit Ratio	Share of Lending out of the Total Deposits.	
		No. of Schools Per square Kilometres.	
	Educational Infrastructure	No. of Schools Per Thousand Populations in the age group of 6-15years.	
Social Infrastructure	Healthcare	No. of Hospital Beds Per Thousand Populations.	
	Infrastructure	No. of Hospital Beds in every Ten square Kilometres Area.	
Source: Created	d by author.		

Theoretically, it is believed that PCNDP of any region at present depends on its past values. In other words, those districts which were having higher per capita NDP in the past also tend to have higher per capita NDP at present. However, there has not been any consensus about the optimal lags of per capita NDP up to which it shares significant impact on present level of per capita NDP or economic growth. Further, impact of public infrastructure development may not be seen or be available instantaneously, rather it takes some time to reflect its impact on economic growth. Therefore, it is rationale

to incorporate lag of both per capita NDP and public infrastructures into the regression model. To fulfill these requirements, the following autoregressive distributed lag (ARDL) model has been used:

$$Y_{it} = \sum_{j=1}^{p} \alpha_{ij} Y_{i,t-j} + \sum_{j=0}^{q} \gamma_{ij} X_{i,t-j} + \nu_{it}$$
 (Eq. 1)

Where, Y represents dependent variable, i.e., natural logarithm of PCNDDP. X represents the independent variable, i.e., infrastructure indices. 'i' and 't' represent cross section unit and time period. 'p' and 'q' are the lags of dependent and independent variable respectively, where choice of the optimal lag length is determined according to Akaike Information Criterion. 'v' is the error or disturbance term.

The re-parameterized ARDL model as a vector error correction system, prescribed by Pesaran, Shin and Smith (1999) is as follows:

$$\Delta Y_{it} = \phi(Y_{i,t-1} - \theta X_{it}) + \sum_{j=1}^{p-1} \beta_{ij} \Delta Y_{i,t-j} + \sum_{j=0}^{q} \delta_{ij} \Delta X_{i,t-j} + \varepsilon_{it} \quad (Eq. 2)$$

Where, Δ is the first difference operator. $Y_{i,t-1} - \theta X_{it}$ is the error correction term. ϕ is the speed of adjustment towards long-run equilibrium situation. θ is the long-term coefficient, whereas, β and δ are the short-run coefficients. ε is the white noise error term (i.e., its mean is zero and variance is constant within each panel). $(Y_{i,t-1} - \theta X_{it})$ is the error correction term (ECT), which reflects the existence of a long-run relationship between the dependent and independent variables. Again, the error correction term also shows the speed of adjustment to retain the long-run equilibrium condition if some shocks create disequilibrium in the short-run condition. This re-parameterized ARDL model can be estimated using pooled mean group (PMG) estimation method. In PGM estimation method, short-run coefficients or estimators are allowed to differ from region to region. But it restricts the long-run coefficients to be homogenous for all regions.

STATUS OF PUBLIC INFRASTRUCTURE IN ASSAM

It is already mentioned that Assam was among the bottom three states of India in terms of infrastructure development (Finance Commission, 2000). At district level, situation was even worse than what has been observed at state level. Among the twenty three districts of Assam, only six districts

was having infrastructure higher than the state average (Table 2). This has also reflected in huge disparities among the districts due to high value of coefficient of variation (Table 2). However, there has seen some improvement in overall level of public infrastructure in the state during the time period from 1999-00 to 2017-18. During the specified period, all districts have witnessed positive growth in overall public infrastructure. Further, in comparison with 1999-00, there are now eight districts which have public infrastructure higher than the state average. This shows that public infrastructure in some districts have improved faster than the others. Among these districts, Bongaigaon, Dima Hasao and Darrang district have witnessed significant improvement over other districts (Table 2). Again, inter-district disparities have also reduced with improvement in overall level of public infrastructure in the districts of Assam. However, there are two districts, namely, Lakhimpur and Goalpara which have deteriorated its position significantly in the overall public infrastructure index. But relative positions of most districts have not changed significantly as it is evident from significantly high rank correlation among the relative positions of the districts.

Table 2: Relative Position of Districts in Public Infrastructure Index (PII) in 1999-00 and 2017-18

Districts	PII 1999-00	Rank	PII 2017-18	Rank
Darrang	0.216	06	0.391	04
Sonitpur	0.181	11	0.270	13
Morigaon	0.171	13	0.275	12
Nagaon	0.204	08	0.305	10
Dhemaji	0.111	20	0.175	22
Dibrugarh	0.111	21	0.223	17
Golaghat	0.140	14	0.282	11
Jorhat	0.245	04	0.329	06
Lakhimpur	0.200	09	0.247	16
Sibsagar	0.209	07	0.349	05
Tinsukia	0.123	18	0.176	21
Barpeta	0.218	05	0.327	07

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Bongaigaon	0.139	15	0.398	03
Dhubri	0.139	16	0.260	15
Goalpara	0 252	03	0.318	09
Kamrup (R)	0.301	01	0.410	02
Kokrajhar	0.191	10	0.323	08
Nalbari	0.298	02	0.444	01
Dima Hasao	0.030	23	0.214	18
Karbi Anglong	0.113	19	0.197	20
Cachar	0.081	22	0.152	23
Karimganj	0.138	17	0.206	19
Hailakandi	0.175	12	0.265	14
Assam	0.215		0.321	
C.V. (%)	40	28	.36	
Spearman's l	Rank Correlat	0.83	350*	

Source: Author's own calculation

Note: Value in parenthesis shows level of significance. * represents level of significance at 1%.

Again, using the specific criteria mentioned in methodological section, districts have been clustered into three categories in Table 3. These clusters are less developed, moderately developed and developed districts. It is seen that there is not much changes in the cluster of developed districts. But there have been changes in the size of the clusters of less developed and moderately developed districts as some districts have improved its position from being a less developed district to moderately developed one. These districts are Dhubri and Golaghat. Again, Bongaigaon district has improved its status significantly from being a less developed district to developed district in public infrastructure. Moreover, one interesting observation is that hill area districts (i.e., Dima Hasao and Karbi Anglong) and two Barak valley districts, namely, Cachar and Karimganj district have continued to be the less developed districts. This shows that these two regions of the state have been deprived of public infrastructure.

Table 3: Relative Status of Development in Overall Public Infrastructure Index

Categories of Development	In 1999-00	In 2017-18
Less Developed	Dhemaji, Dima Hasao, Cachar, Karimganj, Karbi Anglong, Tinsukia, Dhubri, Bongaigaon, Golaghat, Dibrugarh	Dhemaji, Dima Hasao, Cachar, Karimganj, Karbi Anglong, Tinsukia, Dibrugarh
Moderately Developed	Morigaon, Hailakandi, Sonitpur, Kokrajhar, Lakhimpur, Nagaon	Dhubri, Golaghat, Morigaon, Hailakandi, Sonitpur, Kokrajhar, Lakhimpur, Nagaon, Goalpara
Developed	Sibsagar, Barpeta, Jorhat, Goalpara, Nalbari, Darrang, Kamrup	Sibsagar, Barpeta, Jorhat, Bongaigaon, Nalbari, Darrang, Kamrup

Source: Based on author's own calculation.

Now, it is important to analyse the changes in the pattern of public infrastructures considered under two broad groups separately as the characteristics of these two groups of public infrastructure are different. To do that, relative positions and index values of both economic and social infrastructure has been presented in Table 4 and Table 6.

From Table 4, we can see that all districts have improved its economic infrastructure in absolute terms. Also, the districts which were in the higher rank are still maintaining their position in economic infrastructure index. These districts are Kamrup, Nagaon, Darrang and Nalbari. Similarly, districts which were in bottom ranks are not able to improve their ranks and still keeping their position at the bottom (except Dima Hasao District). These districts are Dhemaji, Lakhimpur, Cachar, Hailakandi and Karimganj. This implies that just like overall public infrastructure, relative positions of most numbers of districts have not deviated much during 1999-00 to 2017-18. This proposition is also supported by highly significant rank correlation coefficient of 0.8073.

Again, huge inter-district disparities in economic infrastructure have been observed in Assam. Although reduction has been taken, but still a huge disparity tend to exist in terms of economic infrastructure among the districts. Due to the fact that there are only five districts which have an economic infrastructure higher than the state average, whereas most number of districts are far below the state average during both periods. Consequently, high inter-district disparities tend to exist in Assam in terms of availability of economic infrastructure.

Table 4: Relative Position of Districts in Economic Infrastructure Index (EII) in 1999-00 and 2017-18

Districts	EII 1999-00	Rank	EII 2017-18	Rank
Darrang	0.248	03	0.462	01
Sonitpur	0.250	02	0.338	06
Morigaon	0.149	10	0.223	15
Nagaon	0.233	04	0.374	04
Dhemaji	0.055	23	0.110	23
Dibrugarh	0.109	15	0.201	19
Golaghat	0.102	16	0.310	09
Jorhat	0.147	11	0.240	14
Lakhimpur	0.096	18	0.129	21
Sibsagar	0.116	14	0.278	12
Tinsukia	0.130	13	0.212	16
Barpeta	0.201	07	0.317	08
Bongaigaon	0.141	12	0.334	07
Dhubri	0.098	17	0.205	18
Goalpara	0.204	06	0.255	13
Kamrup (R)	0.310	01	0.422	02
Kokrajhar	0.165	09	0.297	10
Nalbari	0.229	05	0.367	05
Dima Hasao	0.064	22	0.286	11
Karbi				
Anglong	0.192	08	0.380	03
Cachar	0.075	21	0.207	17

Karimganj	0.091	19	0.126	22
Hailakandi	0.084	20	0.179	20
Assam	0.205		0.340	
C.V. (%)	47	.30	35.	.09
Spearman's Rank Correlation		0.80	73*	

Source: Author's own calculation.

From Table 5, it can be seen that almost all the less developed districts in 1999-00 belongs to Barak valley, Upper Assam. On the contrary, all the developed districts were part of Lower and Central/North Assam. This implies that there is unequal distribution of economic infrastructure among the districts as more emphasis has been placed by the respective governments in the North and Lower Assam districts while distributing economic infrastructure. Although, all the districts have shown improvement in Economic infrastructure, but the pattern of unequal development of economic infrastructure favouring some region has almost remained more or less the same even in 2017-18. This implies that no effort has been given so far to alter the pattern, so that there should not be a particular region which is lagging in economic infrastructure. But the two hill districts, namely, Dima Hasao and Karbi Anglong districts are realizing significant improvement in economic infrastructure. Dima Hasao is the only district which has been able to upgrade from a less developed district to a moderately developed district.

Table 5: Relative Status of Development in Economic Infrastructure Index

Categories of Development	In 1999-00	In 2017-18
Less Developed	Dhemaji, Dima Hasao, Cachar, Hailakandi, Karimganj, Lakhimpur, Dhubri, Golaghat, Dibrugarh, Sibsagar	Dhemaji, Cachar, Hailakandi, Karimganj, Lakhimpur, Dhubri, Dibrugarh, Tinsukia, Morigaon

^{*} shows statistically significant at 1% level.

	Tinsukia, Bongaigaon,	Dima Hasao, Golaghat,
Moderately	Jorhat, Morigaon,	Sibsagar, Jorhat, Kokrajhar,
Developed	Kokrajhar	Barpeta, Goalpara
	Karbi Anglong, Barpeta,	Karbi Anglong,
	Goalpara, Nalbari,	Bongaigaon, Nalbari,
Developed	Nagaon, Darrang,	Nagaon, Darrang, Sonitpur,
	Sonitpur, Kamrup	Kamrup

Source: Based on author's own calculation.

Table 6: Relative Position of Districts in Social Infrastructure Index (SII) in 1999-00 and 2017-18

Districts	SII 1999-00	Rank	SII 2017-18	Rank
Darrang	0.187	15	0.332	13
Sonitpur	0.131	18	0.216	19
Morigaon	0.197	13	0.340	10
Nagaon	0.178	16	0.249	17
Dhemaji	0.223	09	0.280	15
Dibrugarh	0.113	20	0.246	18
Golaghat	0.192	14	0.256	16
Jorhat	0.407	02	0.452	04
Lakhimpur	0.415	01	0.472	03
Sibsagar	0.375	04	0.437	05
Tinsukia	0.116	19	0.147	21
Barpeta	0.237	08	0.338	11
Bongaigaon	0.137	17	0.474	02
Dhubri	0.197	12	0.329	14
Goalpara	0.311	06	0.396	07
Kamrup (R)	0.292	07	0.399	06
Kokrajhar	0.221	10	0.352	09
Nalbari	0.388	03	0.536	01
Dima Hasao	0.014	23	0.16	20
Karbi Anglong	0.067	22	0.102	23
Cachar	0.087	21	0.112	22

Karimganj	0.209	11	0.335	12
Hailakandi	0.363	05	0.393	08
Assam	0.225		0.302	
C.V. (%)	52.41		37.58	
Spearman's Rank Correlation			0.8330*	

Source: Author's own calculation.

Again, all the districts have increased its social infrastructure during 1999-00 to 2017-18 (Table 6). Also, not much deviation has been observed in the relative positions of the districts except Bongaigaon and Dhemaji. Whereas Bongaigaon district has attained significant improvement leading to a shift from 17th rank in 1999-00 to 2nd rank in 2017-18, Dhemaji district has observed deterioration in its relative position from 9th rank in 1999-00 to 15th rank in 2017-18 (Table 6). Otherwise, other districts remained at more or less the same positions.

Unlike in economic infrastructure, more districts have social infrastructure higher than the state average in the year 1999-00. Despite this fact, interdistrict disparities in social infrastructure were higher than that of economic infrastructure in 1999-00. However, the number of districts having higher level of social infrastructure than the state average has increased from eight to fourteen districts during 1999-00 to 2017-18 (Table 6). As a result, disparities among districts in social infrastructure have reduced at a faster rate than what it is observed in economic infrastructure.

Table 7: Relative Status of Development in Social Infrastructure in Index

Categories of Development	In 1999-00	In 2017-18
Less Developed	Dima Hasao, Karbi Anglong, Cachar, Dibrugarh, Tinsukia, Sonitpur, Bongaigaon	Dima Hasao, Karbi Anglong, Cachar, Dibrugarh, Tinsukia, Sonitpur, Nagaon, Golaghat

^{*} represents level of significance at 1%.

	Nagaon, Darrang,	Darrang, Morigaon,
Moderately	Golaghat, Morigaon,	Dhubri, Karimganj,
Developed	Dhubri, Karimganj,	Kokrajhar, Dhemaji,
	Kokrajhar, Dhemaji,	Barpeta
	Barpeta	
	Goalpara, Nalbari,	Goalpara, Nalbari,
Developed	Kamrup, Hailakandi,	Kamrup, Hailakandi,
	Sibsagar, Jorhat,	Sibsagar, Jorhat,
	Lakhimpur	Lakhimpur, Bongaigaon

Source: Based on author's own calculation.

Again, unlike economic infrastructure, there was is no such pattern of unequal distribution of social infrastructure by the government favouring a particular region. Each category of development is incorporating districts from all parts of Assam. Since most districts have maintained their relative positions, so the pattern of mixed status of development has prevailed over the period of study (Table 7). Apart from Bongaigaon, Nagaon and Golaghat districts, development status of other districts have remained unaltered. Among these three districts, only Bongaigaon district has improved its status, whereas other two districts have dropped down to the category of less developed district.

IMPACT OF PUBLIC INFRASTRUCTURE ON ECONOMIC GROWTH OF ASSAM

Before going to analyze the impact of public infrastructure on economic growth of Assam, we first attempted to determine the level of stationarity. It is due to the fact that one of the requirements of applying an ARDL model is to have variables that are either stationary at level (i.e., trend stationary) or stationary at first difference. Now, it can be observed from Table 8 that some variables are stationary at level (i.e., trend stationary) whereas others are stationary at first difference. Since, the variables are integrated of both order zero and one; therefore cointegration tests are not applicable as these tests require all the variables to be stationary at first difference. Therefore, an ARDL (Autoregressive Distributed Lag) model will be a suitable model for regression analysis.

Table 8: Results of Panel Unit Root Tests

Variable	Level		First Dif	ference
	IPS	LLC	IPS	LLC
LNPCNDDP	0.720	0.263	3.434*	-4.185*
	(0.764)	(0.604)	(0.000)	(0.000)
PII	-0.876	-2.706*	-4.249*	-2.812*
	(0.190)	(0.003)	(0.000)	(0.002)
EII	-0.145	-2.116**	-7.855*	-6.068*
	(0.442)	(0.017)	(0.000)	(0.000)
SII	-0.144	-0.647	-2.197**	-1.863**
	(0.442)	(0.258)	(0.014)	(0.031)

Source: Author's own calculation

Note: Figures in the parenthesis are p-Values of the test statistics.

Table 9: Impact of Composite indices of Public Infrastructures on Per Capita Net Domestic Product of the Districts of Assam

Variables	Model 1	Model 2	Model 3
	Long-run Coefficients		
PII	3.761*		
	(0.337)		
EII		6.404*	
		(0.983)	
SII			8.912*
			(1.558)
	S	hort-run Coefficie	nts
ECT	-0.106**	-0.073*	-0.053*
	(0.047)	(0.021)	(0.018)
ΔΡΙΙ	0.088		
	(0.118)		
ΔΕΙΙ		0.057	
		(0.140)	
ΔSII			0.135
			(0.244)

^{*, **}and *** represents significant at 1%, 5% and 10% level respectively.

Constant	1.065**	0.731*	0.520*
	(0.456)	(0.198)	(0.165)
Model	ARDL[1,2]	ARDL[1,3]	ARDL[1,2]
Specification			

Source: Author's own calculation

Note: *, ** and *** indicates statistically significant at 1%, 5% and 10% level.

Figures in the parenthesis are standard error.

Figures in the squared brackets are optimal lags of the variables of the model.

ECT represents error correction term.

In Table 9, results obtained from three regression models have been presented. First model shows the relationship between overall public infrastructure and per capita NDDP of the districts of Assam, whereas other two models (i.e., Model 1 & 2) show the relationship of economic and social infrastructure with per capita NDDP. From Model 1, we can infer that a long term relationship exists between overall public infrastructure and per capita NDDP as the ECT term is found to be significant at 5% level. But there is no significant relationship between the two in the short run. Public infrastructure affects per capita NDDP positively in the long run. Moreover, if any discrepancy occurs in the long run equilibrium path of the relationship between the two, then it will correct 50 percent² of the disequilibrium within a time span of nearly 6 years if no other disequilibrium is caused in the preceding years. Otherwise, disequilibrium caused in the next years will have to be added into the existing ones to determine the period.

Similarly, economic and social infrastructure has also influenced per capita NDDP of the districts of Assam only in the long run. No short run relationship is found to exist with per capita NDDP. Results obtained from Model 2 shows that economic infrastructure has highly significant positive relationship with per capita NDDP. Along with that, disequilibrium in the long run relationship between the two gets automatically corrected by 50 percent within a time period of around 9 years. Again, social infrastructure is having a significant positive relationship with per capita NDDP of the districts of Assam in the long run. One interesting result is that the influence

of social infrastructure is found to be higher than economic infrastructure on per capita NDDP of the districts of Assam. This is something unique, because it is usually believed and empirically found that influence of economic infrastructure should be higher than social infrastructure as economic infrastructures are directly linked with productive activities whereas social infrastructure affects economic activities through its influence on labour productivity. However, social infrastructure takes a longer time period to correct any disturbances occurred in the long run equilibrium relationship with per capita NDDP. It is obvious as social infrastructure first influences economic activity by influencing productivity of labour which requires time.

CONCLUSION

The present study has presented the status of public infrastructure of the districts of Assam during the period 1999-00 to 2017-18. Also, its contribution towards economic growth of the state has been assessed. There has been improvement in both types of public infrastructures, i.e., economic and social. Initially, inter-district disparities were higher in social infrastructure but these disparities have reduced much faster than the reduction in the disparities in economic infrastructure due to unequal distribution of social infrastructure favoring lagging districts. However, even if disparities in economic infrastructure have reduced over the past the districts of Lower and Central/North Assam are still better off than the districts of Barak valley and Upper Assam. Therefore, more emphasis should be given on these two lagging regions while distributing economic infrastructure to attain balanced economic growth in the state.

Again, overall public infrastructure has positively influenced per capita NDDP of the districts of Assam. However, productivity of social infrastructure is found higher than economic infrastructure in Assam. But both are contributing positively towards the growth in per capita NDDP of Assam in the long run. Therefore, the respective governments should focus on infrastructure projects to attain higher level of per capita NDDP in the state. It should not bother about the short run impacts of these projects. Since discrepancies in the long run equilibrium path of the relationship do

not require much longer period to correct the disequilibrium, therefore, it is preferable to avoid intervention to correct these discrepancies. But if a chain of disruption occurs in the long run path of this relationship year after year then it would become necessary to make state intervention to correct the discrepancies and to maintain the relationship between public infrastructures and per capita NDDP of the districts of Assam.

Lastly, it can be inferred that the Government of Assam as well as the Government of India should focus on infrastructure development to promote or achieve higher level of economic growth in Assam. The respective governments can also use public infrastructures as an important policy tool to reduce regional disparities across the districts of Assam, so that a balanced growth can be achieved. Further, this policy can also be used to uplift the situation of Assam from being a poor state to a developed state of the country.

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APPENDICES

Appendix 1: Minimum and Maximum Values for Normalization

Variable Name	Minimum Value	Maximum Value
Roads Per Hundred square Kilometres	16 (Dhemaji, 2004)	114 (Sibsagar, 2015)
Roads Per Lakh Populations	49 (Cachar, 2004)	1058 (Dima Hasao, 2000)
Village Electrification	16.52 (Karbi Anglong, 2006-07)	119.52 (Barpeta, 2011-12)

Irrigation Intensity	0.00 (Hailakandi, 2004-05)	31.5 (Karbi Anglong, 2014-15)
No. of Bank Branches Per Hundred square Kilometres.	0.31 (Dima Hasao, 2009)	11.27 (Kamrup, 2018)
No. of Bank Branches Per Lakh Populations.	1.91 (Dhubri, 2007)	15.48 (Kamrup, 2018)
Credit-Deposit Ratio	8.6 (Dima Hasao, 2000)	91.7 (Kokrajhar, 2008)
No. of Hospital Beds Per Thousand Populations.	0.38 (Dima Hasao, 2000)	3.57 (Nalbari, 2016)
No. of Hospital Beds in every Ten square Kilometres Area.	0.14 (Cachar, 2006)	1.01 (Dima Hasao, 2000)
No. of Schools Per square Kilometres.	0.10 (Karbi Anglong, 2000-01)	1.45 (Hailakandi, 2015-16)
No. of Schools Per Thousand Populations in the age group of 6-15years.	4.17 (Tinsukia, 2002-03)	31.64 (Dima Hasao, 2000- 01)

Source: Created by author

Note: Information given in the parenthesis are the districts and the specific year corresponding to the minimum and maximum values.

Endnotes:

¹ Due to unavailability of district level data, the specified period has been considered for the study.

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² To determine the time period that would be required to correct any disequilibrium caused in the relationship between infrastructure indices and per capita NDP of the districts of Assam, the following formula has been used:

$$(1 - ECT)^n = 0.5$$

Where, ECT is the speed of adjustment and n refers to time period needed to equilibrate half of the disequilibrium caused to the long run relationship.

A Cross-Sectional study of North-East Region of India: Strengthening National Integration through National Cadet Corps (NCC)

Rita Jain*

&

T Bisht,** S Gupta,*** P Diwan**** & S Kumar*****

Abstract:

Purpose: The North East Region of India (NER) with seven states known as 'The Seven Sisters' since 1972, is largely an unexplored region in the federal structure of India. NER is a multi-ethnic melting pot of various communities, languages and varied social and cultural traditions. This study aims to scrutinize the complexities of the NER, along with the role of National Cadet Corps (NCC) in essaying as a medium to bring about a significant change, to uplift and assimilate NER into mainstream India.

Keywords: North-east Region; Identity; National Cadet Corps; Development and Integration; Complexities

INTRODUCTION

North-east India, consisting of the seven sister states namely Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura, is a complex region. The society here is a multi-ethnic melting pot of different tribal and religious groups, multiple languages and varied social and cultural traditions. It is one of the most diverse and heterogeneous parts of India, occupying 8% of India's geographical spread and is home to only 4% of the country's population (Sahni, 2002). More than 200 diverse tribes

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differing from one another with respect to customs, cultures, dialects and identities live here. The region is endowed with rich natural resources, with agriculture as the principal source of revenue (Grewal, 2003). The strategic location of North-east India makes it vulnerable towards any change, be it local, national or international. The Geo-positioning of NER is one of the key reasons because of which Northeast feels isolated from mainland India. The region is connected to India by only a 22 km wide Chicken neck corridor. Approximately 98 per cent of its total border is being shared internationally. Hence this region becomes more vulnerable than any other region of India (Sahni, 2002).

To pass through the region people needed to go through the Inner Line Permit (ILP) regime in 1873. The introduction of ILP made the region more excluded from mainland India. The problem related to McMahon Line (border divides India-China) became more complicated with the independence of India. As India received some part of NEFA region because of her legacy from British India. This was not acknowledged by the Chinese government. Subsequently the Indo-China war during 1962, Indo-Pakistan war in 1965; creation of Bangladesh 1971, also worsened the situation in the NER. However, upholding the ethos of asymmetrical federalism in the constitution, India granted some amount of autonomy to these states by Article 371 A and 371 G, enshrined in the Sixth schedule of Indian constitution. These provisions made an attempt to protect the traditions, land and rights of various hill communities (Haokip, 2012; Inone, 2014)

India's Northeast has witnessed violent conflicts and insurgencies which have overtaken Kashmir on the scale of intensity of violence and named it as South Asia's hottest warring zone. The liquidity of borders has also resulted in illegal migrants across the border which has created the fear amongst the indigenous tribes of losing their land culture and identity, thereby leading to revolt. (Das, 2009)

Further, Politics and social exclusion in India's NER is the main issue of ethnic identity in several parts of Northeast. There was a rise of ethnic consciousness among NER during the colonial rule of British leading to rejuvenation of the feeling of distinct identity in them. The British policy

of 'inner line permit system', the introduction of Christian missionaries and education has made local tribes conscious about their distinct identity. Demands like ethnic representation and participation in the legislative assembly were the most prominent examples of the rise of their social and political identity (BijuKumar, 2013).

Extreme politicization of the identity in the NER has created a line of separation within the social communities of the Northeast. It ignited not only ethnic conflicts in the region but also affected the development, peace and stability of the region. Issues of identity with the economic deprivation and failure of state machinery to meet the local aspiration are the main cause of ethno-nationalism and instability of the region. (Tennyson, 2018)

Another issue that prevails in the region is the slow pace of development in the Northeast in contrast to other states of India. This region has been suffering economically since partition which has also led to psychological separation. (Dutta, 2018) Further lack of economic development is the most important cause of conflict and dissatisfaction in the region. (Dutta, 2004)

The National Cadet Corps (NCC) in India is the largest uniformed organization of youth volunteers in the world. The Youth enrolled from schools and colleges, are empowered for playing a vital role in nation-building. NCC comprises three wings namely, Armed Forces, Naval and Air force which operates under the Ministry of Defense, Government of India and have their headquarters in New Delhi. The NCC came into being on 15th July 1948 by an Act of Parliament with an initial strength of 20,000 cadets. Today it boasts of a strength of over 14 lakh cadets belonging to at least 16,288 institutions. It has a nation-wide footprint, with cadets enrolled from the remotest corner of India

In the North-east states of India, the enrollment of NCC is remarkable. Despite the prevailing security situation and difficult terrains, around 1 lakh cadets are enrolled at present. This indicates the willingness of the youth of the NER to contribute towards the process of nation building and their burning desire to be an integral part of mainland India.

During the wars of 1965 and 1971, NCC cadets acted as the second line

of defence. They assisted ordnance factories, supplied arms to the frontline and helped capture enemy paratroopers. After the war, NCC cadets were trained for civilian duties including relief and rescue operations, traffic control, social service and youth management. According to the present DG of NCC Directorate, Lt Gen Chopra, the training philosophy of NCC cadets has been suitably refined to accommodate the changing aspirations of the youth and expectations of the society. Today, its training programs aim to groom young women and men into well-balanced, patriotic and responsible citizens by developing their leadership skills and comradeship. The cadets are also trained to enhance their soft skills and personality. The NCC takes pride in helping the disadvantaged sections of society realize their aspirations, thereby contributing towards both equity and development. They are encouraged to provide value-based contributions towards society in terms of social and community development.

NCC has offered the voluntary services of its cadets under its "Exercise NCC Yogdan" initiative, to civilian authorities for tackling the recent Covid-19 outbreak in India and has issued guidelines for their deployment in tasks such as manning helplines, distributing medicines and relief material, community assistance and data management.

True to its motto "Unity and Discipline", the NCC therefore plays a vital role in nation building and promoting social cohesion by instilling timeless values of self-discipline, brotherhood, acceptance and selfless social service in its cadets.

The issue of integration of the North-east is two-sided or reciprocal in nature. While the people of mainland India perceive the people of the North-east as different, many people from the North-east who reside in or have travelled to the mainland also report difficulty in adjusting there. Hence, the motive of integration cannot be fulfilled by working only on one side of a problem. For this, one needs to understand and tackle both aspects of the issue. This is where the role of NCC, an organization of youth becomes crucial. The NCC has the innate requisite ability and structure to work on both aspects of the problem and help to build a more aware and inclusive society. It can bring together and train youth from all over India

by creating awareness about this far-flung, yet integral part of India and its unique, rich cultural heritage. The present study was conducted with the following objectives:

- To discover foremost influences through NCC in the NER, India
- To identify the complexities of NER, India
- To understand the level of awareness in NER NCC cadets about Government policy initiatives towards integration for NER populace

METHODOLOGY

The present cross-sectional study was conducted to attain the objectives stated above. For this a two-stage cluster sampling with unequal size was done in 3 states considering the state as one unit. Since the list of all the NCC units are not available, complete coverage was not possible due to economic and time factors. Information was collected both through questionnaires and through semi-structured interviews. We focused on states facing major issues in NER namely Assam (393), Manipur (395) and Arunachal Pradesh (282). Sample consisted of 1070 NCC cadets studying in different schools or Colleges of this region falling in the age group of 15-23. Questionnaires with more than 70% empty cells (41) were removed from the sample.

Field work for data collection was done in two phases. First a pilot survey was conducted with the aim to see the feasibility of the study, test the questionnaire and to standardize the technique. After standardization of the technique, modifications were incorporated and then final field work was again conducted. A Cronbach alpha test was done to check the reliability of the questionnaire, it ranges between 0.7 to 0.9 which is a good score, validating the internal consistency among survey questions. Questionnaire was approved by the Institutional Research committee for ethical clearance. A formal permission was first taken from NCC HQ Delhi to conduct a survey during Camps held in the Northeast region followed by a formal consent from each subject before the survey. Data was collected through offline as well as online methods but keeping in mind the length of the questionnaire and age of

the subjects, offline (paper and pen) mode was preferred. Questionnaire consisted mostly of multiple choice types with sections on (i) Personal Information (ii) Role of NCC (iii) Complexities of North-east Region. Data was analyzed using Microsoft Excel.

RESULTS

1. Socio-Demographic Profile

In the present study, the sample consisted of 1070 cadets with 44% male and 56% female Both female and male cadets had uniform representation from village and town whereas there is more female representation from city. Table 1 depicts the comparison of data of cadets belonging to villages, towns and cities. Most cadet's families were small with 2-4 members irrespective of the background. Wide disparities were seen in income groups with about 50% people earning less than 10,000 and majorly working in the farming sector in rural populations. In the city around 28% reported to have income above Rs. 30,000. Around 46% of parents had less than 10 years of education. A major highlight of the socio demographic profile was the access of basic facilities like electricity, fuel, vehicles and toilets available to a significantly higher proportion of people throughout the region. Around 92% people in villages reported to have access to electricity and 81% people had toilet facilities. But only 51% of people in villages reported access to piped water. Villages parents were mostly engaged in farming in contrast to parents of cadets belonging to cities who were office goers (58%) and doing businesses (26%). Around 10 % parents of the cadets also reported to be unemployed which is also in concordance with the census data 2015 of NER. There was a great demand for housing for common man, bus stands, local markets etc. as per the survey population.

Table1: Socio Demographic profile

Variables	VILLAGE	VILLAGE (492) TOV		TOWN (215)		CITY (353)		All (1070)	
	Number	%	Number	%	Number	%	Number	%	
GENDER									

								_
MALE	235	47.7	110	47.2	130	31.8	475	44.3
FEMALE	257	52.3	113	52.8	223	68.2	595	55.6
FAMILY SIZE								
2-4	417	85.5	189	90.4	261	74.6	867	82.8
MORE THAN 4	71	14.5	20	9.6	89	25.4	180	17.2
YEARS OF EDUC	ATION							
LESS THAN 10 YEARS	253	59.1	75	39.1	115	32.8	443	46.1
MORE THAN 10 YEARS	175	40.9	117	60.9	225	66.2	517	53.9
FAMILY INCO	ME:							
LESS THAN 10,000	214	56.7	76	49.7	103	39.4	393	49.6
10,000-20,000	77	20.4	33	21.5	59	22.6	169	21.4
20,000-30,000	35	9.2	10	6.5	26	10.0	71	9.0
MORE THAN 30,000	51	13.5	34	22.3	73	28.0	158	20.0
FACILITIES AT H	OME							
ELECTRICITY	452	92.0	190	88.3	338	95.7	980	91.5
PIPED WATER	250	50.8	134	62.3	280	79.3	664	62.0
TOILET	399	81.1	175	81.3	328	93.0	902	84.2
FUEL	352	71.5	173	80.4	312	88.0	837	78.2
VEHICLE/ CAR	230	46.6	136	63.2	261	74.0	627	61.3
FATHER'S OCCUP	PATION							
GOVERNMENT SERVICE	98	20.0	61	28.3	98	27.8	257	24.6
BUSINESS	52	10.5	34	15.8	93	26.3	179	17.1
PRIVATE SERVICE	75	15.2	36	16.7	108	30.5	219	21.0
PROFESSIONAL	5	1.3	5	2.3	11	3.2	21	2.0
FARMER	200	40.6	50	23.2	10	2.9	260	25.0
UNEMPLOYED	51	10.4	27	12.5	30	8.4	108	10.3

2. Language as a medium to connect

Northeast is the abode of a large number of Indigenous tribes with approximately 220 languages and dialects being spoken. There is a general saying, that in Northeast after every mile spoken language changes. Hence, the common thread to communicate effectively can only be English, which is also an official language in five out of 7 states of Northeast. Most NCC cadets from the Northeast are well-versed in both the official languages

of India (Hindi and English) and face no difficulty in sharing ideas, experiences and views with fellow cadets hailing from other parts of the country. Thus, these languages have the potential to act as mediums for building connections between the people of this region and the mainland and should be harnessed to promote national integration. Hindi being the most popular spoken language in Arunachal Pradesh. (Moral, 1994). In the present study, results show (**Figure1**) that a significantly large population of NER was proficient and comfortable in English (66%) and in their mother tongue (75%). More than 50% could also speak Hindi being the third largest spoken language according to the survey.

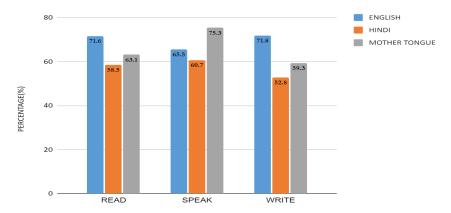


Figure 1: Language familiarity levels in the region as per the survey conducted: Mother tongue> English>Hindi

3. Education

NER is facing various issues related to socio-economic development, infrastructure and acceptance by other parts of India. Education being a powerful tool can bring substantial changes in the socio-economic and cultural life of the people in the states. Higher Education is the mandate to bridge the knowledge gap between states and communities enriching dialogues between people, culture, network of ideas and research. The literacy rate in Northeast states at present is (78%) which is much higher than the rest of the country. NCC cadets with the kind of training they get, develop a positive and constructive attitude to fulfil their aspirations and challenges of life. Self-awareness will prevent them indulging in harmful

activities and also capable of guiding their peers. (Konwar, 2012). **Table 2** highlights that the education sector still lacks in fulfilling the goals of many aspiring students in the northeast. Cadets (78%) reported that education provides them confidence and makes a strong foundation for their better future (66%). Cadets from Assam were most confident and aware of opportunities available to them as compared to those from other parts of the region. Arunachal Pradesh and Manipur expressed the requirement of more schools and colleges in their area. There seemed to be a huge demand also for professional colleges (45%) in the NER. Around 18% of students felt that there are insufficient teachers and the government should take steps accordingly to appoint an appropriate number of teachers in NER. Also, there was a lack of Internship/Placement facilities (28%) in the area, more so felt by Assam Cadets (39%). (**Table 3**).

Table 2: Perception of participants of NER cadets towards education

EDUCATION PLAYS A KEY ROLE IN DEVELOPMENT OF	ALL(1051)	Assam (391)	Arunachal Pradesh(280)	Manipur (378)		
SOCIETY. BEING A PART OF THE EDUCATION SYSTEM, IT MAKES YOU.	Percent (n)					
Confident	77.9 (823)	86 (336)	75 (212)	72.7 (275)		
Prepares you for future	65.7 (685)	72.3 (283)	72.3 (204)	52.4 (198)		
Self-sufficient	45 (468)	57.3 (224)	52.4 (148)	25.4 (96)		
Need more counselling from expert	16.4 (174)	19.8 (77)	15.5 (44)	13.9 (53)		
Makes you more aware of opportunities	47.5 (502)	60.3 (236)	45.2 (127)	36.9 (139)		
Confused	3.6 (40)	4.8 (19)	1.2 (3)	4.8 (18)		

Table 3: Education Status

EDUCATION STATUS IN YOUR AREA?	ALL(1051)	Assam (391)	Arunachal Pradesh (280)	Manipur (378)
		Percen	et (n)	
Sufficient in your area	38.6 (403)	50.1 (196)	39.3 (110)	26.3 (97)
More Professional courses / colleges needed	45.1 (484)	56.5 (221)	32.1 (90)	46.8 (173)
Lack Internship / Placement facilities	28.3 (307)	38.9 (152)	16.7 (47)	29.2 (108)
Insufficient teachers	17.7 (188)	22.9 (90)	14.3 (40)	15.8 (58)

Due to fewer Higher Education Institutions (HEIs) in this region, many students feel that developed cities like Delhi were still given more importance in terms of basic facilities including good educational setup. A need for building more colleges was evident in order to provide the students their basic right to education. Major focus should be on providing internship and placement opportunities to suit requirements of NER, so that students don't leave their motherland in order to acquire skills to work and earn a livelihood. Only 16% of people felt a need of better counselling sessions for the youth. The reason could be lack of understanding even about the benefits of such counselling sessions.

4. Employment Opportunities: Enhancement through Capacity Building Activities

Northeast, being a land of less opportunity, economic uncertainty and unemployability, shows that around 10% of people in the northeast region are still unemployed. The youth unemployment problem was reported to be more severe in urban than rural areas and for females than males in most of the Northeast states in the country. At present, the main occupations of the people in the NER is farming and business. (Tripathi, 2016; Singh, 2016). Unemployment has a major role in directing the youth towards evil practices

which can lead to social, economic and emotional turmoil of the people of the region. Steps towards generation of employment opportunities for instance by establishment of new industries and small scale manufacturing units and promoting entrepreneurship can help to alleviate this problem of unemployment to a great extent. College students may be additionally imparted skill training or industrial exposure to make them job ready. Majority of cadets showed the inclination towards a career including joining the army rather than going for higher education. With NCC, they get an advantage as it better prepares them for employment. Apart from training cadets towards excellence, inculcating human values and unifying them to be good team players, NCC also hones their leadership potential and tremendously enhances their soft skills. NCC cadets are known for their well-rounded personalities, which are the most desirable qualities sought by potential employers. Besides, the cadets are awarded certificates (A, B and C) on the basis of their proficiency. Their employment opportunities increase manifold as they are given preference in many government jobs. NCC cadets are confident enough to take challenges and they are mentally ready to venture into and settle in other parts of India. A huge credit can be given to the North-east Region has the highest density of Armed Forces in India as compared to the other parts as per the discussion with Col. V.K. Madan, Imphal.

A significant number of Northeast students (26%) want to study in other parts of India whereas a very low number (17%) want to pursue higher education locally (**Table 4**). Around 15% want to look for opportunities beyond India. A good number of respondents (16.2%) of NER either want to work outside India and 15% people want to look for employment in other parts of India.

Table 4: Future Goals of NCC Cadets in NER

WHAT ARE YOUR FUTURE GOALS?	ALL(1048)	Assam(391)	Arunachal Pradesh (280)		
	Percent (n)				
Go and study in other parts of India	25.9(266)	25.7 (100)	31 (87)	20.9 (79)	

Pursue higher education locally	16.8 (189)	17.3 (68)	23.8 (67)	14.4 (54)
Go and work outside India	18.5 (170)	17.6 (69)	16.7 (47)	14.4 (54)
Find employment locally	12.3 (133)	16.3 (64)	9.5 (27)	11.1 (42)
Look for employment in other parts of India	14.7 (156)	17.8 (70)	14.3 (40)	12.1 (46)
Join Army	65.7 (696)	73 (285)	59.5 (167)	64.7 (244)

To bring out the best in youth, NCC organizes various camps and adventure activities for cadets. These activities and adventure sports help to build leadership qualities, spirit of teamwork, oneness, discipline, punctuality, strength and concentration among the cadets.

Camps also act as a refresher training to learn the basic skills of survival and emergencies. 80% cadets had attended Combined Annual training Camp (C.A.T.C.) which is held for 10 days where both boys and girls cadets of Junior and Senior wing participate. Only 36% of NCC respondents had participated in shooting activities. The participation level was lower in those camps with rigorous selection criteria such as Republic Day (24%), National Integration Camp (18%), Adventure(18%) etc. Even lower percentage was recorded for participation in ALC/BLC, Thal Sainik Camp and Military Attachment which requires more focus and training.

Army Attachment Camps (AAC) are organized in collaboration with Indian Army. They have been introduced with military tactics and various weapons used in combat. Advance Leadership Camp (ALC) is for all the cadets who have completed basic camp in leadership. This camp is organized at different places all over India throughout the year. National Integration Camp (NIC) is to inculcate national integration among cadets and society. Best cadets are chosen to represent their states. Cultural exchange takes place as cadets from various states participate in this camp. NER cadets shared their experience of attending six more special NICs at Lehi, Nagrota (J&K), Chakabama (NER, Nagaland), Srinagar, Lakshadweep and Port Blair where they interacted with Non-NER Cadets. Republic Day Camp (RDC), considered the most prestigious camp is the culmination of all NCC training activities. Every year, selected NCC Cadets from 17 directorates

attend this rigorous camp during the months of December and January which is inaugurated by the Vice President of India. Various competitions are conducted for the award of the Prime Minister's Banner. Cadets compete for "Best Cadet" titles in Boys and Girls for both junior and senior wings. Aeromodelling and Ship modelling activities are also conducted during RDC. Besides, Hiking and Trekking Camps comprise activities such as adventurous trekking and hiking up mountains, with expeditions to local mountains and hills. Thal sainik Camp (TSC) is another 12 days camp conducted in Delhi every year. Cadets selected represent their directorates to participate in this camp. Hence, attending camps by the youth of NER by being in NCC can also play a progressive step towards the larger motto of integration of Northeast with rest of India through interaction of NER cadets with cadets of rest of India. Camps being conducted on an All India basis certainly helps bridging the cultural gap among various states of India and cadets are exposed to lifestyles of other states.

5. Social Awareness and Community Services

Discussion with cadets and officers during survey process led to our understanding that keeping with its modern mandate, the NCC undertakes various social welfare activities that aid the administration in the time of calamities, blood donation camps, literacy programs, construction and cleanliness drive that sensitizes them and channelizing their energy in a direction towards self-improvement and community welfare. The NCC cadets believe that it is their responsibility to serve the community and help people. The NCC cadet units of various states of the North-east reported to have worked in various community workshops, Swachch Bharat Abhiyaan, awareness programmes on ill effects of drugs and AIDS, antimalarial drive, women empowerment, training and preparing the cadets for all India NCC competition. Debates, lectures, trekking and adventure activities were also organized. All the units in NER were found to be active in terms of taking initiatives and organizing various community service camps .NCC has also adopted heritage sites and public parks under cleanliness drives. This exemplar practice has been done by NCC Unit of Rayburn College, Churachandpur, Manipur.

6. Integration of NER

NCC role in Integration: As a part of interaction with the NCC cadets of Northeast, it was clear that they feel privileged to be in NCC as they get equal opportunities just like the other cadets from rest of India

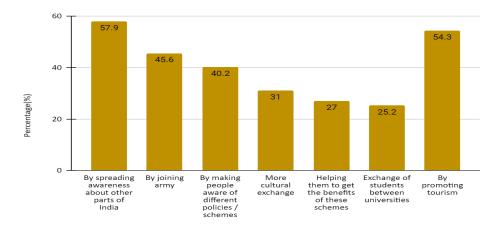


Figure 2: Perception of survey population regarding NCCs role in integration of the North Eastern states with mainstream India.

There seems to be a number of ways in which NCC can contribute in integrating the northeast region with the rest of India as per the responses of the cadets. About 58% of the cadets believe that by spreading awareness about other parts of India among youth, they can help in narrowing the gap between the people of northeast and rest of India. 46% of the cadets feel joining the army will help them in instilling a feeling of unity. Also, around 40% people feel that by making people aware of different policies and welfare schemes started by the government for the common man, can help make them connected to the country and these steps can help in the integration of the NER with mainstream India (Figure 2). A large sample population (83%) have the feeling that being in Northeast makes them less privileged in terms of services and opportunities (Table 5). Around 66% of cadets feel that increasing the employment opportunities can help in unifying the area. Also, 64% of people feel the need to strengthen the education sector and about 55% people feel that the government should make policies so that the people feel safe and secure in the area. A major proportion of Assam (60%) cadets feel that industrialization can definitely help in increasing the economic status of the region and bring in more job opportunities for the people.

Table 5: Areas which needs attention

WHAT ARE THE AREAS WHICH NEED TO BE	ALL(1028)	Assam(389)	Arunachal Pradesh(280)	Manipur(359)		
STRENGTHENED IN YOUR REGION?	Percent (n)					
People should be given more employment opportunities.	65.8 (684)	80.9 (315)	61.9 (173)	54.7 (196)		
Education sector needs to be better developed	64.1 (661)	78.1 (304)	66.7 (187)	47.4 (170)		
Government should make policies so as to make the people feel safe and secure.	55.3 (567)	68.2 (265)	60.7 (170)	36.9 (132)		
More industries should be set up in the region	37 (395)	60.3 (235)	28.6 (80)	22.2 (80)		
There should be no restriction on the movement of people	13.9 (138)	13.7 (53)	19 (53)	9 (32)		

Cadets emphasized that education, health and industrial sectors are the three important areas which need to be upgraded for improving living conditions of the people of NER. They also suggested that government policies should be formed to make them feel safe, secure and more technologically equipped. The government accordingly should formulate effective policies for near-term (within next five years) and long-term (between fifteen to twenty years). This will lead to both intellectual and economic growth of the region bringing it at par with other states of India.

(ii) Major Challenges in the road to bring NER closer to India.

It has been rightly said "when people in Delhi think of the Northeast, they think of the distance and that translates into a mental gap. When the people of the Northeast think of Delhi, they think in terms of different levels of development, and this translates into an emotional gap" (Sinha, 2002).

—S.K. Sinha

Northeast despite being the most resourceful and beautiful part of the country fails to bind together in the spirit of oneness and unity. Factors like geographical location, facial features, different culture, languages,

migration are responsible for the difficulties faced by the people living there. Facilities such as piped water, housing for common man, transportation, banking, hospitals, jobs, higher professional colleges are sporadic and unevenly distributed among people living in different parts of NER. Poor connectivity adds to this and makes them feel secluded from the rest of the country. Above all the lack of psychological integration and cultural chasm with the rest of the country makes it alienated from us.

The immense economic and political changes that came in this region during the wake of independence also created a sense of unease among the tribal population of the region. There were apprehensions that the tribal traditions would be submerged into the mainstream, leading the tribal communities to differentiate themselves from the heart mainlanders. Although the Government has made Northeast a focus region, however lack of awareness among the masses and low education have kept them away from availing benefits of many schemes started by the state and the Indian government. The honorable home minister Shri Amit Shah stated the mandate of the government that by 2024 the region of northeast will be "Samasya Mukt" and that without northeast region, India would feel handicapped. The perspective of cadets regarding the health sector scenario in the northeast region is given in Table 6. Only 9.3% cadets were satisfied with the medical facilities in their region and even lower in Arunachal Pradesh (2.4%). Respondents (27%) agreed to have access to doctors but are not always available and the hospitals are not able to effectively handle medical emergencies (23%). Only 18% people reported to have hospitals in their vicinity Hence, implying low preparedness of the state authorities to deal with emergency health outbreaks.

Table 6: Perspective on Medical facilities in NER

ARE THERE ENOUGH MEDICAL FACILITIES IN YOUR REGION?	ALL(1039)	Assam(391)	Arunachal Pradesh(280)	Manipur(368))	
	Percent (n)				
Ample	9.3 (104)	14 (55)	2.4 (7)	11.5 (42)	
Hospital in vicinity	18.5 (274)	22.6 (88)	33.3 (93)	25.3 (93)	
Easy access of doctors	27.1 (211)	27.2 (106)	17.9 (50)	14.9 (55)	

No hospital nearby	17.6 (176)	9.9 (39)	23.8 (67)	19.1 (70)
Doctors are not available always	23.1 (238)	19.6 (77)	25 (70)	24.8 (91)
Ready for medical Emergency	22.9(247)	27.5(108)	14.3(40)	26.9(99)

The opinions of the survey population about infrastructural work done by the government in the areas like housing, building schools and colleges, universities and hospitals is given in **Table 7**. Around 50% of cadets feel although the government has been successful in building these facilities in some areas but there is a need for more infrastructural advancements in NER. There is still more demand for housing for the common man (40.5%), bus stands (35%), markets (37%) and warehouses (14%). Arunachal Pradesh is lagging far behind in terms of Infrastructure. Warehouses is another requirement of the Northeast for storing the fresh produce and to boost exports as per the survey population.

Table 7:Development of Infrastructure

HOW SUCCESSFUL IS PRESENT GOVERNMENT IN YOUR AREA	ALL(1032)	Assam(391)	Arunachal Pradesh(280)	Manipur(361)	
REGARDING DEVELOPMENT OF INFRASTRUCTURE?	Percent (n)				
Housing for common man	40.5 (442)	63.9 (250)	20.2 (57)	37.5 (135)	
Schools	54 (565)	71.5 (280)	52.4 (147)	38.1 (138)	
Colleges	58.5 (603)	69.5 (272)	63.9 (179)	42.1 (152)	
University	50 (477)	59.3 (232)	21.4 (60)	51.2 (185)	
Hospital	56.5 (592)	71.8 (281)	51.2 (143)	46.4 (168)	
Bus stand	34.7 (381)	59.5 (233)	15.5 (43)	29.2 (105)	
Market	37.1 (406)	62.1 (243)	17.9 (50)	31.4 (113)	
Warehouses	14 (147)	17 (66)	13.1 (37)	12.1 (44)	

Geographical location and other parameters pertaining to it, have been a major concern of under development of NER for many years. A major percentage of 49% people feel that remoteness and isolation, because of being landlocked, is the reason for them lagging behind from other states of the country. Lack of access to markets (31%) and limited connectivity to the rest of India (35%) respectively emerged as two important factors from their responses as responsible for the under development of NER. Assam (62%)

was reported to have limited connectivity and inadequate infrastructure. Traditional cultivation methods and untapped market for organic and herbal products (13%) could also be the reasons for the under development of NER according to (11%) of survey population. Overall 35% cadets indicated difficult terrain and climate as the reasons for underdevelopment and 56% reported the same from Arunachal Pradesh.

Migration is an important underlying cause of the turmoil in the Northeast as it results in tension between tribal natives of the region and migrants from neighboring states. About 64% cadets of Assam felt that their economy gets affected (48%) due to people coming from other parts of India which leads to an increase in the labour force. The migrants generally of the age group 20-30 years, unskilled and semi-skilled take up labour work or jobs leading to shrinking of employment opportunities for locals as felt by 43% of students resulting in conflicts (**Table 8**). A major proportion, 68% people of Assam cadets feel that the education sector in effect faces the loss due to tensions and instability in their region. About 24% of them think that this also affects the electoral process challenging the democracy of people in the region. About 58% of people feel that migration and clashes between people also affects the demographic profile of the state.

Table 8: Reason for tension between Tribal natives and migrants from neighbouring states

TENSION BETWEEN TRIBAL NATIVES OF THE REGION AND IMMIGRANTS.	ALL(1007)	Assam(391)	Arunachal Pradesh(280)	Manipur(336)
		Perce	ent (n)	
Economy is affected	48.2 (508)	63.9 (250)	25 (70)	55.6 (188)
Employment Opportunities for locals are shrinking	42.7 (457)	67.4 (264)	21.4 (60)	39.2 (133)
Affects the demographic profile of a state	27.6(231)	24.7 (97)	13.1 (37)	28.5 (97)
It is a threat to the security	20.2 (208)	22.4 (88)	16.7 (47)	21.6 (73)
Affect the process and electoral process	24.3 (248)	23.9 (93)	20.2 (57)	28.8 (98)

Migrant labour gets jobs more easily as reported by 43% being ready to work at lower pay (42%) resulting in tensions between natives and migrants. A very high proportion of about 63% people from Assam feel that migrant

labourers are more hard working (23%) and skilled (27%) as compared to locals (**Table 9**). According to 22% cadets, contractors find it easy to handle migrants as compared to locals.

Table 9: Reasons for more Employment for migrants from neighbouring states

TENSION BETWEEN TRIBAL NATIVES OF THE REGION AND	ALL(1011)	Assam(391)	Arunachal Pradesh(280)	Manipur(340)
IMMIGRANTS.		Per	cent (n)	
Local labour is scarce whereas immigrant labour is easily available.	43.6 (466)	62.6 (245)	17.9 (50)	50.3 (171)
Immigrants can be hired cheaply as compared to the local labourers.	41.8 (439)	55.7 (218)	26.2 (73)	43.4 (148)
Immigrants are more skilled compared to local labourers.	27.2 (277)	25.4 (99)	22.6 (63)	33.7 (115)
Immigrants are more hard working compared to local labourers.	22.5 (233)	24.4 (95)	14.3 (40)	28.9 (98)
Immigrants can be easily handled as compared to local labourers.	21.5 (316)	50.4 (197)	13.1 (37)	24 (82)

Native people feel alienated also because these migrants are preferred for jobs as compared to the locals for many reasons. The poor education setup has led to unskilled locals whereas the migrants are more educated and skilled to get good paying jobs. It appears that vocational training should be provided to the students to enroll them to be job ready and help them to seek employment.

The domination of other people who migrated from various states was a major problem faced by the locals. 39% believe that poor development of the state was also because of migration which hinders the growth process of the state. Locals not being preferred for jobs (40%) and not much higher educational opportunities (37%) are other factors reported by the cadets. Domination of the Bengalis and people from other states are also factors contributing to the problems of the people in NER as said by 21% and 17% people respectively.

Besides migration, Illegal Immigration is also a major issue in NER. Until recently, illegal immigration and security were considered different subjects of political discourse. Politicians are considered to be responsible

for this immigration by 55% cadets and 44% cadets reported contractor to be responsible for illegal immigration (**Figure 3**)

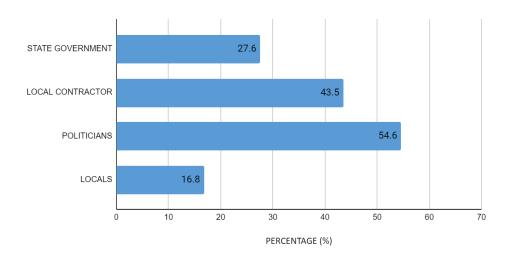


Figure 3: Cause of Illegal Migration as per the survey results

With regard to views of cadets about measures to be taken for prevention of illegal immigration the results are presented in Table 10. A significant number i.e. 59% people think that appropriate actions by the government can help to resolve this prevalent problem. About 76% of people of Assam feel that there is ardent need for stricter laws and it's better enforcement to bring peace to this region. A very few i.e. only 9.5% people feel that forcible deportation can also be a measure which would prove useful. Around 56% of people of Assam feel that cooperation of locals as the reason for this situation. Only 5% people of Arunachal Pradesh cadets feel that by granting the work permit to immigrants, the illegal immigration can be tackled whereas around 41% of cadets of Manipur support this measure. Apart from the above stated problems, disruption of communal harmony, political disorder and increased criminal cases are also some prevalent issues which arose because of illegal immigrants as reported in discussions. Social empowerment, communalism and security seem to be long battles given the issue of immigration in the state.

Table 10: Measures to be taken to prevent illegal migration

WHAT MEASURES SHOULD BE TAKEN FOR PREVENTION OF	ALL(1026)	Assam(391)	Arunachal Pradesh(280)	Manipur(355)	
ILLEGAL MIGRATION?	Percent (n)				
Forcible deportation	9.5 (99)	14.5 (51)	1.2 (3)	12.7 (45)	
Strict laws are needed	52 (535)	76.1 (270)	25 (70)	55 (195)	
Cooperation of locals	27.4 (409)	56 (199)	26.2 (73)	38.5 (137)	
Appropriate actions by the government	59.2 (580)	67.7 (240)	66.7 (187)	43.1 (153)	
Work permit to immigration	23.6 (247)	24.7 (88)	4.8 (13)	41.2 (146)	

7. Awareness of NCC in the NER about Policies and Initiatives of the Govt. for People of NER and for Tribe

To promote growth in NER, the Government has launched many schemes on which we gathered data. Given in **Table 11a** is the statistics about awareness and availing of these schemes by the Ministry of Tribal Affairs among the students of NER. Cadets were found to be aware of the Centrally sponsored scheme (50%) of pre-matric scholarship, the highest number are from Manipur (69%). Only 24% knew about the Central sector scholarship scheme for scheduled tribe students. A very low proportion of cadets were aware of the rest of the schemes available for tribes like Establishment of Ashram school in tribal sub-plan areas, Eklavya model residential schools for scheduled tribe students, Vocational training center in tribal areas, grants to tribal research institutes and scheme to upgrade merit of scheduled tribe students. We clearly see that the people are not much aware of such policies initiated by the state government and thus fail to enjoy it's benefits.

Table 11a: Awareness about schemes for Tribes

MINISTRY OF TRIBAL AFFAIRS HAS STARTED MANY SCHEMES FOR TRIBES.	ALL(1049)	Assam(391)	Arunachal Pradesh(280)	Manipur(378)
ARE YOU AWARE OF THESE SCHEMES FOR TRIBES?	Percent (n)			
Centrally Sponsored scheme of pre- matric scholarship for needy schedule Tribe students studying in class IX & X	50 (518)	28.2 (110)	53.6 (150)	68.3 (258)
Establishment of Ashram Schools in Tribal Sub-Plan Areas	14.3 (149)	12.7 (50)	15.5 (43)	14.7 (56)

Eklavya Model Residential schools for scheduled tribe students	10 (104)	7.9 (31)	10.7 (30)	11.3 (43)
Central sector scholarship scheme for scheduled tribe students	24.3 (255)	18.3 (72)	23.8 (67)	30.7 (116)
Vocational Training Center in Tribal Areas	15.1 (162)	15.5 (67)	17.9 (50)	11.9 (45)
Grants to Tribal Research Institutes.	9.9 (104)	10.2 (40)	10.7 (30)	8.9 (34)
Scheme to upgrade Merit of Schedule Tribe Students	17.2 (181)	14.5 (57)	15.5 (43)	21.5 (81)

Table 11b highlights the awareness of the cadets of the NER about the various central government schemes. 43% people are aware of Digital North East Vision 2020 which has been formulated by the government for enhancing technological growth in the region. Digitalization can definitely prove to be a reason for the unification of Northeast India with the other parts of India. This policy also aims at increasing digital literacy among the people in the region. People were also aware of National Bamboo Mission and Digital North East Vision 2022 whereas the schemes like NERSDS, SARDP-NE and special grants to promote research in the Northeast were known by less people with percentages of 28%, 30% and 38% respectively.

Table 11b: Awareness about Government schemes for North East Region

THERE ARE MANY GOVERNMENT SCHEMES STARTED TO PROMOTE	ALL(928)	Assam(391)	Arunachal Pradesh(280)	Manipur(257)
THE NER. ARE YOU AWARE OF THESE SCHEMES?	Percent (n)			
North East Venture Fund (NEVF)	32.6 (334)	58.8 (230)	15.5 (43)	23.6 (61)
"National Bamboo Mission"	41.6 (414)	66.2 (259)	21.4 (60)	37.1 (95)
Digital North East Vision 2022	42.4 (427)	71.2 (278)	21.4 (60)	34.7 (89)
North East Industrial Development Scheme (NEIDS), 2017	37.3 (382)	68.2 (267)	15.5 (43)	28.2 (72)
Bharatmala Pariyojana; North East Road Sector Development Scheme (NERSDS)	27.7 (299)	60.8 (238)	14.3 (40)	8.1 (21)
Special Accelerated Road Development Programme for North East (SARDP-NE)	30 (313)	57.5 (225)	19 (53)	13.6 (35)
Special grants to promote research in North East Region	38 (387)	62.8 (246)	39.3 (110)	12 (31)

The schemes of Govt to promote Startup and Innovation, 35% of NCC cadets were found to be aware of Govt. Scheme 'Start up India and Stand

up India' and a major proportion of 54% people of Assam were aware of this scheme. A more aware NCC cadet can use this opportunity to stand independently and work locally and spread the message to other people.

This emphasizes that there is a need for more awareness amongst people about the schemes and policies to create a structured plan and certainly youth through NCC can communicate these to local people.

Table 11c shows the awareness of cadets of various schemes and initiatives taken by the government for the welfare of the general public. Maximum students in NER were aware of the MGNREGA scheme whereas only 40-50% of cadets knew about Ujjwala (Free cooking gas connection), PM Awas Yojana and PM Jan Dhan Yojna.

ARE YOU AWARE OF THESE ALL(1016) Assam(391) Arunachal Manipur(345) Pradesh(280) **GOVERNMENT SCHEMES** Percent (n) 70.7 (717) 63.9 (250) 67.9(190) 80.4 (277) **MGNREGS** 75.8(296) Ujjwala (Free Cooking Gas 55.4 (572) 56(157) 34.4 (119) Connection) 59(231) 40.4 (419) 40.5(113) 21.8 (75) PM Awas Yojana 66.2 (259) 61.9(173) PM Jan Dhan Yojna 46.7 (473) 12 (41) PM Fasal Bima Yojna 31.1 (323) 50.4 (197) 34.5(97) 8.4 (29) PM Sukanya Samridhi Yojna 16.9 (166) 17.3 (68) 27.4 (77) 6.1 (21) Start up India, Stand Up India 34.6 (363) 53.7 (210) 29.8 (83) 20.4 (70) 16.3(64) Stand Up India Loan Scheme 18.2 (181) 23.8(67) 14.5 (50)

Table 11c: Awareness about Government Schemes

Hence it is evident that not many cadets know about Government initiatives and welfare policies for the Northeast and for tribal communities. Also, they are less aware of Government schemes like PM Fasal Bima Yojna, Jan Dhan Yojna Sukanya Samridhi Yojna etc.

DISCUSSION

NER is an "undiscovered gem" which needs proper refining and growth to flourish. Over the past few decades all authorities, with the help of government agencies, are trying their best to fasten the economic, social, cultural and emotional growth of this region. Integration of the northeast with pan India still remains a long-lived dream. The solution to a problem cannot be found without looking deeply into the question and this paper has studied the complexities that are existing in NER and why they still feel disintegrated from their country. The study highlights many reasons including poor education setup, economic factors like low income, unemployment, scarce facilities, poor infrastructure which needs to be upscaled for development of this region and creating satisfaction in local communities. It also brings the solution which locals think including strong laws and better implementation plans on areas of infrastructure, education, hospitality and prevention on illegal immigration need attention on priority.

The current study, first of its kind, is exploratory in nature, The largest Youth force organization, National Cadet Corps in our opinion has the potential to be the driving force to change the environment and put forth the importance of NCC to drive the much needed change to bring Northeast closer to the rest of India. A positive feature was an equal representation of male and female cadets in the region. NCC can play a vital role in tackling the prevalent problems with utmost care. NCC as we all know promotes democratic values and can change the perception of young people which will trickle down in all the tribal communities that are existing in NER. NCC can empower the youth at an early stage and boost confidence in them. NCC instills discipline among the cadets, it helps in better time management. Team-building exercises facilitate the idea of unity and working together in any environment. NCC gives them the platform to explore the other parts of India and thereby an exchange of culture happens. Despite limitations of the NER, NCC has been found to continue to grow and expand in many educational institutions. The rigorous training and discipline imparted at NCC helps develop the overall character of the trainee. For the Northeastern youth who find it challenging to carve their niche in mainland India, NCC provides breeding grounds for leadership roles and careers in defense services. In the wake of natural disasters, NCC helps the youth involved directly in relief work, community assistance, etc. Such activities are particularly helpful during the absence of trained manpower, which tends to arise in lesser-developed NER. More generally, the knowledge, network and skills imparted at NCC trains the younger generations to mobilize help

during crises in the NER - be it natural, political, societal or health. NCC with its programs like National Integration camp, Republic Day camp etc. allows the NE youth to share the same platform with cadets belonging to the rest of the country. When a Northeast cadet gets equal opportunity and equal treatment to participate and perform as the cadets or students from the rest of India, a feeling of general biasness is removed and connection is formed. It also helps them raise bars by showcasing their skills/talents. The Republic Day parade of NCC also brings together youth from around the country as well as from different states of Northeast India. Although, there is a mixed opinion on how the Republic day and other National festivals are celebrated in the northeast region. Some states like Arunachal Pradesh and Meghalaya celebrate these festivals with enthusiasm whereas in some states like Manipur there is a curfew imposed on these days which forces the people to stay within their homes. Many people have an opinion that as the formation of northeast states took place after independence so they don't feel as much associated with the country as compared to others. While many people believe that there is immense patriotic feelings in them regarding their motherland.

NER People were found to be largely being unaware of schemes started by the government. Awareness of Startup India and Standup India loan scheme will boost entrepreneurship among youth, thereby will help to make them self-reliant. Large scale awareness drives through NCC cadets certainly will help the general public to use these schemes in large numbers and reap their benefits. The role of NCC among these regions is definitely going to bring positive changes and make them prepared for the future.

It is evident from the data that people need more employment opportunities, higher education colleges, hospitals, better connectivity, housing, action on illegal immigration. There are many areas of development where the government needs to involve local people and start working at the grass root level to make NER a useful resource for the country and for the people living there. Based on interviews and discussion with local people we also recommend the following steps which can be adopted by the government to boost the growth and development of the region.

- 1. Insurance for farmers of these areas as farming is a major occupation in these states. Loss of harvest due to many calamities can cause no source of income to many families of Northeast leading to a drift towards wrong practices.
- 2. Promotion of handmade crafts and small-scale industries in these areas which can give rise to small businesses.
- 3. Schemes to provide internship and placement opportunities to Youth of Northeast so that they do not leave their land in search of jobs etc.
- 4. Promote tourism in NER and enhance better connectivity which can provide employment to many people.

CONCLUSION

Northeast India is a melting pot of diverse cultures and ethnicities evolving into a dynamic multicultural society. It is needed that we hold the richness of this region together and work towards the setbacks with better enforcement of laws, well equipped NCC and innovative policies. The study highlights a number of issues besides poor infrastructure including poor education facilities and scarcity of job opportunities in this region due to which people want to either go in search of jobs to other parts of India or continue with higher studies outside India. Our study finds that about 60-83% agree that spreading awareness about other parts of India to the youth will be an important factor in integrating the North-east region besides exchange of students between universities. Other factors like joining the Army, making people aware of different government policies, helping them to benefit from schemes, promoting tourism also can have a significant impact in bringing together the North-east region. As we focus our study on prevalent issues in the NER we also observed from the data that Illegal migration from neighbouring countries and migrations in large numbers from other states of India creates imbalance in the region and also creates negativity and hampers the prosperity of the region. NCC in the NER starting from school level can be expanded and aligned with the local requirements for instance communicating to people about government schemes, skill trainings leading to generating employment.

Awareness about various Government schemes and policies like Northeast Venture Fund, National Bamboo Mission, Digital North East Vision 2020, Northeast Industrial development scheme, Bharatmala pariyojana etc have been set up by the government for the economic growth and development of the region, will reduce the feeling of alienation among the Northeast people. Among the three states, people of Assam were found to be more aware of such schemes and policies as compared to the people of the states of Manipur and Arunachal Pradesh. The state governments should also proactively work to bring these to the knowledge of common man of NER.

The present study has not addressed the situation in the rest of NER states because of the political turmoil in these areas due to CAA and NRC protests followed by the pandemic when studies were being conducted. This paper being the first of its kind study to the best of our knowledge, this study is the first of its kind and as such no research articles were readily available. Therefore, the entire research has been conducted on primary data and mostly referred books and news articles available.

FUTURE SCOPE

This study of the NER will be extended by thorough structured studies on Non-NCC school and college students. We can take views on the activities that should be modified for Northeast NCC to channelize them towards creating synergies. We can also take opinions on the change in curriculum in educational institutions to suit the requirements of Northeast local population. The findings and indicators are expected to provide deeper insights for further policy prescriptions on the region and emphasize the importance of adopting an NCC-centric approach to public policy formulation to address the issue.

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Endnotes:

¹ The National Cadet corps (NCC) is the largest uniformed Volunteer Organization in the World, committed to empowering youth for playing a vital role in nation building was being formed on 15th July 1948 by an Act of Parliament. More on NCC home page: https://indiancc.nic.in/ assessed on 21 November 2020

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Arunachal Pradesh in Northeast Economic Zone: An Assessment

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Abstract: There are some facts in the history of economic development which have assumed the status of almost an axiomatic truth accepted nowa-days by all without any questioning. One of this fact is the openness of the economy to international trade and technological exchanges. Trading boosts the competitiveness of a society, thereby accelerating the process of its technological improvement. As a beginning, Arunachal Pradesh can enhance its scale of cooperation with other states of North east by improving her level of technologies and enhancing her trading strength so as to be able to compete successfully with the rest of the country first and then the world at large. It is not the inward-looking approach, but the outward orientation that supplies the energy for being competitive both in technology and efficiency. Members of the Northeast Economic zone can initially enhance the scope of cooperation among themselves, in order to be more competitive with the rest of the country. The ultimate purpose of all the members of the zone will be to compete successfully with the outside world.

Keywords: Outward orientation, Jhumming, local specialization, rentseeking behaviour, First Industrial Revolution

An empirical fact of the process of economic growth that has now assumed the status of an axiomatic truth is that it is not the inward, but the outward orientation of a society that supplies the motive force for its economic growth. No society has, to date, developed without having an outward orientation and interacting with other societies. The interaction has taken place through the medium of trade, cultural inter-flows, and inter-movement

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of labour, capital technology, etc. So, progress has been associated with the expanded relationship with the 'outsiders'. A developing society is bound by an expanded network of relationship that is not only economic but also socio-cultural. The interaction with 'others' promotes mutual learning, sharing the experience, knowledge and most important of all, technology of others. Wherever economic growth took place the economies of scale and division of labour became the facilitators. However, the 'division of labour is limited by the size of the market' (Smith, 1801). Only when the size of the market is expanding the division of labour can be introduced and the advantages of specialization and the economies of scale can be harvested. An expanding scale of production demands more inputs, more often different types of inputs all of which cannot be sourced locally or from a single place. Some inputs may not be locally available at all, or even if available, may be much more expensive than elsewhere. The other problem is the sale of output produced locally. The local demand may be low. So, in order to get the remunerative price, part of the output should be sold outside the area in order to make the expanding output profitable and viable. Both the input requirement and the sale of rising output call for searching a cheaper market of inputs and a larger market of outputs.

In the hilly parts of Northeast India most of the traditional economies were based on subsistence agriculture using slash-and-burn method, locally called *jhumming*, which uses the type of technology most suitable in the hilly terrain, but its productivity is low. After independence with the introduction of new technology, better seeds and new inputs, productivity increased. The horticultural crops were introduced steadily, and all these tended to change the profile of the economy - yielding the surplus output which was From the hills the surplus output flowed down to the unprecedented. plains of Assam and with time reached different parts of the country. This is an ever-expanding process. Dependence on external sources of inputs and also a variety of consumption goods has increased over the years. In the northeast, the hills and the plains are most of the time economically complementary. The production configuration of the hills being different from that of the plains, there has grown a deep inter-dependent relationship between them. The existing relationship can be further strengthened and

formalized in order to reap the benefits of cheaper inputs and expanded market for outputs (Mishra and Upadhyay, 2017).

In some respects, forming an economic zone can increase the complementary relationship among the Northeastern states and shift the competitive part to outside this region. The principle is: 'cooperate locally in order to be strong and then compete globally'. When cooperative relationship is established among the Northeastern States, local specialization can be strengthened and each of the cooperating states will be more competitive with the outside, either with the rest of the country or the world. Step by step the horizon of competition can be expanded and ultimately it would be the world market, where a northeastern state will be able to compete. The world market is fiercely competitive. But payoff is also high. The successful competition in international market opens the door for a vast market. One example is Chinese production base, the base which was expanded rapidly because of its low cost of production having appeared instrumental in outbidding the competitors in the ever-growing international market. Chinese economic expansion is the replay of what happened to Japan a century earlier. Like phoenix, the proverbial bird with the power of regeneration, Japan rose from the ruins caused in the Second World War. It did not look back, nor did it look inward. It looked outward and this outward looking policy led to the rapid expansion of its economy based on manufacturing. Japanese export of manufactured goods steadily rose not only in the developing countries but also in Europe and America. The post Second World War growth of Germany is simply the replay of Japan's economic growth. The Second World War had destroyed a significant part of the German industry. But after the war, German reconstruction was rapid. Its manufacturing sector expanded rapidly and its outward looking policy was similar to that of Japan's international orientation. Its motto was: expand the output not only for home market but also for foreign market. Export-oriented policy of Japan and Germany was found to be more effective than the inward-looking policy, pursued by many countries which proved in due course of time to be very costly. Inwardlooking policy uses import-substitution as a method of industrialization. Import-substitution using protectionism as a policy tool has most often

brought about inefficiency and bred what is called rent-seeking behaviour of protected industries (Krueger, 1974). Thus, inward-looking behaviour creates not only inefficiency but also vested interests and the rent seekers, while outward-looking behaviour brings competition, efficiency and the resulting low cost of production. The experience of developed countries in industrialization and outward orientation provide a good lesson in framing policies in poor societies. Succinctly it can be put as: higher output means a larger market and an enlarged market means expanded relationship with the people belonging to other communities or societies or countries.

Regional Zoning: A Simple Conceptual framework

That the basic propulsive force driving the growth of any economy is the technical progress is accepted almost like an axiomatic truth in Development literature. It is true that there are other elements, for example, organizational strength of the firm, the motivation of the workforce, especially human capital, etc. But the centrality of the technology is found not only in production but also in other activities. Technology is usually embodied in capital goods; frequently a better technology is embodied in machinery used in production in general and in large-scale production in particular. There are many factors shaping the scale of production but the most basic one is the demand for output. Only when the potential market is large, that is, demand is high, the capital intensity in production can be enhanced. We can consider a simple production function $Y = f(K_1, \ldots, K_m, l_1, l_2, \ldots)$ l_n), where K_i (i = 1, 2,m) is the i^{th} type of capital and l_i (i = 1, 2,m....., n) is the jth type of labour or human capital used in production. Each type of capital embodies a particular type of technology and this type can be operated by the labour which has the necessary skill and training, more properly, the required type of 'human capital'.

The marginal propensity of the i^{th} type of capital is $\delta y/\delta k_{_i}$ ($i=1,\,\ldots,\,m$) and j^{th} type of labour is $\delta y/\delta l_{_j}$ ($j=1,\ldots,\,n$). $\delta y/\delta k_{_i}$ is at a very low level of capital (K) increases as the quantum of K increases, and then it reaches a maximum and starts declining afterwards.

A similar kind of behaviour can be taken for the marginal productivity of labour.

In the hilly region of Northeast, characterized by accidented topography, the cluster of households in a village, is usually low, in some places extremely low. It mainly depends on the topographical features: in the high hills there is extremely low density of population. For example, in Dibang Valley district of Arunachal Pradesh the density of population is only one per square km. A very low density of population just like the extremely high density creates its own problems – the nonexistence of local demand for goods in any significant extent.

A basic element of production is the availability of market which either exists or which can be created through necessary effort. Most often a good may be produced in an abundant quantity but market may not be readily available: it is to be created either in the area of production or else the good is to be exported elsewhere. However, export also faces a highly competitive market. In view of this if through co-operation market space can be established regionally, it may facilitate the marketing and hence large-scale production may be feasible through virtually mutual protection. The regional or sub-regional grouping derives its raison d etre from this logic: the harvesting of the benefits of large-scale production facilitated by the high-productive physical and human capital, and selling the output within the group.

In the Northeastern region of India, there are huge variations in topography, temperatures and soil types: There are alluvial plains and lofty mountains. Easily the hilly part which still practises low productive jhuming simply for subsistence can be converted into high-productive orchard. The plains can produce the traditional crops, the food grains, and various other crops demanded in the hilly part of the region. So, the zoning of Northeastern states derives its rationale from the potential benefits of specialization, commercialization and enlarging the scale of production and market.

The production function as mentioned above normally leads to a low average cost at a high level of production. A high level of production demands a larger market. In Northeast India all the states except Assam have a low density of population and a low level of urbanization. This keeps

the local demand low. In view of this the formation of economic zone may help to create a common market where each State will get the opportunity of a large market for its specialized products.

Hilly parts of Northeast India have a huge land mass for production of a good range of fruits and vegetables. Local markets cannot consume the entire output. To date, fruit processing industries have been only at an initial stage of development. Arunachal Pradesh has the largest area among all the Northeastern states: Its area is almost one third – to be exact 31.94 per cent - of that of the entire Northeast India. But its population is low, only 3.02 per cent of the regional total. Its density of population, 17 per sq km, is the lowest among all the States and the Union Territories of the country. The vast area of Arunachal Pradesh can produce a variety of crops and fruits as well as vegetables. Climatically, Arunachal Pradesh is not uniform, it has a number of zones. The plains of the State, adjacent to Assam, have a climate similar to the plains of the entire Northeast. From the plains as one goes up the hills, the temperature decreases as the altitude increases. The part of Arunachal Pradesh bordering China remains frozen during the winter.

The climatic variation offers the opportunities of producing a good range of agricultural and horticultural crops. The plains produce the agricultural crops and the hilly parts produce a variety of fruits: Kiwi, apple, orange and others. One problem with horticulture like agriculture is the risk emanating from the fluctuations of both output and price. A good harvest witnesses a glut in supply and a dip in price. On the other hand, a poor harvest is associated with a fall in output and a rise in price. So, horticulture carries risk, but its risk is somewhat different in nature and scale. Another important factor is income elasticity of demand which is higher for horticultural than that for agricultural products. Food grains and vegetables have an income elasticity which is less than unity, but fruits and fruit products have an income elasticity of demand which is greater than one. That is, the rate of growth of demand for fruits and fruit products is higher than the rate of growth of income. So, as the condition of the country including the Northeast improves the demand for horticultural products will increase rapidly. Moreover, there is the expanding international market for them. In Arunachal Pradesh, cold storage facilities and packaging are not sufficiently developed nor is the electricity supply very dependable. In view of this, a part of the surplus output of some fruits, especially perishable ones like oranges and pine apples get rotten and wasted almost regularly.

Moreover, the prices of the fruits fall during the harvesting period and rise during the off-season. Both low price and rapidly deteriorating nature of the products result in the growers not getting the remunerative price. Economic cooperation among the Northeastern states can take care of the problems posed by price fluctuations of agricultural crops, vegetables, fruits, etc. The plains of Assam produce different agricultural crops at a relatively low cost. Based on these, different food industries can be established and the output can be supplied to the entire region and even the rest of the country. The horticultural and agricultural products of Arunachal Pradesh and other hilly States of Northeast can be processed and the final products can be marketed throughout the region and the rest of the country or even abroad.

Creating this type of complementarity among the States of Northeast India will keep the cost of production low and enhance the competitive power of the individual States. Given the high level of competition especially beyond the Northeast, the cost of production must be controlled in order to successfully compete not only in the country but with the outside world. Assam, is a good producer of jute, an important natural fibre. Jute bag is environmentally friendly and also cheap. Promotion of jute bags produced in Northeast can help the jute industry in the region, particularly in Assam. It will also be protective of the Northeastern environment. The pine apples, oranges, apples and kiwis in Arunachal Pradesh are produced in substantial quantities, but the processing part being absent, value addition does not take place. Once the Northeastern market becomes easily accessible, Arunachal Pradesh can start adding value to her horticultural products and meet the demand of not only the Northeastern but also part of the market beyond the region. Another fundamental advantage of Arunachal Pradesh is its climatic variation. In the hilly parts especially where the altitude is high, the winter vegetables of the plains are produced during the summer when the prices of these vegetables are very high downhill. However, the marketing facilities

being not developed, the producers are forced to sell their output at the local market. This deprives them of a good amount of profit. Creation of inter-state marketing cooperation more solidly can enable the marketing of winter vegetables during the summer in the plains of entire Northeast and beyond.

Cooperation carried intelligently is always a strength, more so in case of economic relationship based on trade and technology of production. Co-operation most often means mutual learning. So, co-operating in the exchange of technology of production and even in exchange of technical manpower in general can strengthen the economic base of all the cooperating States of Northeast India. A State of Northeast can use the managerial talent of the other States of the region. The modus operandi of the strategy is to be determined through an in-depth study which would identify the comparative advantage of each Northeastern State. In establishing cooperation, the adage "united we stand and divided we fall" should be the guiding principle. But to keep the unity self-sustaining, all the cooperating States must get some benefits; true that the quantum of benefits is unlikely to be equal but the gains of cooperation must not be monopolized by some States. Trust and understanding are the basic inputs for enhancing the scale of co-operation. A deep-seated belief that the partners' behaviour will not be parasitic, rather it will be altruistic is a piece of highly valuable 'social capital' yielding solidarity in group behaviour and thus maintaining – even raising occasionally – the fruitfulness of the outcome of the action of the members.

Table: 1
Population and Income in Northeastern States

Sl	States	Area (sq km)	Population	Density	Per	Per capita
No			(lakh) 2011	(per sq	capita	NSDP* as
				km)	NSDP*	percentage
					2014-	of Per
					15	capita NNI*
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Arunachal	83743	13.84	17	103633	119.79
	Pradesh					
2	Assam	78438	312.06	398	54618	63.13

3	Manipur	22327	28.56	128	52436	60.61
4	Meghalaya	22429	29.67	132	68202	78.83
5	Mizoram	21081	10.97	52	85659	99.01
6	Nagaland	16579	19.79	119	78526	90.77
7	Sikkim	7096	6.11	86	210394	243.19
8	Tripura	10486	36.74	350	71666	82.84
9	Northeast	262179	457.74	175	62070	71.75
	India					
10	India	3287265@	12108.55	382	86513	100
		(3166414)@@				

Note: @ = Dejure; @@ = Current position; *= Current price in crore of Rupees (Base 2011-12)

NSDP=Net State Domestic Product: NNI= Net National Income

Sources: Census of India 2011 and Economic Survey 2016-17, Volume 2,(Government of India)

As table 1 shows most of the States in Northeast India have a level of Net State Domestic Product (NSDP) per head which is lower than the national average. Only two States – Arunachal Pradesh and Sikkim – have a level of per capita NSDP which is higher than the per capita Net National Income (NNI). Sikkim is an outlier with a level of per capita NSDP, which is 2.43 times the national average and 3.39 times the Northeastern average. Even in the country as a whole Sikkim belongs to the topmost, the highflying group, consisting of Delhi, Goa and Chandigarh. These four States/UTs have a level of NSDP per head which is more than twice the national average.

Table: 2
Major Horticultural Crops Grown in the Northeastern States of India

Sl.	States	Fruits	Vegetables	Spices	Plantation
No					crops
(1)	(2)	(3)	(4)	(5)	(6)
1	Arunachal	Citrus, apple,	Pea, beans,	Ginger, large	Tea,
	Pradesh	walnut, banana,	colocassia,	cardamom,	Rubber
		pear, plum,	tomatoes,	turmeric	
		kiwi, pineapple	Cabbage, potatao		

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2	Assam	Banana, citrus, pineapple, jackfruit,guava, papaya	Potato, cabbage,sweet potato, brinjal, onion, cauliflower	Chilli, ginger, turmeric, black pepper	Arecanut cashew nut, coconut
3	Manipur	Pineapple, citrus, banana, passion fruit	Tomato,	Chilli, ginger, termeric	
4	Meghalaya	Pineapple, citrus, banana	Potato, radish, French bean, cabbage, cauliflower, tomato, capsicum	Ginger, turmeric	Arecanut
5	Mizoram	Citrus, banana, passion fruit	Chow-chow, cabbage, pumpkin,brinjal, beans	Ginger, turmeric, chilli	Arecanut
6	Nagaland	Pineapple, banana, citrus, passion fruit	Colocasia, chow- chow, tapioca, potato, pea	Garlic, chilli, ginger	
7	Sikkim	Citrus, kiwi fruit	Cabbage, French bean, chow- chow	Large cardamom, chilli	
8	Tripura	Citrus, pineapple, banana, Jackfruit, mango, litchi	Potata, brinjal, sweet potato, beans, tomato	Chilli, ginger, black peper	Arecanut, coconut, cashew nut

Source: 1. Statistical Abstract of Arunachal Pradesh, 2018

2. Yadav, R.K., D.S. Yadav, N. Rai and K.K.Patel. 2003. 'Prospects of Horticulture in North eastern Region', ENVIS Bulletin, Himalayan Ecology, 11(2), p.28

Table: 3
Fruits and Vegetable crops Suitable for Cultivation in Arunachal Pradesh

Sl. No	Horticultural Zone (altitude/ rainfall)	Fruit crops
(1)	(2)	(3)

1.	Foothills and	Mandarin, acid lime, assam lemon, amla	
	valley (170-	(Indian gooseberry), pineapple, jackfruit,	
	195m)	papaya, beans, cucurbits, potato	
2.	Mid-hills (915-	Peach, plum, apricot, pear, pomegranate,	
	1,803m)	grapes, low-chilling apple, persimmon,	
		kiwi, off-season vegetables, potato	
3.	High-hills	Apple, cherry, walnut, chestnut, kiwi, off-	
	(above 1,803)	season vegetables	
4.	Rain-shadow	Apple, pear, plum, peach, almond,	
	areas	walnut, etc.	

Source: Mishra, S.S., K.A. Singh and T.K. Bag. 2002. 'Present Status and Prospects of Diversified Fruit and Plantation Crops Production in Arunachal Pradesh', in K.A. Singh (ed.), *Resource Management Perspective of Arunachal Agriculture*. Basar, Arunachal Pradesh: ICAR Research Complex for NEH Region, p.13

Manufacturing and economic growth

There are some empirical facts of economic development which have got the status of almost an axiomatic truth. One of these observed in all developed economies without an exception is the relationship between manufacturing and economic growth, especially at the initial stage of development (Kuznets, 1966). In all economies, the initial thrust of growth came from manufacturing or foreign trade or both. It was the steam engine which laid the foundation of mechanized industrial production and swift transport facilities paving the way for the first industrial revolution in Great Britain. The second Industrial revolution which took place in Germany was based on diesel engine. Compared with steam engine the capacity of the diesel engine was very high and was responsible for ushering in large factory-based production and swift means of transport. So, a sustained economic growth is synonymous with the development of manufacturing industry. Like other hilly states of the country Arunachal Pradesh is yet to establish a sound base of manufacturing industry.

Table 4

Contribution of Manufacturing to GSDP in Arunachal Pradesh

S1.	Year	GSDP	Manufacturing	Manufacturing
No.		(Rs in crore)	(Rs in crore)	as percentage of
				GSDP
(1)	(2)	(3)	(4)	(5)
1	2011-12	11062.71	129.00	1.17
2	2012-13	11299.14	140.37	1.24
3	2013-14	12338.24	182.85	1.48

Note: GSDP= Gross State Domestic Product at constant price

Source: Statistical Abstract of Arunachal Pradesh, 2016

Table 4 shows the manufacturing contribution to Gross State Domestic Product (GSDP) in Arunachal Pradesh. In 2011-12 the manufacturing contribution was only 1.17 per cent of GSDP. This is really extremely small. The data of two more years are also given in the table. The contribution of manufacturing shows only the marginal improvement. Chinese high economic growth has been sustained for so long a period that it has now assumed almost proverbial proportions. From a very low level of income the Chinese per capita income has increased to a high level. This is unprecedent, never before has any country experienced such a high growth rate over a long period of time. The basic thrust of high growth has come from the rapid expansion of manufacturing sector of the Chinese economy. The cheap Chinese manufactured goods have been exported almost throughout the world. The Chinese case is not an exception. It is simply the replay of other East Asian countries. The best example of North East Asia is Japan. Its rapid economic growth after Meiji restoration in the 1860s was facilitated by the steady expansion of the manufacturing industry.

Arunachal Pradesh and other North eastern states should take serious steps to promote their manufacturing industries. For this to happen an outward looking policy is a sine qua non. Market for the manufactured goods outside Northeast is intensely competitive. So, the viable strategy will be promoting the mutual co-operation among the North-eastern states in such

a way that each State of the region will get specialized in some segment of the manufacturing industry where it has a comparative advantage. This will keep the average cost of production low compared with the average cost outside the Northeast. Northeastern States should not remain confined to this region only. But at the initial stage of industrialization, when the scale of production remains low and cost of production continues to be high Arunachal Pradesh like other Northeastern hill States may find the competition with the region beyond Northeast too fierce to overcome. With time as the quantum of experience increases, the manufacturing becomes more sophisticated and efficient resulting in the fall of unit cost of production. A low cost of production opens the door of comparative advantage. Arunachal Pradesh and other Northeastern States will then be able to compete not only with the rest of the country but also with the outside world. For this to happen economic co-operation among the States of Northeast should be promoted rapidly. The cooperation would not dislodge competition; rather like the friendly game, it would promote efficiency through constructive competition. It will then make each State economically better-off and stronger in competition. Since the path of development is through the medium of industrialization, a modest beginning can be made through pooling capital and managerial resources from each member State. Considering the local resource endowment, manufacturing units can be set up in each State. Each member would try to raise the efficiency to ensure the profitability of its unit. The path to form a healthy zone of productive co-operation is not very smooth. So, it is relevant here to discuss some constraints.

That grouping of the States of Northeast India into an economic zone will benefit all the participating members can be accepted without much hesitation. But what cannot be ascertained is whether all the constituent States will be equally benefitted by the zoning. Rather it is possible to say without much hesitation that the distribution of benefits, at least in the initial stage, will be highly unequal. Some States will get the lion's share and the gains of others may be small or even insignificant. It will depend on the current position of the individual States. Some States in the region are relatively advanced and few others are much less advanced. Again, except Assam, no other State in Northeast India is homogeneous

in terms of geography, culture, language and socio-economic position. So, the competitive abilities of different States are unequal. Hence in economic grouping the advanced areas of the zone will get the higher benefits than the poorer areas. However, with some safety measures having been built in the system it can be ensured that all the participating States get at least some benefits. That is, the management of the organization can build a system where no activity will result in a zero-sum game, a situation where some States gain at the cost of the others.

In the short term the removal of all inequalities in the distribution of benefits may be neither possible nor desirable. In fact, even if it is possible it may not be desirable. This point needs elaboration. The magnitude of benefits in an exchange may reflect the efficiency and productivity. A member State producing a commodity or service with high measure of efficiency will gain more than one whose efficiency level is low. To the extent gain or profit is the outcome of efficiency, it can be encouraged in order to raise the level of efficiency, and reduce the cost of production, a situation which is desirable in all circumstances. Sometimes profits come from innovation or more broadly what Schumpeter called invention, innovation and diffusion – these together form what is called Schumpeterian trilogy. It is this trilogy that acts as the basic driving force of economic growth. The formation of Northeast Economic zone can enhance the growth of the conditions promotive of the trilogy (Kaya, 2015). The inputs for its activation are likely to come from the enhanced interaction among the people specially the business people, policy makers and others. Traditional technology of the hills of northeast India is very efficient in the maintenance of the environment but it cannot produce much surplus. Introduction of plantation crops, orchards, etc. can enhance the productivity of both land and capital.

Formation of a zone promoting economic co-operation would enhance the aggregate benefit and every member would get at least some benefit. To conclude, the economic basis of a zone is quite strong. It would be promotive of the economic growth of Northeast India and enlarge the network of large scale production and intensify inter-industry relation.

The economic relation is no doubt important but in practice it is enmeshed in the complex socio-cultural milieu. So most often, especially in the traditional societies economic relations may not enjoy much

autonomy. Even in the modern economy, the market relations may not be totally autonomous of other relations (Polanyi, 1944). Granovetter (1985) calls this embeddedness of economic relationship into the socio-cultural and political realms of the society. To press this point home, economic relations, even most profitable ones, cannot take shape without the support of accommodative socio-cultural network. That is market cannot stay independent of the general cultural ethos of the society. One cannot make market totally culture-free. More than a century ago, Maine asserted that the general movement of the society is from status to contract (Maine, 1876), but Durkheim regarded contract even in modern society being shaped by non-contractual relationship (Durkheim, 1994). To put it in simple terms, the contractual relations work best when they are consistent with the basic values and traditions of the society. In the Northeastern context, the noneconomic factors, mainly the basic institutional factors are relevant to the formation of the relationship between the hills and the plains. The States in the plains, mainly Assam, and to a little extent part of Tripura (previously it was called Tripura Hill Tracts to distinguish it from Tripura which is plains now called Comilla in Bangladesh) have been guided by the Indian Penal Code (IPC) since its inception in 1861. But the hills of the Northeast specially Arunachal Pradesh were not brought under the IPC, rather they continued to be guided by their own traditional ethnic laws. There are many tribal communities, even in Arunachal Pradesh there are more than 10 major and more than 50 minor tribes. Each tribe has its own traditional law and most often there is substantial difference between the legal systems of different tribal communities. This difference kept the inter-tribal economic relation low.

Apart from this there are also restrictions on the entry of 'outsiders' into Arunachal Pradesh. This is basically an important factor constricting the economic relationship of the State with the 'outsiders'. In the formation of the Zone this dualistic structure of Northeast should be taken care of. The institutional configuration especially the legal structure, administration of justice, contract enforcement mechanism, etc. being different in the hills from the plains, special care should be taken so that the zone can operate smoothly and meaningfully. Then this part of the country can enhance its well-being through stronger and better economic relation among its constituent units.

Northeast economic zone, speaking in economic terms is perfectly feasible and it would boost the welfare level of all the Northeastern states. Economic reasoning always justifies borderless unrestricted trading and free movement of capital and also labour. But the problem is that the real world is not propelled by only economic forces. Had it been guided by only the consideration of the economy, poverty would have been written only in the history books. Poverty exists everywhere of course with different intensity: in acute form in much of the developing world and in less acute form in the developed countries. So non-economic factors may be very powerful, squeezing away the economic forces in the crucial segment of the social space. In this regard, especially on socio-economic behaviour, James Duesenberry made a very relevant remark, "economics is all about how people make choices, sociology is all about how they don't have any choices to make" (Duesenberry, 1960, P. 233).

To look into the perspectives of Northeast India in the light of the economic condition and the binding socio-cultural factors, a dichotomous picture emerges: the plains and the hills. In area, hills dominate the Northeast but in population the plains carry the overwhelming majority. Some fundamental differences between institutional structure of the plains and the hills are very relevant. Macaulay's India Penal Code (IPC) came to the Plains of Assam, like the rest of the country, in 1862 but the hills of the Northeast are yet to accept and introduce Macaulay's IPC.

Area of the hilly part of the Northeast is more than 60 per cent but population wise, the plains carry about 70 per cent of the regional weight. Arunachal Pradesh, like other hilly States of the Northeast, namely Mizoram and Nagaland are under protective barriers - the inner line restricting the entry of non-locals. Not only the borders are protected, but also restrictions of different types are present throughout the State. Land of Arunachal Pradesh cannot be sold to the nonlocals (non tribals). Even tribal inhabitants of other hilly States cannot purchase land in the State. Another problem is the absence of cadastral survey. In Arunachal Pradesh, cadastral survey is yet to take place. It may be noted that in the plains of North India Sher Shah Suri initiated the cadastral survey in the first half of the sixteenth century. During Akbar's time, the cadastral survey witnessed further coverage. An

important source of finance was land revenue for the Government of India during the rule of East India company.

The absence of cadastral survey and restrictions on the ownership of land and real estate, the requirement of inner line permit and non-assurance of trading license to the outsiders, mainly non-tribals have implications on the proposed Economic Zone. Some of these problems exist in the rest of the country in other forms. For example, in case of agricultural finances, in the plains of the country, there is restriction on the alienation of agricultural land to the non-farmers. This restriction implies that even the bank financing the farmer against the mortgage of the land cannot take the mortgaged land in case of default. It is common knowledge how this restriction has badly affected the health of the agricultural finance in particular and rural finance in general.

The basic input in regulating economic relationship is the rule of law, the force driving the observance of the contract. The stronger the contract enforcing mechanism of a place, the higher its attractiveness as the destination of capital, both physical and human. Not only the third-world corrupt politicians but also some richest business people even from poorest countries tend to keep their resources in the safe custody of European/American banks. The rule of law is so much respected in the developed world that contracts are enforced with the full force of the law. To conclude, the proposed Northeast economic Zone is a good idea and to materialize it, all preparatory measures, including operating principles and the guidelines should be prepared beforehand in such a way that it can contribute to the advancement of Northeastern prosperity, cohesiveness, unity and integrity.

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Joyful Memories of Idyllic Times:

Remembering Shillong in Leela Majumdar's Pakdandi(1911-1919)

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Abstract: The hill stations of colonial India, like Shillong, functioned as sanctuaries of the British ruling race, forming enclaves of British culture and administration that was juxtaposed with the existing local cultures. Falling within the ambit of local history which implies not merely everything that has happened in a town, village or city but is often interrelated to national and international events, Shillong and its inhabitants, institutions and scenic beauty occupy ample space in the incomplete autobiography of *Leela Majumdar* called *Pakdandi* (The Winding Mountain Path) published in 1986. This article demonstrates how her personal narrative is knitted with the kaleidoscopic interplay of events in Shillong in a colonial era, touching on themes such as society, economy, education and gender relations and thus contributing significantly to the field of historical studies on Shillong.

Keywords: Shillong, Sahebs, Khasis, Brahmos, Loreto Convent, World War I

The hill stations of colonial India functioned as sanctuaries of the British ruling race, forming enclaves of British culture that was juxtaposed with the existing local cultures. They were also places which acted as political and military headquarters and cantonments for British troops, that provided employment for countless of Indians, who often travelled great distances as servants, merchants, office *babus* and clerks. One such hill station was Shillong which was founded in 1864. Falling within the ambit of local history which implies not merely everything that has happened in a town, village or city but is often interrelated to national and international events , Shillong and its inhabitants, institutions, happenings and scenic beauty occupy ample space in some personal narratives and autobiographies. Among these, one such account happens to be the incomplete autobiography

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of *Lila Majumdar* called *Pakdandi* (meaning The Winding Mountain Path) published in 1986. So far, ample attention has not been paid to this beautifully crafted autobiography that captures different images of Shillong in the second decade of the twentieth century.

Majumder interweaves the history of a hill station where she spent her childhood with her individual memories, experiences and reflections. Her autobiography helps historical studies of Shillong as it describes its rich culture and kaleidoscopic interplay of events in a colonial era. It throws light on the political happenings, and the social life of the place as well as its educational institutions. All this is done with a great deal of élan. Her autobiographical writing partly covers a new genre of literary writing, that of childhood memories. Autobiography is sometimes regarded as a branch of history as it provides one of the most fascinating and illuminating approaches to history. Majumdar's autobiography is significant in the sense that it not only describes her surroundings but also throws light on a specific historical period, the early 20th century which was a witness to rapid changes.

It may be pointed out that Lila Majumdar's autobiography cannot be defined as a piece of 'exhortatory' literature as Malavika Karlekar terms, which was meant to remind the readers of their basic responsibilities in a changing environment. Women's autobiographies, diaries, journals and letters are becoming increasingly important, 'as sources on self-perception as well as for providing insights into gender relations, social structure, political and social change and so on'. Majumdar captures the memories of her childhood in Shillong in her autobiography from page three to page eighty-one, where she notes down also her responses to the changing environment. She recreates the lives of the Bengali Brahmos, the indigenous Khasis, the missionaries, the *sahebs* and *memsahebs*, the climate of the place and it's amazing scenic beauty. She also encompasses the important events and happenings surrounding her childhood such as the coronation of a British King and the First World War. Her autobiography also reflects the private anxieties of a little girl. In this article I have thematically arranged

her personal narrative and description of Shillong into six sections.

Family, Residence and Locality

Shillong was sanctioned to serve as the year-round capital for the government of Assam in 1874, and as such attracted a wide range of people. The indigenous Khasis, who worked as porters, carpenters, masons, domestic servants, graziers, and market gardeners, made up about half of the population of the station. The other half consisted primarily of Bengali government clerks and professionals, Bihari dhobis and small traders, Marwari merchants, Assamese servants, and Nepali porters and graziers. Among the Bengalis who went to Shillong in search of employment some came from Calcutta and the others from Sylhet. A small community grew up with them in the locality of Laban out of which many were followers of the Brahmo Dharma. One such Brahmo who came to Shillong from Calcutta as a Surveyor of Forests was Lila Majumder's father -Pramada Ranjan Roy.

Lila Majumdar's childhood was spent in the bosom of mountains listening to the sounds of little streams and the cascading waterfalls, not least the splashing of heavy rain; experiencing the sweet sunshine of summer, the cold icy touch of Winter; hearing the day and night spontaneous sounds of pine trees that are found in plenty in the Khasi Hills, amidst which dwelt a large variety of animals, birds, butterflies and insects, that touched her heart profoundly. She felt that the beautiful natural surroundings and the security of the home was something beyond which nothing was required in childhood. As the houses had thin walls and tin roofs, they were not very strong and secure. Yet security came from possessing a strong mindset which could not be broken. Majumdar writes that she and her siblings spent their childhood in Shillong in great peace.

One can glimpse the norms of a patriarchal society in the description of her father who was very strict and had no reservations about beating his children including his daughters. Her father felt that beatings were necessary for the proper upbringing of children. He had made many sacrifices for the family but any disobedience on the part of the children was met with loud shouting that left their hands and feet cold. Since childhood, Majumdar writes that she never got along with her father in spite of resembling each

other. She respected him a great deal but was terrified of him and always tried to prevaricate him. As much as he was strict, he was also very hardy and possessed great physical strength. Once for a fault of hers her father slapped her so hard that whenever she recalled the incident, her ears used to start ringing. Her father was a great sportsman and used to play hockey and cricket. He had a good physique and his body was as strong as that of a horse rider. He had earned a silver cup as prize which used to adorn the neat shelf of the drawing room and did the family proud. The children used to accompany him to the preserved/consecrated forest. He taught the children Maths and also the dignity of labour. He used to tell his children, 'Do not unnecessarily let others serve you, not even salaried servants. Why should you not be able to polish your own shoes which even an illiterate person can do?'He used to polish his own shoes even when he became Deputy Surveyor General. Well-reputed in his profession, her father was bestowed with the titles of Rai Saheb and Rai Bahadur. He was not a sycophant but the Englishman earned his admiration for being punctual, diligent, irreproachable and honest.

Before coming to Shillong, Lila spent some time in Cherrapunjee where her father was working in the Survey Department. It was there that she had her first elephant ride along with three of her siblings. The elephant belonged to the Survey Department. She writes that elephants, horses and donkeys always accompanied her father and his team in the deep jungles of Cherrapunjee for work. She was excited on hearing that tigers and bears lived in the jungles. Majumdar does not mention how long the family stayed in Cherrapunjee, but finally it shifted to Shillong where they began to live in a little house (for a short time) on a hilly slope, surrounded by eucalyptus trees, in the locality of Laban. In the corner of the garden under a pomengrate tree, there was an elongated stone .Next to it someone had planted a mountain rose plant. Majumdar learned from a little boy Sonamoni that beneath the stone lay the ashes of a five year old girl named Lila, who had died in the earthquake of 1897. Hearing this all the children wept. Sonamoni's grandfather happened to be Bose Saheb who had a beautiful daughter. Majumdar learned much later that she was the wife of Aurobindo Ghosh, the famous freedom fighter.

Majumder mentions a river in her neighbourhood across which ran a bridge. There was a neat field above the river where the Sahebs played tennis, cricket and golf. The family next shifted to a beautiful house called 'High Woods' and lived there for eight years(1911-1919). Not once did it cross their minds that the house did not belong to them. Majumdar never again saw a house like that. The rent was forty-five rupees. The main gate opened into a pebbled path which ran down to the bungalow with a long verandah and a wooden railing. There was a drain running on three sides of the house so that rain water could be channelized. The verandah could be climbed by stepping on two flat stones. Orchids hung from the ceiling in wired baskets and beneath that geranium grew in green wooden boxes. Majumdar writes that it was a house which people dream of .The owner of the house was a Khasi who possessed a Bengali name, Jeebon Roy. He wore a big fat moustache .Everyone used to say he was very learned and a good man at that.

The past pours out of her pen as she recalls Sasibabu's shop on the other side of the pool. Pink lozenges were available there. There were many tinroofed houses below the shop. There used to be a market too which used to be held once a week. The river ran a zig-zag course along the market. The house 'High Woods 'fascinated little Lila and gradually grew inside her to occupy an important place in her heart. It had wooden floors which made creaking noises when one walked on it .The floor was covered by a mat made of coconut ropes. The walls were whitewashed; the corrugated tin roof had a lot of holes through which rain water dripped in and beneath the roof there used to be a ceiling made of canvas, over which ran huge rats at night frightening any new arrivals to the house. The doors and windows of the house had glass panes. There were a lot of fruit trees and flower plants. Caterpillars abounded and one could hear them chewing on the leaves. An interesting nugget of information in her autobiography was that the hills were the abode of silk worms and in every house people used to weave muga-tassar from silk threads. There were shops in Police Bazar owned by Jamat-Ullah and Golam Haider which had practically everything ranging from toys, hats/caps, shoes, clothes, utensils, cakes, biscuits and other paraphernalia.

Across the river was the heavily wooded Lumparing Hills. The hooting of owls and the howling of jackals at night were deeply imprinted in her adult memory. From Laban the snow-clad mountains could be seen on a clear day, over the blue sky in the far distance, drawn like a picture in silver colour. The plains of Sylhet were visible from Shillong peak. When in 1916 Lila's youngest brother was born, a larger accommodation was required. Chandranath Roy who was the son of Jeebon Roy and was the landlord then, his father having died in 1903 told them not to vacate the house and built additional rooms that also included a study with shelves for keeping books, much to the excitement of the children.

Another interesting feature of houses in Shillong was that the kitchen was housed separately. Such was the case of 'High Woods' also. Next to the kitchen was a room for heating water in kerosene tins usually meant for baths. This was usually done on a stove made of three stones. Tender wood was used as fuel that would give out a lot of smoke and exude a nice smell. During holidays the family used to hang around the fire and engross themselves in stories and discussions. The children used to roast wild apples in the ashes of the stove in the afternoons when the cook, Jaminidi had retired to her room. There was also a stable in which lived the horse, Kalamanik owned by the family. It was a common thing for the family to light fires of dry leaves during winters and sit around it. Their faces would turn red with the heat, but their backs would remain cold. Their hair and bodies used to smell of burnt leaves. During the night oil-lit lamps illuminated the roadsides. Lila reconstructs her experience in a remote time when the sky turned deep purple at night with lacs and lacs of dazzling stars, and fireflies could be seen in plenty in all their bioluminescence in the surrounding bushes and shrubs.

Memories of School Days

Loreto Convent School occupies a privileged position in Majumder's narrative. In the year 1914 Lila aged six and her elder sister aged seven were admitted to the school that lay at the top of the hills. It was an institution run by *mems* or foreigners, 'all equally fair.' At that time Lila could read only three or four letters of the alphabet which she indicated with her fingers, but

could not understand even a single word of English. She describes the nuns as wearing white-black gowns that covered their ears. Foreign classmates gleefully informed the two sisters that beneath their veils, the nuns had shaven heads. The siblings would stare at the nuns unabashedly because of their rosy complexions. She points out how the students of the school varied in their complexions from rosy to yellowish to tanned or copperish. One Iris de Silva was darker than the two sisters. But all claimed that the horrid Indian climate had spoilt their complexion but all was okay underneath their skin. Iris' relatives were from Portugal and very rich. One of the first lessons that were given to Lila was about God whose picture, with His beard and moustache and long flowing robes appeared in *The Book of Bible Stories*. The picture of God made a deep impression in young Lila's mind but shocked and surprised her as being a Brahmo she was always taught that God was formless.

In those days the school syllabus did not include Bengali. Lila felt the undercurrents of racism in school as indicated by the contemptuous attitude of some of her classmates and a few teachers who made fun of Indian languages, customs and habits. Gradually the sisters mastered the English language. There was no separate grammar book for English which was taught through general lessons. At home they were taught Bengali through Vidyasagar's primers. In 1914 Lila who happened to be in kinder garten had to study English, Maths, Drawing and Nature Study as part of the syllabus. She loved to draw pictures of lizards and kettle with coloured threads on cardboard. The school hours were from 9.00a.m. in the morning to 3.00p.m. There was a break for lunch between 12.00p.m. to 12.30 p.m. During lunch hours no one was allowed to sit in the classroom. At the end of the year both the sisters were given double promotion and put in Standard One. Majumder recalls that the books in Loreto Convent were great such as Steps to Literature which contained the great stories in the world, including the Ramayana; Gateways to History containing historical stories; and Biology which was taught with the help of charts and drawings on the Blackboard. Majumder complains that only two subjects were not taught well and they were Geography and Maths. The school syllabus also included French lessons which included the mastering of two huge French books. Initially

Mother Hyacinth taught them French orally for five years and also gave them sewing and knitting lessons. She was very efficient and Lila never forgot what was taught to her by Mother Hyacinth whose eyes were like a hawk as she could catch mistakes very easily. She was a perfectionist. Later Mother Camela took over but her French pronunciation sounded like English.

In those days boys below ten years were allowed to study in Loreto Convent. Some of them stayed in the boarding. Most of her classmates were nice and friendly except a few who took pleasure in calling Leela and her Bengali friends nigger, blacky and native. When a distressful Lila narrated this to her mother, the latter used to say that native was not a bad word, it actually meant those who were born in that country. But the childhood memories of being treated contemptuously especially by teachers were something she carried with her for a long time. As the Bengali girls used to hold the first and second positions in the class, there was a lot of jealousy towards them. The truth gradually dawned on Leela that the bad behaviour came from the *feringees*(Anglo-Indians) and not the *mems*. The former were very greedy and would try to bully the native girls in parting with their possessions comprising of ribbons, clips, bead necklaces and pencils etcetera. If they did not succeed they would then hide the hats, books and slates of the native girls. All this made Lila want to cry. However, there were good boys and girls also. Lila recounts one such experience in her autobiography. It seems one day she got a scolding in the Drawing class without any reason. Her throat was aching and she was determined not to cry. In her words:-

At that time a boy named Walam Singh, son of a Khasi king pressed a small copper cross into my hands and said, "I am rubbing this spot with your rubber okay? Glancing at him I immediately understood that he was feeling sorry for me and so gave me the cross. Pointless to say none of us were Christians.

Like most children studying in Catholic schools the two sisters became very devoted to Jesus. According to Lila, 'Roman Catholics decorate religion in such a beautiful way that it is difficult not to become a devotee.' The *feringhee* girls used to wear broad blue ribbons with names of saints written on them, a medal and a copper cross around their necks. Lila and her sister also wanted to imitate them but knew it would not be permitted at home. They used to have prayer books with golden bordered pictures of Jesus in them. Seeing this Lila also collected some pictures in a biscuit tin. In missionary schools the influence of Christianity is very strong upon its pupils. Lila was no exception. She was moved by Jesus's mother's beautiful face. She felt that for the sake of God so many saints had endured pain but not like Mother Mary. She developed a deep and lasting respect for Jesus's teachings. Mother Margaret had quoted some lines from the Bible to her-"If you ask, you will get. If you search, you will get. If you knock on the door, it will open." Lila loved these words and they made a lasting impression on her mind.

The chapel of Loreto Convent was open to both Christians and non-Christians .It was beautiful with a carpet, chandeliers hanging from the ceiling, beautiful sculptures and a pedestal with silver-gold arrangements. Jesus's face was everywhere as pictures pertaining to the main events in His life decorated the walls of the chapel. On the day of the initiation of the nuns, the pupils of the school used to carry flowers and take them to the chapel. One nun used to come forward and touch their foreheads with a drop of the Jordan River, thus fulfilling their hearts. In her classroom used to hang a colourful picture of a small boy inclining towards a pond at a dangerous level and a guardian angel hovering behind him to rescue him lest he should fall. This used to make Lila think that all guardian angels did not have the same level of efficiency. When Mother Joseph died the girls took flowers to the chapel. It was the first time that young Lila encountered a dead body in a beautiful wooden box lying on a nice-looking bed. Seeing Mother Joseph with her eyes closed and candles lit near her head and legs, Lila felt that death was beautiful like this. But in her childish mind crossed one gloomy thought- what happened to the soldiers who died in the battlefield?

During her school years in Shillong, plays centering on the lives of saints used to be enacted on special religious festivals. It was a time for creativity as the stage was decorated beautifully, with scenery drawn and

painted by teachers and students on big cardboard screens. On the way to school Lila had to cross a place called Dhankheti which was full of paddy fields. Lila also mentions two other reputed schools at that time. One was the government school of the foreigners -Pine Mount School which was in front of their house. The *mems* of the school stayed next to her house. The school had a great tennis court and every evening sahebs and mems used to gather there. Many tables used to be arranged and filled with tea, cakes and sandwiches. Lila and her siblings used to stand and watch with their mouths wide open much to the irritation of their mother and aunt. As she writes, 'We could not imagine a more luxurious life than this.' Every year- ending all the schools in Shillong used to close down for two and a half months as part of winter vacation. In Pine Mount School big motors (the word bus was not in vogue then) used to take the students home. The whole school building used to fall asleep. Another school was a boy's school-St. Edmunds. The sisters were not ignorant in matters of love as their feringhee classmates used to send love letters to their boyfriends in St. Edmunds through the ayahs. They confided this proudly to the two siblings who were absolutely flabbergasted!

The Khasis

Lila recalls in her biography that during her childhood days in Shillong, there was no dearth of story-tellers. In these the Khasi maids excelled the most. They were generally called ka kmie. This was found objectionable by her mother, Mrs.Roy who forbade her children to use this word to address the Khasi maids. She would reprimand them by saying, 'If anyone calls you mother, oh mother, will you like it?' But it was difficult to find out the names of Khasi maids. When they were small, each had a name .But as soon as they got married and had a baby, they would be addressed as so-and-so's mother. Nobody would utter their actual names and if someone did by mistake, they would get irritated. In Lila's Shillong residence there was a succession of Khasi maids-*Ka kmie* Uben, *Ka kmie* Doren, *Ka kmie* Madila etcetera. Lila gradually discovered to her surprise that unlike the Bengalees , the Khasis were a matrilineal race. The stories they narrated to Lila and her siblings were horrifying such as the hero being eaten by a tiger, or shot by an

arrow or chased by a demon or forced to commit suicide! They would never tell funny stories. It made little Lila wonder how in spite of living in such a beautiful place like Shillong their stories contained unpleasant themes. Lila figured out that perhaps it was because of a difficult lifestyle in a hilly terrain that compelled the Khasi maids to think of such stories. One could also discern an element of pathos in their narratives. Whatever the reason, the children loved to hear the stories told by Khasi maids. Lila also learned about the tragic story behind the cascading waters and smokiness of the Mawsmai Falls in Cherrapunjee. The possession of indigenous knowledge of the Khasi maids came handy when Lila's elder brother and sister started foaming in the mouth after chewing on some wild fruit. Everyone present thought that the end was near. Lila's mother started crying while her father stood stunned. It was Ka kmie Uben who came to the rescue when she ran to the kitchen and got some salt and put it in the mouths of the siblings. They immediately vomited and recovered. This incident happened on the day the family shifted from Cherrapunjee to Shillong. Ka kmie Uben was a wonderful person. Even though in a fit of anger, Lila had beaten the maid with an umbrella and even scratched her, the latter still took her for an outing. Ka kmie Uben used to also make clothes for dolls owned by Lila and her elder sister by cutting holes in the middle of pieces of cloth with a pair of scissors. Lila at that time was aged four- and- half and her elder sister five- and- half.

It is also learned from this autobiography that Khasi maids in those days never ventured beyond the Khasi Hills. They never used to eat in other people's house, or spend the nights there. They never dressed in any other clothes except their traditional attire. They hated stitched clothes. The rich would wear necklaces made of big gold and red beads. They used to wear ear rings made of unalloyed gold. Her autobiography clearly portrays gender relations in Khasi society. According to Lila the Khasi women were very hardworking and did most of the work while the men wiled away their time in leisure. For breaking stones along the roadside the men used to be paid six and a half annas and the women only four annas, a fact clearly indicative of gender inequality. Lila further expresses her happy recollections of one maid in particular- Ka kmie Elbon. She was quite different than other Khasis as she ate and slept in their house which was a *Dkhar*

(non-Khasi) house. Khasis generally never ventured outdoors after sunset for fear of *Dakus*(dacoits). But Elbon used to roam about without any fear saying that the *dakus* were her own people. She was not very affectionate towards the children and felt her son Hendrickson was far better than them. But no one ever saw Hendrickson who stayed with his grandmother. Sadly the latter never let Elbon enter her house. Lila was too young to grasp the fact that perhaps there was some hidden tragedy behind this. It was quite bizarre as in a matrilineal society children usually lived with their maternal grandparents. Elbon never expressed her true feelings. She used to often say that her brother and husband had gone to fight in France during the Great War, never to return. This was the time of the First World War. One day to everyone's surprise, for a minor reason Elbon left in a huff never to return. Leela remembered her even as an adult as Elbon used to play with the children, tease them and crack jokes with them.

The First World War, 1914-1919 and Its Implications

During her residence in Shillong World War I broke out in1914. Leela first came to know about the War in Europe from her mother and maternal aunt. The War did not initially mean anything to her and her siblings as it was being fought far away and was as remote as the Ramayana-Mahabharata Wars. But one day in the Catholic Church adjacent to Loreto Convent School, everyone had to pray for those who had sacrificed their lives in the war. The War came closer home when in school, the students who were taught knitting, were instructed to knit sweaters for the soldiers fighting in the War in France. Leela learned that her Anglo-Indian classmates were to knit high-neck sweaters for Sahib soldiers. They were given khaki wool from the school. The native students had to bring wool from home .Leela bought red wool and the native school girls knitted high-neck sweaters in different colours such as red, blue, yellow and green for Indian soldiers. A particular incident created more awareness of the War and its implications. This was when Miss Levans started to give sewing lessons to the girls. She was around twenty, had an unusually pale complexion, golden hair and a figure as light as feather. It looked as if her eyes were always filled with tears. The class girls used to say:-

She has come from Belgium. The Germans killed her father and brothers before her eyes and burnt her house. The Red Cross sent her. Some kind and sympathetic people bought her clothes.

The Loreto girls were very unkind to her and used to harass her so much that at times she had to leave the class crying. One day they all came to know that she had left as abruptly as she had arrived.

Every year before school closed down for Winter Vacation, the Annual Prize distribution used to be held on a particular day. In the year 1915 there were none of the usual prizes such as picture books, toys, and dolls etcetera. Instead big cards were given. Each card had a map of Europe, and in the middle stood a school girl holding the Union Jack. It was learned that the money usually spent for the prizes had been given away to the soldiers to help them in the War. Some elders sarcastically commented, 'Not for the help of native soldiers.' That really hurt but it was true. Again in 1916, 1917 and 1918 the same was repeated as instead of prizes, cards were given. Lila was an exceptionally good student and had always stood first in class. After the War ended, Lila to her surprise was given a prize of eight rupees in an envelope at the Annual Prize Distribution ceremony. Earlier she had never got any prizes except in her first year in school (1914) when she had been awarded a prize consisting of an animal's book and a bat-ball. At the end of the War celebrations were held in Shillong. The school children were given a treat; there were sports, dancing and singing; the people were given military tattoos etcetera. Every house lit candles and lamps. She also reminiscences that way back in 1911 the commemoration of George-V, the British king was celebrated in Shillong with the lighting of Chinese lanterns.

When World War –I broke out Lila's father became desperate to fight. He had a heavy gun at home which he kept clean and lubricated, as he had to carry this gun in the dense jungles of the Khasi Hills. As Lila writes, 'The fact that my father would not kill tigers with his gun but naughty Germans made me shiver with fear.' In spite of her father's persistent efforts he was not sent to the war front. Instead some lazy Sahibs who drank a lot and did not know any work were dispatched. This angered her father very much. But the Big Sahib calmed him down by saying that he was also not going.

Their work involved essential services .Drawing maps was also useful in the case of War and one never knew when the War might come knocking on their doors.

Missionaries, Mems and Sahebs

Though there were many missionaries in Shillong at the turn of the twentieth century, a missionary couple endeared themselves to little Lila's heart. She recalls them with fond memories and great joy in her autobiography. The missionary couple was Mr. and Mrs. Stephen. They were pretty old and their concerned children would write to them from abroad to go back home and spent the last days of their lives with them. But they insisted on staying in Shillong to continue their activities that involved running a school consisting of poor illiterate hill people and a small hospital; and going from house to house to teach the people to be clean; and singing the praises of God in the Church. In the end, as their health deteriorated, they were forced to go back to their country by their children. The old couple left in tears after assigning the responsibility of the school and hospital to people in the locality and giving away their household possessions. Not a year passed by when it was heard that the couple had returned to Shillong. Filled with love and affection, their friends got back their possessions and arranged them in their house. Mrs. Stephen became busy with the school and Mr. Stephen with the church and hospital. They were heard saying, 'Where will we go? In our minds this place is our nest. We cannot live anywhere else.'They lived in Shillong till the end of their lives.

At the back of Lila's house lived the *Boro Saheb* -Mr. Crow of the Forest Department. His wife was mad and very beautiful. She had to be locked in. Sometimes she would run away from home and subject Lila's mother to her mad ramblings. One day she told Lila's mother, 'We have parties in our house. So many people come. But I am not allowed in.' This saddened Lila's mother. Within a few minutes *ayah*, nurse and bearer all came running and took her back home. Mr. Crow had about ten golden cats and one ash coloured cat that were all extremely pampered. The latter used to steal fried fish from Lila's kitchen. This made things difficult as in those days in Shillong, there were only two market days when fish would be available. From

the autobiography it is known that there was a locality known as *Saheb* para though the exact location is not mentioned. The daughters of two ICS officers who studied in Loreto lived in *Sahebpara*. They would wear lovely white silk dresses with buttons of artificial pearls to school-which little Lila longed to wear sometime in the future; though, as she recounts the desire disappeared with time.

The Brahmos in Shillong

Lila recalls rather sadly that there were lots of Bengalis in Shillong at that time, but there was no unity among them. Many of them lived in the locality of Laban. There was a Sylheti para and higher up on the slopes of Laban a Kolkati para. Durga Pooja used to be celebrated there. Meetings of the Mahila Samity used to take place. Most of the Brahmos lived in the locality of Laban. They were very active as Sunday schools were held where stories were narrated, songs sung and poems recited. Maghotsav was celebrated every year and young boys and girls participated in several competitions. In one such competition, Lila once got a prize for reciting an English poem and was pretty surprised. During *Diwali* the Brahmos did not light lamps much to Lila's disappointment. In those days there was no bioscope in Shillong. The Brahmos were not given to watching theatre. They lived a frugal existence with simple clothes and no luxurious items at home. Once a year a Flower Exhibition was held in Shillong where many foreign flowers were displayed.

Shillong attracted a lot of people from Bengal due to its salubrious climate and scenic beauty. Many prominent Brahmos used to visit Shillong such as Rabindranth Tagore, Rathindranath Tagore, Pratima Devi and Dinendranath Tagore. To Lila's childish ears Dinendranath's 'voice sounded like thunder when he sang; and Rabindranth's recital of "*Puraton Britto*" in a house called Brook-side in Kenches Trace kept Lila spellbound. During *Maghotsav* (celebrated to commemorate the founding of the Brahmo Samaj on 25th January) many Hindu friends and Brahmos used to contribute together towards organizing a feast. Those feasts were held at a place called Chandmari. It was great fun as under the shade of trees *upasanas* took place, songs were sung, and such delicious eatables like *khichuri* (hotch-

potch) ,aloo dum(potato curry), cauliflower fry, tomato chutney, dahi (curd) and bodey (sweets)were served and consumed. Plays were enacted such as 'Lakshmir Pariksha' (Test of Lakshmi). Sometimes in the house of a Hindu Bengali-Kanjilal, Satyanarayan pooja used to take place followed by harir loot as coins and batasa (sugar candy) were thrown around and all present had to scramble, push each other and run to have a share of the loot. Though Lila was never successful in this venture, she nevertheless liked and enjoyed it. Lila also got an opportunity to see the Bengal Tiger- Sir Ashutosh Mukherjee in 'Norex' bungalow, situated not far away from 'High Woods'.

Many members of the Tagore family lived in Shillong for some time such as Hemendranath's daughter Manishadi (who imparted singing lessons Lila and her elder sister) and Dwijendranath's two sons -Sudhi Tagore and Aru Tagore. The Brahmos in Shillong were very orthodox. They did not regard other Brahmos as proper Brahmos. One reason for their orthodoxy was that many of them hailed from Hindu families and on becoming Brahmos had to suffer a great deal of persecution. As a five year old Lila had visited a Brahmo mandir and had watched intently how the men, one playing the harmonica, another the table and another still the kartal were going round in circles and singing. Two contemporaneous Brahmos who made an extremely pronounced impression on her mind was her neighbour, SaradaManjari Dutta whom she called Didima (grandma)and Nilmoni Chakraborty who was a Brahmo missionary living in Cherrapunjee. SaradaManjari was a simple person around sixty/sixty-five years old. She was fair and petite and extremely pious. She could be seen praying continuously on occasions like someone's birthday, funeral and wedding ceremony. She taught in the Girls' Middle English School. Once when Leela's mother was taken ill, it was SaradaManjari who took care of Leela and her siblings. She not only fed them well but also told them bedtime stories. As for Nilmoni, Leela felt he looked like God in *The Book of Bible Stories*. He lived in Cherrapunjee which is thirty-three miles from Shillong. In those days Cherra could be reached by a two –wheeled tonga drawn by a horse or a man driven pushpush. In between Shillong and Cherra there used to be a place called Bhampep which had a dak bungalow. Nilmoni worked for the upliftment of poor Khasis. He was a vegetarian and a bachelor. Many would eat at his house

and learn how to read and write in Khasi. Leela had happy recollections of chewing on drumsticks whenever she visited him with her family.

Conclusion

Good days do not last forever. Majumder's idyllic existence in Shillong came to an end when her father was transferred to the Head Office in Calcutta in 1919, much to the envy of her schoolmates as Calcutta promised a lot more attractions compared to a dull place like Shillong. Leela was then in the sixth standard. She and her elder sister appeared in the Preliminary Cambridge Examinations in St. Edmunds School .The nuns took great care to prepare the sisters for the exams. In December 1919 the Roys wound up their establishment in Shillong and left for Calcutta. Their horse Kalamanik was given away. The family undertook a long journey to reach Calcutta. In those days one had to travel by road to Gauhati, then get down at Pandu Ghat and board a steamer to Amingaon from where a train awaited to take the traveller to Sealdah station after one nights journey. In Calcutta Majumder had to study in Diocesan Girls School where Bengali was taught. Having to leave Shillong filled Lila's heart with sorrow. It was a place where one climbed trees, had picnics, went on long treks and had a lot of fresh fruits and vegetables. The climate of the hill station kept her healthy all the more as she had to walk to and from school covering three miles every day. The breeze of the pine trees was refreshing. One could have seven to eight seers of milk for one rupee and an egg for four paise. Those were indeed joyful times and idyllic days! When Leela Majumder went to Shillong after twenty- five years she did not find anything she had seen in the past. And when she went after twenty-eight years the preserved/consecrated forest was no longer there. So many things had changed. However, the sounds, fragrances and images of Shillong remained with her forever.

Thus, it is seen that Pakdandi is about a woman's articulation of her ideas, opinions and experiences. It covers a wide spectrum of events and major happenings in the early life of the author .Her autobiography no doubt symbolizes the retrieval and incorporation of eye-witness accounts

and experiences that taken together act as an important source of local history, covering socio-economic, political and personal aspects. The book is all the more interesting as the general narrative is interspersed with several anecdotes in the life of the author. Though it is not written in a strictly chronological order, it gives us many personal details and is written in an unassuming style, as she grapples with different emotions and feelings regarding her surroundings and the people she comes across. It is spontaneous and informative and marked by the absence of self-importance. It details a long chain of events in the author's life.

Life in Shillong is skillfully entwined with the author's personal feelings and experiences. In Lila Majumdar's incomplete autobiography one can glean vignettes of a very different Shillong as it was at the turn of the twentieth century, with its blend of local, Bengali and British cultures. Some insights are obtained on the religious environment with an array of Christians, Muslims, Hindus and Brahmos living in peaceful co-existence. Nothing is mentioned of the traditional Khasi religion, or about the festivals of the Khasis. One is informed about the matrilineal system of the Khasis and can infer from Majumder's descriptions that Khasi society comprised of syiems and landlords as well as the poorer lot like labourers and maids. It is also known that Khasi men took part in World War I in faraway France as part of the Labour Corps .

So it is obvious that in her autobiography Majumder stands back and reflects on her childhood especially her years in Loreto, which she gratefully acknowledges built the foundation of her character and is responsible for what she is today!

Endnotes:

¹ A few that merits mention are Dutta, Sarada Manjari(1942) *Maha Jatrar Pathey*(in Bengali), Published by Nani Bhusan DasGupta, Calcutta; Chakraborty, Nilmoni (1974), *Atmajibonsmriti* (in Bengali), Sadharan Brahmo Samaj, Calcutta; Chaudhuri, Nirad C. (1987) Thy Hand, Great Anarch! India 1921-1952, Addison-Wesley, London.

² Lila Majumder was born on 26th February, 1908 in Kolkata at the house of her father's

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elder brother, Upendra Kishore Roy Choudhury (grandfather of Satyajit Ray, the famous film director). She was a prolific writer who excelled in writing children's classics. An incomplete biography lists one hundred and twenty-five books including a collection of short stories, five books under joint authorship, nine translated books and nineteen edited books. She won a number of awards for her contribution to children's literature-Rabindra Puraskar, Ananda Puraskar, Leela Puraskar, Bharatiya Sisu Sahitya Puraskar, Suresh Smriti Puraskar, Vidyasagar Puraskar and Bhubaneswari Medal for lifetime achievement. She was awarded *Deshikottam* by Visva-Bharati and honorary D.Litt. by University of Burdwan. She died in 2007 at the ripe age of ninety.

- ³ See Mukherjee, Rudrangshu and Karlekar, Malavika (Eds.)(2010), Remembered Childhood, 'Essays in Honour of Andre Beteille,' Oxford University Press,Delhi. This book develops this new genre of writing on childhood memories.
- ⁴ Karlekar, Malavika, (1991) Voices from Within Early Personal Narratives of Bengali Women, p.2, Oxford University Press, New Delhi,.
- ⁵ Basu, Aparna 'Women Narrating Women,' in Ramaswamy, Vijaya and Sharma, Yogesh(Eds.)(2009),Biography as History Indian Perspectives, p.263, Orient Blackswan, New Delhi,.
- ⁶ Kennedy,Dane (1996),The Magic Mountains Hill Stations and the British Raj, p.190,Oxford University Press, Delhi,.
- 7 Ibid
- ⁸ Majumder, Lila *Pakdandi* (in Bengali)(1986), p.5, Ananda Publishers, Calcutta; All the translations for this article are mine.
- 9 Ibid.p.9
- ¹⁰ Ibid,p.68
- ¹¹ It was not unusual for leopards and tigers to roam about in Shillong as the town had thick forested areas. In the closing years of the nineteenth century Colonel Wilson had shot two leopards on the same day at Iewduh (Bara Bazar), Sengupta, Surojit (2006),Urban Social Structure: A Study of a Hill City,p.73,Akansha Publishing, New Delhi. Further a report of The Statesman dated 26th September 1918 describes how the Khasias heard a tiger prowling roundabout St. Edmunds' College and chased after it with bows and arrows. However, it was an Irish Christian Brother, Brother Conney who shot it dead in an Indian cornfield near the stables of St. Edmund's College. The beautiful animal measured about

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eight feet long. A Khasia who was mauled rather badly was removed to hospital.

¹² Babu Jeebon Roy (1838-1903) was a writer and interpreter to Captain Showers during the Jaintia War in 1862.He rose to the rank of Inspector of Police in 1875.His Mawkhar residence arranged the first 'magic lantern' show in Shillong. He assisted Colonel Bivar in 1877 in planning the lay-out of Shillong Town. For more on Jeebon Roy see Jeebon Roy Memorial Lectures (2000), Jeebon Roy Memorial Institute, Shillong.

¹³ Majumder, Lila ,op.cit.,p.11

¹⁴ Both Jamatullah and Golam Haider hailed from Hoogly district. Jamatullah had a departmental store very famous in the 1920s and presently Uncle's Shop. Golam Haider came to Cherrapunjee in 1849.Initially he supplied goods to the English East India Company. In 1862 he came to Shillong and took a plot of land on lease from Bivar Saheb. There he opened a departmental store that later housed Modern Book Depot and now is a park. The goods for the Sahebs in Shillong used to come from London to Calcutta and then to Shillong. Bhattacharya, Shyamadas, *Shillonger Bangalee* (in Bengali),(2004), pp.67-82,Patra Bharati, Calcutta

¹⁵ Majumder, Lila op.cit., p.22.

16 Ibid

¹⁷ Ibid,p.35

¹⁸ Ibid; she uses the word *raja*. The Khasi chieftains used to be dressed in silk and adorned with precious ornaments of gold, silver and other precious stones. May, Andrew J,(2012), Welsh Missionaries and British Imperialism: The Empire of Clouds in north-east India,p.156,Manchester University Press,Manchester.

¹⁹ Majumder, Lila op.cit. p.35.

²⁰ Ibid,p.36

²¹ Ibid,p.38

²² Ibid.p.46

²³ Ibid,p.58

²⁴ Ka kmie usually refers to a married woman and mother. Information supplied by Watklet War, Cherrapunjee; Khasi maids were extremely hardworking and could be hired on a salary of seven to eight rupees in addition to food. Dutta, SaradaManjari ,op.cit., p.110

²⁵ Majumder, Lila op.cit.p.14

²⁶ Ibid.p.32

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- ²⁷ Ibid,p.37
- ²⁸ Ibid,p.29
- ²⁹ Ibid,p.44
- ³⁰ Ibid, p.8; George V (1906-1936) became King of England after the death of his father Edward VII.
- ³¹ Ibid, p.44
- ³² Ibid,p.57
- ³³ Ibid,p.24
- ³⁴ Ibid,p.56
- ³⁵ Rabindranath Tagore reached Shillong on 11th October, 1919 and stayed there for three weeks. It was his first visit. He lived in *Brooke-side* in Rilbong which belonged to Kiron Chandra Dey, Chittagong Division Assistant Commissioner. Tagore visited only once the Shillong Brahmo Samaj. The residents of Shillong were lukewarm in their response to Tagore's visit as he had renounced his knighthood following the Jallianwala Bagh Massacre and had also written a strongly worded letter to Lord Chelmsford on 30 May 1919 condemning the incident. Later Tagore made two more visits to Shillong in1923 and 1927.
- ³⁶ Satyanarayan pooja is performed in honour of Lord Narayan –the preserver of the Universe. Usually carried out in honour of Lord Narayan/ Lord Krishna Harir *loot* involves sugar candy being distributed in a unique way. After the devotional singing or *kirtan* is over, handfuls of *batasa* or sugar candy are thrown up in the air and come spinning down on the floor much to the excitement and delight of all present especially little children.
- ³⁷ Sir Ashutosh Mukherjee (1864-1924) was a Bengali educator, jurist, barrister and mathematician.
- ³⁸ Dwijendranath Tagore was the eldest son and Hemendranath Tagore the third son of Debendranath Tagore and therefore Rabindranath Tagore's siblings.
- ³⁹ *Kartal* is an ancient musical instrument which consists of a wooden clapper that has discs and plates that produce a clinking sound when clapped together.
- ⁴⁰ SaradaManjari Dutta took the initiative to spread primary education among Bengali Brahmo girls in Shillong. She also acted as a midwive. She could be seen going from house to house caring for the sick women for whom she loved to cook. She also acted as an *acharjee*(priestess) in conducting Brahmo services in the *upasana griha* or the Brahmo

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Mandir. She was kind and compassionate and advanced for her times.

⁴¹ Nilmoni Chakraborty did a lot of work for the betterment of poor and illiterate Khasi villagers of Cherrapunjee. He served as a homeopathic doctor (albeit untrained) and treated the Khasis for various ailments –fevers, injuries caused by fall, pox and especially cholera. He propagated the message of Brahmo Dharma among the Khasis so that many Khasis became Brahmos in the first decades of the twentieth century. He established several primary schools where instruction was imparted in Bengali, Khasi and English. He also strove for temperance among the Khasis.

⁴² Majumder, Lila ,op.cit., p.65

⁴³ See N. Passah, Amena, *No Labour, No Battle: A Re-look at the Khasi-Jaintia and Garo Corps of World War I* in Proceedings of the North East India History Association, (2010), pp288-304,edited and published by Amrendra Kumar Thakur, Shillong.

Poverty and Deprivation in Manipur: An Analysis

Thiyam Bharat Singh*

Abstract: The main objective of this present study is to examine the twin issues of poverty and deprivation in Manipur. Data on poverty and deprivation are based on a survey done on the estimation of poverty in Manipur (2019). Based on quantitative and qualitative data, we find that poverty as measured by the calorie-norm methodology is widespread in sixteen districts of Manipur reflecting a relative deprivation of consumption for minimum energy requirements. Poverty is found to be concentrated in the remote villages of hill districts. Lack of communication, exclusion of remote villages, unemployment, landlessness, low productivity, low income, and lack of healthcare facilities are contributing to poverty and deprivation. The study also observes high human poverty in rural areas of Manipur indicating a social deprivation in health, education and income. Social hierarchical order as a part of the social system may be considered a sharp social device to generate poverty and deprivation. The developmental gap between hills and valleys and the exclusion of remote villages in the hills are pushing people into the poverty trap and deprivation. The study suggests an inclusive development giving priority to remote villages of hill districts and other marginalised communities for the reduction of poverty and deprivation.

Keywords: Poverty, Deprivation, Social Exclusion, Hills, Valley and Marginalisation

Introduction

Poverty is defined in terms of capability deprivation – lack of capability to live a minimally decent life – rather than the lowness of income (Amartya Sen, 2004). Social exclusion can be viewed as an analytical concept that directs us to how social structures can generate poverty (Gore & Figueiredo, 1997). De Haan (1999) makes a strong case for the use of social exclusion, stressing that it focuses on central aspects of deprivation, is equally relevant

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to analysis and policies, and directs us to the fact that deprivation is a multidimensional phenomenon. Processes of exclusion can be linked to deprivation or impoverishment in a multidimensional way, and the poor are likely to be excluded from broader participation in society. Social exclusion approach widens and corrects the individualistic interpretation of the monetary and capability approaches. It makes the social dimensions of poverty (structural characteristics of society and situations of groups) its central focus (Dominador, 2008). One aspect of social exclusion in India is exclusion from basic goods due to income poverty (Nayak, 1994). India faces the challenge of increasing poverty-reduction responsiveness to growth. Poverty is considered an essential dimension of social exclusion, which is closely connected with deprivation and discrimination, preventing the participation of individuals and groups in economic and social life in the development process in Manipur (Singh, 2014).

In sum, deprivation is a multidimensional concept, and social exclusion is linked with deprivation, and the poor are likely to be excluded from their participation in social and economic life. Literature on poverty, social exclusion and marginalisation shows a link between poverty and social exclusion or poverty and deprivation. Poverty may push people into the domain of social exclusion, but it is also true that social exclusion may also push people into deprivation. There is a perception that social hierarchy is a social device which generates poverty, deprivation and social exclusion. In this context, inclusive development is highly needed to achieve the goal of social inclusion and welfare.

Profile of Manipur

Manipur is situated in the Northeastern region of India, bordering Myanmar in the South, Nagaland in the North, Mizoram in the South-West and Assam in the West. Manipur's land and geography differ from the rest of the country. For instance, the area covers a geographical area of 22,327 sq. km, constituting 0.7 per cent of the total land surface of India. About 90 per cent of the total area (20,089 sq. km) is covered by hills, while the remaining area makes the valley area 2,238 sq. km. Manipur is made up of sixteen districts. While the hill districts consist of (i) Senapati, (ii) Kangpokpi, (iii) Tamenglong, (iv)

Noney, (v) Churachandpur, (vi) Pherzawl, (vii) Chandel, (viii) Tengnoupal, (ix) Ukhrul and (x) Kamjong, the valley comprises 6 districts namely (xi) Imphal East, (xii) Imphal West, (xiii) Bishnupur, (xiv) Jiribam, (xv) Thoubal and (xvi) Kakching. Districts in the hills of Manipur have recorded larger areas as compared to the areas of valley districts. According to census data (2011), the figure of the population rose by over 5 lakhs from 2001 to 2011 and it accounted for 28.56 lakhs with a population density of 18 per sq. km. Out of the total population, males accounted for 14. 39 lakhs while females accounted for 14. 17. There are seven Scheduled Castes communities and more than 33 different Scheduled Tribes communities in Manipur. In terms of population, Imphal West and Imphal East districts in the valley registered the highest figure as compared to other districts. Data shows that valley districts recorded the maximum figure in terms of sex ratio and population density as compared to hill districts with increasing urbanization in the Imphal West district. According to the Economic Survey of Manipur (2020-21), the proportion of the urban population to its district population is found to be highest in Imphal West with 62.33 per cent among valley districts and the percentage of urban population to its district population is found to be highest in Ukhrul district with 14.78 per cent among the hill districts. The least concentration of urban population is found in Senapati District with only 1.56 per cent, and the second least in Churachandpur District with 6.70 per cent. Agriculture plays a vital role in the economy of Manipur, as evidenced by its major contribution to the State Domestic Product, with 52.81 per cent of the workers in Manipur engaged as cultivators and agricultural labourers. However, the performance of agriculture in the State mainly depends on timely rainfall and weather conditions. Recent data also shows that the primary sector showed a growth rate of 4.3 percent in the year 2019-20 over the previous year and it showed a growth of 9.2 percent in 2020-21. Further, it has been estimated to grow at 7.9 percent in the year 2021-22 The fluctuation in the proportion of the primary sector to the State Domestic Product in Manipur may be due to the variation in the performance of agriculture.

Objectives and Methodology

The main objective of this present study is to examine the twin issues of poverty and deprivation in Manipur. Data on poverty and deprivation are based on a survey done on the estimation of poverty in Manipur (2019). In this study, the non-income approach of poverty (i.e. calorie norm poverty) is mainly used to look at the phenomenon of poverty. The calorie norm (minimum calorie requirements) approach basically reflects the relative deprivation of food in society. Particular mention may be made of calorie norm method that is used to estimate poverty in Manipur on the Report. It is done by collecting detailed information about the (last 24 hours) activities of household members. Then, the monthly household consumption is compared with the monthly energy requirement. On the one hand, if the household consumption is less than the energy requirement, then the household is considered poor. On the other hand, if the household consumption is more than the energy requirement, then the household is considered non-poor. One of the merits of non-income approach is that it does not use Consumer Price Indices as done in the other case. Thus, the study estimates poverty in Manipur by identifying the total number of households that fall short of consumption in relation to energy requirement

Primary data are also collected from the field visits, adding some qualitative information to the study. The present paper also uses data from different other sources like NSSO (NSS Reports on Consumer Expenditure Surveys), Economic Surveys, Directorate of Economics & Statistics (Government of Manipur), Vision 2020 of the Ministry of Development of North Eastern Region, North Eastern Council (NEC), Books, Articles, Journals, Seminar Papers, Conference Papers, Working Papers, various Ph.D Thesis, etc. Further, a wide range of literature has also been examined for the current study. The paper has been organised into six sections. Section I presents an introduction to the study. Section II provides a profile of Manipur. Section III provides objectives and methodology. Section IV lists out challenges of poverty. Section V presents issues of deprivation. Section VI provides the findings and conclusion of the study.

Challenges of Poverty

Poverty is said to be widespread in the hill districts of Manipur due to the underdevelopment of its region. The unique geographical condition of the hill districts and the long-term neglect by the State are responsible factors for causing a development gap. Because of this reason, the majority of the people who inhabited the hills are likely to fall below the poverty line. The State Planning Department, in its Eighth Five-Year Plan (1992-1997), estimated the district level poverty ratio of Manipur and data shows that the Chandel district of Manipur recorded the highest poverty ratio of 64. 07 per cent, followed by Tamenglong with 55.1 per cent, Ukhrul with 52 per cent and Churachandpur district with 51.78 per cent, respectively. This clearly confirms that poverty was highly concentrated in the hill districts of Manipur. The poverty ratio was the lowest in the Bishnupur district, with 38.0 per cent among all the districts of the State. Table 1 presents data on the poverty of Manipur and the country as a whole during 1973-74 to 2009-10.

Table 1: Poverty Ratio in Manipur and the Country (%)

Year	Manipur All India		
1973-74	49.96	54.88	
1977-78	53.72	51.32	
1983	37.02	44.48	
1987-88	31.35	38.86	
1993-94	33.78	35.97	
1999-00	28.54	26.10	
2004-05 (Based on MRP)	13.20	21.80	

2004-05 (Based on URP)	17.30	27.50
2009-10*	47.1	29.8

*Tendulkar Methodology; Source: Planning Commission, Government of India (2012) Note: MRP: Mixed Recall Period, URP: Uniform Recall Period

It may be observed from the table that about 47 per cent of the population in Manipur lived below the poverty line in 2009-10, which was higher than the all-India average. The poverty rate of Manipur had been continuously declining from 1973-74 to 2009-10, except for a marginal rise in poverty in 1977-78. However, the poverty rate in Manipur had fallen in 2004-05 to 13.20 per cent (based on MRP) and 17.30 per cent (based on URP), respectively. This data indicates that the poverty of Manipur deteriorated in the beginning, and the situation slowly improved in the following years. However, the situation of poverty again became worse in 2009-10 in Manipur. Recent data on poverty in several States of India found that urban poverty is very high in Manipur, Chhattisgarh has the highest percentage of people living below the poverty line with 39.9 per cent, Jharkhand stands in the second place with 36.96 per cent of the population living below the poverty line, Manipur recorded the third position in terms of Below Poverty Line (BPL) with 36.89 per cent and Arunachal Pradesh accounted for 34.67 per cent of the population living below the poverty line.

A recent survey conducted by the State Planning Department, Government of Manipur (2019) estimated poverty in Manipur in 16 districts by selecting 8,000 households during the period 2017-19. The survey spread over 115 wards in urban areas and 191 villages in rural areas of 16 districts of Manipur. The study collected information from 2,280 urban households and 5,720 rural households in Manipur using three methodologies, i.e., (i) Calorie Norm Methodology, (ii) Tendulkar Committee's Methodology and (iii) Rangarajan Committee's Methodology. Significant findings are given as follows:

(i) 55 per cent of the total population in Manipur or 15, 76,564

- poor persons are living below the poverty line in Manipur and of this 3, 55, 423 are urban poor and 12, 21, 141 are rural poor (Calorie Norm Methodology)
- (ii) 9.4 per cent of the total population in Manipur or 2,68,302 poor persons are living below the poverty line in Manipur and of this 39,677 are urban poor and 2,28,625 are rural poor respectively (Tendulkar Committee's Methodology) and
- (iii) 13 per cent of the total population in Manipur or 3,71,177 poor persons are living below the poverty line in Manipur and of this 97,693 are urban poor and 2,73,484 are rural poor respectively (Rangarajan Committee's Methodology)

The detailed district-wise poverty ratio of Manipur (based on the Minimum Calorie Requirements) is presented in Table 2.

Table 2: District Wise Poverty Percentage of Manipur (Calorie Norm)

Sl. No	Districts	Rural Poor %	Urban Poor %
1	Imphal West	33.00	20.40
2	Imphal East	53.20	69.40
3	Bishnupur	48.30	45.90
4	Thoubal	43.00	44.60
5	Kakching	45.60	50.80
6	Jiribam	24.40	43.80
7	Churachandpur	82.00	67.70
8	Pherzawl	77.90	0.00
9	Senapati	68.30	0.00
10	Kangpokpi	72.10	57.80
11	Ukhrul	71.80	46.40
12	Kamjong	98.00	0.00
13	Chandel	67.50	0.00
14	Tengnoupal	48.30	52.00

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16	Tamenglong Noney	77.00 80.80	80.00 0.00
Total	Manipur	60.00	42.00

Source: Estimation of Poverty in Manipur (2019), Planning Department, Manipur

The table shows that Kamjong, one of the hill districts bordering Myanmar, has recorded a percentage of 98 per cent of rural poor persons, followed by Churachandpur district with 82 per cent, Noney district with 80.8 per cent, Pherzawl district with 77.9 per cent and Tamenglong district with 77 per cent respectively. Districts with the lowest percentage of rural poor are observed in Imphal West district, estimated at 33 per cent, followed by Jiribam district with 24.4 per cent, Thoubal district with 43 per cent, Kakching district with 45.6 per cent and both Bishnupur and Tengnoupal districts with 48.3 per cent each respectively. It may be observed from the table that Tamenglong district has recorded the highest percentage of urban poor, which has been estimated at 80 per cent, followed by Imphal East district with 69.4 per cent, Churachandpur district with 67.7 per cent, Kangpokpi district with 57.8 per cent and Tengnoupal district with 52 per cent respectively. Imphal West district registered the lowest proportion of urban poor people with 20.4 per cent, and the other lower urban poverty ratio was observed in Jiribam district with 43.8 per cent, Thoubal district with 44.6 per cent and Bishnupur district with 45.9 per cent, respectively. Thus, it may be observed from the table that poverty is significantly high in the rural areas of hill districts as compared to the districts in the valleys of Manipur. This situation may be due to the exclusion of remote villages in the hills. As social exclusion is linked with poverty and deprivation, people in the remote villages of hill districts are likely to be excluded from broader participation in social and economic life. A study by Gonmei (2013) argued that the structural shifts during the past decade in the economy of the hill areas of Manipur revealed a marginal growth in agriculture and manufacturing. Characterised by predominant rural agriculture associated with low productivity and isolated rural life, the application of modern economic methods remained one of the fundamental challenges being faced in the hill districts of Manipur. Various studies show that poverty is concentrated not only in the hill districts of Manipur but also in different parts of the valley areas. Kumar, N. Roshini (2014) conducted a study in the Bishnupur district of Manipur by selecting 170 households in two towns in which 110 households belonged to rural areas, and the remaining households were selected from urban areas. The study's findings showed that Scheduled Tribes (ST) households generally faced greater intensity of poverty. For example, about 58 per cent of the rural ST households lived below the poverty line, while 50 per cent of ST urban households lived below the poverty line. This data indicates that the poverty ratio of ST households is relatively high for both urban and rural areas of the Bishnupur district of Manipur. The study shows that majority of the poor are agricultural labourers. Rural poverty is inversely related to agricultural production, productivity and per capita income.

It is believed that agriculture is an engine of economic development and is an employment-driven sector. The primary sector (agriculture) contributes more than 20 per cent to the Net State Domestic Product, employing more than 50 per cent of the population in the economy. There is great potential for poverty reduction if agriculture is well developed in Manipur. In a related study by Janatun Begum (2015) on poverty alleviation programmes in the valley of Manipur, it is found that 80 per cent of the households lived below the poverty line in Thoubal district, followed by the Bishnupur district. Poverty is inversely related to the size of landholdings and correlated with landlessness. The majority of the poor households included marginal farmers, small farmers and agricultural labourers. Nongpok Sanjenbam is one of the villages in the Imphal East district of Manipur. It has got about 135 households with a population figure of 500. Hanghal Ninglun (2008) study in Nongpok Sanjenbam found that the village was mired in poverty lacking basic facilities. Most of the villagers worked as agricultural labourers. However, very recently, community-based development measures have been taken up in the village. Around 200 women were employed at the looms weaving the panel (a traditional women's wear) and other traditional clothes. The women did not undergo training because their skills were inherited from the previous generation. Weaving is the primary source of income. The study by Kumar, N. Roshini (2014) found that the average condition of the agricultural labourers is not encouraging as compared to

non-agricultural households. The poverty ratio for agricultural labourer's households accounted for 33 per cent in rural areas.

The poverty situation in Manipur is mainly associated with its illiteracy, low income, farm-work, rural communities, marginalised social groups, geography, social norms and neglect. According to the report on poverty estimation in Manipur (2017-20), poverty is not caused by the landlessness of people in Manipur but is caused by the communication gap, lack of awareness, illiteracy, unemployment and exclusion of remote villages. Poor people do not have access to relevant information, and as a result, they are not aware of developmental schemes. Social exclusion is both a cause and consequence of poverty in Manipur. Several members of different communities such as ST, SC, OBC and Minorities have a higher chance of becoming poor in society. The study has covered more than 60 per cent of households that belonged to marginalised sections of the society; out of this, 80 per cent belong to rural areas of Manipur. Further, 43 per cent of the households fall into the low-income category and out of this, 77 per cent belongs to rural Manipur.

To sum up, poverty (as measured by the calorie-norm methodology) is widespread in sixteen districts of Manipur, which indicates a relative deprivation in the consumption pattern of food. There is also deprivation in health, education and living standard, as evidenced by higher Human Poverty Index (HPI). Poverty has been shown by lack of communication, exclusion of remote villages, unemployment, landlessness, low productivity, low income, illiteracy and lack of healthcare facilities. Since poverty is closely interrelated with the agricultural sector of the economy, there is a high chance of the rural population falling below the poverty line if the agricultural production is uncertain due to variation in monsoons. It may be particularly mentioned that the outbreak of the Coronavirus pandemic followed by the imposition of lockdown, curfew and the containment measures adopted by the government might have significantly enhanced the poverty situation in Manipur. The tangible impact is found in the closure of markets, shops and hotels.

Issues of Deprivation

Deprivation is said to be a multi-dimensional phenomenon. The processes of exclusion can be linked to multi-dimensional deprivation or impoverishment, and the poor are likely to be excluded from more involvement in society. It may also be said that poverty and deprivation are two dimensions of social exclusion. In a study on social exclusion by Singh (2014), it is found that poverty is considered an important dimension of social exclusion, which is closely connected with deprivation and discrimination. The findings of the study show that poverty prevents the participation of individuals and groups in economic and social life in the process of development in Manipur. The level of poverty also varies subject to the changes in social groups, viz., SCs, STs, and others. Social exclusion, therefore, is a real problem that generates deprivation. That the level of poverty contributes to the exclusion process is a manifestation of social exclusion. Suggestion for "Inclusive Growth" as the means for empowering the disadvantaged group of people has been suggested by the study to overcome the cobweb of social exclusion. A report by the Government of India (2013) revealed that Manipur had been placed among the category of worst performing states in India in terms of poverty reduction and classification of States by growth rate per capita Gross State Domestic Product (GSDP). The percentage distribution of poor among Scheduled Caste and Other Backward Class in Manipur to a total number of poor was comparatively higher than the All India average. The level of development of a State is likely to be the consequence of a complex set of historical, cultural, and sociological factors.

There is a perception that poverty pushes people into the trap of marginalisation and social exclusion. Some researchers argue that social exclusion is causing poverty leading to deprivation and marginalisation. In a study by Singh (2013) on poverty, deprivation and social exclusion in two districts of Manipur viz., (Imphal West and Senapati district) using selected parameters such as household monthly per capita income and expenditure, unemployment, per capita land holding, illiteracy and unemployment, it is found that poverty ratio of urban households in Imphal West district was estimated at 38 per cent of the sampled urban households. The poverty ratio of rural households covered under the study was estimated at 58 per cent in

the Imphal West district of Manipur. In the case of the Senapati district, the study estimated the poverty ratio at 42 per cent for urban households, while the poverty ratio for rural households was estimated at 54 per cent. It may be noted here that the incidence of poverty was higher for both rural and urban Senapati areas than in the Imphal West district.

Multi-dimensional Poverty Index (MPI), developed by the United Nations, measures or estimates poverty in India by using three parameters, viz., deprivation in health, education and the standard of living. It basically identifies the number of persons who are multi-dimensional poor. A study on socio-economic conditions, inequality and deprivation in North East India by Konwar Paranan (2015) found that the value of MPI was higher in Assam in the Northeastern region. In terms of BPL families, Manipur recorded 46.7 per cent, followed by Assam with 40.9 per cent and Arunachal Pradesh with 37.4 per cent, respectively exceeding the all-India level (29.5 per cent) in 2011-12. It was observed that inequality was high in the growth rate of population (among demographic indicators), sanitation facilities (among the indicators of economic conditions), rail density (among indicators of infrastructure), average years of education, per capita monthly expenditure (in Rs) and population below the poverty line. Analysis of access to basic amenities, namely, drinking water, toilet facility and electricity, reveals the existence of large-scale State level variation.

The human poverty index generally measures deprivation in basic human development in the same dimensions as the Human Development Index. The variables used in this index are the (i) percentage of people expected to die before age 40, (ii) the percentage of adults who are illiterate, and (iii) overall economic provisioning in terms of the percentage of people without access to health services and safe water and the percentage of underweight children under five. In a research study conducted by the North Eastern Council (NEC) (2008) on poverty eradication in the Northeastern Region of India, it is found that human poverty (health, education and income deprivations) in rural areas was higher than in all India level (36.3 per cent) in Arunachal Pradesh (45.4 per cent) followed by Assam (45 per cent), Tripura (43.8 per cent), Nagaland (39.8 per cent), Manipur (38.2 per cent) and Mizoram (37.4 per cent). The same is lower in Sikkim (28.6 per cent) and Meghalaya (12.6

per cent). This indicates that there is social deprivation in health, education and living conditions in Manipur.

Research shows that poverty alleviation in the hills has been facing several fundamental problems, and the poverty of the hills is reflected in illiteracy, ill-health, unemployment, failure of commerce, and the general lack of development and the resulting dissatisfaction manifests in political agitations including the problem of insurgency in the hills. As regards poverty in the hills, a study by Gonmei (2013) rightly mentioned that the need for the economy of the hills is to bring about favourable changes in various existing institutional structures, social, economic, political, and technological. However, the nature of change must be in such a way that it will not lose its separate identity because the issue of tribalism is that institutions are the framework within which cultures thrive, and identities are formed. A study in two hill districts of Manipur (Chandel and Churachandpur districts) found that about 85 per cent of the families lived below the poverty line, which was found higher than the poverty ratio reported by the Tribal Bench Mark Survey (Serto Kom Thangneireng, 2000). The economy of tribal people is dominated by primary agriculture, indicating no sign of intense cultivation. Production is meant for consumption. The problems being faced by the ST community, particularly in the hills and rural areas, are multidimensional. Development processes of the tribals in the remote hills have remained unchanged due to a lack of education among the tribes. Tribals who settled at the valley and foot-hills were found better. Signs of poverty loomed large as one entered a village in the hill areas. One will witness a unique nature-the steep hill slopes, narrow and deep gorges and sharp ridges of the hills and mountain ranges. The study argued that tribal people and the State government live in a separate zone.

It is generally argued that there is a development gap between the hills and valley of Manipur, and as a result, poverty is concentrated in the hills of Manipur. In a research done by Shilshi (2007) on the tribal population in Manipur, it is mentioned that poverty continues to be the main problem with the tribal population. About 58 per cent of tribals lived below the poverty line. Poverty in the tribal parlance is the family that struggles to manage day-to-day food, or one who does not have enough grains to last for the year

is considered poor. A study by Singh (2007) on poverty in Manipur found a marked difference in the extent and nature of poverty between the valley and the hills of the State of Manipur. Uneven performance, lackadaisical implementation of the poverty alleviation schemes, and the failure of land reform measures in the hills are the main reasons for poverty in Manipur. The policy options for reducing poverty in Manipur depend not merely on promoting state economic growth but on considering the marked disparity between the hills and the valley. The poverty alleviation schemes need redesigning, proper planning and implementation, and close monitoring and public accountability. The scenario of social deprivation in Manipur may be summarised in Table 3

Table 3: Deprivation Based on different Factors in Manipur (In %)

Sl. No	Category	Yes	No	Total
1	Religion	27.00	73.00	100
2	Old Age	3.00	97.00	100
3	Political Factors	3.30	96.70	100
4	Economic Factors	2.70	97.30	100
5	Culture	4.00	96.00	100
6	Ethnicity	4.00	96.00	100
7	Caste	4.20	95.80	100
8	Mentally Challenged	9.00	91.00	100

Source: Government of Manipur (2019). "Estimation of Poverty in Manipur 2019", A Report Submitted to the State Planning Department, Prepared by the CSSEIP, MU under the supervision of Thiyam Bharat Singh.

It may be observed from the table that the severity of deprivation is found to be very high in religion as compared to others. Deprivation based on religion accounted for 27 per cent. Deprivation based on other reasons like old age, political reasons, economic reasons, culture, ethnicity, caste etc., is evident, but the percentage of deprivation is very less.

It is believed that Scheduled Caste people in Manipur are historically-socially-politically-economically socially excluded communities. In this

regard, Singh and Ningthoujam (2021) studied the marginalisation of Scheduled Castes (SCs) communities in Manipur. The findings of their study show that socio-economic indicators of SCs communities in Manipur have not yet improved over the years. There is poverty and low literacy with an inadequate infrastructure that exacerbates the people to fall into the poverty trap. SCs population is lagging in every development parameter. Agriculture is still one of the significant sources of survival for both the Lois and the Yaithibi communities. Only a small number of them have successfully got government jobs. Both the employed and the unemployed people are engaged in brewing, silk rearing, weaving and animal husbandry. Traditional types of techniques for cultivation are still practised leading to low production. There is no proper facility for undertaking trade and business in the ST areas except in Sekmai and Kakching. The acute lack of cultivable land is the main reason for low production and severe financial problems.

In sum, deprivation of social groups associated with isolation of people from societal relations can lead to economic impoverishment. Social hierarchical order as a part of the social system may be considered a sharp social device to generate poverty and deprivation. Social exclusion may be the cause of poverty and the consequence of poverty. It is generally believed that social exclusion is a process through which people cannot participate in social and community life. Therefore, it is purely a multidimensional concept. Any social group may be excluded based on religion, education, gender, caste and community. Policy formulation should take into account the social order for a reduction of poverty and deprivation. In Manipur, many social groups may become poor and face deprivation leading to the cobweb of social exclusion if the State Government does not urgently take inclusive measures.

Findings and Conclusion

The overall findings show that poverty (in terms of calorie-norm methodology) is widespread in sixteen districts of Manipur, reflecting a relative social deprivation. Poverty is found to be concentred in the remote villages of hill districts. Lack of communication, exclusion of remote

villages, unemployment, landlessness, low productivity, low income, illiteracy and lack of healthcare facilities are contributing to poverty and deprivation. The study also observed high human poverty in rural areas of Manipur, indicating social deprivation in health, education and income. Social hierarchical order as a part of the social system may be considered a sharp social device to generate poverty and deprivation. The developmental gap between hills and valley and the exclusion of remote villages in the hills are pushing people into the poverty trap and deprivation. Findings show that poverty and deprivation are also closely interrelated with the agricultural performance of the economy because the majority of the rural poor are found to be agricultural labourers, farmers and landless farmers. As a result, there is a high chance of the rural population becoming impoverished if agricultural production falls due to monsoon variation. In addition, the present study finds that ST communities are being marginalised and lagging behind in every development parameter. Their living conditions have not yet improved in Manipur over the years. Low literacy and inadequate infrastructure are serious problems that exacerbate them to fall below the poverty line. Particular mention may be made here that the Government of India has recently allocated 93,007.95 quintals of rice per month under the Prime Minister Garib Kalyan Anna Yojana (PMGKAY) - Phase III for Manipur State under the National Food and Security Act (NFSA). The total number of poor beneficiaries under AAY (1, 76, 699) and PHH (16, 83,460) has been calculated at 18, 60, 159. This figure is very close to the estimated poverty ratio of 55 per cent of the total population or 15, 76,564 poor persons in Manipur, as mentioned earlier in this study (using Calorie Norms).

Further, it may be added here that the outbreak of the Coronavirus pandemic followed by the imposition of lockdown, curfew and the containment measures adopted by the government might have significantly enhanced the poverty situation in Manipur as poorer households have been exposed to the risk of this coronavirus. Media reports confirm that the imposition of lockdown followed by the closure of significant markets, shops and hotels is tangibly impacting the general population and poor households in particular. In this connection, a report on (the impact of one year of Covid-19 in India on the jobs, incomes, inequality, and poverty)

prepared by Ajim Premji University (2021) reveals that the pandemic has further increased informality causing a severe decline in earnings for the majority of workers resulting in a sudden increase in poverty. Women and younger workers have been disproportionately affected.

Lastly, the study suggests an inclusive development for the reduction of poverty and deprivation. Priority should be accorded to remote villages of hill districts and other marginalised communities of Manipur. Initiatives should also focus on economic infrastructure, social infrastructure, diversification of agriculture and productive activity. The development projects targeting Manipur State should enhance the tribal/agricultural livelihood sources and improve the overall literacy rates of the population. Inclusive development by leaving no one behind should be the suggestion for closing the developmental gap between hills and valleys and breaking the cobweb pushing people into the poverty trap and deprivation. The study suggests an inclusive development giving priority to remote villages of hill districts and other marginalised communities for the reduction of poverty and deprivation.

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Endnotes:

¹ It may be mentioned here that Manipur had nine districts before 2016, namely (i) Imphal West, (ii) Imphal East, (iii) Thoubal, (iv) Bishnupur, (v) Chandel, (vi) Tamenglong, (vii) Ukhrul, (viii) Senapati and (ix) Churachandpur district. Later, the State created another seven additional districts.

- ³ Government of Manipur (2022), "Press Note on Estimates of State Domestic Product of Manipur 2016-17 to 2021-22", Directorate of Economics and Statistics Government of Manipur.
- ⁴ The report is the outcome of a survey conducted in 16 districts of Manipur by selecting 8000 households during the period 2017-19. The survey spread over 115 wards in urban areas and 191 villages in rural areas of 16 districts of Manipur. The study collected data from 2, 280 urban households and 5,720 urban households in Manipur. The sample size of
- ⁵ Calorie norm method is used to estimate poverty in Manipur in the Report. It is done by collecting detailed information about the (last 24 hours) activities of household members. Then, the monthly household consumption is compared with the monthly energy requirement. On the one hand, if the household consumption is less than the energy requirement, then the household is considered poor. On the other hand, if the household consumption is more than the energy requirement, then the household is considered non-poor. One of the merits of the non-income approach is that it does not use Consumer Price Indices as done in the other case. Thus, the study estimates poverty in Manipur by

² Economic Survey of Manipur 2021

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identifying the total number of households that fall short of consumption in relation to energy requirements.

- ⁶ Zero figure represents districts with no urban areas after the creation of the districts in 2016.
- ⁷ This index has made a significant departure from the traditional measure of the poverty line through the income criterion by capturing the deprivation of people in respect of education, health and standard of living
- ⁸ The report is the outcome of a survey conducted in 16 districts of Manipur by selecting 8000 households during the period 2017-19. The survey spread over 115 wards in urban areas and 191 villages in rural areas of 16 districts of Manipur. The study collected data from 2, 280 urban households and 5,720 urban households in Manipur. The sample size of households by districts and by rural-urban for sixteen districts of Manipur has been arrived by taking proportional sampling
- ⁹ Konwar Paranan (2015)