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Tradition and Modernity in Bhutanese Life

Rajat Kanti Das Editor, Journal of Indian Anthropological Society

Our understanding of the interaction process between tradition and modernity is that it follows a set pattern, whereby tradition gradually gives way to modernisation. But it has its own specific character depending on the specific cultural and socio-political background. A visit to Bhutan will confirm this. The first impression one gets is that there is a blending of traditional Bhutanese cultural ethos and modern Western way of living. No doubt, the spread of modern education has ushered in a whole new set of ideas, new outlooks and worldviews which are alien to Bhutan in its traditional form. It sometimes creates rift between the modern educated youth and the older generation, which is even more glaring in the field of culture. A leading scholar on Bhutan has the following observations to make which probably apply to all changing traditional societies and cultures. Lopen Karma Phuntsho(2013) observes:

"The Bhutanese protégés of modern education today represent a culture in transition and change. Unlike the older generation who are mellow in traditional context, they have neither a strong footing in the old traditional setting nor a firm ground in the new and modern affair of things. Yet, with one foot in modernity based on the Western model and the other in the traditional past, they live a diachronic life, which is at once very novel, chaotic and confused but also adventurous and dynamic. Their aspirations, values, and priorities in life vastly differ from those of their parents. It is a new order of life, which is somewhere between tradition and modernity, between the ancient roots of the East and new trends of the West but largely a shallow populist pursuit of life without a firm grounding in the artistic and intellectual traditions of either one...most modern Bhutanese are in a cultural limbo, having relinquished the old but not fully reached the new. Their cultural identity formed from a shaky convergence of the two, is as amorphous as it is insecure. Symptoms of such insecurity and immaturity can be seen in the poor sense of the aesthetic taste and a peculiar sense of sophistication and the hybrid culture which begins to emerge."

Harsh words indeed, but these are not without substance. The sense of cultural insecurity and hollowness might have prompted our young tourist guide to make sarcastic remarks about the Lama, for whom we were waiting to get an entry into the prayer room of an ancient Dzong(the sacred fortress) at Paro. "Our Lama was having his afternoon siesta. After all, he also needed rest for a while after lunch", the guide jokingly said. Yet, search for meaning

of the old tradition in the present context is still on and the contemporary mind is not without respect for the religious preachings. Love, compassion, respect are frequently used words and it is difficult to believe that they hold little meaning for the young mind. Family bondage and community feeling are still strong enough to keep them attached, ever so loosely, to the tradition of the community they belong to. Of course, day by day ambivalence in their behaviour pattern is becoming more and more pronounced. On the one hand, they give an impression of a disciplined mind that would strictly follow the zebra-line crossings, religiously contribute voluntary labour to maintain a clean environment, and on the other hand, they indulge in drinking, sometimes in the open, and behaving like alcoholics.

The modernised young or those who are on the path of modernisation have now a say in almost everything and developed their own perception - be it old beliefs, behaviour and rituals meant for living in harmony with nature made up of natural and supernatural elements, or identifying the positive contributions of Buddhism to convert nature from a malevolent, destructive force to a wholesome habitat, or making people aware of the benefits derived from direct intercourse with nature. Again, there is no denying the fact that being equipped with modern education they are more inclined towards economic wealth and prosperity, quickly adopting a material, consumerist lifestyle, as a result of which they become a party to unchecked exploitation of nature in different forms. However, as a matter of approach, be it state-centric or people-centric, the traditional wisdom embodying nature is purposefully blended with the modern outlook. But there is a difference. Non-human actors have faded away only to pave the way for living human beings to take up concrete programmes to conserve the environment. Bhutan can now boast of possessing around seventy per cent of the forest cover. Conservation is activated through Western environmentalist discourse, effective legislations, and, above all, by making people aware of the need to protect and conserve environment. Environmental education like all forms of formal education occupies an important place in people's worldviews and here state sometimes imposes itself in no uncertain terms. Wide stretches of nature which used to be earmarked as spiritual places in the forms of holy mountains, sacred lakes, and groves as seats of divine power have given way to forest reserves and protected enclaves.

Women have made their presence increasingly felt in almost every sphere of life. Notwithstanding their household engagements, they have entered into the outside world in a big way. They are now in the markets managing shops, in hotels doing all types of job, in government offices and, what is more, they have proved themselves to be intent cultural performers. Their cultural exuberance gets manifested in the traditional dances they perform, the traditional artistic forms they create, the handicrafts they produce. Even then, the gender difference is more than evident. We did not come across any female guide, any woman taking active role in religious functions associated with the sacred fortress (Dzong). Incidentally, the Dzongs were not only centres of

administration, they used to play extremely important religious and cultural roles. The difference is even more revealing at the family level. In adopting family names, one gets the impression that women do not get a fair deal. It is customary for the Bhutanese to use first names which are gender-neutral. The gender of a person is revealed in the second name. But this is no longer possible when the girl adopts her father's second name as her second name. Traditionally also, Bhutanese used to receive their names from religious figures and did not have the tradition of a family name. What is evident is that the females are required to use patriarchal symbols by way of cultural representations. Even today, a man having multiple wives is not a rare phenomenon. An enlightened young man, when confronted with this embarrassing question, tried to give his own justification saying that there was no bar for a woman to exercise her own choice and she could go for more than one man as her partners. But he could not cite any specific case, or probably he wanted to avoid making any specific reference of it, lest it would expose their women in poor light.

Gender equality, or craving for it, is more a modern phenomenon increasingly perceptible in economic life, educational performance, participation in social service sector and Bhutan's overall development programmes. The much talked about Gross National Happiness (GNH) became a hot topic of discussion by the end of the twentieth century. The new exposition of GNH was made mainly by Jigme Y. Thinley, which was based on four concrete pillars, namely, socioeconomic development, good governance, cultural preservation and environmental conservation. Later, the Centre for Bhutan Studies developed a complex but comprehensive set of seventy indicators under nine domains of psychological well-being, living standard, good governance, health, education, time use, community vitality, cultural diversity and consumption. Attempts are being made to develop the GNH index further on the basis of new indicators. However, the main thrust of the GNH index centres around all important social, cultural, economic and ecological factors. In this exercise the wisdom of traditional living is not completely lost sight of. Their increasing international exposure notwithstanding, tradition still carries weight in their life. The question is whether the display of traditional elements is tutored and followed more out of compulsion than as a spontaneous expression of mind. Even if it is compulsive, outwardly there is hardly anything to suggest that they are dissatisfied with the practice.

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Anthropology in Contemporary India

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Abstract: Anthropology in contemporary India has two fairly distinct personalities. As an 'academic discipline', the subject has evidently borrowed from the West and seems totally inclined toward the Western tradition of thoughts and research strategies. As a 'body of knowledge,' particularly in the Indian context, it has a set of unique, if not pristine qualities. What is rather unfortunate is the apparent indifference of the fellow professionals over here even to acknowledge these as facts.

For a healthy growth of Anthropology in India, it is extremely important as well as urgent that the academic discipline receives its sustenance from the body of knowledge, which emerged out of indigenous experiences and experiments. So, if Anthropology needs to redefine and / or remodel itself in terms of scopes as well as research strategies, it may unhesitatingly be done.

Key words: Anthropology, contemporary India, Western tradition

Available accounts of development of Anthropology by and large appear rather geo-specific, as if all ideas and initiatives towards crystallization of the discipline have emerged out of experiences and experiments of the societies located in and around the North Atlantic region of the World. A careful scrutiny of Indological literature establishes with evidence that reasonably serious endeavours had been initiated in India for systematization of a knowledge that later could qualify to be known as Anthropology. Possibilities for similar development of thoughts elsewhere, particularly centering around the ancient civilizations cannot be altogether ruled out. In fact, there is need for a fresh look at the origin and development of Anthropology, taking the historical antecedents in view. This is particularly important in case of societies and cultures that underwent experiences of growth of civilization as well as of periodic phases of eclipses because of colonial or certain other interjecting phenomena that came in their way. The ground realities thus had to be multi-layered entities, often violating the sequences of periodicity. Having this background in view, the account that follows proposes to examine the related issues with specific reference to India. Since contemporary phenomena are at times expected to reflect on experiences of the past, the given narration instead of being extra-sensitive to the sequences of time, may by and large prefer to depend on contextual requirements.

Ι

There have been multiple attempts to systematize the knowledge of Anthropology. Incidentally, those who are fairly well known to have involved themselves in this respect are all from Euro-American background. Such attempts seem to have altogether been based mostly on contemporary phenomena, as had been experienced by the societies and cultures located around the North Atlantic region. What had been the position elsewhere and in the past? Was the rest of the world altogether void of anthropological knowledge?

Contemporary Euro-American initiatives appear rather insensitive to the historical antecedents, particularly of the experiences of the so-called 'yet-to-be developed nations'. Serious attention to some such facts could have led to a balanced as well as comprehensive perspectives of Anthropology. In spite of all seriousness of scholars and their painstaking but praiseworthy attempts, the available accounts are found rather deficient to speak for Anthropology as a whole. The magnitude of variation as observed the world over, both in socio-cultural and biological terms, is bound to make any such endeavour often difficult. But the awareness of insufficiency itself seems quite crucial, since in the long run it is likely to help development of a fairly comprehensive approach to Anthropology.

The scope of the subject as a whole and the apparently disparate nature of its sub-disciplines are to a certain extent responsible for this predicament. Physical Anthropology as a sub-field, except for politicization of the concepts of race and caste, stands out quite distinctly on a value-neutral ground. The sub-field of Palaeo-Anthropology in this context, because of its association with prehistoric cultures, may have some chances, very scarcely though, to reflect culture-specific bias. The social-cultural anthropological observations, in comparison are required to be made cautiously, deliberately making them free from the specificities of any concerned society and culture.

Π

Anthropology in contemporary India can evidently be appreciated in terms of a dichotomy: (i) Anthropology as a body of knowledge and (ii) Anthropology as an academic discipline. Under normal circumstances, the second option should have constituted a part of the former. Due to the over-powering sociopolitical influences from elsewhere, this was not to happen in pre-independent India. Even in contemporary India, perhaps because of certain cultural constraints, the desired merger could not yet to be that visible. In other words, despite availability of a reasonably rich body of indigenously grown anthropological knowledge in India, that could not carve out any space for itself in the syllabus of contemporary system of training and / or research in Anthropology. Hence, India's dependence on the Euro-American brand of Anthropology, particularly in the areas of thoughts and methodologies, even today seems near total.

The major texts on thoughts, that are often referred to toward systematization of the knowledge of Anthropology in India, are all from Euro-American extractions. For illustrations, we may refer to the following selected items: *History of Anthropology* (1910) by Alfred C. Haddon,

A Hundred Years of Anthropology (1935) by T. K. Penniman, The History of Ethnological Theory (1937) by Robert H. Lowie, The Rise of Anthropological Theory (1968) by Marvin Harris,

A History of Anthropology (1988) by Thomas Hylland Erikson and Finn Sivert Nielsen,

An Introduction to Theory in Anthropology (1997) by Robert Layton, History and Theory in Anthropology (2000) by Alan Barnard, (2000:01). One Discipline, Four Ways: British, German, French, and American Anthropology (2003). The Halle Lectures.

It is somewhat surprising that the observations of Dr. Chris Hann of Max Planck Institute of Social Anthropology, who favoured the publication of *The Halle Lectures* with his generous 'Foreword', went rather unnoticed, particularly when he took up the issue of possible contributions of China and India to the overall growth trajectory of Anthropology. This speaks of a kind of narrow vision amounting to substantiation of a position, as if even a civilization can grow and flourish without adequate support from any knowledge base.

There are about a dozen texts on contemporary anthropological thoughts authored by scholars of Indian origin. As hardly any one among them ever referred to any non-Western initiative, they at best qualify to be called as poor imitations of what has already been done by our colleagues from the West in a relatively more comprehensive manner. We, therefore, somewhat regretfully though, feel compelled to ignore them here and instead propose to highlight in brief a selection from classical Indian texts, having evident relevance to contemporary Anthropology.

III

The earliest Indian account that can be related to what is now broadly called Anthropology, goes back to the period of Smritis. One of the earliest Smritis: Manava Dharmashastra (literally, The Sacred Science of Man), dates approximately 1350 B.C. (Saraswati: 1993), is perhaps the most ancient text in Anthropology ever produced anywhere on the earth1. It is claimed to be more than 1000 years older than the first application of the word Anthropology as such, which is believed to have been used for the first time by Aristotle (384-322 B.C.). Through delineation of five basic principles like: (i) the principle of universe; (ii) the principle of one and many; (iii) the principle of inner-outer continuum; (iv) the principle of life; and (v) the principle of human organization; the Treatise presents the cosmic theory of man and accordingly maintains a distinction between two sets of reality which may broadly be understood in terms of (i) supra-sensory cognition and (ii) day to day mundane perceptions. Although the contemporary approach of Anthropology to man and society is to a certain extent essentially different from what gets reflected through the Smritis, the contribution of the latter in the historical development of the discipline, particularly in its delineation of boundary, appears fairly significant. As it would be evident from the details that follow, despite its cyclical nature of argument, the Manava Dharmashastra maintained a clear distinction between man as a self-contained individual and man as a member of the society. It is the interplay of self-contained individual and member of the society that approximates the true reality which manifests itself in the given situational context. In Manava Dharmashstra, most of which is attributed to Manu, the principle of human organization has been explained in terms of man-woman and parent-offspring relationships as well as three sets of orderings of : (i) subsistence; (ii) life; and (iii) desires. As has been envisaged in this principle, rules of human conduct involving marriage, inheritance, crime, and punishment, etc. represent a sort of transcendent law. According to this law, husband and wife are indissolubly united, the basic unit of human organization being formed in the law of indestructible unity of man and woman. With reference to parent-offspring relationship, it has been observed that as continuity of human family depends on the offspring, the husband, wife, and their offspring make a perfect social unit.

In the ordering of subsistence, human beings have been classified into four categories Brahman (different from the Brahmana which is assumed to have burst forth into the universe), Kshatriya, Vaishya, and Sudra; all of whom are believed to be the manifestations of the same reality; the cosmic man. In the said text, the ordering of life represents four phases through which all human beings are supposed to pass for ultimate return to the state of the primordial. They are (i) brahmacharya or the phase of spiritual disciplining for acquiring knowledge; (ii) grihastha or the phase of enjoying worldly pleasures through accumulation of wealth and procreation of children; (iii) vanaprastha or the phase of cultivating detachment; and (iv) sannyasa or the phase of ultimate renunciation of all worldly possessions and emotional bondages. Desires, in the said treatise, have also been put into a four-fold scheme like: (i) dharma or the desire for righteousness in the sense of duty; (ii) artha or the desire for fulfilment of mundane requirements; (iii) kama or the desire for sensual gratification; and (iv) moksha or the desire for ultimate liberation or the *nirvana*. This arrangement allows every individual to maximize gratification in life through ultimate submission to the cosmic rhythm (Saraswati: 1993).

Kautilya's Arthasastra dated around 320 B.C. in this respect is an extraordinary compendium of knowledge of science that had hardly many parallels². Apart from many insightful observations on statecraft, the treatise contributed substantially to our understanding of social structure, social organization, and economic arrangements of ancient India. For example, Kautilya in his *Arthasastra* considered formation of villages as one of the duties of government superintendents. According to his prescription, villages of agricultural farmers should consist of not less than a hundred families and not more than five hundred families belonging to *Sudra* (agriculturists and artisans) castes with boundaries extending up to 4,500 yards generally

delineated by rivers, mountains, forests, or such other natural landmarks. It is also prescribed that there shall be a fortress for every eight hundred villages. Lands developed for cultivation shall be given to tax payers only for life³. Lands allotted to those who do not cultivate them should be confiscated by the State and given to others who need and can cultivate them. Cultivators may be supplied with cattle, money, grains, etc. which they are liable to return after harvest. Elders among the villagers should look after the property of bereaved minors till the latter attain maturity.

Whosoever has crossed the age of copulation may become an ascetic after distributing the properties of his own acquisition among his sons. Adequate arrangements should be made for guarding agricultural fields, particularly those with standing crops. Lands belonging to the tribes should not be usurped by others and the tribal territories should be left more or less undisturbed even by the state.

The account of Kautilya is not entirely conclusive though, adequately suggestive about the concern for issues related to anthropological interest and to a considerable extent manifests the thoughts as reflected in *Manava Dharmashastra*. With no disregard to Herodotus, observations of Kautilya, who was almost a contemporary of the former, could undoubtedly bring the issues of Social/Cultural anthropological nature into sharper relief.

The earliest reference of physical anthropological nature could perhaps be traced from Charaksamhita⁴, approximately dated between the first and second century A.D., a knowledge that extended more or less uninterrupted up to the period of Susrutasamhita (around forth century A.D.)⁵. Vatsyayana, who is believed to have written during the early centuries of the Christian era, is often referred to by the Western oriented scholars as an authority of erotics⁶. His account, in fact, can qualify to be considered as an important constituent of the composite science which is now known as Ayurveda or the Indian System of Medicine. Vatasyayana was appreciably comprehensive in his approach to the study of human nature and culture and thus contributed substantially to the understanding of the undifferentiated areas of Physical and Social/Cultural anthropology. His attempt to establish relationship between morphic forms with expressions of temperament explored altogether a new ground that is yet to be fully appreciated. Vatasyayana's Kama-Sutra, as an important treatise on the ancient Indian system of medicine, can undoubtedly be regarded as an important classical scientific contribution. As elaborated by the author himself, there should be harmony in the three objectives of life namely, religion, wealth, and sexual pleasure. The principles of Kama-Sutra are meant to ensure social life in perfect harmony.

Apart from the account of social life of those days, as stated, Vatasyayana also attempted a classification of human types on the basis of their anthropomorphic forms and examined the possibility for any positive correlation of anthropomorphic forms with temperament and attitude toward

life. He, more or less in the same manner as Manu, attempted to define various forms of marriages and prescribed the code of conduct for married men and women. In spite of the evidences of such early initiatives, at a later date possibly due to apparent lack of continuity of the knowledge or evidently known interlinkages between successive stages of development of Anthropology as a body of knowledge, Indian Anthropology of the contemporary period by and large lean heavily toward the Western initiatives as its role model. Development of Anthropology as a body of knowledge and Anthropology as an academic discipline having a specific faculty in the university system are neither one and the same nor analogous, though the former by all means includes the knowledge associated with the latter. In fact, during their respective initial phases, the two sometimes received impetus from divergent sources. In the context of developing nations, who had mostly to redesign their academic curriculum as per convenience of their alien masters under the colonial system of administration, such differences are relatively more evident. In India, for instance, when continuity of the knowledge from the traditional past is not that difficult to presume, growth of Anthropology as an academic discipline evidently had to have a different background. With the introduction of the Western system of education, Anthropology also became a part of the socalled liberal tradition that grew afresh as an academic discipline primarily under the British patronage.

IV

It thus becomes apparent that although Anthropology as an academic discipline did not emerge in India until the early decades of the immediate past century, the Smritis or Dharmasastras of the pre-Christian era and other scriptures bear enough evidences to demonstrate that the scholars of ancient India did exercise their minds a great deal on the subject, the product of which would qualify as major contributions to the knowledge of Anthropology. Hence the roots of Anthropology as an academic discipline and as the body of knowledge in the Indian context are not one and the same, despite the fact that the former, as already indicated, by implication could ordinarily constitute a part of the latter. Under normal circumstances, the two traditions should have merged together to constitute a common stream. Due to certain queer but inherent reasons, this was not to happen in India. Since the Western liberal tradition of Anthropology grew in India along with the establishment of universities according to the European model and syllabus, the body of existing relevant scriptural as well the secular knowledge by and large did not find any space for themselves there. This in all probability had happened not necessarily due to any discriminatory design of the promoters of education as such but as a strategy of convenience, according to which the spirit of universal education could get smoothly disseminated. Since the knowledge hidden in Sanskrit texts for several centuries remained mostly unknown to the external world and there was practically little apparent continuity thereof

during the interim periods, the same neither could assimilate nor withstand the new trends of thoughts established through recent contacts and incorporated by the alien rulers, nor get represented in the syllabus of the modern universities of India. It may not be out of the place to mention here that those who provided academic leadership at the initial stage of establishment of educational institutions in British India, almost all of them had their initial exposures to the Western system of education. Hence it was rather natural that they tried to emulate the design of educational programme in India to which they were personally exposed and the very basis of the knowledge they were used to and confident about. Therefore, as yet no serious attempt has been made either to update information regarding the scriptural and secular knowledge of India or to establish a bridge between the body of indigenous knowledge and the academic discipline. As a result, even after several decades of experimentation with various systems of education in independent India, the body of indigenous knowledge and the academic discipline of Anthropology remain discrete identities and the former is yet to be extended with due honour and recognition. There is another factor that deserves a mention here. Since the scholars responsible for providing leadership at the initial stages of development of the modern universities in India were grown under alien tradition, they could not cross the threshold either to be able to effectively communicate with those who were brought up under indigenous tradition. As a result, scholars brought up under the alien tradition could neither transcend the boundary, nor treat the locally trained academicians as their equals. Scholars who grew up under the indigenous tradition did not claim any air of superiority though, they had a fairly high sense of self- esteem. Being exposed to the over-charged spirit of nationalism they seldom demonstrated extra-importance to their heritage but a few instances are there when they did not hesitate even to over-stretch their arguments. Hence, the two sets of the so-called elites had rather more disagreements among themselves than unanimity. Thus the question of any concerted action in order to bridge the gap between the comprehensions of the situation by the aliens and indigens remained a distant reality. Knowledge of Anthropology, however, whether delineated in terms of boundary of the academic discipline or otherwise, as already implied, did not altogether lack some traditional moorings. Incidentally, since the scholars in general who were responsible for ushering in the liberal system of education in India all grew up being exposed to the spirit of alien traditions, for a model they naturally fell back upon the wave of Anglo-Saxon tradition. This being the overwhelming spirit those days, the indigenous traditions failed to receive appropriate recognition. What is, therefore, considered as Anthropology as an academic discipline on the global plane, particularly the Social/Cultural Anthropology, has its moorings in the Western tradition. Accordingly, the experiences and experiments of the rest of the world, so far as the knowledge of Anthropology is concerned, mostly went unrecognized.

V

Continuous dependence of Indian Anthropology on the alien tradition, particularly of the Anglophile world, has become an imperative for a different set of reasons too. Since the original impetus for setting up the teaching institutions and departments in India came from that part of the world, its influence on the syllabi and use of standard texts and references that grew around that region was found handy as well as initially inevitable. As English was the medium of instruction at the level of higher education all over India, for both, the teachers as well as the students, their adoption was only natural. Despite the fact that such free use of texts and references from elsewhere became a source of impediment for development of such literature at the local level, their continuous use remained unabated. Further as research methodologies, theories, as well as concepts grew elsewhere, a great deal of energy had to be invested on their proper assimilation, correct understanding, and exact use. Once that art could be mastered, the natural inclination was to live with the same to the extent possible. In comparison, endeavours for original thinking and any serious evaluation of the existing theories, methodologies, and concepts were rather rare. Medium of instruction at the higher educational level was as such an important reason for impediment. Since the literature in existence grew under highly competitive professional situation, Indian initiatives in this respect were somewhat hesitant. Patronage received and the clientele in view had a fairy decisive role in this regard. Since such literature in English language has a relatively wider base of users, the publishers of them could invest a great deal more money for their qualitative presentation then what had been possible in case of local initiatives. The professional competence for such a purpose did not indigenously grow to the extent required either. As a result, whatsoever local initiatives were forthcoming, they could hardly be any match to those who had been already occupying the field. Further, India having many major languages spoken regionally, attempts to develop such literature in regional languages were even inconspicuous, since there could be sparingly any user for such literature.

Education policy as such is also an important factor in this respect. Since until recently Anthropology was never taught at the high school level and remained restricted as a part of the higher educational programme, there was practically no clientele for such literature brought out in regional languages. Under such circumstances, the proportion of energy spent on deciphering the exact meanings of concepts developed elsewhere appears to provide a relatively much higher premium than for any initiative for standardization of indigenous concepts and ideologies.

During recent decades, particularly after the independence of India, a number of changes have come about in various academic fields. A single factor that created a sort of chain reactions in this respect is the language policy at

the level of higher education. Since most of the universities in India have decided to impart training in the language spoken in the State, there was an instant demand for suitable texts and references. In order to fill up the knowledge gaps, several academies were set up regionally for generating literature in local vernaculars. Since knowledge as such is cumulative in character and could not be generated by placing any urgent indent but at the same time the requirement of literature in local vernaculars was immediate, the academies concentrated the bulk of their energy, attention, and resources in translating in English texts and references of foreign origin. Even after about seventy years of independence of the country, the scarcity of anthropological literature in local vernaculars has not eased even a bit. Whatsoever literature has been produced so far, suffer from multiple inadequacies either as translations or because of their primarily repeat performances. Seldom we come across any anthropological literature produced in India, including those in English, that can qualify being something very outstanding in quality or original. In a major way the literature produced over here also reflects the state or condition of Anthropology as a profession in India. It is no doubt a fact that after independence of India there has been a massive expansion of educational infrastructures. Many new universities have been set up and at present over 45 universities in India have under-graduate or post- graduate faculties in Anthropology7. The number of institutions engaged in anthropological researches has also multiplied and India perhaps has the second largest body of professional anthropologists in the world8. It has also the distinction of having the Anthropological Survey of India, which as a single institution engages the largest number of professionally trained anthropologists. Unfortunately, since the last quarter of the previous century, the Survey as the advanced centre for scientific researches and training seems to have lost direction and degenerated itself to a mere centre for population enumeration.

The Anthropology Section of the Indian Science Congress Association, for decades together provided a healthy platform for dissemination of anthropological knowledge, since its very inception in 1914. This Section, too, of late, has allowed itself to get diluted attention. The Asiatic Society, that acted as the beacon since 1784, could nevertheless manage to stick to its commitment to Anthropology, as it was.

During the decades before independence, only few universities in India imparted training in Anthropology just as a complementary to other academic disciplines. There were only two post-graduate departments having integrated courses in Anthropology at the time of independence. After India won freedom, the situation over here has no doubt experienced change a great deal and as already stated, Anthropology is now taught in nearly 50 universities of the country. But the picture is still not that encouraging, if not evidently dismal. At present when most of the universities imparting training in Anthropology

do emphasize the integrated character of Anthropology, there are still some universities where Anthropology constitutes a part of composite departments. There are some others with only truncated coverage like Human Biology, Physical Anthropology, Human Genetics, Prehistory, and Physical Anthropology, etc. There are several university departments where initially the truncated department of Social Anthropology had appendages like Sociology, Tribal Studies, Tribal Development, etc. As a result, hardly there could be any common syllabus of Anthropology that might have cut across the requirements of the post-graduate departments from all over the country. For obvious reasons, therefore, the requirements of texts as well as references for them had to be different. To a large extent due to this situation, Anthropologists as fellow professionals could not initiate any concerted programme for the promotion of text books and references. The Indian Anthropological Society, the oldest functioning voluntary organization of the profession, made a serious endeavour in this direction but the output so far has remained sparse. Let me hasten to add here that this is certainly not due to any lack of sincerity on the part of the fellow professionals. In fact, the problem as such is of much higher magnitude and a great deal more complex than what it apparently seems to be. With the proliferation of the post-graduate departments of Anthropology in different linguistic areas of India and due to extension of course up to the Higher Secondary level, all on a sudden a huge demand has been created for qualified teachers and researchers capable of undertaking professional responsibilities in local vernaculars. Requirements of text books and references in regional languages of India was also equally pressing. Differences in the syllabi of various universities made the job relatively more exacting. Under the circumstances an attempt was initiated by the University Grants Commission of India for standardization of syllabi, which so far met with only sparing success.

It may be pointed out in this connection that for encountering a problem of such complexity and magnitude appropriately and particularly for indigenizing the texts and references, a constant feedback between teaching and research is not merely important but essential. Incidentally, in spite of the fact that there are almost as many anthropological research institutions in India as the post-graduate teaching departments are, they instead of cultivating complementarity through close collaboration, rather have compartmentalized their functions to a major extent. During pre-independence days, even the teaching departments of Anthropology made very valuable and significant research contributions which helped not only updating research information but at the same time indigenizing the syllabus to a certain extent. This spirit seems to have died down to a considerable degree during the post-independence days when research in the teaching departments has become more or less a matter of individual commitment. Hardly the teachers belonging to the same department take up any major research programme together. Thus

each research endeavour appears as a discrete isolated action, having little continuity of interest over a period of time. Research information generated by the non-teaching institutions, due to inadequate organizational support for exchange of information, also remained more or less the exclusive preserve of the researchers themselves.

In spite of an apparently disappointing state of affairs, Anthropology in India recorded a growth spurt during the post-independence era. To illustrate, India has experienced an extraordinary growth of Anthropology in terms of proliferation of professional research journals9. Nevertheless, except for a very limited few attempts to publish research information in local vernaculars, the bulk has been published in English. What is further disappointing in this respect is that there has been hardly any attempt to centralize such research information and to properly disseminate them for their possible use in updating and indigenizing the syllabus. In fact, there is practically no mechanism to avoid duplication of research endeavours. As a result, in spite of a sort of apparent explosion of anthropological research information, there has been hardly any serious application of them and anthropologists as fellow professionals are yet to convincingly demonstrate the skill of application and social relevance of their research output. It may be pointed out in this connection that the scope of exchange of research information in postindependence India has by any standard improved a great deal and anthropological seminars and symposia, due to relatively easy availability of patronage, have became quite common. Even then, research information generated in India are yet to receive any comprehensive treatment and appropriate recognition from abroad. The initiatives of the Clearing House Unit of the Anthropological Survey of India, due to insufficient response from the members of the profession, could not yet make any major dent. The integrated discipline of Anthropology consisted of three major sub-streams like Prehistoric Archaeology or Palaeo-anthropology, Physical Anthropology, Social/Cultural Anthropology each having a number of sub-sub-streams specify areas of their respective research operations. Although in terms of identification of research areas as well as research interests, all the three sub-streams of Anthropology got more or less equal weightage, as academic sub-disciplines they did not receive instant acknowledgements. In most of the universities of India having post-graduate department of integrated Anthropology, the degree offered is just in Anthropology without any specification of subject matter specialization. The majority of them still do not organize courses for advance training and/or super specialization. The pioneering post-graduate department of Anthropology of University of Calcutta, from the very beginning recognized the need for specialized training and research and accordingly organized courses in Prehistoric Archaeology, Physical Anthropology, and Social/Cultural Anthropology. Accordingly students could have the benefit of making their choice of courses for subject matter specialization as well as advanced training.

Although such scope for specialization is not available in many of the universities even today, this by and large has been accepted as the model for integrated post-graduate departments of Anthropology in the country as a whole. Those having truncated or composite departments, such universities too, follow more or less the same line of course development and specialization. Among the research institutions, the Anthropological Survey of India has two major divisions like Physical Anthropology and Cultural Anthropology as well as an important section of Palaeo-anthropology.

On the whole, thus, Anthropology in India has two very distinct trends having divergent tendencies. As an academic discipline, Anthropology in India is heavily inclined toward the Western tradition. As a body of knowledge, nevertheless, Indian Anthropology is very distinct having scarcely receiving any influence from elsewhere. It is rather unfortunate that even after about seven decades of India's independence, there has been hardly any crossfertilization between these two distinct personalities of Anthropology in India. For a healthy growth of the discipline it is extremely important and urgent that the academic discipline receives its sustenance from the body of knowledge that emerged out of indigenous experiences and experiments. For that reason, if Anthropology in India has to redefine and remodel itself for making its contributions specifically relevant, this is certainly very much welcome. The earlier such endeavours are initiated, the better it is for the society as well as for the discipline. The initial crisis of identity of Anthropology in India inhibited its growth, development, and progress to a major extent. This is perhaps nothing very unique in the global context, nor that isolated a phenomenon. Most of the colonized nations must have had more or less similar experiences. The calculated great divide between the ex-colonial rulers and the subjugated peoples from across societies and cultures is primarily responsible for the predicaments of an immensely potential academic field of Anthropology. What is evidently satisfying in case of India is the academic maturity of the fellow professionals, who as on today appear bent upon redefining the scope, methodologies, and theories of Anthropology. The Indian National Confederation and Academy of Anthropologists (INCAA), a national consortium of anthropological associations, since its very inception in 2004, has initiated moves to appropriately meet the inadequacies as are there in Indian Anthropology. This is certainly very important and welcome a phenomenon. For ex-colonial powers, the discipline of Anthropology has lost a great deal of its utilitarian value. The discipline, in fact, is not considered that essential for them any more. In contrast, Anthropologists in India appear to be on the threshold of a major breakthrough to demonstrate how even without making war machines, this specific branch of knowledge can meaningfully serve a society as well as the humanity, by suggesting innumerable alternatives of life-styles that in turn have the potential to transform the whole world.

NOTES

- 1. de Bary (1958), calculates the period of *Dharmashastras* to be c. 500 B.C.-500 A.D. For other details *vide History of Dharmashastra* by P.V. Kane, 1930-1958.
- 2. For details vide the English version of Kautilya's Arthasastra by R. Shamasastry, Mysore: Sri Rghuveer Printing Press, 1951.
- 3. As per prescription, all agricultural lands belong to the state. A farmer could have the right to cultivate them throughout his life, but without any authorization to transfer them to his descendants. This system of land tenure is very crucial to discourage uneven growth and accumulation of wealth.
- 4. For details vide English version of Charaksamhita, by Jayadeva Vidyalankara, (1975).
- 5. For details vide English version of Susrutasamhita, by Atrideva, (1975).
- 6. For details *vide* English version of *Kama-sutra of Vatasyayana*. Edited and translated by Santosh Kumar Mukherjee, (1945).
- 7. Vide, S. Bose, 1985: 303-308
- 8. The number of professional anthropologists in India is perhaps second only to the United States of America.
- 9. Altogether 27 research journals in Anthropology are published from India.

REFERENCES

Atrideva. 1975. Susrutasamhita. Delhi, Motilal Banarasidas.

Barnard, Alan 2000. *History and Theory of Anthropology*. Cambridge, Cambridge University Press.

Basham, A. L. 1954. The Wonder that was India. New York, Grove Press, Inc.

Bose, S. 1985. Universities Conducting Studies in Anthropology in India. *Human Science*. 34: 303-308.

De Bary, Theodore 1958. Sources of Indian Tradition. Chicago, Chicago University Press.

Erikson, T. H. and F.S. Nielsen 1988. A History of Anthropology. London, Pluto Press.

Haddon, A. C. 1910. History of Anthropology. London, Watts & Co.

Hann, Chris (ed.) 2005. *One Discipline, Four Ways: British, German, French, and American.* Chicago, Chicago University Press.

Harris, Marvin 1969. *The Rise of Anthropological Theory*. London, Routledge & Kegan Paul. Kane, P. V. 1930-58. *History of Dharmashastra*. Vols. I – V, Poona, Bhandarkar Oriental Research Institute.

Layton, Robert 1997. An Introduction to Theory in Anthropology. Cambridge, Cambridge University Press.

Lerner, Daniel 1968. "Modernization", *International Encyclopedia of Social Sciences*. New York, The Free Press.

Lowie, Robert 1937. *The History of Ethnological Theory*. New York, Holt, Rinehart and Winston. Mukherjee, Santosh Kumar 1945. *Kama –Sutra of Vatsayana*. Calcutta, Oriental Agency.

Penniman, T. K. 1935. A Hundred Years of Anthropology. London, Gerald Duckworth & Co.

Saraswati, B. N. 1993. *Sacred Science of Man.* Calcutta, Institute of Social Research and Applied Anthropology.

Shamasastry, R. 1951. *Kautilya's Arthasastra*. Mysore, Shri Raghuveer Printing Press.

Vidyalankara, Jayadeva 1975. *Charaksamhita*. Delhi, Motilal Banarasidas.

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Anthropometric and Physiological Risk Factors of Tuberculosis: A Case Control Study on Delhi Adults

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Abstract: The present case-control study was conducted among the adults of both sexes in Delhi, India. Participants who were diagnosed as suffering from tuberculosis (TB) by the Directly Observed Treatments Short Course (DOTS) centers and taking regular medicines were considered as 'cases'. Among 983 cases of both sexes, 632 were affected with Pulmonary TB (PTB) and 351 with Extra-Pulmonary TB (EPTB). Participants matched for age, sex and socio-economic status, who were apparently healthy and were confirmed by doctors to be free from TB were defined as 'controls' (N=333). The present study was undertaken to compare the anthropometric and blood pressure profiles of cases and controls inhabiting the mega-city of Delhi, India. We used anthropometric indices, viz. Body Mass Index (BMI), Waist Hip Ratio (WHR) and Waist Height Ratio (WHtR) and systolic and diastolic blood pressures (SBP and DBP) for comparing the cases and controls. Results exhibited that cases were taller and thinner compared to their control counterparts. Hyper tensive and pre-hypertensive individuals and those at risk for WHtR and WHR had a higher risk of suffering from TB in comparison to controls. Underweight cases were five times more likely to suffer from TB compared to controls.

Key words: Pulmonary tuberculosis, Anthropometric indices, Blood Pressure, cases and control, Delhi

INTRODUCTION

Tuberculosis (TB) is a chronic disease caused by *Mycobacterium tuberculosis*. There are two main types of tubercular infections: pulmonary TB (bacteria generally affect the lungs) and extra-pulmonary TB (bacteria generally affect tissues outside the lungs such as lymph nodes, brain, kidneys, or bones). According to WHO report (WHO, 2015), of the 9.6 million TB cases diagnosed globally, 2.2 million were estimated to be from India. TB Control Program in the Indian subcontinent has been effective as there is 50% reduction in TB mortality rate and 55% reduction in TB prevalence rate by 2013 relative to 1990 level. In absolute numbers, there is a decline in the prevalence of the disease from 40 lakhs to 26 lakhs annually (TB India, 2015).

Tuberculosis has a significant impact on nutritional state, leading often to malnutrition which subsequently leads to morbidity and mortality, particularly in resource scarce conditions (Macallan et al., 1995). Loss of body weight coupled with loss of body fat and nutritional depletion are the common diagnostic traits found in patients with pulmonary tuberculosis (Tungdim and Kapoor, 2008).

Anthropometric measurements and indices are appropriate tools to evaluate the nutritional status of adults. Several studies highlighted the association between BMI and/ or body build with incidence of tuberculosis (Tverdal, 1986; Reed and Love, 1933; Long and Jablon, 1956; Comstock, 1986). For example, BMI is an important anthropometric indicator used for evaluation of adult nutritional status in terms of chronic nutritional deficiency. Furthermore, some authors have also used it as a proxy measure for evaluating the economic condition of a population (Shetty and James, 1994; Khongsdier, 2002, Kapoor et al. 2009).

The present study was undertaken to compare the anthropometric and blood pressure profiles of TB cases and control. Furthermore, an attempt was made to find out the specific anthropometric and blood pressure variables that are associated with the chance of TB infection.

MATERIALS AND METHODS

We conducted this cross sectional study among 983 adult TB patients (cases) and 333 healthy controls residing in the city of Delhi, India. The mean age of the cases and healthy controls was 29.9±10.9 years and 34.3±13.5 years, respectively. Among the 983 cases, 632 were affected with Pulmonary TB (PTB) and 351 were affected with Extra-Pulmonary TB (EPTB). Among the 983 cases, 559 were males and 424 were females. Among the healthy controls, 174 were males and 159 were females. Individuals who were receiving treatment for TB from the twelve selected TB DOTS centers and other hospitals of North, West and South Delhi were considered as 'cases'. The controls were healthy participants with no history of tuberculosis, matched with cases for age, sex and socioeconomic status. It was ensured that none of the participants was related to each other by birth or by marriage. The present study was not, restricted to any single ethnic community, though.

The selection criteria for PTB cases were as follows: (1) participants who were diagnosed with TB within the last two months preceding the date of study and taking medicines and following prescribed dietary practices, and (2) volunteered to participate. We excluded HIV affected TB patients from the study. Inclusion criteria for the controls were as follows: (1) participants who apparently were healthy, (2) has not received any anti-TB treatment before, and (3) volunteered to participate.

Ethical clearance for the study was obtained from the Institutional Ethics Committee of the Department of Anthropology, University of Delhi, India. An informed consent form was signed by each study participant prior to the collection of data.

Each of the participants was measured for body weight, stature, waist circumference, hip circumference, systolic (SBP) and diastolic (DBP) blood

pressures following Weiner and Lourie (1981). The stature and body weight were measured with an anthropometer and a beam balance scale, respectively. The waist and hip circumference were measured using a steel tape. Systolic and diastolic blood pressures were measured with the help of mercurial sphygmomanometer and a stethoscope following standard procedure after a resting period of 10 minutes.

Body Mass Index (BMI) was calculated as body weight in kg divided by stature in meter squared [BMI= Body weight (kg)/ stature (m²)]. Waist Height Ratio (WHR) and Waist Hip Ratio (WHR) were also computed as measures of adiposity levels and regional distribution of body fat.

We used bivariate statistics to compare the anthropometric and blood pressure profiles between the cases and controls. We further used binary logistic regression to predict the likelihood of being affected with TB (dependent variable) compared to the cases, using all the anthropometric and blood pressure variables as independent variables and controlling the sociodemographic variables.

Data management and statistical analysis was performed using SPSS 20.0 version.

RESULTS

Table 1 provides the socio-demographic characteristics of cases and controls. Majority of the participants from the cases (~36%) and controls (~35%) belonged to Shudra and Kshatriya *varnas*, respectively. Most of the cases and controls were married and resided in nuclear family set up. Majority of the cases (~24%) experienced primary education while the controls (~34%) were mostly graduates or post-graduates.

Table 2 shows the mean and standard deviation values of anthropometric and blood pressure profiles of the cases and controls. It was found that irrespective of sex, the mean values of weight were lower among the cases, compared to the respective controls. The differences between cases and controls in respect of the mean values of body weight and stature for both males and females were found to be statistically significant (p<0.001) independently. Again, the mean values of waist and hip circumference were significantly (p<0.001) lower among the cases compared to the controls irrespective of sex.

Table 3 shows crude Odds Ratio (OR) and adjusted Odds Ratio values for various anthropometric and blood pressure variables.

Crude Odds Ratio: Pre-hypertensive and hypertensive (SBP) individuals exhibited 18% (OR=0.18; 95% CI, 0.13-0.26) and 9% (OR=0.09; 95% CI, 0.05-0.14) chance respectively to develop TB in comparison to the reference category. Similarly, pre-hypertensive and hypertensive (DBP) individuals exhibited 27% (OR=0.27, 95% CI 0.19-0.14) and 12% (OR=0.12, 95% CI 0.08-0.09) chance respectively compared to the reference category. Individuals

Table I: Sociodemographic variables of cases and controls

Variables	Ca	ses	Control		
	N	%	N	%	
Varna					
Brahmin	140	14.2	52	15.6	
Kshatriya	232	23.6	116	34.8	
Vaishya	138	14.0	66	19.8	
Shudra	350	35.6	79	23.7	
Muslim	123	12.5	20	6.0	
Total	983	100.0	333	100.0	
Marital status					
Married	573	58.6	212	64.2	
Unmarried	405	41.4	118	35.8	
Total	978	100.0	330	100.0	
Educational statu	ıs				
Illiterate	226	23.0	71	21.5	
Literate	110	11.2	12	3.6	
Primary	233	23.7	42	12.7	
High secondary	141	14.3	65	19.6	
Senior secondary	124	12.6	30	9.1	
Graduate/ post- graduate	149	15.2	111	33.5	
Total	983	100.0	331	100.0	
Family Types					
Nuclear	686	69.8	248	77.3	
Joint/ Extended	297	30.2	73	22.7	
Total	983	100.0	321	100.0	
Family Income (Ir	n Indian rupe	es)			
10000 and below	458	46.6	111	45.1	
10001 and above	525	53.4	135	54.9	
Total	983	100.0	246	100.0	

Waist Height Ratio (WHtR) in risk category (OR=0.12; 95% CI; 0.09-0.16) exhibited 12% chance to suffer from TB in comparison to the reference category. Underweight cases (OR= 7.38; 95% CI, 5.05-10.79) have seven times (approx.) more chance to suffer from TB compared to the reference category.

Adjusted Odds Ratio: Pre-hypertensive and hypertensive (SBP) individuals exhibited 51% (OR=0.51; 95% CI; 0.32-0.82) and 46% (OR=0.46; 95% CI; 0.23-0.94) (SBP) chance to suffer from TB in comparison to the reference category. Again, pre-hypertensive and hypertensive (DBP) individuals exhibited 53% (OR= 0.53, 95% CI 0.33-0.85) and 44% (OR=0.44, 95% CI 0.24-0.82) chance respectively to suffer from TB compared to the reference category. Individuals with Waist Hip Ratio (WHR) in the risk category had two times (approx.) greater chance (OR=2.27; 95% CI, 1.41-3.64) to suffer from TB in comparison to the reference category in the final model (after adjusted for other variables). Cases belonging to underweight category had five times (approx.) greater risk for TB

Table 2: Anthropometric and blood pressure profiles of cases and controls

Measurements	s/ Ca	ises	t-valu	e Co	ntrol	t-value	Male cc	Female
Indices	Male	Female		Male	Female		t-value	сс
N	Iean±S.D.	Mean±S.	D.	Mean±S.D.	. Mean±S.I	Э.		t-value
Weight(kg)	50.0±8	44.6±9	9.03*	64.09±12	57.05±13	4.98*	-	-
							16.37**	12.34**
	.88	.76	**	60	20	**	*	*
Stature(cm)	167.9±53	154.2±6.4	35.65*	165.54±6.96	151.65±6.3	18.98*	4.62***	4.20***
	.63	6	**		5	**		
Minimum							-	-
Waist	70.35±9	66.71±10	5.93**	80.69±11.94	78.03±13.3	1.92	12.16**	11.03**
Circumference	.06	.01	*		2		*	*
(cm)								
Maximum Hip								
Circumference	80.56±7	81.07±9.5	-0.94	92.59±8.0	94.97±10.2	-2.37*	18.65**	15.34**
(cm)	.24	5			9		*	*
Systolic Blood							-	-
Pressure (SBP)	113.40±	109.08±1	4.61**	131.48±13.9	128.03±20	1.38	11.17**	11.41**
(mmHg)	14.06	5.08	*	6	10		*	*
Diastolic Blood							_	_
Pressure (DBP)	74.81±1	72.43±11	3.19**	86.89±12.69	82.72±12.2	2.40*	9.19***	8.53***
(mmHg)	1.18	75	*		6			
Body Mass	17.76±3	18.77±3.9	-	23.32±3.99	24.80±5.53	-	-19.12**	-14.55**
Index(kg/m ²)	.13	7	4.47**	r		2.81**	*	*
Waist Hip Ratio	0.87±0.08	0.82±0.08	10.46**	* 0.87±.08	0.82± 0.09	5.42***	0.61	0.14
Waist Height	0.42±0.05	0.43±0.06	-3.66**	* 0.49±.072	0.52± 0.09	-3.09**	-13.55***	-12.20***
Ratio								

^{*}p<0.05, **p<0.01, ***p<0.001, cc=case & control

(OR= 4.81; 95% CI, 2.93-9.71) relative to those of the reference category. Overweight (OR= 0.23, 95% CI, 0.12-0.42) and obese (OR= 0.21, 95% CI, 0.09-0.50) cases may have a protective mechanism against TB as they had 23% and 21% chance respectively to develop TB in comparison to the reference category.

DISCUSSION

Tuberculosis negatively affects the physical well being as exhibited from various anthropometric measurements due to improper nutrition. In the present study, it was observed that the TB patients were relatively taller and thinner in comparison to healthy control subjects. This finding supports earlier studies that tuberculosis develops more frequently among men who were tall and thin than those who were short and heavy (Reed and Love, 1933; Long and Jablon, 1956; Comstock, 1986). A decrease in body weight was brought about by depletion of fat and wastage of muscles as observed among TB patients. Studies (Tungdim et al., 2015; Harries et al., 1988) have confirmed that proper treatment of TB and improved diet exhibited a significantly impact on the body weight.

It was demonstrated that the nutritional status as assessed by waist and hip circumference, body mass index and waist height ratio was significantly

Table 3: Association of Anthropometric and Blood pressure variables with TB infection (Crude and Adjusted Odds Ratio)

Variables	Exp(B)*	CI (95%)	Exp(B)**	CI (95%)
SBP				· · · · · · · · · · · · · · · · · · ·
Pre-Hypertensive	0.18	0.13-0.26	0.51	0.32-0.82
Hypertensive	0.09	0.05-0.14	0.46	0.23-0.94
Normal	O^a		O^a	
DBP				
Low	1.52	0.76-3.06	1.1	0.52-2.33
Pre-Hypertensive	0.27	0.19-0.40	0.53	0.33-0.85
Hypertensive	0.12	0.08-0.19	0.44	0.24-0.82
Normal	O^a		O^a	
WHR				
Risk	0.91	0.71-1.18	2.27	1.41-3.64
Normal	O^a		O^a	
WHtR				
Risk	0.12	0.09-0.16	0.39	0.22 - 0.70
Normal	O^a		O^a	
BMI				
Underweight	7.38	5.05-10.79	4.81	2.93-7.91
Overweight	0.13	0.08-0.21	0.23	0.12-0.42
Obese	0.13	0.06-0.26	0.21	0.09-0.50
Normal	O^a		O^a	

TB= tuberculosis, *Exp (B) = Odds Ratio (crude), **Exp (B) = Odds Ratio (adjusted), CI= Confidence Interval, 0a = Reference category, SBP= Systolic Blood Pressure, DBP= Diastolic Blood Pressure, WHR=Waist Height Ratio, WHtR= Waist Height Ratio, BMI= Body Mass Index, significant values are presented in bold font

poor in TB patients compared to the healthy controls. It was also found that underweight cases were more likely to suffer from TB than that in case of controls. Anorexia or loss of appetite (principal symptom of TB) leads to low energy intake, which causes loss in body weight with a decline in body fat and muscle mass. The decrease in energy intake might be due to less food availability and improper or imbalanced diet. Infectious disease such as TB may result in impaired absorption and increased rates of metabolism (Gizburg and Dadamukhamedov, 1990; Ulijaszek, 1997). Similarly, in a study conducted by Tverdal (1986) a distinct association was observed between an increasing risk of pulmonary TB with a decreasing body mass index, at all lengths of observations irrespective of sex and age groups. Onwubalili (1988) also found that TB patients had significant decrement in the body mass index, triceps skinfold thickness and arm muscle circumference. The cases and controls had similar food habits owing to similar socio-cultural background and living conditions.

TB cases were undernourished due to poor dietary intake. Since malnutrition has a significant impact on cellular immune function, it predisposes a person to tuberculosis (Cegielski and McMurray, 2004). Besides, patients treated for pulmonary TB exhibit pulmonary hypertension (PH), which

can be due to the destruction of vascular bed as a result of parenchymal abnormalities, vasculitis, and endarteritis, leading to reduced cross sectional area of the pulmonary vasculature (Ferrer, 1975; Fishman, 1976).

In the present study, Waist Hip Ratio (WHR) exhibited a strong association with occurrence of TB case when adjusted for other variables. Tungdim et al., (2015) conducted a cross-sectional study among the adult patients in Manipur, North east India and found that wasting of muscle mass and decrease in fat percentage occurred because of chronic disease (TB). However, an overall improvement in these components with anti-tubercular treatment was also observed. Waist hip ratio (WHR) is an indicator of the degree of masculine distribution of adipose tissue: the higher the WHR, the more masculine the pattern of adipose tissue distribution and the greater the risk of diseases such as noninsulin dependent diabetes mellitus (Hartz et al., 1984; Krotkiewski, 1983).

CONCLUSION

The present study strengthens the observations that anthropometric measurements and indices are important correlates of TB. Anthropometric variables reveal depletion of fat stores and muscle wastage with onset of tuberculosis. Body Mass Index (BMI) and Waist Hip Ratio (WHR) specifically, have shown strong association with tuberculosis occurrence. Hence, these variables appears to be useful in predicting TB treatment outcome.

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REFERENCES

- Cegielski J.P. and D.N. McMurray 2004. The relationship between malnutrition and tuberculosis: evidence from studies in humans and experimental animals. *Int J Tuberc Lung Dis.* 8: 286-298.
- Comstock G.W. 1986. Prevention of tuberculosis among tuberculin reactors: Maximizing benefits, minimizing risks. *J Am Med Assoc.* 266: 2729-30.
- Ferrer M.I. 1975. Cor pulmonale (pulmonary heart disease): Present day status. *Am Heart J.* 89: 657 64.
- Fishman A.P. 1976. State of the art: Chronic cor pulmonale. *Am Rev Respir Dis.* 114: 775 94.
- Ginzburg V.S. and A.A. Dadamukhamedov 1990. Absorption of nutrients in patients with pulmonary tuberculosis. *Probl Tuberk.* 10: 44-46.
- Harries A.D., W.A. Nkhoma, P.J. Thompson , D.S. Nyangulu and J.J. Wirima 1988. Nutritional status in Malawian patients with pulmonary tuberculosis and response to chemotherapy. *Eur J Clin Nutr.* 42: 445-450.

- Hartz A.J., D.C. Rupley and A.A. Rimm 1984. The association of girth measurements with disease in 32,856 women. *Am J Epidemiol.* 119: 71-80.
- Kapoor S., R. Tyagi , K. Saluja, A. Chaturvedi and A.K. Kapoor . 2009. Nutritional profile and socio-economic status of Saharia, a primitive tribe of India. *Open Anthropol. J.* 2:58-63.
- Khongsdier R. 2002. Body mass index and morbidity in adult males of the war Khasi in Northeast India. *Eur J Clin Nutr.* 56: 484-9.
- Krotkiewski M., P. Björntorp , L. Sjöström and U. Smith 1983. Impact of obesity on metabolism in men and women. Importance of regional adipose tissue distribution. *J Clin Invest.* 72: 1150-1162.
- Long E.R. and S. Jablon 1956. Tuberculosis in the army of the United States in World War II: an epidemiological study with an evaluation of X-ray screening. Medical Monograph series, Veterans Administration. *Am J Med Sci.* 232:601.
- Macallan D.C., C. Noble, C. Baldwin, S.A. Jebb, A.M. Prentice, W.A. Coward, M.B. Sawyer, T.J. Mc Manus and G.E. Giffin1995. Energy expenditure and wasting in human immunodeficiency virus infection. *N Engl J Med.* 333: 83-88.
- Onwubalili J.K. 1988. Malnutrition among tuberculosis patients in Harrow, England. *Eur J Clin Nutr.* 42: 363-366.
- Reed L.J. and A.G. Love 1933. Biometrics studies on US Army officers: somatological norms in disease. *Hum Biol.* 5: 61-93.
- Shetty P.S. and W.P.T. James 1994. Body Mass Index: A Measure of Chronic Energy Deficiency in Adults. FAO Food and Nutrition Paper, 56.
- TB India 2015. Annual TB Report. Central TB Division. Directorate General of Health Services, Ministry of Health and Family Welfare.
- Tungdim M.G. and S. Kapoor 2008. Tuberculosis treatment and nutritional status among the tribals of Northeast India. *Acta Biol. Szeged.* 52: 323-327.
- Tungdim M.G., H. Aurora, and S. Kapoor 2015. Outcome of Tuberculosis Treatment on Measures of Obesity and Adiposity Indices among the Tribals of Northeast India. *Mycobact Dis* 5:182.
- Tverdal A. 1986. Body mass index and incidence of tuberculosis. *Eur J Respir Dis.* 69: 355-362.
- Ulijaszek S. 1997. Transdisciplinarity in the study of undernutrition infection interactions. *Coll Anthropol.* 21: 3-15.
- Weiner J.S. and J.A. Lourie 1981. Practical Human Biology. London, Academic Press.
- World Health Organization 2015. *Global Tuberculosis Report*. Geneva, World Health Organization.

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Corporate Social Responsibility and Sustainable Development

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Abstract: This paper evaluates the alignment of Indian Corporate Sector towards Sustainable Development Goals and its role in contributing to the development needs of the Country, e.g., education, poverty alleviation health care sanitation, and environment. Many conceptual studies reported that the Process, Products and Corporate Social Responsibility (CSR) programmes, adopted by Corporate Sector may not contribute to national development goals that reduce human misery in view of ideological differences, stakeholder bias, etc. This study suggests that Business created by corporate sector could contribute to social and economic development. While creating prosperity, it can have adverse impacts on people and planet. But, various recent mitigating initiatives, changes in policy framework, guidelines and legislation can help to create collaboration and partnership among States, Corporates, Civil Societies, and Non Profits; this in turn can pay dividends to the area of societal development and environment in India. This study further provides evidences of contribution of corporate, especially Central Public Sector Enterprise in India through CSR activities when these are aligned with economic and social goals. The Government of India has been taking various proactive actions in disciplining Corporates to integrate social and environmental concerns in their business practices. What started in late 2000 AD. by way of Voluntary Guideline on CSR by Ministry of Corporate Affairs (2009, 2011), followed by a Guidelines on CSR and Sustainable Development by Department of Public Enterprise, Ministry of Heavy Engineering and Pubic Enterprise (2010, 2013, 2014) culminating in amendment of Companies Act 2013, making 2% contribution of net profit towards CSR mandatory for stipulated categories of business enterprises, both in private and public domain. This paper also presents a detailed analysis of the concept and evolution of CSR and provided a critical evaluation of contribution made towards social development by Indian Public Sector Undertaking.

Key words: CSR, CPSE, Companies Act, Economics, GDP, Industries, SDG, Sustainable Development, Social Inclusion, Trans National

INTRODUCTION

The Development pathway in today's world has undergone a significant change in approach since 1990s. One can recall, the study sponsored by the 'Club of Rome' and carried out by the MIT Researchers on 'Limits to Growth' in 1972 (Meadows et al., 1972). It was perhaps the first warning for the human society that unlimited growth can never be sustained with the philosophy of 'Sky is the Limit'. The historic UN Conference on Environment and Development, (UNCED) held in Rio de Janeiro in 1992, focused on the issue of development with the paradigm shift of the thought to the pathway of sustainability. The UN Commission on Sustainable Development came into

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existence immediately after UNCED and a set of Sustainable Development indices (SDI) were also prepared for guiding the nations for determining the future pathway and for periodic assessment. With the turn of the century, United Nations announced Millennium Development Goals (MDG) for the period of 2000-2015 and thereafter the Sustainable Development Goals (SDG: 2015-2030) were set up to which India is a signatory, focusses on three dimensions:

- Economic prosperity,
- Social inclusion
- Environmental sustainability.

An attempt has been made to analyse the existing processes adopted by Corporate Sector for their products/ services and CSR activities in the enabling atmosphere created by states with the aim to find out their alignment to above development challenges that the country is going through.

It will be worthwhile to recall Indian History of Philanthropy which has a deep and ancestral route in the origin and evolution of three major religions, viz. Hinduism, Buddhism and Jainism in this subcontinent. All these major religions perpetuated the philosophy of giving out to the needy, not necessarily for the believers of the religion but to the underprivileged section of the society at large. As such, India has a long history of philanthropy (Viswanath and Dadrawala, 2004; Contgreil et al. 2013). Indian philanthropists also supported, during the period of colonial rule, the concept of Nationalism. It led to independent education institution for emancipation of citizens across the country from the wealth shared by the more privileged class of Indian society, commonly called zamindars or raja. The city of Calcutta witnessed the impact of such gracious philanthropy while setting up its campuses; land and building for the University and College of Science and Technology was gifted by Sir Tarakhnath Palit and Sir Rashbehari Bose. Likewise, five major zamindar families of Mymensigh, now in Bangladesh, contributed to the setting up of National Council of Education which gave birth to Jadavpur University. Similar initiatives could also be noticed in Maharastra, Uttar Pradesh, Chennai and elsewhere.

After independence with the emergence of voluntary organisations' movement, philanthropy was evidenced through professional fund raising. Non Governmental Organisations, community based or otherwise, played a significant role while mobilising fund from individuals or institutions for a wide range of social causes ranging from elderly citizens' care, running orphanage to treatment of cerebral palsy and thalassemia. However, "philanthropy" as traditionally practised by private trust, family foundation....had a limited impact in bridging equity divide (Viswanath and Dadrawala, 2004). It should also be pointed out that India has a tradition of philanthropic activities from such large industrial houses like Tata, not only

for meeting the need of the poor but also for advancing the cause of Science and Technology through fundamental research.

ECONOMIC PROSPERITY

As per International Business leader's forum there are primarily eight Economic multipliers of Business. In addition to creating jobs, companies generate investment, produce safe products and services, pay tax, invest in human capital, establish local business linkage, spread international business standards, support technology transfer, and build physical and institutional infrastructure. All these are economic value addition (Nelson, 2003).

As per the annual report of Ministry of Statistics and Planning Implementation during 2011-12, more than 420 million people were employed in unorganized sector and 29.58 million people were employed in organized sector (Report of the Committee on Unorganised Sector Statistics, 2012). Employment is one of the major contributors in uplifting people out of poverty. Industry has been steadily contributing in this area. Central Public Sector Enterprises (CPSE) as a whole employs 1.3 million people (Department of Public Enterprises, 2016 a). As per International Finance Corporation, Ecogreen study in Indonesia on direct, indirect and induced job creation for every direct employment about 21 indirect employments are generated. This can, however, vary with other contextual factors, including type of industry (Abdo, 2012). Unilever carried out two studies in Indonesia and South Africa: while in Indonesia they created 7000 direct jobs, there were 293000 indirect jobs.

World GDP is growing at 3.4% - 3.6%, though few economies have shrunk. Brazil and Russia were projected to have negative growth in 2015-16 (The World Bank, 2015). The prosperity and growth story of India continues unabated surpassing the other emerging economies / BRICS nations. However, like many countries India has concern in the other two focus areas, namely, Social Inclusion and Environmental sustainability.

SOCIAL INCLUSION

As per The World Bank Report, India's GINI index is 33.6 which shows a low-moderate deviation in the distribution of income, consumption and expenditure. Because of this inequality, the Human Development index (0.609) is adjusted to 0.435 (Inequality adjusted Human Development Index) by The World Bank, 2015.

A recent report (Anon, 2016) showed that 62 people in the world can be called wealthiest (Asset value USD 1.76 Trillion) and less than 1% of the population has control on half of world's assets. In India the resource pyramid is also skewed towards the rich and this trend is increasing, currently one percent of the population holds 53 percent of the total assets. 10 percent population holds 76 percent and bottom 90 percent holds 24 percent of total asset of the country. (Stierli, 2014)

These inequality, critics stated, are claimed to have been created by Business/ Industries. Roddick (1991) has shown that one Haitian female worker producing Disney dress and dolls shall take 166 years to earn as much as Michael Eisner (Disney President between 1984-2005) earned in a day. As per Fan Economy Survey in 2007, the pay of CEO in largest 500 (S&P) company is on average USD 10.5 million, which is approximately 344 times the salary of average American workers.

This inequality however can be reduced by owners and leaders of business with equitable distribution of assets, consciously bringing parity of executive pay with average salary of employees, reduction in patent cost, transfer of technology and various other efforts. Profit maximizing motives are often incompatible with good development practice. High level of greed for profit maximisation even without compromising legal, ethical requirement at times may give an impression that the business is exploiting natural resources, violating processes/rules or exploiting stake holders for the benefit of owners/ shareholders/employees. Peter Drucker presents an alternative perspective to the classical economic view in his book The Daily Drucker-The purpose of profit (Drucker, 2004). He considers profit is necessary for being in business and staying in business and for creative destruction (as coined by Joseph Schumpeter's innovation). He argues that profit performs three main functions, viz., it measures the effectiveness/soundness of business efforts; (ii), it provides a 'risk premium' necessary for the corporation to stay in business; and (iii) it insures the future supply of capital. 'A profitability objective therefore measures not the maximum profits the business can produce, but the minimum it must produce' (Drucker, 1984). This has also been brought out by (Carroll et. al., 2010). Issues like gender inequality, governance, corruption, human rights and labour welfare etc also add to the societal woes causing inequality. Business owners and leaders in India are consciously working in this area by voluntarily joining Global Compact Network India and Global Reporting Initiative to mitigate these challenges though seemingly a lot need to be done in these areas.

ENVIRONMENTAL SUSTAINABILITY

While corporate action has increased life expectancy, reduced a number of people under poverty line and has contributed to human development immensely, our atmosphere is overburdened with harmful greenhouse gases. Air and water are polluted with toxins and deadly carcinogens that are harming flora and fauna. Bio capacity and ecosystem are under tremendous pressure. We are running short of food, water and natural resources (Visser, 2011). Many attribute the present condition to the mindless exploitation of cornucopia of natural resources. As Paul Hawken has written in his Book 'Ecology of Commerce', "at present we are stealing the future selling it in the present and calling it GDP" (Hawken, 1993) and in the name of environmental consciousness what is being done are simply not enough. What is needed is

to innovate and replace incremental impact with big ideas and bold action to make this earth more conducive to life and enhance the life of mother earth. And undoubtedly, unless Business does that they will be negatively contributing to development.

A media report (The Guardian, 2010) based on unpublished UN study showed that World's top firms caused \$2.2 trillion of environmental damage. The total profit made by these companies was estimated at 1/3rd of this amount. Study report released by Trucost (2013) shows that the primary production and primary processing sectors analysed in the study are estimated to have utilised unpriced natural capital totalling USD 7.3 trillion, which equals to 13% of global economic output in 2009. The majority of unpriced natural capital costs are from greenhouse gas emissions (38%), followed by water use (25%); land use (24%); air pollution (7%), land and water pollution (5%) and waste (1%). The business takes this as their free input for production and do not build up to the cost of products and services.

The petrol price of \$3 a gallon at the pump in the United States in mid-2007 reflected the cost of discovering oil, extracting, refining and delivering it to the service station. It overlooked the costs of climate change, tax subsidies to the oil industry (such as the oil depletion allowance), the health care costs for treating respiratory illnesses caused by polluted air, and the military costs of protecting access to oil in politically unstable regions. The difference between the market prices for fossil fuels and the prices that also incorporate their environmental costs to society is obviously huge. The International Centre for Technology Assessment calculated that factoring in other costs beyond those for production and distribution would put the price of a gallon at the pump to \$15, instead of \$3 (Anon., 2008). So, market does not factor in these costs, as it is driven by least cost method.

The business may spend a good some of the profit towards CSR and social development but the process they follow, the practices they adopt, the principle they get guided by, and the products they offer to the people can create enormous negative economic, social and environmental consequences. The cost of consequence and restoration may be much higher than the profit made and the overall economic gain derived through the process of business. Business must integrate these concerns in the process and products to avert this sooner as otherwise same will be very difficult to mitigate. The question that comes is whether the business is a solution or part of the problem.

Triple Bottom line (TBL) as coined by John Elkinton (Elkington, 1999) has been a measure to establish whether a company is restorative. Some organisations now have started reporting TBL. In totality business must strive to create economic, social and environmental value rather than destroying it. Naomi Klein call it "race to bottom", the tendency for companies to locate their production in places where labour and environmental cost is lowest (Visser, 2011). This will give us more profit but halt human development, and

degrade our ecosystem. Business leaders and management have to take call and not trade-off between economic growth and environmental impact, between profitability and ethical standard, between cheap product and fair labour /environmental rules (Visser, 2011). They must sooner believe that the ultimate purpose of business is not to make money or it is not a transaction of making and selling. The promise of the business is to increase wellbeing of humankind through services, creative innovation and ethical action (Hawken, 1993). Business must be viewed as a social actor embedded in the society to serve the social members with products and services to make life meaningful.

Gandhiji (Gandhi, 1955), the founder of trusteeship in India, cautioned against seven deadly sins identified by him that are injurious to our lives and society. Two of these are "commerce without morality" and "science without humanity". This can be guiding message for all involved in proliferation of commerce, science and technology. To make CSR deliver development and more inclusive the business leaders need to act from corporate rectitude and the process has already started in India. Companies Act 2013 will also facilitate to bring in more transparency, governance and developmental initiatives. To bring equality and diversity the Act prescribed Women Directors on Board. To bring transparency and enhance governance Independent Directors are to be appointed. Developmental activity through Corporate Social Responsibility has to be approved, monitored and reported by the apex management level (Board of Directors) of Companies. Development activities identified where CSR fund to be invested. However these need to be inculcated at vision, mission, policy, and strategy level to continuously innovate on governance, processes and products so that it increases diversity, reduces inequality in all form (including gender) and integrates social and environmental concerns in each and every corporate action. Glimpse of CSR practices of Maharatna Company shows that these process have been initiated by engaging in strategic CSR through innovative products/services or processes like in case of Project Shakti of Hindustan Lever (though it will not qualify as Indian CSR) a burning social problem can be converted into an economic opportunity towards creating wealth and eliminate hunger and reduce poverty (Rangan, 2005). Drucker argued that Proper Social responsibility of business is to turn a social problem into an economic opportunity to Economic Benefit to Productive Capacity into human competence - into well paid jobs and into wealth (Drucker, 1984). And to my belief to increased Human Development Index, I name this as Indian 98% CSR. Indian enlightened corporate leaders are making giant step forward by voluntarily joining Global Compact to act in the area of ten principles under Human Rights, Labour, Environment and Anti-Corruption. More than 230 organisations have become members of Global Compact Network India and more than 340 are the signatories to Global Compact Network. Most of the organization in the Oil sector also made steps towards Global Reporting initiatives.

SOCIAL DEVELOPMENT AND INDIAN CSR

The United Nations had originally set up eight major goals under Millennium Development Goals (MDGs) to be achieved between 2000 and 2015. In 2015, United Nations has provided a list of 17 Goals with the aim of inclusive growth, of all citizens in the Member-Nations (UN 2015).

Primarily, the member states of UN should be responsible to see that these goals are achieved within the stipulated time frame. As a matter of fact, the Government of India, have already announced a series of social and economic development programme to achieve SDGs. These include Right to Work, Right to Food, Right to Health, Gender Equity, National Climate Change Action plan, Integrated Coastal Zone Management plan, National Biodiversity Action Plan all supported by National policies and appropriate laws. But besides its own initiatives, the Union Government of India has expectations from Corporate Houses who could and share a part of their profit for some of the above goals through a .

Indian Corporate Social Responsibility with its 2% funds as prescribed in the Companies Act may generate approximately USD 2-2.5 Billion as observed earlier from various projections and reports, which can be utilized for social development to address the issues as detailed in Schedule VII. However, this fund appears too meagre compared to more than USD100 billion investment made by the state year after year and also the fund received by non-profits for undertaking various social projects.

However, this CSR fund is not to be undermined. Because the purpose of keeping the CSR fund with the Corporates rather than collecting additional tax of 2 % has a long thought through planning. Business has more resources, reach and technical expertise and believed to be less affected by the plague of corruption. Hence, the strength, reach and maturity of Corporates need to be utilised to achieve development goals. This can also lead to synergy and collaboration among government-corporates as well as Corporates-corporates creating a multifold impact. On the other hand, spending the CSR fund efficiently in activities having corporate connect, identified by the management of the corporates, at strategic location has tremendous potential to create competitive context of business (Porter and Kramer, 2011).

For better performance this magical 2% CSR fund as prescribed in Companies Act 2013 to be invested in projects, and programme activity with clear output and outcome in mind while implementing in project mode. If necessary, this may supplement the Government scheme. This may help in improvising the government process and system for better and assured delivery to the beneficiaries. Peter Drucker argued that Government has proved incompetent at solving social problems. The non-profit spends far too less for results than government spends for failure (Drucker, 2004).

For example, CSR Gap funding of Rs 675 per student per year for the midday meal through Akshay Patra Foundation (Akshay Patra Foundation, 2016, https://www.akshayapatra.org/) not only ensures that the more nutritious, hygienic, hot food is served to the school children in the far flung rural and almost inaccessible areas which in turn improves the health and nutrition of the students, improves attendance, increases chance of secondary and tertiary enrolment, reduces medical cost, reduces loss of revenue to parents due to illness, ill health, increase employment and earning opportunity and ultimate economic and social development. This collaboration may also ensure assured and improved delivery for total Government allocation on Midday Meal projects (Rs 10000 Crore). Thus, the confluence of 2.5 billion USD of CSR fund of Corporates with more than USD 100 billion of government allocation and considerable amount from Non-profit/ individual will create astounding success when the wide reach and resources of Government, the efficiency, technical know-how, technology and governance of the Business and deep understanding, knowledge, experience of social sector players and the Nonprofits come together. India has more than 3.17 million (Cantegreil, et. al. 2013) non-profits working in the area of social sector with varied experience can join hands with Government Corporate to fill up the missing link to acquire all the attributes and resources needed to deliver. With Indian Companies Act 2013 having set the framework, the team work of Government, Corporate, Non-Profit Organisations and Civil Society can etch indelible success storey in the development Canvas of India.

DISCUSSION

The concept of CSR itself has been raising questions at least for the last 20 years. Some believed that CSR is primarily a product of "economic and capitalist assumption", (Freeman and Liedtka, 1991) and thereby fails to meet social and environmental needs.

Successful CSR programme will naturally be dependent on the system of management within the organizations as well as that in the surveillance system of the government. CSR can provide tangible values to the organization for which two most important stakeholders, viz. shareholder and employee, can reap benefits; it can be evidenced in a review of 127 research publications showing positive correlation between CSR and Corporate financial performance (Margolis and Walsh, 2003).

Some researchers believe that, CSR can also help create intangible long lasting resources of an organization and they become more difficult to imitate when they are "path dependent, casually ambiguous, socially complex "(Bowman and Ambrosini, 2003). For example, The Tata Group in India by dint of its long term commitment to CSR and Governance has created an unparalled intangible asset. One may be reminded that Tata group initiated the first Social Audit in Tatanagar (Jamshedpur) way back in 1980s.

It is felt that in a situation where Trans National Company (TNC) carry out CSR activity ,the motive of CSR and loyalty to the alien country may be of doubt, which may be absent in Public Sector Enterprises owned by State, for example, as in the case of India. The motive of survival, existence and profit making, though expected to overshadow the normative case, however, the enlightened executives will always endeavour to create a balance focusing on all stake holders.

However, the repetitive failure of CSR projects in meeting its expected outcome and developmental targets can bring disrepute to the organization, thereby creating damage to its brand name. As such, it will be worthwhile to make the CSR intervention aligned to development and make it successful. Frynas (2005) pointed out that the firms' motives for social engagement can be much more complex than simply being taken as a response to external pressure; according to him, these motives may greatly limit the positive developmental potential of corporate social engagement. What then, drives specific firms to engage in social investment? In this research, the author has identified at least four important factors impelling firms to embark on community development projects:

- obtaining competitive advantage;
- maintaining a stable working environment;
- managing external perceptions;
- keeping employees happy

All the above purposes or motives of CSR establish the existence of Business target of CSR. However, even if the motive is to obtain favour from client or state or to keep employees happy and improve perception of the company, there will be a CSR project or activity in the ground. Developmental objectives may not be a part of corporate objectives. However, in the Indian context particularly many CPSEs have already drawn their social objectives alongside economic objectives. Many conscious organizations have incorporated social aspiration and targets in their Vision and Mission statement though same has not been strategised like any other business initiatives in many cases. Also the current regulations and act governing CSR of CPSEs have given frame work and process which insist on measurable outcome. In that event even the intent or motive of the management may not of doubt the very fact that the fund or resources channelised through a systematic CSR project is bound to give positive results.. Bringing in transparency through reporting and making the details available in public domain and involving the apex management, is apt to create credibility within the business profile and to public at large.. Otherwise the organization runs the risk of poor brand image and irresponsible attitude.

In India, failure to involve local community or beneficiaries still remain an area where lot of work need to be done; for example, many a time corporates deliver what the beneficiaries do not need. Such incidents happen if no prior need assessment exercise is carried out and the corporates do not involve the local community in the process of planning, execution and monitoring of the CSR project. Lack of trained human resources is still a challenge. Even the technically qualified CSR professionals, many a time may not be able to appreciate the social issue and may seem to be inclined to deal it as a problem with manufacturing or production. Indian Government has created enabling environment to provide skill building and training for understanding, imbibing and implementation of CSR philosophy. Many courses are now available across premium institutes. Under Ministry of Corporate Affairs, a knowledge portal has been opened to further the education and training in this area. And many organizations, particularly CPSEs have started recruiting manpower specially trained in the area of social work and CSR to take charge of the CSR activities. These professionals also align and integrate the employees and all stakeholders towards CSR agenda of the company, geared towards over all development aspirations

Recent changes of Companies Act of India in 2013, has created excitement among all stake holders including central and state government. States have also formed their CSR cell. Some of the major Municipal Corporations like Mumbai have their CSR cell that coordinate with the industries and express the needs of the community. Government of Maharashtra has developed various geographical area wise projects, where government seek gap funding or total CSR investment (Maha CSR). CPSEs in India particularly the extractive ones have been traditionally interacting with local community and administration as there exists business case for them to legitimize their operation and building reputation. Thus the failure to integrate CSR initiatives with greater development plan have been widely addressed in CPSE though there can still be some gaps which can be person and location specific minority.

Branco and Rodrigues (2006) has shown that CSR may create firm specific resources that are valuable, not easily imitated, or not easily bought and sold in the market. On the conceptualisation of CSR these authors argued that CSR has different meaning and understanding with centrality of Stakeholders.

Undoubtedly, the system of management within the organizations as well as that in the Government is decisive factors for success of CSR programmes. However, CSR intervention for development may not misalign the interests of shareholders and company executives, because in the long run CSR is going to give lasting value to the organization for which two most important stakeholders, viz., shareholder and employee, are going to reap benefits as brought out by Margolis and Walsh (2003), whose review of 127 research publications established positive correlation between CSR and Corporate financial performance.

As such, CSR creates intangible long lasting resources of an organization and they become more difficult to imitate when they are path dependent,

casually ambiguous, socially complex (Bowman and Ambrosini, 2003). For example, the Tata Group in India by dint of its long term commitment to CSR and Governance has created unparalleled intangible assets.

It is felt that in a situation where a Trans National Company (TNC) carries out CSR activity the motive of CSR and loyalty to the alien country may be of doubt, which may be absent in Public Sector Enterprises owned by the State, for example, as in the case of India. The motive of survival, existence and profit making though expected to overshadow the normative case, however, the enlightened executives endeavour to create a balance focusing on all stakeholders.

The other issue raised by Frynas (*op cit.*) is that "why then, do companies, such as Shell in Nigeria, fail in their developmental efforts? Through research studies a number of other important constraints on the implementation of CSR were identified:

- country-and context-specific issues;
- failure to involve the beneficiaries of CSR;
- lack of human resources;
- social attitudes of oil company staff and a focus on technical and managerial solutions;
- failure to integrate CSR initiatives into a larger development plan."

As brought out by Frynas (op cit.) these issues are very important and context specific. For example, in India most of these problems were burning issues a decade ago. However, various government initiatives to facilitate Corporates' to contribute to development through CSR have tackled these problems, but the problem is on there seems a lot need to be done.

Dahlsrud (2006) observed 37 different meanings of CSR but it can still fail to provide a holistic concept. He has also questioned, the phrase coined by World Business Council for Sustainable Development (WBCSD) that "business is good for development and development is good for business" with the plea that it may confuse Business leaders misinterpreting that the development activity is purely a 'business case'. According to Dahlsurd (op.cit) the 'business case' definition of CSR gives ideological neutrality, whereas 'normative' or 'society case' definition is ideologically charged.

Fryans (2008) in a later paper has argued that the current CSR agenda is inappropriate for addressing international development goals, contrary to the claims about the positive role that CSR could play to meet the targets of such goals viz., i.e., poverty alleviation and health improvements.etc. This, one may argue, appears to be unjustified because of three points listed below:

- (1) Lack of empirical evidence,
- (2) Analytical limitations of CSR,
- (3) Unresolved governance questions.

An attempt can now be made to discuss all the above four points, whether or not they impede the process of development, particularly in Indian context, that too for Indian CPSE.

(1) Lack of empirical evidence:

It is opined that for private or public corporate engaged in CSR, it may not be necessary to measure the overall long term social impact in development system. If any corporate house has drawn its CSR program or plan in a target community, through a process of establishing the need, but not necessarily through a base line study, and drawn detailed plan, clearly identifying the physical measurable milestone- based resource allocation with monitoring and evaluation process in place, there seem to be no need to measure the impact which is beyond the control of the organization. However an external assessment could be useful indicator.

It is also argued that. Business Houses should not get demotivated or stop working towards social development because of their inability to see the impacts or measure it immediately. They should not also conclude that their output and outcome do not lead into measurable impacts. For example, providing elementary value based education to the first generation learners in the backward area (K.C. Mahindra Education Trust programme "Nanhi Kali"; Annual Report, 2009-10) may create various virtuous outputs and long term impact of reducing the crime rate in that particular community and dispelling superstition related inequality, oppression, mob violence riots etc. However, it will have long gestation as the children to become the change-agent and to transform the community, have to be of significant age may be at adolescent or adult level. Thus even though specific CSR activity of organization will have definitive positive impact, the same may never be known as the efforts get mixed with other inputs after decades. Organizations must in their CSR plan and strategy identify the input, output and outcome of proposed intervention and through their monitoring mechanism shall try to carry out objective evaluation, either concurrently for midcourse correction or for output and outcome measures. These will be definitive measures for their contribution with high prospect of impact to follow. A Study by "the United Way of America" in its 2000 Survey reported that an overwhelming proportion of its partner organizations found outcome measurement useful for communicating results and identifying effective practices (84-88%), as well as for helping to improve service delivery (76%) of programs (Rangan, 2010). It is expected that all organisations involved in CSR should undertake an unbiased system of assessment on their work done under CSR.

Merino and Valor (2011) have argued that the motivations of their paper were to examine the notion of CSR and its efficacy to mitigate poverty on three levels: its tools, conceptualisation, and ideological framework.

On implementation of CSR with focus on Tool, Merino and Valor (op.cit) argued that CSR is a management system with micro solution, where as poverty

have both political and economic power with macro structure and thus a micro structure cannot solve a macro problem, on which it has no influence. Since CSR is aligned with neo liberal thinking, it can never trigger the paradigm shift for the development of southern countries, with a long history of colonization from the northern countries.

The corporate sectors have been blamed for their poor understanding of development and their belief that for every complex problem there is a simple solution. The concept may be applicable in a situation where the corporate sectors are the only player in development activity and state, non profits and all other stakeholders and members are mute spectators as they do not participate in developmental efforts. The development is primarily the job of the state which all stakeholders seem to understand. Due to present situation, where it is becoming difficult for state to handle all the problems of the citizens especially in the backward areas, they look upon others for collaboration and partnership. Since Business has resources and greater reach in their area of operation and may be less affected by corruption, they with their own expertise can fill the gap and bring in their resource as CSR fund, with both behavioural and technical competence, and ethics in play so that the combined efforts succeed.

This has also been substantiated by Ebrahim and Rangan (2014). Rangan tried to distinguish between outcomes and impacts, with the former referring to lasting changes in the lives of individuals and the latter to lasting results achieved at a community or societal level. It has been brought out that the normative argument is not feasible, or even desirable, for all organizations to develop matrixes at all levels of a results chain, viz. from immediate outputs to long term societal impacts. It will be advisable to connect outcomes to societal impacts, such as a sustained drop in poverty in the region, which may seem even more complex due to the number of additional factors at play—involving the larger political, social, cultural, and economic systems—that are beyond the control of any one entity. In short, outputs do not necessarily translate to outcomes, and outcomes do not necessarily translate into impact.

Thus, it can be viewed that the impact is a complex process where various tangible and intangible socio-economic contextual inputs lead to specific impact. Business Houses should not get demotivated or should stop working towards social development because of their inability to see the impacts or measure it immediately. They should not also conclude that their output and outcome do not lead into measurable impacts. For example, providing elementary value based education to the first generation learners in the backward area (K.C. Mahindra Education Trust programme "Nanhi Kali"; Annual Report, 2009-10) may create v virtuous outputs and long term impacts of reducing the crime rate in that particular community and dispelling superstition related inequality, oppression, mob violence riots etc. However, it will have long gestation period as the children to become the change makers

and to transform their community they have to be of significant age, may be at adolescent or adult level. Thus, even though specific CSR activity of organization will have definitive positive impact, the same may never be known as the efforts get mixed with other inputs after decades. Organizations must in their CSR plan and strategy identify the input, output and outcome of proposed intervention and through their monitoring mechanism should try to carry out objective evaluation, either concurrently for midcourse correction or for output and outcome measures. These will be definitive measures for their contribution with high prospect of impact to follow. Study by The United Way of America in its 2000 Survey reported that an overwhelming proportion of its partner organizations found outcome measurement useful for communicating results and identifying effective practices (84-88%), as well as for helping to improve service delivery of programs (76%) (Rangan, 2010). Thus organisation has to be more interested to carry out evaluation of their activities to ensure it delivers the planned and promised programmes.

(2) Analytical limitations of CSR:

People living below poverty line (BPL) have always been a major concern especially in a emerging economy. One can argue that how CSR can solve a developmental challenge like poverty without negative influences on GDP growth? It is assumed that investing in eradicating poverty has no major bearing on the corporate houses. But citizens having more purchasing power will undoubtedly have impact on turnover and profit profiles of corporate.

It is true that CSR understanding has been constantly emerging. Business for profit is universally accepted, but sharing profit beyond the realm of share holders, employees and other direct beneficiaries has not gained the same ground in the past except for some philanthropists from business houses around.

But in the changing time, business houses have also joined hands for common causes such as Climate Change, Health Care, Sanitation for all, etc. to make the planet, a better place to live and work. Admittedly, Business houses are capable of handling projects, even CSR projects, through a monitoring mechanism akin to normal project like Critical Path Method (CPM) or Programme Evaluation Review Technique (PERT).

It is felt that the Government is in a better position to measure the progress made in broader country specific development issue as most of the countries are signatories to United Nations MDG and now SDG, with development targets .In India, poverty eradication and freedom from hunger – both SDG targets, have been integrated in specially focused Prime Minister's programmes.

To achieve these targets, Corporates have taken up various developmental activities. One such activity or programme is Skill Development for dropouts and unemployed youth to make them self employed or employed in organized/unorganized sector. A new Ministry of Skill Development and

Entrepreneurship" has been set up. In the renewable energy sector, the Government of India has started giving training to 20,000 youth per year starting 2017 One of the targets of the CSR project may be to monitor number of youths who have been skilled and percentage of those skilled people who got employed. Corporates may track these youths for some period to check their dropout rates from employment, if any. To that extent the CSR project of the Corporate may be useful and is likely to contribute to eliminate poverty. And there seem to be a need to re assess the amount to be invested and to establish the actual change in poverty in the community to which the beneficiary belongs which is dependent on various other external variables. The Government of India, through its arm (such as Ministry of Statistics and Programme Implementation) is already carrying out this activity and making the data available. However, organisations may carry out interventions through social projects after identifying the need. This can be carried out based on a base line survey to be done by the organization or from the secondary data made available by the State on the development status. For example, in India poverty and hunger are known in the area where CSR interventions are desirable. Based on Census data (2011), Corporates can intervene in specific location through projects with measurable outcomes without venturing into measuring the poverty status of the community before or after, with additional outlay of resources.

(3) Unresolved governance questions:

The problem has been taken care of in India by clearly defining what CSR means, what CSR includes and what it does not. The Indian meaning of CSR may not address the strategic CSR that increases the competitive context of business or business interventions that bring prosperity in the bottom of the pyramid, but it has an unambiguous definition. Also, when the State is a partner in the developmental efforts of the corporate or vice versa, or if it is unable to identify citizens as stakeholders, they lose the developmental focus, but it may not be applicable particularly in Indian CPSE context.

A fundamental question that can be raised about the "current economic paradigm which ignores the incompatibility of infinite economic growth with the finite nature of the world's material resources: and biological capacity". Growth without employment cannot help reduce poverty.

Further, according to Blowfield (2005) the main argument against CSR presented by social organisations is that it does not allow discussion about structural factors, which include the right to make a profit, the virtue of free trade, the freedom of capital, the supremacy of private property, and the superiority of markets in determining prices and values.etc .

It is undeniable that Business ventures are integral part of market economy and human sustenance and that can have enormous effect on poverty reduction increasing life expectancy fighting diseases. It is the leaders and owners of business who need to be conscious to liberate the true potential of business so that each person can live a life full of dreams (Mackey and Sisodia, 2013).

Some scholars believe. possibly in the name of CSR spiritual manifestation of leadership, is required" who will come out of the selfish, greedy divisive, quarrelsome, bigoted traits of traditional human race and work to bridge the gap between all lives - the gap between north and south, the gap between white and black, the gap between haves and have-nots."

CONCLUSION

Motivation of charity may vary from selflessness to selfishness though many believe that in selfishness also there lies self-interest. CSR in its primitive form was more akin to philanthropy or giving back to society which could have been driven by religious devotion, tradition, altruism or guilt. As business navigates the risk and opportunity, CSR becomes risk mitigatory endeavour or corporate responsiveness. Further to create benefit, business started looking business case in all CSR activities taking CSR as a Management Tool.

Whatever be the motive, the fact that resources are deployed and invested with specific target in mind that is more likely to give some outcome. Knowledge of outcome based on identified need, better governance within the government as well as in the corporate and in Non-profits, better coordination between state and all non-state players or contributors to the development arena are expected to give improved outcome and impact.

Review of CSR activities of Indian Industry particularly Maharatna CPSE establishes that a great deal of efforts being made to compliment and supplement the efforts of Government in economic as well as social development. The focal areas and the activities undertaken by these companies clearly establish their alignment to government expectation and initiatives. The development activities of conscious corporates/CPSE have been going on since decades. Government has been initiating various facilitating environment for CSR and sustainable development for better outcome and impact.

On the other hand, a recent report based on the analysis of 305 privately owned unlisted companies, including a few of the biggest brands like Google, IBM, Microsoft, Barclays, HSBC, Sony, LG, Samsung, Visa etc operating in India seems to be revealing on the performance of private vs., public sector. The report brings out analysis of the prescribed CSR spend and actual CSR spent of financial year 2015-16.

It is shocking to note that, "39% of the private unlisted companies failed to meet the CSR compliance that requires 2% of the average net profit of the previous three years to be spent on CSR projects. However, 29% companies went beyond mandatory CSR limit. While almost 2% of the companies did not spend any amount on the CSR, despite having mandatory CSR spend requirements."

This report was compiled from the available CSR data as of 31st January 2017 for the companies with prescribed CSR of INR 15 lacs or above.

"Out of 305 companies, only one company had prescribed CSR range of more than 100 crore. Most of the companies (156) had a prescribed CSR which ranged between 1-10 crore. As few as 14 companies had prescribed CSR between the ranges of 10-100 crores.

The total prescribed CSR of 305 companies amounted to Rs 954.18 crore and the actual CSR spent was around 707.87 crore. The total unspent CSR was rounded off to 26% whilst actual CSR spent to prescribe CSR was 74%."

This situation is revealing at a time when regular guidelines since 2009, have made conducive atmosphere for Corporates to work in the area of CSR. The concept of CSR and sustainability has been spread among the corporates by periodic issue of such guidelines.

Conceptual issue of CSR has been taken care by providing clear definition leaving no ambiguity as to what the corporate are expected to do. Mandating the CSR and listing down the area where CSR investment has to be necessarily made, has given focus on development area. Areas not covered there cannot be considered for CSR spending within mandatory allocation of resources. Providing the CSR project with management guidelines – from identifying needs to allocating resources – with measurable output and milestone based resource allocation should be the prime targets to ensure that the project delivers predefined output in time.

Involvement of Apex Management/Board Level Officials in allocation of CSR budget and bestowing the responsibility of monitoring the CSR policy and projects has attached higher accountability. This calls for Corporates to spend CSR fund only in predefined development projects and that their progress and performances are monitored by top management and put on public domain.

Even if one believes that the CSR itself is an economic and capitalist construct and does not challenge basic economic activity, it may be prudent to believe that current CSR agenda of corporate participation through mandatory CSR with projects, programme and activity in the identified development sector, under proper execution and monitoring system with clear focus on the outcome, could contribute to development goals, such as poverty alleviation, education, health care sanitation, etc.

Central Public Sector Enterprise of India (CPSE) which was created with focus on value creation as well as bringing social equity has been contributing to the social cause in tandem with government initiatives. They have been constantly participating in social development initiatives undertaken by the Government: for example, they have recently contributed to social causes by constructing 1.42 lakhs toilets in schools. In addition to contribution through job creation, these CPSEs have generated investment, produced safe products

and services, paid tax and duties, invested in human capital, established local business linkages, spread international business, supported technology transfer, and built physical and institutional infrastructure. In addition, they have been investing thousands of Crores of CSR fund in developmental activities largely geared towards achieving national goals for social welfare. With the present enabling atmosphere and clarity, the CPSEs appear to be aligned concurrently to social development and economic prosperity and are potent development actors.

However, studies report that there is unequal flow of CSR fund and that the number of CSR projects is very low in some parts of the country and concentrated in a few states. (CESD, 2015) This can be because of the fact that the Company Act suggests to give preference to the local areas where the companies operate understandably to create competitive context of business. However, considering the wide gap between resource availability and need, these local area interventions do deliver development. After all, charity begins at home. CSR may thus be a "business case" for the business houses without losing focus on development. To mitigate such spatial inequality due to lower concentration of business, CSR investment of organisations that virtually do not have local area (finance /on line business) and government scheme may be intensified.

REFERENCES

- Abdo, Ha. 2013. Assessing Private Sector Contributions to Job Creation: International Finance Corporation. Available at, http://www.ifc.org/wps/wcm/connect/d3b612004e3468c783d5ab7a9dd66321/IFC_FULL+JOB+STUDY+REPORT_JAN152013_FINAL.pdf?MOD=AJPERES (accessed on 08/11/2016).
- Akshay Patra Foundation https://www.akshayapatra.org/ accessed on November 08, 2016.
- Anonymous 2008. The Real Cost of Gasoline: An Analysis of the Hidden External Costs Consumers Pay to Fuel Their Automobiles, Washington, D.C., U. S, International Center for Technology Assessment. http://www.icta.org.doc.Real%20Price%200f%20 Gasoline.pdf, accessed on 08 November, 2016.
- Anonymous 2016. Briefing Paper: An economy for the 1% How privilege and power in the economy drive extreme inequality and how this can be stopped. Oxfam https://www.oxfam.org/sites/www.oxfam.org/files/file attachments/bp210-economy-one-percent-tax-havens-180116-en 0.pdf, accessed on November 08, 2016.
- Blowfield, Michael and Jedrzej G. Frynas 2005. Critical perspectives on Corporate Social Responsibility in the developing world. *International Affairs*. 81(3): 499–513. DOI: 10.1111/j.1468-2346.2005.00465.x.http://onlinelibrary.wiley.com/doi/10.1111/j.1468-2346.2005.00465.x/full. accessed November 12, 2016.
- Bowman, C. and Ambrosini, Veronique 2003. What Does Value Mean And How Is It Created, Maintained And Destroyed? Academy of Management Annual Meeting. Seattle, Washington DC, U.S.A. https://dspace.lib.cranfield.ac.uk/handle/1826/3254, accessed on 08th November, 2016.
- Branco, M. C., and Lúcia Lima Rodrigues 2006. Corporate Social Responsibility and Resource-Based Perspectives. *Journal of Business Ethics* 69: 111-132.

- Cantegreil, M., Dweep Chanana. and Ruth Kattumuri (Eds.) 2013. *Revealing Indian Philanthropy*. London, Alliance Publishing Trust.
- Carroll, Archie B. and Kareem M. Shabana 2010. The Business Case for Corporate Social Responsibility: A Review of Concepts, Research and Practice. *International Journal of Management Reviews*, 12: 85-105.
- CII-ITC 2015, Center of Excellence for Sustainable Development. *A billion dollars story of CSR spends in FY15: Results of CESD Annual CSR Tracker.* Delhi, Center of Excellence for Sustainable Development. http://www.cii.in/PublicationDetail.aspx? enc=Jf41yS0BVDIEJ+J4tFVVHMbzKX3nULPRpPERIMCRIbs, accessed on April 05, 2016.
- Dahlsrud, Alexander 2006. How Corporate Social Responsibility is Defined: an Analysis of 37 Definitions. *Environ. Mgmt.* 15: 1–13 DOI: 10.1002/csr.132 http://onlinelibrary.wiley.com/doi/10.1002/csr.132/pdf accessed on November 08, 2016.
- Department of Public Enterprise 2016. *Annual Report on the performance of Central Public Sector Enterprises*. New Delhi, Ministry of Heavy Industries and Public Enterprise.
- Drucker, P. F. 1984. The New Meaning of Corporate Social Responsibility. California Management Review. 59: 53-63. DOI: 10.2307/41165066. https://cmr.berkeley.edu/search/articleDetail.aspx?article=5402, accessed on October 14, 206
- Drucker, P. F. 2004. The Daily Drucker. New York, Harper Collins Publishers.
- Ebrahim, Alnoor, and V. Kasturi Rangan 2014."What Impact? A Framework for Measuring the Scale & Scope of Social Performance. *California Management Review* 56: 118–141.
- Elkington, John 1999. Enter the Triple Bottom Line. Capstone, Minnesota, U.S.A., Scientific Research.http://www.scirp.org/(S(czeh2tfqyw2orz553k1w0r45))/reference/ReferencesPapers.aspx?ReferenceID=1915530, accessed on November 24, 2016.
- Freeman, R. E., and Jeanne Liedtka 1991. Corporate Social Responsibility: A Critical approach. *Business Horizons* 34: 92-98.
- Frynas, Jedrzej. George 2005. The false developmental promise of Corporate Social Responsibility: evidence from multinational oil companies. *International Affairs Publication*. 581-589. DOI:10.1111/j.1468-2346.2005.00470.x. http://www.scirp.org/(S(i43dyn45teexjx455qlt3d2q))/reference/ReferencesPapers.aspx?Reference ID=1828597, accessed on November 12, 2016.
- Frynas, Jedrzej. George 2008. *Corporate Social Responsibility and International Development: Critical Assessment.* Birmingham, Blackwell Publishing Ltd.
- Gandhi, Mohandas. Karamchand 1955. *Ashram Observances in Action*. Ahmedabad, Navajivan Publishing House.
- Government of India, 2011. Census of India. Office of the Registrar General & Census Commissioner, India. New Delhi, Ministry of Home Affairs.
- Hawken, Paul. 1993. *The Ecology of Commerce: A Declaration of Sustainability*. New York, Harper Collins Publisher.
- Mackey, J., and Rajendra S. Sisodia 2013. *Conscious Capitalism.* Boston, Massachusetts, Harvard Business Review Press.
- Margolis, J. D., and James P. Walsh 2003. Misery Loves Companies: Rethinking Social Initiatives by Business. *Administrative Science Quarterly*. 48: 260-305.
- Meadows, Donella H., Meadows, D. L., Randers, J. and Behrens III, W. W 1972 *The Limits to Growth*. New York, Universe Books.
- Merino, Amparo, and Valor, Carmen. 2011 The potential of Corporate Social Responsibility to eradicate poverty: An ongoing debate. *Development in Practice*. 21:157-167

- DOI:10.1080/09614524.2011.546005. http://policy-practice.oxfam.org.uk/publications/the-potential-of-social-corporate-responsibility-to-eradicate-poverty-anongoin-131187, accessed October 13, 2016.
- National Statistical Commission, 2012. Report of the Committee on Unorganised Sector Statistics, Government of India, New Delhi.
- Nelson, Jane 2003. Economic Multipliers: Revisiting the core responsibility and contribution. London, International Business Leaders Forum.
- Porter, Michael. E., and Mark. R. Kramer 2011. Creating Shared Value. Boston, Massachusetts: *Harvard Business Review*. 89: 62-77.
- Rangan, V. Kasturi 2005. *Unilever in India: Hindustan Lever's Project Shakti—Marketing FMCG to the Rural Consumer-* Case 505-056. Boston, Massachusetts, Harvard Business School.
- Rangan, V. Kasturi 2010. The Limits of Nonprofit Impact: A Contingency Framework for Measuring Social Performance, Boston, Massachusetts, Harvard Business School.
- Roddick, Anita 1991. Body and Soul. Maryland, The Crown Publishing Group.
- Stierli, Michael. 2014 *Global Wealth Databook 2014*. Zurich, Credit Suisse AG Publisher. http://economics.uwo.ca/people/davies_docs/global-wealth-databook-2014-v2.pdf http://economics.uwo.ca/people/davies_docs/global-wealth-databook-2014-v2.pdf http://economics.uwo.ca/people/davies_docs/global-wealth-databook-2014-v2.pdf http://economics.uwo.ca/people/davies_docs/global-wealth-databook-2014-v2.pdf http://economics.uwo.ca/people/davies_docs/global-wealth-databook-2014-v2.pdf http://economics.uwo.ca/people/davies_docs/global-wealth-databook-2014-v2.pdf
- The Guardian, 2010. World's top firms cause \$2.2tn of environmental damage, report estimates. https://www.theguardian.com/environment/2010/feb/18/worlds-top-firms-environmental-damage accessed on May 05, 2017).
- The World Bank 2015 a. Global Economic Prospects: The Global Economy in Transition. Washington, DC: DOI: 10.1596/978-1-4648-0483-0.
- The World Bank. 2015 b. Improved sanitation facility, Washington, DC DOI: 10.1596/978-1-4648-0336-9.
- Trucost Plc. 2013. *Natural Capital At Risk: The Top 100 Externalities Of Business*. London: TEEB for Business Coalition. http://naturalcapitalcoalition.org/wp-content/uploads/2016/07/Trucost-Nat-Cap-at-Risk-Final-Report-web.pdf accessed on November 26, 2016.
- United Nations 2015, The Millennium Development Goal Reports. New York.
- Visser, Wayne, 2011. The Age of Responsibility: CSR 2.0 and the New DNA of Business. *Journal of Business Systems*, *Governance and Ethics*,5:1-17 http://www.waynevisser.com/wpcontent/uploads/2012/06/paper age responsibility wvisser.pdf, accessed on November 08, 2016.
- Viswanath, Priya and Dadrawala, Noshir 2004. *Global Equity Initiative*, Boston, Harvard University.
- Address for correspondence: A. K. Ghosh, Centre for Environment and Development (CED), Kolkata, Email. Id: cedkolkata@yahoo.com.

Preliminary Observations on the Quaternary Sediments and Associated Cultural Remains of the Subarnarekha River Basin, Ghatsila, Eastern India

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Abstract: The present article brings forward the results of recent exploration of the Quaternary sediments and associated prehistoric cultural materials of the Subarnarekha river valley, adjacent to Ghatsila town, East Singhbhum district of Jharkhand, eastern India. In this study Quaternary litho-stratigraphy of five distinct localities, namely Moubhander, Benashol, Dahigora, Gopalnagar and Nuagoan were studied and compared to understand Quaternary geological history of this region. Quaternary sediments were studied by means of the understanding of surface features and underground structures of the sediments from exposed natural and artificial sections in the field; and then various lithological features were correlated with each other to understand past geological phenomenon. Beside this context of prehistoric cultural remains, found from various strata of Quaternary sediments were studied. Results of this work reveal that the Subarnarekha river valley, adjacent to Ghatsila town of eastern India provides evidences of the succession of Pleistocene climate as well prehistoric human culture.

Key words: Quaternary Sediments, Lithostratigraphy, Microlithic, Lower Paleolithic, Subarnarekha River Basin, Eastern India.

INTRODUCTION

Evidences of prehistoric cultures of eastern India are found buried in the flood plain deposits of various rivers, like Mahanadi, Subarnarekha and Damodar (Ghosh, 1970; Ghosh et al. 1984; Tripathy, 1972; Mohanty, 1988; Ray, 2003; Polley and Ray, 2010; Padhan, 2014). Geomorphological as well as geological evidences show that all these rivers originated from the eastern extension of the archaic erosion landscape of peninsular India and then either fall in larger rivers like the Ganges or in the Bay of Bengal. Among all these rivers Quaternary sedimentary deposits of the Subarnarekha river valley have shown its great potential for understanding the succession of Pleistocene and early Holocene environment and associated ancient human culture of Chotanagpur plateau region of eastern India. Sedimentary deposits and associated prehistoric cultural remains of the East Singhbhum (now Purbi Singhbhum) district of Subarnarekha river valley have been studied since the time of British administrators and continued up to recent times (Ball, 1881; Anderson 1917; Mitra 1926; Murray 1941; Sinha 1951; Sen and Ghosh 1960; Sen et al 1962; Ghosh 1966, 1970; Ghosh and Chaudhuri 1991; Chakrabarti, 1993).

Ghosh (1970) was the first, to take a comprehensive survey of both East and West Singhbhum districts of Chotanagpur plateau region and properly

correlated the presence of prehistoric tools within different units of Quaternary sediments. Ghosh (1970) also found that Paleolithic sites of this region are clustered in five areas, namely- Chandil group of sites of Northern Singhbhum, Sini group of sites of Northern Singhbhum, Ghatsila Group of sites of Eastern Singhbhum, Chaibasa group of sites of Central Singhbhum and Jamda group of sites of Southern Singhbhum.

In another work Ghosh et al. (1991) divided the concentration of Lower Paleolithic sites in eastern India into six different 'geo-environmental locales' on the basis of geo-environmental and typo-technological attributes of the sites and of the recovered artifacts. After Ghosh (1970) some other workers like Chakrabarti (1986, 1993); Chakrabarti and Chattopadhyay (1987), Bhattacharya and Singh (1997, 1998) and Bhengra (2007), Polley and Ray (2010) have also made some contributions to understand Stone Age archaeology of Subarnarekha valley region, however, more work requires to be done.

In the context of aforesaid works, the present article depicts the result of exploration of the Quaternary sediments and associated prehistoric cultural materials of the Subarnarekha river valley near Ghatsila town of the Purbi Singhbhum district of Jharkhand. The result of this work will make some useful contribution to the knowledge of Quaternary climatic evolution and distribution of prehistoric sites of Chotanagpur plateau region of eastern India.

STUDIES ON THE PHYSIOGRAPHIC AND GEOLOGICAL CONTEXT

Five different sites were studied in the present exploration. All these sites are located in the vicinity of Ghatsila town in the Purbi (East) Singhbhum district of Jharkhand. Distributions of all these localities are found near the North-East and South-West banks of river Subarnarekha. The surveyed sites are-Moubhander (22°35′57.07"N, 86°26′52.36"E), Dahigora (22°35′12.79"N, 86°28′06.83"E), Gopalnagar (22°34′57.56"N, 86°27′41.86"E), Nuagoan (22°34′38.62"N, 86°28′41.38"E) and Benashol (22°35′16.05"N, 86°27′16.03"E) (see Figure 1). Among these five localities stone implements were recovered only from the Gopalnagar, Dahigora and Moubhander. So, the surveyed sites, like Gopalnagar, Dahigora and Moubhander can be referred to as archaeological sites and the rest can be referred as geological sites, since Quaternary alluvial deposits are well exposed in these sites (see Table 1).

The surveyed sites and the adjacent areas are owned by the people of neighbouring villages and are used by them for agricultural purpose. However, some badlands are also available in the surveyed sites which are left uncultivated.

The area is moderately undulated with an average elevation 75 to 150 meters above mean sea level (see Figure 3). Most of the surveyed area has a pediplain like topography with outcrops of quartzite and schistose rocks. The surveyed region consists of deposits of denudational origin (see Figure 2). It

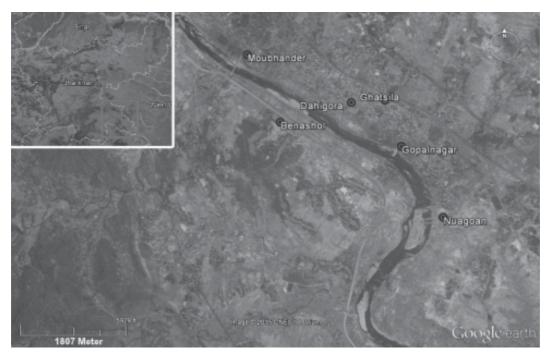


Figure 1: Map showing location of the surveyed sites in respect to Ghatsila town and Subarnarekha River.

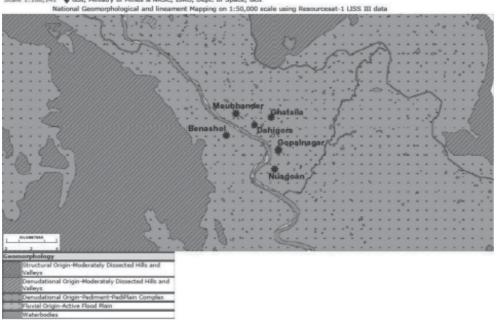


Figure 2: Geomorphological Map of the Surveyed Region.

can safely be classified as pediment which is thinly covered by the gravel and silt deposits of fluvial origin. Remains of ancient eroded mounds, like Phuldungri hill with outcrops of Dharwarian rocks is present on the North West corner of the surveyed area. Jadugora hill range (about 300 meters above mean sea level) is situated on the western bank of the river Subarnarekha. On both the banks of the river, vast sediments of Quaternary alluvium, around 6 to 10 meters high in some places are found. At the time of the field work, it was found that the Subarnarekha river bed was 30 to 45 meters wide and 1 to 3 meters deep at certain places. Channel side bar depositions containing loose sand and gravel are located on both the banks of the river. A mid channel bar is found near the site Dahigora (see Figure 1 and Figure 2). The schistose rocks that appear above the river bed display foliage dipping to the south.

Regarding the drainage pattern of this region it can be stated that the study area falls within the Subarnarekha drainage system in general. The principal river of this region is Subarnarekha. However, besides Subarnarekha a number of small rivulets and gullies are found in this region. Some of these rivulets are known as Kankurama Nala, Gharmora Nala, etc. The general slope of the land of the surveyed region is towards the channel of river Subarnarekha. The top soil of this area is grayish in color and sticky in nature. Stickiness indicates the presence of a vast quantity of clay, which would be very useful for cultivation. Lateritic soil with calcareous nodules are found in some parts of the river bank.

In the present work a classic "Empirical Paradigm" approach (Miall, 2010:5) of geological stratigraphy is used to study and understand Quaternary geology of the study area. In this approach study of geomorphic features, like fluvial deposits, calcretes and regolith deposits are used to study physiographic features and sections of geological stratigraphy of the surveyed region. Before going into the field, geological and geomorphological map and reports of the surveyed area were consulted. Various 'Earth Observatory Software Applications' like Google Earth and ISRO Bhuvan were used to get an idea about the geomorphological and morphostratigraphy of the study area. GIS tools and software, like ISRO Bhuvan, TCX Converter, 2015 and Quick Grid Grid Viewer, 2015 were used to develop 3D geomorphological model of the site. To study the geological stratigraphy of Quaternary sediments in the field, methods of descriptive stratigraphy (Miall, 2010: 4-6) were used. Studies of the stratigraphic sections were conducted in purposively selected sites. Selections of the sites were done with the help of geomorphological map of the region and also by the help of Earth Observatory Software applications. Near surface sediment characters of the litho-units were studied from the truncated profiles of the river bank and the exposed sections of diverse landforms, like levee, abandoned channel and point bar deposits (Brown, 1997: 63-70). Then a geological survey schedule was developed, following methods of field survey of sedimentary rocks (Lahee, 1952; Herz and Garrison, 1998:37-45; Tucker,

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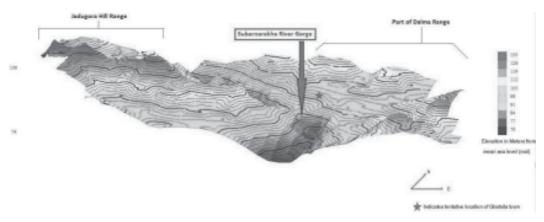


Figure 3: Tentative 3D contour modeling of the surveyed region, indicating contour pattern of land forms.

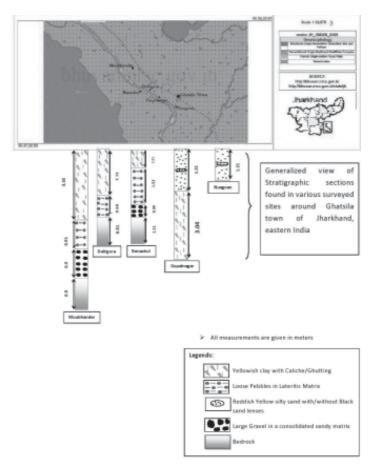


Figure 4: Geomorphological map of Ghatsila region showing location of the surveyed sites and generalized view of Stratigraphic sections

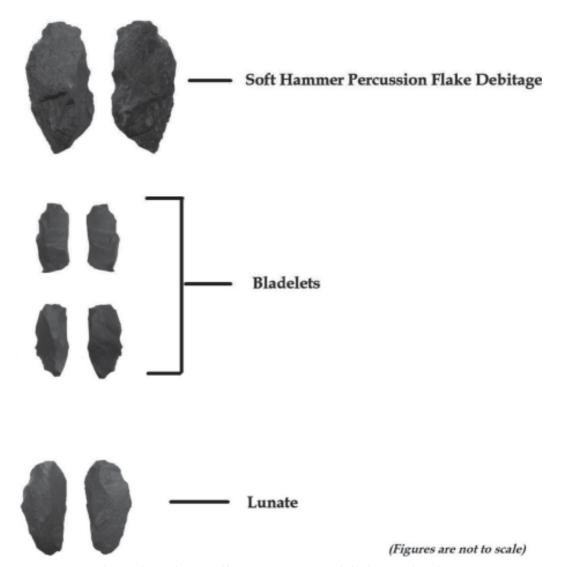


Figure 5: Various artifact types recovered during exploration.

2003) and was applied to study and interpret sedimentological units in the field. In determining the relative age of the sedimentological units the rules applied in the present context are the relative position of the sedimentary units in a stratigraphic section and also position of the units in relation to the present day river channel (Lahee, 1952:115-116; Tucker, 2003:194-195). Beside this, degree of compaction and pedogenesis were also used to understand relative age of various sedimentary units and climatic condition at the time of their origin. Depositional environment has been deducted on the basis of sedimentological characters of the fluvial deposits (Lahee, 1952:61-115; Tucker, 2003:191-213). Finally, to make a satisfactory analysis of

sedimentary environment data originated from present exploration was compared with that of the previous works (see Hunday and Banerjee, 1967; Ghosh 1970; Dassarma and Biswas, 1978; Ghosh et al. 1984; Chatterjee, 1986; Ghosh and Chaudhuri 1991; Ghosh and Majumdar; 1991; Bandopadhyay 2007; Ghosh 2014; Ghosh and Guchhait 2014) carried out in the studied and its adjoining regions. Methods used in the present study would be more effective with the application of various tools, like geochemical analysis of sediments and use of seismic maps but due to lack of necessary funds and time constraint it was not possible in the present context.

Studies of the Quaternary sediments in the surveyed region show that they can be divided into four distinct litho-units resting over bed rock. These litho-units are recognized as- Unit I- Pebbly-cobbly gravel in a consolidated matrix, Unit II- Detrital Laterite¹ /loose pebble in lateritic matrix, Unit III-Yellowish clay with Caliche, Unit IV- Blackish brown silt/sand (see Figure 4). Depositions of litho-unit sequences begin over bedrock of pre-Quaternary origin. Now a days these are found over the pediment and pediplain complex of denudational origin. The bed rock is made up of schistose rocks and it is of the same age with the Dharwarian rocks of South India (Dassarma and Biswas, 1978). In the other regions of eastern India, this bed rock is likewise exposed (Ghosh, 1970; Dunn 1929, 1940; Dunn and Dey, 1942; Krishnan, 1960; Hunday and Banerjee, 1967; Dassarma and Biswas, 1978).

Unit I

This unit is exposed near the bank of river Subarnarekha near Benashol village (see Figure 7). This unit rests about 3-3.5 meters below present soil surface. It lies in an unconformable way on the schistose or quartzite bed rock. It is composed of unsorted clastic sediments of gravel and cobble sizes. Gravels and cobbles are rounded and compose primarily of quartzite, vein quartz and sometimes basaltic and schistose rocks. The matrix of the deposit consists of highly consolidated silt and sand. The cementation of the deposit is made by calcium carbonate. Thickness of this bed in the entire section varies from 0.6 to 0.9 meter whereas thickness of those sedimentary sections where this unit is exposed may vary in between 7.6 to 3 meters. These bigger clasts were probably deposited when the volume and velocity of the river Subarnarekha were on a higher extent (27 meters above the present river bed). No archaeological elements have been recovered from this unit at the time of present exploration.

Unit II

It contains unsorted small pebbles (size 1.9 to 5.9 cm) in loose detrital laterite. Pebbles in this unit are rolled and composed primarily of quartzite, quartz, and rarely some basaltic rocks. It sometimes contains cobble size clasts of laterites. The laterite present in this deposit is detrital in nature (Paton and Williams, 1972:45). The unit is found in stratigraphic sections in varied depths (1.2-3.5 meters). Thickness of this sedimentary unit varies in between 0.9 to

Table 1: Comparison of Stratigraphic profiles (sections) revealed at surveyed sites around Ghatsila town.

)	,	,		,			,									
Type of Deposits								Sites	es								
(All measurements given	~	Moubhander				Dahigora	<u> </u>			Gopalnagar	ıagar		Nuag	Nuagoan	B	Benashol	-
here are in Meters) Sec	Sec	Sec	Sec	Sec	Sec	Sec Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec Sec	Sec	Sec Sec	Sec
I	Π	III	IV	П	П	III	IV	>	Н	П	III	IV	Ι	Π	Н	П	III
Blackish brown silt/Nil sand (Holocene Deposit)	Ni1	Nil	Nil	Ni1	Ni:1	Nil	Ni1	Nil	Nil	N i 1	2.49	2.49 1.18 1.21 1.40 Nil	1.21	1.40	Nil	Nil	Ni1
Yellowish clay with 8.62 caliche		1.28	0.60 1.28 4.26 4.26 2.13 2.89 0.76	4.26	2.13	2.89	0.76	0.30 4.26 2.37	4.26	2.37	Nil	N i1	N i1	Nil	1.15 1.06		0.88
Detrital laterite/ looseNil pebble in lateritic matrix	1.55	0.45	2.43	Nil	Nil	Ni1	Ni1	0.57	N i1	Ni1	Nil	N i1	N i1	Nil	1.37 1.52		1.09
Pebbly-cobbly gravel Nil in a consolidated matrix	Ni1	Ni1	0.97	Nil	Nil	Ni1	Ni1	Ni1	N i1	Ni1	Nil	N i1	N i1	Nil	0.91 0.60	09.0	Ni1
Pre-quaternary rocks Nil (Bedrock)	Ni1	Ni1	0.30	Ni1	0.91	Nil	Ni1	Nil	Nil	Nil	Ni1	Nil	N i l	Ni1	0.54	Ni1	Ni1

1.8 meters. The unit is well exposed on both the banks of the Subarnarekha river near Moubhander, Dahigora, Gopalnagar and Benashol region (see Figure 6 and Figure 7) about 15 to 18 meters above the present river bed. Previous researchers have recovered a number of in situ Acheulian artifacts from this unit (Ghosh, 1970). However, during the present exploration only a single debitage (soft hammer flake) perhaps of Acheulian industry was recovered in situ from this deposit. Recovery of this artifact justifies the claim of previous researchers (Ghosh, 1966; 1970) regarding presence of Acheulian artifacts in this deposit.

Unit III

The deposit contains reddish brown Plastic clay with Caliche, Pisolitic laterite nodules and quartz particles. The deposit is confined mainly near the vicinity of present bed or Subarnarekha river and extends as narrow belts when going away from the present river bed towards higher grounds. Depth of this deposit is about 1.2 meters from present soil surface. Thickness of this unit varies in between 0.9 to 8.5 meters (found near the NE bank of the Subarnarekha River near the site Moubhander) (see Figure 7). On the upper part of this unit, a zone of calcareous formation or 'Caliche' or 'Ghutting' is found strewn on the surface. Ghosh (1970) had recovered implements of Singhbhum flake-blade industry from this deposit. During present exploration microlith artifacts are found in situ from this deposit near Gopalnagar region.

Unit IV

This unit represents top of the present day depositional flood plains and braids along the river Subarnarekha. Thickness of this deposit is about 1.2 meters. The unit contains blackish brown loose sand. Sometimes loose, black sand lenses, fragments of bricks and recent cultural materials are found embedded in the deposit. During the present exploration, it is found that the unit is usually deposited adjoining to the river channel near Gopalnagar region.

DESCRIPTION OF THE RECOVERED ARTIFACTS

In the present exploration only 10 artifacts probably of Microlithic period² and one flake debitage, probably belong to Acheulian industrial phase were recovered (see Figure 5 and Table 2). Microlithic artifacts were recovered from the Yellowish Clay deposit, exposed in Gopalnagar region. Artifacts were found scattered near the exposed sections mixed with caliche nodules. From the distribution and context of artifacts in the field, it appears that the artifacts and the caliche nodules eroded out of the exposed sections due to rain wash. After this the clay and other smaller and lighter particles of the deposit washed away due to rain water activities leaving relatively heavier stone artifacts and caliche nodules near the exposed sections. A flake debitage was recovered from exposed detrital laterite near Gopalnagar.



Figure 6: Quaternary deposits exposed near the site Moubhander.

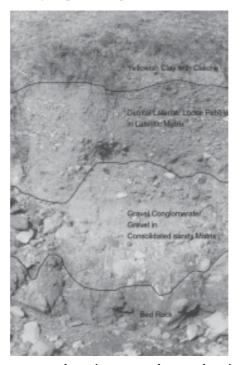


Figure 7: Quaternary deposits exposed near the site Benashol.

Table 2: Description of recovered artifacts

Museum No.	Probable Artifact Type	Raw Material Type	Nature of Preservation	Geological Context of Recovery
GLP-01-14	Flake Debitage	Black Cherty Quartzite	Fresh	Unit II (Detrital Laterite)
GLP-02-14	Bladelet	Black Chert	Fresh	
GLP-03-14	Single side scraper on flake	Black Chert	Partially rolled	
GLP-04-14	Lunate	Black Chert	Fresh	
GLP-05-14	Broken artifact	Greenish cryptocrystalline rock.	Broken	
GLP-06-14	Broken artifact	Brown Quartzite	Broken	Unit III
GLP-07-14	Single side Scraper on flake	Grey Chert	Rolled with reddish patina on it.	(Yellowish Brown Caly with Caliche)
GLP-08-14	Double side Scraper on Core	Black Chert	Fresh	,
GLP-09-14	Bladelet	Black Chert	Fresh	
GLP-10-14	Scraper cum Knife on Flake	Black Cryptocrystalline rock	Little bit rolled	
GLP-11-14	Bladelet	White cryptocrystalline quartz/ milky Qua	Little bit rolled	

Various attributes of the flake debitage, e.g. curved longitudinal cross section of the flake, feathered flake termination, narrow faceted striking platform, lip like, projection at the junction part between striking platform and the bulb of percussion and also presence of a diffused bulb of percussion identify this artifact as a soft hammer percussion flake (Cotterell and Kamminga, 1987:689-691; Debenath and Dibble, 1994:14-15; Andrefsky, 2005:123; Whittaker, 2009:185-190) debitage. Since a number of Acheulian artifacts has been recovered by previous scholars (Ghosh, 1966; 1970) from the same stratigraphic unit of the studied region, the recovered soft hammer flake can be assumed to be of Acheulian industries.

DISCUSSION AND CONCLUSION

Quaternary record and its climatic inference in India are extremely diverse as so many geotectonic and climatic settings are represented. The Quaternary paleoclimatic and paleontological studies in India indicate that there were distinct period of erosion and incision (degradation) and sediment deposition (aggradation) associated with changes in the south-west monsoon conditions and sediment supply (Mishra et al., 2003; Singhvi and Kale, 2009, cited in Ghosh and Guchhait, 2014:4154; Badam, 2013:110). Quaternary sediments

of eastern India are characterized by the presence of laterites and unconsolidated gravels, sands, silts and clays with occasional horizons of caliche (Vaidyanathan and Ghosh, 1993), which are formed and deposited by the effect of paleomonsoon and paleofloods of various peninsular rivers (Ghosh, 2014:81) and the river Subarnarekha was one of them.

Study of the Quaternary geology as well as the distribution of Stone Age sites near Ghatsila town reveals that most of the surveyed region is presently underlain by pre-Quaternary metamorphic and igneous rocks (probably Dharwarian in nature). Beside this, deposits thought to be of late Tertiary are found on the hill tops of this region in the form of primary laterite. Pleistocene events of this region are primarily characterized by the erosional activities in the hills and uplands and by the deposition and re-disposition of this erosional debris along the pathways of present day rivers or river valleys.

The present exploration has revealed that Quaternary sediments of the studied region can be divided into four different litho-Stratigraphic units-Unit I, Unit II, Unit III and Unit IV. Among these, Unit I comprises highly consolidated deposit of Gravels and Pebbles. Unit II comprises deposit of loose pebbles in lateritic matrix. Unit III includes reddish brown clay deposit, rich in Caliche/Ghutting and Pisolitic nodules and Unit IV constitutes blackish brown loose sand.

Unit I has morphostratigraphic and lithostratigraphic similarity with Lower Lalgarh formation of the western shelf zone of Bengal basin which can date back from Lower to Middle Pleistocene (Ghosh and Majumdar, 1991:16). A number of scholars like Chatterjee and Chattopadhyay (1986), Chatterjee (1986) have reported lithostratigraphicaly similar deposit from the middle part of Subarnarekha basin, which is nearly about 50 to 60 km away from the present study area. They named this deposit as Lalgarh surface or Lalgarh formation and dated this to the middle Pleistocene (Chatterjee, 1986:8-12). Some scholars claim that the climate at the time of deposition was humid (Ghosh and Majumdar, 1991). Similar gravel conglomerate bed is also found from the North-East part of the state of Orissa near the site Khamar of the Angul district and dated to 0.3 million years B.P on the basis of Toba ash deposition (Devdas and Meshram, 1991). The deposit of Unit II mainly comprises reworked and redeposited sediments of pebbles in laterite matrix. The deposit has similarity with the Upper Lalgarh Formation of the Kasai-Subarnarekha basin of eastern India and can be dated to Middle to Upper Pleistocene (Chatterjee, 1986; Chatterjee and Chattopadhyay, 1986; Ghosh and Majumdar, 1991). Caliche/ Ghutting bearing reddish brown clay of Unit III is quite similar with Sijua morphostratigraphical unit of Kasai-Subarnarekha basin and Damodar basin (Chatterjee, 1986; Chatterjee and Chattopadhyay, 1986; Ghosh and Guchhait, 2014) and Illambazar Surface of Ajay river basin (Ghosh et al. 1985), bordering West Bengal, Jharkhand and Orissa. Unit III was probably deposited during terminal Pleistocene to early Holocene. Morphostratigraphic and

lithostratigraphic nature of Unit IV indicates that it would be equivalent with the Kasai formation of the Subarnarkha basin, bordering West Bengal, Bihar and Jharkhand (Chatterjee, 1986:10-11; Chatterjee and Chattopadhyay, 1986) and Diara formation of Ajay-Bhagirathi confluence, bordering western part of West Bengal and eastern part of Bihar (Ghosh et al., 1985). The age of this deposit probably goes back in between the early Holocene to present day (Ghosh et al. 1985; Chatterjee, 1986; Chatterjee and Chattopadhyay, 1986; Ghosh and Guchhait, 2014).

Zooarchaeological and Paleoclimatic studies of eastern India shows that this region faced a fluctuating climatic condition between warmer and humid and cooler and drier climate throughout Pleistocene and early Holocene (Kale et al., 2004; Sinha et al., 2005; Sinha and Sarkar, 2009, cited in Ghosh and Guchhait, 2014:4158; Nandy and Pal, 2014). In the present study identification of pebble in lateritic matrix (Unit II) indicates that one of the reasons behind its formation and deposition was alternating wet and dry seasons (Korisettar and Rajaguru, 1998; Ghosh and Guchhait, 2015a:112-113, 2015b:226-227). Unit III was probably deposited during terminal Pleistocene to early Holocene, when fluctuating warm-humid climate was present. The most important lithological feature of the Unit, supporting the aforesaid claim is the presence of 'Caliche' or 'Ghutting' in the Unit III. Caliche or Ghutting is developed in dry climatic condition, where rainfall is slight (Lahee, 1952:22). In eastern India, this upper clay or silt deposit containing Calcrete or Caliche or Ghutting represents one of the most important beds of Quaternary sediments, which indicate the end of the Pleistocene (Rajaguru and Mishra, 1997:29-30). The presence of Calcrete in the present sub-humid and humid parts of eastern India indicates drastic change in the climate during Last Glacial Maximum around 18,000 years B.P., when summer monsoons were very weak in the Indian Sub-continent (Basak, 1997; Rajaguru and Mishra, 1997; Deo et al 2004-2005:219-220; Achyuthan et al 2012; Ghosh and Guchhait, 2014:4155). Beside the presence of Pisolitic nodules in Unit III indicates that probably the deposit was formed in a strongly fluctuating warm-humid climatic condition during the end of Pleistocene or earlier part of Holocene (Ghosh and Guchhait, 2014:4155).

Results of the present exploration with all its limitations show that Subarnarekha river valley region of Ghatsila and its adjoining region may provide significant information regarding Quaternary sedimentary record and climatic evolution of eastern India. Recovery of few microlithic tools brings forward the possibility of presence of microlithic assemblage in the studied region, however, further investigations can bring forward more information in this part. Studying the quality and quantity of data found from this region it can be said that this region can bring forward significant information regarding Quaternary climatic history and associated human culture of this part of India. Efficiency of the present study could be more enhanced with

more systematic exploration, excavation of selected sites and more detailed analysis of archaeological assemblages as well as geological features of the sites, however, due to the limited time span and funding it was not possible. It can be hoped that in the near future more detailed studies in this region can bring more information regarding evolution of man in India as well as south Asia.

NOTES

- ¹ Presence of rounded pebbles and boulders of different rocks, gravelly appearance of the crust and the general absence of conventional horizons (i.e. horizons include residual laterite below and detrital laterite above) of laterite signify its detrital origin (Roy Chowdhury et al, 1965:552; Mishra et al, 2007: 524; Ghosh et al, 2015a: 101). Since all these features are found in present context, the Unit II is identified as detrital laterite.
- ² It is a cultural phase characterized by the production of bladelets/microblades along with backed artifacts; it is associated with modern humans (Jayaswal, 2009:7; Clarkson et al, 2009: 326; Mishra et al, 2013).

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REFERENCES

- Achyuthan, H. *et al.* 2012. Geochemistry of Calcretes (Calcic paleosol and hardpan), Coimbatore, Southern India: Formation and Paleoenvironment. *Quatern. Int.* 265:155-169.
- Anderson, C.W. 1917. A Note on Prehistoric Stone Implements Found in the Singhbhum District. *J. Bihar Orrisa R. Soc.* 3:349-362.
- Andrefsky, William 2005. Lithics: Macroscopic Approaches to Analysis. Cambridge University Press.
- Badam, G. L. 2013. An Integrated Approach to the Quaternary Fauna of South and South East Asia- A Summary. *J. Paleontol. Soc. India.* 58(1):93-114.
- Ball, V. 1881. The Geology of Manbhum and Singhbhum. Mem. Geol. Surv. India. 18(2).
- Bandyopadhayay, S. 2007. Evolution of the Ganga Brahmaputra Delta: A Review. *Geogr. Rev. India.* 69:235 268.
- Basak, B. 1997. Microlithic Sites in the Tarafeni Valley, Midnapore District: A Discussion. *Man Environ.* 22:11-28.
- Bhattacharya, D.K. and Mukesh Kumar Singh 1997. Sohdihwaha: A Late Paleolithic Site from Kharagpur Valley of Bihar. *Indian Anthropol.* 27:29-55.
- Bhattacharya, D.K. and Mukesh Kumar Singh 1998. Jurpania: The Epi-Paleolithic Traditions of Kharagpur Valley in Chottanagpur Plateau. *Man India*. 78:189-204.
- Bhengra, Dilbar 2007. Archaeology of Chottanagpur Division (Jharkhand). New Delhi, Agam Kala Prakashan.
- Brown, A.G. 1997. *Alluvial Geoarchaeology: Floodplain Archaeology and Environmental Change.* Cambridge, Cambridge University Press.

- Chakrabarti, D.K. 1986. The Lithic Industries of the Santal Parganas with Notes on the Damin Industry. *Man Environ*. 10:141-149.
- Chakrabarti, D.K. 1993. Archaeology of Eastern India: Chhotanagpur Plateau and West Bengal. New Delhi, Munshiram Manoharlal.
- Chakrabarti, D.K. and R. K. Chattopadhyay 1987. Notes on Lithic Industries of Hazaribagh-Giridih districts, South Bihar. *Man Environ.* 11:117-121.
- Chatterjee, A. 1986. Quaternary Geology and Geomorphology of a part of Subarnarekha basin, Medinipur district, West Bengal, Mayurbhanj district, Orissa and Singhbhum district, Bihar: Progress report for the field season 1983-84. Geological Survey of India. Calcutta, Government of India Publications.
- Chatterjee, A. and G. S. Chattopadhyay 1986. Quaternary Geology and Geomorphology of Kasai-Subarnarekha basin, Meedinipur and Bankura districts, West bengal, Singbhum district, Bihar and Mayurbhanj district, Orissa. Unpublished Report. Geological Survey of India. Calcutta, Government of India.
- Clarkson, C. et al. 2009. The Oldest and Longest Enduring Microlithic Sequence in India: 35,000 Years of Human and Change at the Jwalapuram Locality 9 Rockshelter. Antiquity 83:1-23.
- Cotterell. B. and J. Kamminga 1987. The formation of flakes. Am. Antiquity 52: 675-708.
- Dassarma, D.C. and S. Biswas 1978. Study of Quaternary Deposits of Bankura District, West Bengal: Progress report for the field session: 1972-73. Government of India. Calcutta, Geological Survey of India.
- Debenath. A. and Harrold Dibble 1994. *Hand Book of Paleolithic Typology (vol-1): Lower and Middle Paleolithic of Europe.* Philadelphia, University of Pennsylvania.
- Deo, S., Mishra, S. and S. N. Rajaguru 2005. Palaeoclimatic Studies at the Deccan College (1940-2005) A Geoarchaeological Approach. *Bull. Deccan Coll. Postgrad. Res. Inst.* 64-65: 209-228.
- Devdas, V. and S. N. Meshram 1991. Search for Quaternary ash bed in the Quaternary basins of Orissa. *Records Geol. Surv. India* 124:40-42.
- Dunn, J. A. 1929. The Geology of Northern Singhbhum, Including Parts of Ranchi and Manbhum Districts. *Mem. Geol. Surv. India* 54:1-166.
- Dunn, J. A. 1940. The Stratigraphy of South Singhbhum. *Mem. Geol. Surv. India* 63:303-369.
- Dunn, J. A. and A. K. Dey 1942. The Geology and Petrology of Eastern Singhbhum and Surrounding Areas. *Mem. Geol. Surv. India* 69:281-456.
- Ghosh, A.K. 1966. Implementiferous Laterite in Eastern India. In: *Studies in Prehistory: Robert Bruce Foote Memorial Volume*, ed. by D. Sen, A. K. Ghosh, pp-149-162. Calcutta, Firma K.L. Mukhopadhyay.
- Ghosh, A. K. 1970. The Paleolithic Cultures of Singhbhum. *Trans. Am. Philos. Soc.* 60: 3-68
- Ghosh A. K., et al. 1984. Archaeological reconnaissance in the Sanjai Valley, Bihar. Bull. Indo-Pacific Prehist. Assoc. 5:29-37.
- Ghosh, A. K. and D. Chaudhuri 1991. Pebble Core Element of Paleolithic Culture of West Bengal. In: *Studies in Archaeology: Papers presented in memory of P.C Dasgupta*, ed. by A. Datta, pp-41-57. New Delhi, Books and Books.
- Ghosh, R.N. and S. Majumdar 1991. Geology and Morphostratigraphy of West Bengal: A Database for Archaeological Exploration. In: *Studies in Archaeology: Papers presented in memory of P.C Dasgupta*, ed. by A. Datta, pp-7-37. New Delhi, Books and Books.

- Ghosh, B.K. et al. 1985. Quaternary Geology and Geomorphology of Ajay basin, Birbhum and Bardhaman Districts, West Bengal, with special reference to Geoenvironmental studies: Progress Report for the Field Season 1982-83 and 1983-84. Geological Survey of India. Calcutta, Government of India Publications.
- Ghosh, S. 2014. Palaeogeographic significance of Ferruginous Gravel Lithofacies in the Ajay Damodar interfluve, West Bengal, India. *Int. J. Geol. Earth Environ. Sci.* 4: 81-100.
- Ghosh, S. and S. K. Guchhait 2014. Palaeoenvironmental significance of fluvial facies and archives of Late Quaternary deposits in the floodplain of Damodar River, India. *Arab J. Geosci.* 7:4145–4161.
- Ghosh, S. and S. K. Guchhait 2015a. Characterization and Evolution of Laterites in West Bengal: Implications on the Geology of Northwest Bengal Basin. *Trans. Inst. Indian Geogr.* 37:93-119.
- Ghosh, S. and S. K. Guchhait 2015b. Characterization and Evolution of Primary and Secondary Laterites in Northwestern Bengal basin, West Bengal, India. *J. Paleogeogr.* 4: 203-230.
- Herz, N. and E. G. Garrison 1998. *Geological Methods for Archaeology*. New York, Oxford University Press.
- Hiscock, P., Clarkson, C. and A. Mackay 2011. Big Debates over Little Tools: Ongoing Disputes over Microliths on Three Continents. *World Archaeol.* 43:653-664.
- Hunday, A., Banerjee, S. 1967. Geology and mineral resourses of West Bengal. *Mem. Geol. Surv. India* 97:302.
- Jayaswal, V. 2009. Prehistoric India: Assessment and Prospects in the 21st Century. In: Status of Prehistoric Studies in the Twenty-First Century in India, ed. by R. Ray, V. Jayaswal, pp-3-11. Oxford, BAR International Series 1924.
- Kale, V.S., Gupta, A. and A. K. Singhvi 2004. Late Pleistocene–Holocene palaeohydrology of monsoon Asia. In: *Progress in Palaeohydrology*, ed. By V.S. Kale, K. J. Gregory and V.U. Joshi, pp- 403–417. Bangalore, Geological Society of India.
- Korisettar, R. and S. N. Rajaguru 1998. Quaternary Stratigraphy, Paleoclimate and the Lower Paleolithic of India. In: *Early Human Behaviour in Global Context: The Rise and Diversity of the Lower Paleolithic Record*, ed. by M. Petraglia and R. Korisettar, pp- 304-342. London, Routhledge.
- Krishnan, M. S. 1960. Geology of India and Burma. Madras, Higginbothams (P) Ltd.
- Lahee, F.H. 1952. Field Geology. London, McGraw-Hill Book Company.
- Miall, A.D. 2010. The Geology of Stratigraphic Sequences. London, Springer Publications.
- Mishra, S. et al. 2003. Fluvial response to Late Quaternary climatic change; case studies from upland western India. *Proc. Indian Nat. Sci. Acad.* 69:185–200.
- Mishra, S., Deo, S. and S. N. Rajaguru 2007. Some Observations on Laterites Developed on Deccan Trap: Implications for Post-Deccan Trap Denudational History. *J. Geol. Soc. India* 70:521-525.
- Mishra, S., Chauhan, N. and A. K. Singhvi 2013. Continuity of Microblade Technology in the Indian Subcontinent Since 45 ka: Implications for the Dispersal of Modern Humans. *PLoS ONE* 8: 1-14. https://doi.org/10.1371/journal.pone.0069280 accessed August 14, 2017
- Mitra, P. 1926. Prehistoric India. Calcutta, University of Calcutta Publications.
- Mohanty, P. 1988. Five seasons of exploration in Keonjhar district, Orissa. *Bull. Indo-Pacific Prehist. Assoc.* 8:47-53.

- Murray, E.F.O. 1941. The Ancient Workers of Western Dhalbhum. J. R. Asiat. Soc. Bengal 6:61-104.
- Nandy, S., Pal. T. K. 2014. *Animal Remains from the South-Western Part of West Bengal, India and their relevance to the Ancient Civilization of the Area.* Occasional Paper No-337. Kolkata, Zoological Survey of India.
- Padhan, T., 2014. Stone Age Archaeology of Jonk River Basin in Western Odisha and Eastern Chhattisgarh. *Heritage: J. Multidiscip. Stud. Archaeol.* 2:405-420.
- Paton, T. R., Williams, M. A. J. 1972. The concept of laterite. *Ann. Assoc. Am. Geogr.* 62:42-56.
- Polley, K. and R. Ray 2010. A Preliminary Study on the Stone Age Cultures of Khunty and its Adjoining Regions, Jharkhand. *Puratattva* 40: 51-70.
- Rajaguru, S.N. and S. Mishra 1997. Late Quaternary Climatic Changes in India: A Geo-archaeological Approach. *Bull. Indo-Pacific Prehist. Assoc.* 16:27-32.
- Ray, R. 2003. Cultural continuity and its implications on human evolution: A study from eastern Indian. *Hum. Evol.* 18:203-212.
- Roy Chowdhury, M. K. *et al.* 1965. Recent Concepts on the Origin of Indian Laterite. *Geol. Sur. India* 31: 547-558.
- Sen, D. and A. K. Ghosh 1960. On the occurrence of palaeoliths in Singhbhum. *Man India* 40:178-191.
- Sen, D., Ray, G. S. and A. K. Ghosh 1962. Paleoliths from Manbhum and Singhbhum. *Man India* 42:10-18.
- Singhvi, A.K. and V. S. Kale 2009. Palaeoclimatic studies in India: Last Ice Age to the Present. *IGBP-WCRP-SCOPE-Report Series* 4:1–30.
- Sinha, R. and S. Sarkar 2009. Climate-induced variability in the Late Pleistocene–Holocene fluvial and fluvio-deltaic successions in the Ganga Plains, India: a synthesis. *Geomorphol.* 113:173–188.
- Sinha, S.C. 1951. The Discovery of Some Prehistoric Stone Tools in South Manbhum. *Sci. and Cult.* 17:164.
- Sinha. R. et al. 2005. Late Quaternary geology and alluvial stratigraphy of the Ganga Basin. Himal. Geol. 26:223–240.
- Tixier, J. 1963. *Typologie de l'Epipaléolithique du Maghreb*. Mémoires du Centre de Recherches Anthropologiques, Préhistoriques et Ethnographiques 2. Paris, Arts et Métiers Graphiques.
- Tixier, J. 1970. L'Abri Sous Roche de Ksar Aqil: La Campagne de Fouilles 1969. *Bull. Mus. Beyrouth* 33:173–191.
- Tripathy, K. C. 1972. South Orissa Prehistory-The First Record of Stone Age Tools. *Asian Perspect.* 15:47-59.
- Tucker, M. E. 2003. Sedimentary Rocks in the Field. London, John Willey and Sons.
- Vaidyanathan, R. and R. N. Ghosh 1993. Quaternary of the East Coast of India. *Curr. Sci.* 64:804-816.
- Whittaker, J. 2009. Flint Knapping: Making and Understanding Stone tools. Austin, University of Texas Press.
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Women and Land Rights; Struggles and Negotiation with References to Sumi Community

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Abstract : When we talk about development from a global perspective, the most important voice which often remains unheard is the voices of the weak, marginalized and the vulnerable population at the periphery including women. This unwritten custom not only exists in the society but has become an accepted norm that violates women's rights to land and resource ownership both at the natal and marital house. Considered as temporary resident in the parental house, women are taught at the very onset of their childhood to compromise their food, space, time, and education for the male members. After marriage, they become a permanent resident in the marital household with no control over resources, economy, politic, religious ideology and sexual or reproductive rights. In this way, they become immediate victim of socio-environmental crisis at the hands of men who misuse their position and power to control, manipulate, and exploit the 'weaker sex' to their advantage.

Irony to their pitiable condition, they emerged as 'harbinger' of environmental sustainability due to their inherent knowledge, caring nature, and close proximity with the given environment. Build upon anthropological fieldwork, case study, interview guide, narratives, and informal group discussion, the present paper attempts to explore the voices of women; their struggles and negotiation with the men-folk in sustaining livelihood rights and resources. uitable for application in Indian context.

Key words: Women, Patriarchy, Land Rights, Sumi Community

INTRODUCTION

When we talk about planning, development and management, be it in the context of social, economic, political, religious, or the environmental platforms across the globe, the most important voice often tend to remain unheard is the voice of women at the margin (UNCSD, 2012). Being ignored and excluded from the socio-public platform has lead to 'culture of silence' of women in the contemporary scenario. There has been continuous debate on gender roles and women rights/identity since past decades but little have been heard of the positive outcomes due to underlying social structure, religious ideology and cultural limitation that refuses to break off from the given community, society and the world at large.

The experience of women may vary in different context of the world such as race, caste, culture, and social structure however there are marked disadvantages that characterises most women's lives in terms of poor resource ownership, low bargaining power and sexual division of labour (Buckingham-Hatfield, 2002). In this light, they emerged as the largest disadvantaged group throughout the world and are most likely to suffer from socio-economic violence at the hands of 'dominant sex'.

Different forms of human rights violation, such as denial of land ownership, resource management and sexual/reproductive rights not only exist in many societies, but have also become accepted norms due to prevailing male supremacy and female subordination (Ajayi and Abiodun, 2005). As such, in many parts of the world, the unwritten customary law oppresses women and violates their rights to land and resource ownership both at the paternal as well as matrimonial households.

However, despite their landless state and non-ownership of resources, women have been the face of environmental conservation for centuries especially in the rural location where land and forest occupy a central place in the lives of the people. As such, when we talk about natural resource management from a global perspective, it is always women who are in the frontline for the protection of the natural resources.

Universally, women have embraced environmental problems and are among the most ardent activists for protecting the earth systems and the lives of the inhabitants in it for centuries regardless of existing disparities in resource management and planning (Steady, 1998; Dem, 1993). It can be seen in the Greenbelt Movement in Kenya where women promoted afforestation to restore local environment and enhance economic growth to Chipko Movement in India in which rural women protested against commercial felling of trees (Loots and Harald, 2005). A recent case in India where a woman representative in village *panchayat* in Uttarakhand initiated planting of trees with broad leaves to increase the oxygen level in the environment (Bishnoi, 2013) and promotion of sustainable community farming by poor women in rural Jharkhand to confront land degradation, land encroachment, and exploitative money lenders (Sinha, 2014) highlight and assert the complex relationships of women to their resource base.

For long, women have been carrying the role of primary consumer of natural resources to ensure household food security, fuel, fodder, and as a result their relationship with the environment has evolved to the extent of safeguarding the purity of given resources at large. The close intimacy and continuous interaction with the given environment enable women to possess inherent knowledge of the earth systems which is deep rooted and vital for further management of the environment sustainability (Channa, 2013).

The harsh reality is that despite immense contribution to the earth system with its power to create, nurture, and transform, the participation of women remain poorly address in the face of existing socio-cultural constraints which consider these activities to be women's work. In addition, gender disparity in resource ownership affects men and women in different ways in times of environmental crisis in which women stands at the receiving end of incoming problems because they lack the means and resources to adapt and protect themselves (Kshatriya and Suili, 2013).

It is argued that women are more sensitive about the earth system and would protect it better had they been in power or given equal access to natural resources (Loots and Harald, 2005). In addition, when women have secure rights and access to land and resources, they gain a chance for self-improvement, recreation, self-worth and economic independence besides contributing to human development in terms of nutrition, hygiene, and education of children (Nath, 2013; Sinha, 2014).

Despite plethora of modern advancement and development in the present day, women are confronted with issues of discrimination, subjugation, oppression, and denial in their day to day life. Therefore, it is stressed that women worldwide have reached their 'carrying capacity' (Agarwal, 1994) in sustaining human needs at large. In this light, the present paper relies on the daily narratives of women to substantiate the argument of gender-environmental debate and explores the narratives of tribal women belonging to $Sumi^{I}$ community who are in search of their identity, voice, space and rights in the face of patriarchal social structure.

MATERIALS AND METHODS

Field Area and the Local Community

The fieldwork for the present study was conducted among Sumi community in Khukiye-Lukhai village, which is about 7 kilometres away from the administrative block, Satakha Town under Zunheboto district, Nagaland. The village under study houses a total population of 994, living in 214 households. As per the record of village council at the time of the fieldwork, the total female population of the village is (553, 56%) relatively higher than the male population (441, 44%).

Sumi is one of the major tribal communities in Nagaland, situated in Northeast region of India. The Sumi dominantly inhabit Dimapur and Zunheboto districts of Nagaland. They are considered as one of the brave warrior tribes among the Nagas², having rich and vibrant culture and tradition which have been passed down through several generations. Their traditional occupation is marked by agriculture and animal husbandry where-in land and forest resources play a central place in the lives of the local community. The sociopolitical system of the village maintains patriarchal tradition where-in men takes absolute control of not only ancestral land and resources but also of politics, religion and socio-economic affairs while women are largely situated on the periphery of the society.

In the contemporary scenario, while the traditional system of the society is continuously maintained and revived, the locals are increasingly accommodating global markets and forces which have reached the remote corner of the village. For example, modern amenities, like use of mobile phone, electrical kitchen appliances and installations of solar cells are predominant in the village.

The present research is a product of two months (August-September 2013) fieldwork using participant observation, interview guide, narratives, and case study. The study is purely a qualitative one employing both primary and secondary sources of data collection. An active participant observation was employed to have in-depth face to face interaction with the informants so as to construct the social realities by merging in their daily lives. Unstructured interview using broad themes relevant to the proposed work was conducted by means of free-flow conversation while allowing respondents to shed light on important details amounting to narratives and case studies. Main focus of the study was on women to construct their worldview, but this did not negate the participation of men-folk and so cross-gender views were also obtained.

RESULTS

Locating women within the Agricultural sector

With more than half of the population of the village indulging in agriculture, it was observed that women formed a major workforce in the agricultural sector which defined not only their economic status but social, cultural and traditional identity in the community. Thus, land and forest occupied a central place in their daily lives to ensure food, fodder, fuel, and medicinal plants for household consumption. It is estimated that women on an average spend 7-8 hours daily working on the agricultural field or foraging deep forests for food security, fodder and fuel. Women actively contribute to the household economy by engaging in agricultural activities alongside men while carrying extra burden of household chores which is primarily conceived to be their role. The surplus agricultural products are utilized by the womenfolk to obtain miscellaneous household items from the market through a kind of 'barter system' in which they exchange seasonal food crops in return for milk, sugar, salt, soap, etc.

The community practices a traditional method of farming called Ali 3 or Jhum characterised by rotational cultivation of agricultural land after a gap of 10-15 years. This method of farming is practiced on a large scale and now faces severe constraint, like the fall in gap of fallow land at the expense of growing population, increase in household consumption, and socio-economic measures, thereby culminating into array of environmental problems, such as deforestation, soil erosion and loss of vegetation. In such a situation, women are compelled to increase their foraging hours and covering long distance to compensate their daily needs leaving less or no room for their own recreation and self-improvement.

On the contrary, the long sojourn of women to agricultural fields and forest to meet domestic needs not only puts them at close proximity to nature, but also help them to develop intense knowledge about the natural resources which aids to the welfare of the earth system at large.

In a positive response to current environmental crisis, the local women in the village initiated a new ecological paradigm in the form of organic farming in the neighbouring villages and town to spread awareness as well as to promote sustainability of the available natural resources. Their approach to organic farming does not simply denote the absence of artificial fertilizers but adopts multitude of traditional knowledge system such as terrace cultivation, indigenous method of seed preservation, local method of pest/weed control, home-based manure, utilization of waste products of food crops, etc. Organic farming operation takes the form of Self Help Group in the village with each group having 10-15 members having common ownership of the agricultural products, income, and bank account. The seasonal organic vegetables are exported to local town and the income generated is deposited in the joint account for their socio-economic security. Working together not only multiplies physical efforts on the agricultural land but it enhances group solidarity or 'we feelings' and gives them a sense of empowerment.

At this juncture, the disturbing fact is that despite the active contribution of women in the agricultural sector, they do not own land at the expense of patriarchal social system which denies them land and resource ownership both at the natal as well as marital household. The pitiable condition of women under such social structure is realised when a women in agricultural household is widowed with no alternative source of income to sustain daily needs for herself and children.

Gender Roles and Sexual division of Labour

In the absence of land and resource ownership, women face extreme socioeconomic pressures in ensuring food security, fodder, fuel, water security with their multiple role as mother, child bearer, care giver, nurturer and so on. The rapid rate of development in the contemporary scenario which is often accompanied with plethora of environmental problems renders extra burden on the vulnerable population including women whose lives are situated at the margin. The increased workload of women may not be directly emanating from the incoming problems, but due to gender differences in socio-economic roles and responsibilities that affect men and women differently with women standing at the receiving end (Kshatriya and Suili, 2013).

Although the mainstay of the present community continues to be agriculture and animal husbandry, they have moved beyond their traditional occupation and embraced other viable economic activities side by side to enhance their living standard in the face of global and market forces which have reached these remote corners betraying the rural settings. The present study witnessed villagers working in government sector, armed forces, private jobs, self help groups, etc with a good number of affluent families migrating to cities and towns for better economic opportunities, education, marriage and socio-political ventures. Table 1 illustrate the primary occupation of men and

women obtained from a sample of 116 households out of 214 houses in the village at the time of fieldwork in 2013.

Table 1: Primary of	cupation of men and	women
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Sr.No	Primary Occupation	No. of Men	Percentage	No. of women	Percentage
1	Government Sector	51	43.96	14	12.06
2	Private Sector	5	4.31		
3	Agriculture & Animal Husbandry	29	25.0	93	80.17
4	Uniform Services (Army & Police dept)	6	5.17		
5	Member of Insurgent group	2	1.72	1	0.86
6	Member of Village Council	7	6.03	1	0.86
7	Religious Sector	1	0.86	2	1.72
8	Deceased	15	12.93	5	4.31
	Total	116	99.98	116	99.98

Generally men migrate or explore other viable economic opportunities outside the village while there is restriction on women's mobility at the expense of domestic chores, forest or land based activities and social responsibilities. This results in migration of men not only took place from the village, but also from the agricultural sector leading to 'feminization of agriculture' (Draboo, 2013; Krishna, 2007). Based on the occupational pattern derived from 116 household in the village, the agricultural sector is dominated by women (80.17%), while men constitute a meagre 24%. The migration of men from the agricultural sector is associated with socio-economic factors as per the shared narratives of men folk that subsistence agriculture alone no longer sustains daily needs in the present day.

This development has redefined sexual division of labour and gender roles within the agricultural sector. Table 2 highlights that women undertaking most of the agricultural works, thereby breaking gender stereotypes by venturing into those activities which were traditionally conceived as masculine such as clearing the forest, preparation of land for sowing and construction of rest house.

On off days from field, men take complete rest while it is never the same for women as it is a day meant to ensure other source of livelihood activities for them; a day to collect fodder, fuel, water, medicinal plants and herbs, washing, cleaning the house, and most importantly a long sojourn to the local town to sell/barter surplus vegetables and food crops procured from the field.

Rigid demarcation of gender roles and sexual division of labour is highly prevalent in the society such that if a man extends helping hand in domestic chores, such as cooking meals and washing utensils/clothes, he ultimately becomes the laughing stock in the neighbourhood. This is often accompanied by taunting remark, like 'totikha' implying suspicion over his sexual

Table 2: Sexual division of labour in agricultural activities

Agricultural Activities	Women	Men	Both
Clearing the forest cover			✓
Preparation of land for sowing			\checkmark
Construction of rest house			\checkmark
Sowing			\checkmark
Application of fertilizer/pest repellent (if any)		✓	
Preparation of food for farm labourer	\checkmark		
Managing water channel			\checkmark
Seasonal tending/Regular mending	\checkmark		
Harvesting			\checkmark
Threshing, drying and clearing			\checkmark
Selling of agricultural products	\checkmark		
Seed preservation	✓		

orientation because these activities are traditionally confined to women folk. Thus, gender discrepancy emerges at this juncture. While there is unspoken acceptance of women venturing into 'masculine' activities, it is considered weak and inappropriate for men to perform 'feminine' domestic chores.

Such prescribed gender roles and sexual division of labour exist not only within individual household, but also within the larger public sphere like, in the village political system, religious institution, and related socio-cultural platforms. The recent times witnessed incorporation of women in political organisation; however, the underlying truth is that women continued to adhere to their traditional role as 'caretaker' contrary to their newly assigned role as women representative in the village council. During informal conversation with one of the women representatives she adds,

"Sometimes they (male members) pass sarcastic comment like 'totimi tsa no qu!' meaning 'what is the use of opinion coming from women' or even worse, she adds, "there are times I come back home from meeting and remain unanswerable to my friends and neighbours when they ask me what agenda was discussed in the meeting, because most of the time, I'm handling either sugar or salt"

It is pertinent to mention that this kind of manipulation does not end here, but it extends to religious sphere where women are deprived of desired appreciation and credit in terms of position, leadership, and rituals even if they stand better qualified and experienced than men. This is because the subordinate role assigned to women in a traditional setting of village is reflected within religious institution reinforced by men who control the church. As such, women till today do not attain position of reverend which means they do not have the licence to baptise or certify a marriage vow. The justification put forth is that women as 'child bearer' and 'nurturer' of domestic realm cannot uphold responsibilities of religious institution with complete dedication and service throughout their life.

Women and the Ongoing Struggle for Land Acquisition

Land is a basic asset for rural household to ensure economic means, to build their future, to overcome daily obstacles, and to create opportunities for wellbeing and most importantly it has permanence than any other material objects. As discussed, the denial of land and resource ownership to women renders them immobile and voiceless in planning and management not only in the socio-public sphere but also within individual households.

As common to many patriarchal societies around the world, the male child is considered an ultimate heir of ancestral land and property without any consideration for the female member in the house. If the family has only female offspring then whatever ancestral assets the family own is inherited by the nearest male kin who then pass it down to his son and continues the tradition.

Contrary to the existing notion of gender equality in *Naga* society, the ground reality of women tells a different story as they continue to bear the major burden of providing food to the family in the absence of legal rights over the resources (Krishna, 2007). In earlier days, prior to the arrival of Christianity and modernity, women faced huge difficulty in exercising their basic rights to food, space, and mobility thereby betraying the fact that domestic sphere is a 'freedom zone' (Jamir, 2009) for the womenfolk. It was customary to serve meal to men ahead of other family members who generally consume fresh and enormous portion of the food whereas women get to eat what little is remaining without any fuss. Reflecting on the childhood days, an elderly woman of about 74 years recounted her experience of growing up in a male dominated household with seven brothers for whom she compromised her education, time, food, and space. In her words:

"Women have always been (and are) an object of compromise, while we were even denied to equal distribution of food, how could we expect a share in ancestral land or property?"

Since women do not own land and resources they face severe constraint in ensuring daily needs in cases of divorce, separation, injury, or death of their spouse. In most cases, women are ignored/ abandoned by the in-laws after the demise of their husband without any life supporting system. This is because the ancestral land is collectively owned by the brothers or close male kin and a widow is denied access to agricultural land which the family was previously dependent on its survival. Under such dire situation, women have no choice but to cultivate on other's land on lease to sustain their daily needs. A young widow aged 41 years who lost her husband to a tragic accident in 2010 leaving behind 6 children narrates her woes of economic constraint and compromise,

"My children are small, I have no choice than to go back to my father's field or work as a farm labourer to feed and educate my children. As a woman, I do not have the courage to ask my in-laws to allow me to cultivate their land which my family was previously dependent on; I chose to remain quiet lest it spark unnecessary tension between us"

This is the general view and experience that is shared across women in the village and the community at large. As noted in the earlier part of the study, traditionally being agricultural households, women execute major part of agricultural activities yet they are recognised as 'agricultural workers' and not 'farmers' since they do not own land.

Another disturbing fact is that the absence of land ownership further goes on to impact welfare schemes and agricultural loans granted by the Government of India, in lieu of women empowerment because they lack the means and resources to avail such opportunities. As such, it is always the land owner or the middle man who acts as a 'mediator' between government officials and women to process the loan. In this light, the land owner or the middle man usually takes half of the given amount as his share, thereby limiting their chance to enhance quality of life. In many cases, governmental schemes and welfare programmes are handled by influential contact and those in power at the societal level while depriving those at the margin for whom such schemes were originally sanctioned.

The Self Help Groups (SHGs) in particular were finding it difficult to function as the traditional patriarchal system denied them access to what was rightfully theirs. About 10-12 SHGs were actively engaged in land-based activities such as organic farming, horticulture, fruit orchard, vermicompost and animal husbandry farms. But since they do not own land, most of these activities are executed on lease for which they pay annually or give half of annual agricultural produce as payment to the landowners. To add to their woes, women never had direct access to agricultural schemes and benefits implemented by the government. Citing their ignorance on official formalities and financial issues, it is always a man who acts as the mediator between the local women and the government officials. As a result, despite of the opportunities to empower their lives, they emerged as a mere spectator to patriarchal manipulation in which the middle-man takes half or more than half of the loan as his share while leaving no scope to enhance their socioeconomic standing.

During informal conversation with the womenfolk, it was learned that few women in the community have acquired ancestral land and property to their credit; however, further introspection suggests that such privilege was (and is) only limited to few affluent household who have enough resources to distribute among the children irrespective of gender and may have further implication on social status. The custom of giving a share in ancestral land or property by a father to his daughter is termed as "Kikimiye Gho"⁵. For a large majority of women, the struggle for land ownership remains a distant reality yet they are constantly struggling to create a niche for themselves in the male dominated social structure.

Negotiating Livelihood Rights and Identity; Case Study of STH

Sulimi Totimi Hoho⁶ commonly addressed as STH is a socio-political organization of women belonging to *Sumi* community who come together to fight for their desired rights and identity against the backdrop of patriarchal social structure. They function at all level of the society-community, district, local town and villages. At the village level, a STH body consists of Chairman, General Secretary, Finance Secretary, and Executive members. The STH committee consists of 10-15 members. The most striking feature of STH is that keeping in mind the root formation of this organisation they continuously re-assert their identity as *Sumi* women by wearing uniform cultural attire each and every time they address a public meeting, social gathering, village council meetings or social issues. The initiative of STH serves as a common platform for women to address their grievances as well as to promote group solidarity of *Sulimi* ⁷ at large.

Through the institution of STH, women are capable of bringing forward the issue of socio-economic deprivation by actively involving in environmental derives and peace process. In this process, these women are in constant negotiation with men in obtaining their rights and recognitions. In this paper, the focus is on regulation of land and resource ownership of women within the institution of marriage initiated by STH.

The main argument of STH is that since women contribute a great deal in overall development of the community therefore they should be given due recognition in resource ownership and decision making. In this way, they have proposed and reviewed traditional regulation of land and resource ownership to safeguard the rights of women in times of marriage dissolution when they are most vulnerable to economic constraint and social judgement.

There are serious efforts on the part of STH to avoid bias judgement in their attempt to safeguard the interest of women and this adds to their advantage to negotiate with the men folk on existing customary norms and tradition. As such, they do not blindly fight for the rights of women but considers the pros and cons of both the parties at the time of marriage dissolution with regard to custody of children, rights over ownership of property owned by the couple (movable and non-movable), compensation for infidelity, divorce, and related cases.

The institution of marriage among Sumi community is governed by the concept of 'Ameh' or 'bride wealth' therefore, an attempt is made by STH to consider land and resource ownership in marriage dissolution with or without 'ameh' after thorough investigation of which party is at fault. Given below are some such interventions.

1. When dissolution occurs in those marriages with 'ameh', and if the

man is found guilty, then he cannot ask to pay back the 'bride wealth'. All the movable property they owned should be divided equally between them along with a fine of Rs 10,000 for violating marital vows. In addition, woman has equal rights over immovable property if she has invested individually or through joint efforts with her estranged husband.

- 2. When dissolution occurs in those marriages **with** 'ameh' and if the woman is found guilty, then she has to estimate the cost of 'bride wealth' and pay back the same to her husband along with a fine of RS. 10,000 for violating marital vows.
- 3. When dissolution occurs in those marriages **without** 'ameh' and if the man is found guilty, he has to repay whatever amount his estranged wife or her family invested at the time of marriage. All the movable and immovable assets invested during their marital years together have to be divided equally between them. If a man deserts his wife for another woman, he has to pay a fine of Rs 25,000 for violating marital vows.
- 4. When dissolution occurs in those marriages **without** 'ameh' and if the woman is found guilty, she has to repay whatever amount her estranged husband or his family invested at the time of marriage. If a woman deserts her husband for another man, she has to pay a fine of Rs 25,000 for violating marital vows.

Similarly, there are rules for protecting the interest of women in case of death of a spouse. As such the STH supports the idea of widow re-marriage. If a widow wished to re-marry then her decision should be respected and consent be given by her in-laws and children. However, if she wished to continue living with her in-laws or in their support, she should be treated as valued member of the family. In addition, one of the most important issues faced by the couple in marriage dissolution is the custody of children. It is pertinent to acknowledge that the customary laws favours men over child custody in case of divorce or marital conflict; however, STH is working in this issue to see that the rightful parent gets the custody of the children, irrespective of gender and socio-cultural barriers.

The STH asserts that the absence of economic security does not end in itself. Rather it goes on to impact other areas of life making women financially dependent on men for their sustenance thereby subjecting them to social evils, such as rape, sexual assault and domestic violence because the women lack the means to defend and protect themselves. As mentioned earlier, despite the limitations faced by women in their daily life, they are working together to confront exiting inequities in the social system. They have also long been associated with peace process and social justice since the emergence of STH in 1989 and their strong activism has been the base of sustaining harmony in the Sumi community at large.

DISCUSSION AND CONCLUSION

The issues surrounding women and their absence in resource ownership/management have been a global concern. Over the past decades, with many environmental platforms, gender studies, women rights organizations, ecofeminism, developmental programmes, and intellectual minds alike are addressing the urgency of gender sensitization in resource ownership and management to enhance sustainable development 'that meets the needs of the present without compromising the ability of the future generation to meet their needs' (Brundtland Report/WCED Report, 1987:41) of the world at large. It is argued that women exist in close proximity with nature and has been the face of environmental movement across the globe without much appreciation and recognition in resource ownership and management. In this light, 'gender parity' in resource ownership and management emerged as 'missing link' to socio-environmental issues that confront the world today.

Among *Sumi*, it is seen that women play a vital role in the agricultural sector thereby sustaining daily needs of the household with no control over resources. The exclusion of women in land and resource ownership is perpetuated by the patriarchal social system thus reducing them to mere 'landless labour' and not as 'farmers' as the Agriculture Policy of India recognises farmer as someone who owns land and not someone who merely works on agricultural land (Draboo, 2013).

It is pertinent to point out that the status of women as landless agricultural labourer affects them in many ways. Besides relegating them to poor socio-economic conditions it further denies them the opportunities to empower themselves. In addition, the credit schemes, bank loan, welfare benefits and other agriculture related schemes can be availed only by a person who legally owns land and residence (Ibid, 2013). This means the landless and rural poor including women are deprived of these benefits since they do not qualify the required criteria. In the present scenario, there is large scale migration of men out of the agricultural sector in search of other viable economic opportunities thereby compelling women to venture into those agricultural activities that was previously considered 'masculine'. In such a situation, the concept of 'feminization of agriculture' is contentious as in spite of departure of men from agricultural sector women are not entitled to land or property ownership. Thus, what is feminised is only agricultural labour and not agricultural land or resources.

In addition, with their traditional role as care giver, child bearer and producers of the domestic realm, women face socio-economic constraint in absence of legal rights over land and natural resources. Today, the world struggles against alarming environmental problems in which the major impacts are felt by the marginalised population at the social periphery including women. The present study is in tune with other existing literature which stressed that

the increased workload and pressure on women may not be directly due to environmental problems, but due to sexual division of labour that is prevalent in the society.

Additionally, the present study explores new paradigm of agriculture initiated by women through Self Help Group (SHGs) even in their landlessness state through incorporation of their indigenous knowledge in the face of land degradation, deforestation and associated environmental crisis.

At this juncture, we have a contrasting picture of women; on one hand, they emerge as 'victim' of land and resource deprivation and on the other, they emerge as 'harbinger' of environmental sustainability –both in the context of social and the physical environment. On this note, it is worth mentioning that despite the limitations in their daily life, women take advantage of their traditional role as 'manager' of natural resources and 'nurturer' of social relations to confront socio-economic issues that target humanity at large.

The exemplary work of *Sulimi Totimi Hoho* (STH) brings to our understanding of how women negotiates with men folk to secure their livelihood rights within or outside the marriage by re-visiting existing customary laws that subjugates women not only in terms of land and resource ownership but also make them highly susceptible to social atrocities. The intervention of STH in cases of rape, sexual assault, domestic violence, marital discord and other forms of social disturbances at the cost of drug addiction, alcoholism, and other antisocial activities has been tremendous and worth reflecting upon. However, the present study limits itself to land and resource ownership in marriage dissolution.

To sum up, despite the inequities that women face in the daily discourses of life, their immense contribution in the socio-physical environment refuses to cease. It is noteworthy that the greater part of their energy and potential remain untapped due to existing socio-cultural restriction and so they would protect the environment better if they are given fair chance and operational decision-making in resource ownership and management. In tune with existing literature, this study supports the theory that when women are empowered not only do they gain a sense of self-worth and recognition but they tend to invest in human development in terms of education, nutrition and basic hygiene. Therefore, there is a dire need to redefine and reshape rigid socio-cultural norms in favour of gender sensitization in land and resource ownership for the world to enhance greater sustainability of the environment at large.

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NOTES

- 1. Sümi; one of the major Naga tribes of Nagaland, North-east, India
- 2. Nagas; a term used to address tribal communities of Nagaland, North-east, India
- 3. Ali: traditional method of farming in which a patch of land is slashed, burned and cleared for cultivation for about 2-3 years until the soil loses its fertility after which they move on to other land to repeat the cycle.
- 4. Totikha: a local term which explicitly mean 'men with feminine attribute'
- 5. Kikikimiye Gho; meaning 'gift of love' involving a share in land/property given by father to his daughter (s)
- 6. Sulimi Totimi Hoho (STH): STH is a socio-cultural organization of women belonging to Sumi community which acts as a platform to reassert their identity and rights. Locally known as STH, Sulimi means women belonging to Sumi community, Totimi stands for women and Hoho stands for organization in local dialect.
- 7. Sulimi: A term used to address women belonging to Sumi Tribal Community.
- 8. Ameh; material objects, cash or animals given to woman by the groom or his family at the time of marriage often equated with 'dowry', 'bride price' or 'bride wealth'

REFERENCES

- Agarwal, Anil. 1994. An Indian Environmentalist's Credo. In: *Social Ecology*, ed. by Ramachandra Guha, pp. 346-384. New Delhi, Oxford University Press.
- Ajayi, Mary A, and Abiodun O. Olotuah 2005. Violation of Women's Property Rights within the Family. *Agenda 66 Domestic Violence*. 1:58-63. http://www.jstor.org/stable/4066538, accessed July 10, 2013.
- Buckingham-Hatfield, Susan. 2002. Gender Equality: A Prerequisite for Sustainable Development. *Geography*. 87:227-233. http://www.jstor.org/stable/40573738, accessed July 10, 2013.
- Bishnoi, Aditi 2013. "Forest Connections", The Hindu Times. October 27.
- Channa, Subhadra 2013. *The Inner and Outer Selves: Cosmology, Gender and Ecology at the Himalayan Borders*. New Delhi, Oxford University Press.
- Dem, Mariam 1993. Sustainable Development: Women as Partners. *Focus on Gender.* 1: 14-18. http://www.jstor.org/stable/4030282, accessed on July 10, 2013.
- Draboo, A. 2013. Women and Land- Why is it Important? . Yojana. 57: 25-28.
- Imchen, Narola 2010. Women in the History of Christianity. Jorhat, Barkataki and Company Pvt ltd.
- Jamir, T. 2009. Engendering Public Space in Naga Society: Tradition and Modernity. *Indian Folktale*. 33:18-21.
- Kshatriya, G. and Siuli Mitra 2013. Woman: The Harbinger of Sustainable Development. *World Focus.* 34: 22-25.
- Krishna, Sumi 2007. Recasting Citizenship for Women's Livelihood and Development: An overview. In: *Women's Livelihood Rights; Recasting Citizenship for Development*, ed. by Sumi Krishna, pp 1-38. New Delhi, Sage Publication.
- Loots, Lliane, and Harald W 2005. Women and the Environment; how are we close to Earth Democracy? *Agenda 64 Beyond Beijing*. 52-62. 2013. http://www.jstor.org/stable/4066570, accessed July 10, 2013.
- Nath, A. 2013. South Asian Women and Sustainable Development: Redefined role and practices. *World Focus.* 34: 48-53.

- Steady, Filomina. C. 1998. Gender Equality and Ecosystem Balance: Women and Sustainable Development in Developing Countries. *Race, Gender and Class.* 6: 13-32. http://www.jstor.org/stable/41658846, accessed July 10, 2013.
- Sinha, S. 2014. Cultivating Self-Reliance. Yojana. 58:62.
- UNCSD. 2012. "Voices of Indigenous Women from the Asia-Pacific Region," Report presented at 3rd International Conference on Sustainable Development, Rio de Janeiro, Brazil, June 13-22.
- World Commission on Environment and Development (WCED). 1987. Our Common Future/ Brundtland Report. Oxford, Oxford University Press.

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Assam as a Subcultural Zone: An Appraisal

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Abstract: Assam is a frontier state of India on the north-east. Its population, by and large, has a rural background; and they came to this part of the country at different time points and from different directions. The life and culture of the various ethnic groups have contributed towards the growth and development of a synthesized Assamese society and culture through ages. The present Assamese culture is believed to be the outcome of the centuries of migration, admixture and fusion of diverse ethnic groups and their respective cultures.

Assam region, as a matter of fact, did act as a human corridor along which the ancient races moved in from different directions along with their ideas and other elements of culture from pre-historic times. The various tribal and non-tribal populations have generally been influenced by one or the other over the past centuries.

Despite being Pan-Indian as a whole, the modes of expression of many of the cultural elements can be considered to be distinctive in Assam.

In this brief discourse, an illustrative discussion has been made on both the material and non-material aspects of culture in Assam. The discussion prompts us to conclude that Assam is not merely a geographical region of India. The ground realities make it apparent that it is also a clear-cut socio-cultural unit. Over the centuries, this distinctive habitat and its resources, the climate, the various groups of people and the ways of life have inter-mixed with one another to give rise to the prevailing cultural mosaic in the region.

Key words: Human corridor, Museum of ethnic varieties, Socialisation, Enculturation, Acculturation, Cultural Synthesis, Assam.

Ι

To start with, it would be prudent, first to have a brief idea about the scientific concept of culture, as well as an anthropo-historical profile of Assam, the territorial unit under consideration.

The concept of Culture, as a matter of fact, may be considered as an analogue to the concept of Life, for which there has never been a satisfactory definition.

A great deal has been written about Culture by different scholars in different ways, on the basis of their respective understanding and observation. But, however, there is a general agreement that culture is learned; it allows man to adapt himself to his natural and social settings; it is generally variable; and that it is manifested in institutions, thought patterns and material objects (Kar, 2012: 117-127). Besides, the one common aspect is the insistence of the anthropologists that culture has a tremendous influence on human beings. Kroeber was one of the great exponents and promulgators of this view. Thus, for example, he writes, "Culture is a factor that produces enormous effects

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............ a tremendous force affecting all human beings, socially and individually In the main it is our culture that directs and outlines the kind of life we can lead The degree to which every individual is moulded by his culture consists of his innate general human capacities andhis individual peculiarities (1948: 8-9, 256, 288-9; see also 1944: 8, 1952: 26-7, 139).

The fact however, remains that despite a great deal of attention and many discourses on the subject, anthropologists' key concept (culture) remains somehow unsatisfying in the way, it is generally comprehended and discussed within the discipline. Kroeber (1952: 139), more than sixty years ago observed, "The most significant accomplishment of anthropology in the first half of the twentieth century has been the extension and clarification of the concept of culture". Incidentally, in the same volume where this observation was recorded, Kroeber acknowledges, "We seem not yet to have attained a concise, unambiguous, inclusive and exclusive definition of culture" (1952: 23, see also Kroeber and Kluckhohn 1952: 4). This observation made by Kroeber long back does not seem to have been completely invalid even today.

It is however, a fact that Tylor's (1871: 1) classic definition of culture as, "That complex whole which includes knowledge, belief, art, morals, law, custom and any other capabilities and habits, acquired by man as a member of society", is certainly concise and clear. Tylor's definition of culture, the first explicit definition of the term in its anthropological sense, as a matter of fact, has never been rendered entirely obsolete. It has indeed been the touchstone for all subsequent considerations of the concept in anthropology. Furthermore, it established with one stroke what Tylor himself called the Science of Culture, the interest that came to be known as Cultural anthropology.

Assam, the geographical region under discussion, is a frontier state of India on the north-east. It is a land, made up of the mighty expanse of the Brahmaputra and the Barak valleys as well as the undulating terrains of Karbi Anglong and Dima Hasao (hitherto North Cachar Hills) districts. Stretching between the districts of Goalpara in the west and Lakhimpur in the northeast, covering an area of 78,438 sq.km. and having a total population of 31.2 million (Census 2011), is dotted with more than 16,000 villages with a total population of around 22 million (Kar, 2006: 11-18). The population of Assam, as a matter of fact, by and large, has a rural background; and they came to this part of the country at different time points and from different directions. The life and culture of the various ethnic groups have contributed towards the growth and development of a synthesized Assamese society and culture through ages.

The state happens to be the heartland of North-east India. Nestled with scenic beauty and enchanting hills, the legendary Pragjyotishpur is the Gateway of North-east India. Assam is the most populous and the second largest (in area) state in this far-flung region, Arunachal Pradesh being the

largest one. Standing on either banks of the Brahmaputra, Guwahati, the City of Eastern Light, is a bustling, busy and crowded city.

Assam is considered by the anthropologists as a museum of ethnic varieties. Various races from different parts of the world at different points of time migrated to Assam, made their settlements and contributed towards the building up of the Assamese society and culture (Chatterjee, 1974). The whole range of the process of formation and development of the Assamese society and the culture can be divided into three periods, identified as the Ancient, the Medieval and the Modern. The ancient period ranges from the earliest time to the 12th century A.D. The medieval period starts from the beginning of the 13th Century A.D., that is from the advent of the Ahoms, a Tai-Mongoloid people, to the beginning of the 19th century A.D., i.e., to the advent of the British. Assam, as a matter of fact, entered a new era and a new phase of her political and cultural life from the beginning of the 13th century A.D., with the entry of the Ahoms. The ancient designations (Pragjyatisa and Kamrupa) of the land were replaced by the new nomenclature, Asam. The term Asam gave birth to other terms like Acam, Aham and Asom etc. Thenceforth, the land came to be known as Asam; and its people as Asamia (Barua, 1933). Chowdhury (1959) maintains that the words Assam and Assamese are anglicized forms of the respective Assamese words Asam (used to mean the land) and Asamia (to mean the people of the land).

While dwelling little bit more by way of introducing the region, it may contextually be noted here that when we propose to understand and appreciate the historical as well as the social and cultural aspects of Assam from anthropological point of view, it may not always be possible to confine our discussion only to the present-day politically defined state of Assam; but, as a matter of fact, we need also to include the neighbouring hill areas that now lie in the states of Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura.

While attempting a discussion on Assam as a distinctive cultural unit of India (in other words, while assuming that despite being pan-Indian as a whole, the modes of expression of many of the cultural elements can be considered to be distinctive in Assam), we need to remember that its present culture, as noted earlier, is the outcome of centuries of migration, admixture and fusion of diverse ethnic groups and their respective cultures.

Incidentally, Assam has a unique geographical location too. It stands as a passage between the wide Gangetic plains in the west and the mighty Himalayas on the east and north-east. As a matter of fact, this region did act as a human corridor along which ancient races moved in both the directions. Besides the movement of the populations, there were also movements of goods and commodities as well as ideas and other elements of culture from the prehistoric times. The composite nature of the population becomes evident when we look at the ethnic elements in the population of Assam (cf. Das, 1965: 1-6).

The present-day population of Assam can broadly be divided into the tribal and caste groups; alongwith of course some other communities like the Assamese Sikhs, Assamese Muslims, the Ahom, Moran, Muttok and the Koch Rajbangshi, etc. Generally speaking, Assam received her caste population from the west, who possibly came by the valley of the Brahmaputra. The tribal groups, by and large, entered Assam from the North and the East, by various routes. Broadly speaking, the caste population who mainly occupy the rich alluvial valley of the Brahmaputra, along with the other non-tribal ones are Caucasoid in origin having fine physical features and characters, comparable to those of the Caucasic people of some parts of the Northern India, while the Mongoloid elements invariably are predominant among the tribal population.

Π

Besides the Mongoloid elements, a very ancient racial element, the Australoid (Austric) is also reported from among some tribal population of Northeast India, for example, the Khasi, Kuki and the Wancho, etc. The Khasis, though predominantly a Mongoloid tribe are Austro-Asiatic speakers. The Bodos, another Mongoloid tribe of Assam seem to have reached the region after the Khasis. The Bodos, as a matter of fact, are a language Group of Assam and the neighbouring states. They are not found anywhere, outside Northeast India.

The non-tribal indigenous population of Assam is linguistically homogenous. As observed by Barua (1969), the inhabitants of Asam form a distinct entity among the people of India, united by a common tongue, an Aryan dialect of great antiquity. Even in the early period, the language in Assam differed a little from that of the Middle India. Barua (ibid) further observes that the Aryan speakers originally migrated to Assam from Madhya Pradesh, from where not only the language, but also a succession of influences, ideas and cultures entered down to the medieval period. The Aryan language brought unity among the diverse tribes and races of the state. And the modern Assamese is an Aryan language, developed out of Sanskrit well before the 10th century A.D.

Besides the Assamese language, one finds here the languages of the Tibeto-Chinese family. This family is further divided into Tibeto-Burman and Sino-Siamese, Kuki-Chin stocks. It has to be specifically noted that the various tribal and non-tribal populations have generally been influenced by one or the other over the past centuries. Thus, for example, spoken Assamese in different parts of the Brahmaputra valley shows significant influence of the local tribal dialects. With regard to language, the distinctiveness of the Assamese population, thus lies in the synthesis of Aryan language with many tribal dialects.

While attempting a brief appraisal of the religious life of the people, at the very outset, it may relevantly be noted that Hutton (1969) seems to have rightly observed that the tribal religions of India include many elements those are

not built into the temple of Hinduism. This observation would nowhere be more true than in Assam region. One also finds the classic Great traditions of Hinduism, mixed and blended harmoniously with the numerous folk tribals or Little Traditions that come from the tribal cultures. There are many centres of the Hindu religion which are also regarded as original centres of tribal religion. Thus, for example, the famous Hindu temple of *Kamakhya* is ascribed to the Khasi or the Austric origin (c.f. Kakati, 1948).

Even to-day, one finds tribal groups such as the Tiwas (hitherto the Lalungs) who consider Shiva as one of their traditional Gods; and not a deity, borrowed from the Hindus. The folk religion of Assam, be it a tribal or a Hindu village, shows many elements originating from animism and nature worship. It is important to note that since the 15th century, a highly distinctive form of religious-cultural conformity has been brought about by the propagation of *Vaishnavism* by *Srimanta Shankardeva* and his disciples. The elements such as the mode of prayer, songs and the use of musical instruments, dramatic performance (*Bhaona*) that were developed and utilized for popularizing *Vaishnavism* on a wide scale among the masses, are very distinctive in Assam.

Assam, as a matter of fact, is popularly referred to as the land of *Shankardeva*, thereby emphasizing a distinctive type of Hindu religious culture. *Vaishnavism* is a pan-Indian tradition, the modes of expression of which can be considered to be distinctive in Assam.

Alongside the linguistic and religious influences from the Gangetic valley of the West, the region also received the ideas of a distinctive type of social organization, based on caste.

The term caste is very often used as if it is a category that does not need further explanation. Anthropologists have always been interested in the working of the caste system, which has been taken as the defining characteristic feature of the Hindu society; and they have devised a number of models distinguishing its major aspects (Cantlie, 1984: 223). While examining the ethnography on the caste system in Assam, it becomes apparent that certain features of the system cannot be subsumed under any of the currently prevalent models. In this apparently unsatisfactory backdrop, let us try to understand the nature of the institution (i.e. the Caste) in Assam.

It is believed that the upper castes such as the *Brahmans* and the *Kayasthas* have come to Assam from Mithila and Kanauj. Besides these caste groups, already formed outside the region, there are clear indications that many local endogenous tribal groups have transformed themselves into castes under the influence of Hinduism. In this way, a regional Hindu society came into existence in the region. However, in contrast to other parts of India, Assam never had a rigid, hierarchic caste society, where each and every caste had a definite occupation as well as rigidly defined status. The caste system is rather imperfect; and occupational castes are also fewer in number when compared to the neighbouring Bengal. The concept of untouchability is rare in traditional

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Assam. Thus, in social customs and traditions, the Assam region shows a blending between the tribal and Hindu elements.

TII

In this chapter, it is proposed to have a comprehensive discussion on the Material Culture. The distinctiveness of Assam as a Cultural region seems to become relatively more evident in the material aspect of culture. In view of the fact that it may not be possible to detail each and every element in this brief discourse, an attempt is being made here to highlight a few of the same by way of an illustration. The fact remains that there is a close relationship between material culture and the physical environment including the available natural resources. This relationship is clearly evident in the types of houses, built by the rural people of Assam. Both the tribals and the nontribals make houses with steep gabled roofs that reflect an adaptation to heavy rainfall. The use of bamboo and thatch for building houses is also distinctive of the tribals and the non-tribals alike. The Rural Assamese Culture, as a matter of fact, is often nick-named as Bamboo Culture, because bamboo is used to make a large variety of useful items of day-to-day life. In this and in many other aspects of material culture, Assam has greater affinity with southeast Asian countries than with the rest of India.

The impact of environment is also evident in the subsistence economy and food habits of the people of Assam. The people are basically agriculturists. Rice is the staple food crop, whether among the tribals or the non-tribals in the hills or in the plains. Certain tastes in food such as *Khar* (an alkaline preparation) and *Tenga* (a sour preparation); and also preparation of relishes, such as *Kharisa* (pickled bamboo shoot) and *Kahudi* (pickled fried mustard seed), etc. are highly distinctive of the Assamese people.

In the sphere of dress and personal adornments, it is worth noting that there are many cultural elements shared by the various groups of people in the region. There are of course, variations, especially among the different tribal groups, inhabiting the hills. The plains Assamese women wear a distinctive 3 piece dress consisting of a lower garment called *Mekhela*, an upper crosspiece called *Riha* and an upper wrap called *Chadar*.

Traditionally, such dresses are made from silk, called *pat* and *muga*, produced locally.

It may relevantly be noted here that Assam has a glorious cultural tradition in textile and handloom weaving. Handloom weaving provides insight into the way of life of the people. Assamese weavers produce varieties of cloth with fineness of texture and colourful designs. The decorated woven fabric has always been of great importance as an expression of the tradition and culture of the people. The skill of weaving has been inherited from generation to generation through the process of enculturation and socialization. Everything made by hand is precious and has an excellent market in the

international world. Over and above, the age-old traditional fabrics have the highest status in handloom textiles.

Assam has one of the richest traditions of woven textiles, made from different materials and by using a variety of techniques. There are however, a good deal of variation in the styles of weaving and designing that have, by and large, been retained and perpetuated by the people till date.

Weaving as a handicraft occupies such an important place in Assamese society that both culture and economics are inter-linked to it. Textiles, produced in the family looms with beautiful eye-catching designs are a prestigious and proud possession for every Assamese woman.

It is a must in every social function of the Assamese people. As a matter of fact, textiles and designs, produced in handlooms, not only have economic importance, but also represent a sentiment which is manifested in the social customs of the people. It may contextually be noted here that spinning and weaving are considered as necessary and important qualification for an eligible Assamese bride.

The Assamese hand-woven textile designs, as we observe to-day, are in most of the cases, the result of the influence of a variety of cultural groups, inhabiting the region. This prolonged and on-going process of mingling of the Assamese and tribal designs provides a very interesting situation that sometimes tends to change the total outlook and expression of a design. It thus provides a suitable area for an intensive anthropo-historical study to understand the various aspects of this process of acculturation (Chetia and Kar, 2001).

While dwelling little bit more on the Assamese textile, it may be noted here that *Sualkuchi*, located in the district of Kamrup is famous for its textile products in Assam. A section of the inhabitants of *Sualkuchi* have, since remote past, remained in the production and distribution of mulberry silk, commonly known as pat and *muga* fibres of various artistic designs and patterns. The place is famous, not only in Assam, but also beyond, for its silk industry. Some scholars (e.g. Sarof, 1982) have compared *Sualkuchi* with Manchester in this regard.

Sualkuchi in fact, is famous, mainly for the production of the Assamese Pat and Muga clothes on a very large scale. Incidentally, it is the only place in Assam where both men and women work on loom. The yields from Sualkuchi are used for both domestic consumption as well as for commercial purpose. Some of the unique fabric items (e.g. the Brindabani bastra), with extraordinary quality and refinement are however, now-a-days not produced in Sualkuchi, mainly because of commercial unproductiveness (Chetia and Kar, 2003: 193-204). Nevertheless, these specific items are even to-day considered as the parameters of the uniqueness of the Assamese tradition and culture.

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Before concluding the discourse, it would be appropriate to have a brief discussion on the Festivals and Cultural Symbols, prevalent among the people.

IV

The most important festival in Assam is the Bihu. At present, it seems to be participated and enjoyed by many tribals also. The festival has three different phases (or types) in accordance with different agricultural phases. These are Bohag Bihu (also called Rongali Bihu, celebrated in Mid-April) Kati Bihu (also called Kongali Bihu, celebrated during Mid-October) and Magh Bihu (also called Bhogali Bihu, celebrated in Mid-January).

At this point, it would be relevant to refer to the typical Assamese towel, called Gamocha which is woven in indigenous hand-loom. Over the years, it has come to acquire a tremendous symbolic significance in the culture of the people.

The Gamocha is an object that is presented during the Bihu festival. The Gamocha is also used in the situation of showing respect. Similarly, coconut, betel nut and betel leaf also have come to occupy a symbolic meaning for showing respect.

Considering its intense cultural symbolic importance, I propose to dwell on Gamocha in some more details. Basically, Gamocha is a towel having multipurpose uses. Its size varies in keeping with the purpose for which it is used. The most commonly used one has a length of around 150cm and a breadth of 70cm. It is decorated with different types of flower, creeper and plant motifs at one end. The other end is finished with a plain border of the same colour. However, use of colours, other than red in the borders is very often observed, probably indicating a changing aesthetic choice of the users. But, however, in any socio-religious use, the people generally go for the red bordered ones. It is generally woven in white cotton with red patterned border. Occasionally, however, it has also been observed that both cotton and silk varns are used for the purpose.

Gamocha is an indispensable element of the Assamese life and culture. It has been intricately and intimately woven in to the social fabric of Assam. It is not merely an item of multipurpose physical utility, but also has a tremendous cultural importance. The cultural importance of a Gamocha can easily be appreciated from the different names, it has been given, one for each of the varied utilities.

In general, as noted earlier, it has a size of 1.50 X 0.70 mtr, which is used as a towel to wipe the body and face. In Lower Assam, it is popularly known as mukhcha. The small piece of the Gamocha, generally the last piece to come off the loom is called *hachati*. It is used as a handkerchief or a napkin. It is also very handy for carrying betel leaf and areca nut by men and women, when they are on travel or on some work out of the house. With regard to the weaving of a *hachati*, it may further be noted that now-a-days, it is done independently; and not as the last piece of a *Gamocha*. The *Gamocha* is also used as an item of man's casual dress to cover the lower part of the body as a loin cloth (2.00 X 0.90 mtr.); a gridle named *tangali* and a turban called *murbandha* (in Lower Assam) on ceremonial occasions (2.00 X 0.50 mts). Its use as a turban by the men-folk is observed during *Bohag Bihu* (the festival that heralds the Assamese New Year) festival with flaps flaunting at the sides. Now-a-days it has become an additional item of dress. On the festive or ceremonial occasion, it is neatly folded and worn around the neck. Further, it is customary to offer a piece of *Gamocha* to the distinguished guests, invited in any social function.

On the occasion of the *Bohag Bihu* every member of a family generally receives a *Gamocha* as a token of love / affection / respect. It is customary in the Assamese society for a young woman to present a self-woven *bihuan* (*Gamocha* towel) to her beloved as a token of love; and to the elders as a symbol of respect on the occasion of *Rongali Bihu*. It is also a custom of significance that in order to show formal respect to any superior person, one should salute and offer him / her a piece of hand woven *Gamocha*. All these practices have been reported by scholars at different points of time (e.g. Chetia and Kar, 2003; Bora, 1992; Gogoi, 1985; and Sarof, 1982). Majumder (1987) maintains that the respect for age, affection for the young and the love between young men and women blossom into ceremonial expression through a piece of *Gamocha*. A *bihuan*'s position is the highest among the indigenous fabrics of Assam.

The Gamocha has also a sacred dimension. It is woven with all purity for the purpose of using on the thapona (altar) in the namphar (prayer house) of the Assamese Vaishavites. In this case, it is called Gosain Kapor (God's cloth). This type of Gamocha is decorated with designs of Sarai (bell metal plate with stand), names of Gods as Hari, Krishna and Ram; and perfumed incense etc. These clothes are either red with ornamentation in white or white with designs in red. An Assamese woman generally draws her dreams in the piece of cloth, she weaves; and the first piece of the woven cloth, used as Gosain Kapor with all the beautiful decoration of the pedestal of the family or the community namphar, is offered to the family deity. It is customary to offer a new piece of Gosai Kapor to the Gods and Goddesses on the occasion of the Rongali Bihu festival. The thoga (wooden book-stand) on which Kirtana and the Bhagawata, the sacred books are placed must be covered with a gorgeously decorated Gosain Kapor. Not only in the namphar, but also in an Assamese Hindu home, Gosai-Kapor is used at the household altar.

These uses of a *Gamocha* have been observed in details by Das (1991), who concludes that it is a ritual fabric for the Assamese people. He also observes that the weaver, who is mostly a woman in Assam, starts weaving a piece of cloth or *Gamocha* with an offering of betel leaves and areca nuts to the Goddess *Bishkarami* Ai (Female conception of *Biswakarma*, the God of art and architecture).

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It may contextually be noted here that there have been the great occasions like the celebration of victory etc., when people have rejoiced; and the *Gamocha* has played a significant role. Nayar (1991), probably very appropriately observes that these are memories of inexpressible beauty, a creation with intricate designs, breath taking floral prints, moving colour schemes, all reflecting the feelings and emotions of the weaver, a magic clothing, a fine textile with rose-coloured patterns in a white background, reminding one of a garden of roses inter-woven with millions of daisies.

In fine, we can probably safely conclude that Assam is not merely a geographical region of India. The empirical ground realities make it apparent that it is also a clear-cut socio-cultural unit. Over the centuries, this distinctive habitat and its resources, the climate, the varied groups of people and the ways of life have inter-mixed with one another to give rise to the prevailing unique cultural mosaic in the region.

In other words, despite being, by and large, pan-Indian in nature, a probing objective understanding makes it apparent that Assam, with a unique cultural mosaic continues to present herself as a subcultural zone.

REFERENCES

Barua, B.K., 1969. A Cultural history of Assam. Guwahati, Lawyer's Book Stall.

Baruah, K.L., 1993. Early history of Kamrupa. Guwahati, Lawyer's Book Stall.

Bora, M. 1992. In gay abandon of the Bihu. *The Eastern Clarion* (An English Daily, published from Jorhat, Assam) Sunday Supplement, April 12, PP. 1.

Cantlie, Audrey, 1984. The Assamese. Guwahati, United Publishers.

Chatterji, Suniti Kumar. 1974 (First Pub. 1951). *Kirata-janakriti*. Kolkata, Asiatic Society of Bengal.

Chetia, Sanjita & R.K. Kar, 2001. Motifs and designs of the Assamese textile: A case study. *Bull. Dept. of Anthropology, Dibrugarh University*. 29: 109-26.

Chetia, Sanjita & R.K. Kar, 2003. The Assamese textiles: A case study. *Man and Life.* 29 (3-4): 193-204.

Chowdhury, P.C. 1959. *The History of Civilization of Assam to the 12th Century Ad.* Guwahati, The Department of Historical and Antiquarian studies.

Das, B.M. 1965. Ethnic elements in Assam. *Pragjyotisa Souvenir (All India Oriental Conference, XXII Session, Guwahati)*, edited by M. Neog. PP. 1-6.

Das, J. 1991. *Handloom Weaving as an Art, in Silent Revolution*. Delhi, Brahmaputra Valley Handloom Weavers Co-operative Society Ltd.

Gogoi, A. 1985. A Comparative Study of Some Historical Textile Designs and Symbolism of Decorative Motif in Textiles of North East India. An unpublished Ph.D., thesis, Baroda, M.S. University.

Hutton, J.H. 1969 (First Pub. 1946). Caste in India. Bombay, Oxford University Press.

Kakati, Banikanta. 1948. The Mother Goddess Kamakhya: Studies in the fusion of Aryan and Primitive belief of Assam. Guwahati, Assam Publications.

Kar, R.K. 2006. Model of man vis-à-vis (Rural) development in Assam: An anthropological view point. *Bull. of the Dept. of Anthropology Dib. Univ.* 34: 11-18.

- Kar, R.K. 2012. The concept of culture vis-à-vis cultural system: Some observations. *Jr. of Indian Anthrop. Soc.* 47: 117-27.
- Kroeber, Alfred 1944. *Configurations of Culture Growth*. Berkeley, University of California Press.
- Kroeber, Alfred 1948. Anthropology, Race, Language, Culture, Psychology, Prehistory (Revised edition), New York, Harcourt Brace.
- Kroeber, Alfred 1952. The Nature of Culture. Chicago, University of California Press.
- Kroeber, A.L., and Clyde Kluckhohn. 1952. Culture: A critical review of concepts and definitions. *Papers of the Peabody Museum of American Archaeology and Ethnology*, Vol. 47, No. 1. Cambridge, Peabody Museum.
- Majumder, L. 1987. Traditional Textiles of Assam: A study of an indigenous craft with reference to continuity and change. Unpublished Ph.D., thesis Assam Agricultural University, Jorhat.
- Nayar, M. 1991. Weaving an art looming large, in Silent revolution. Delhi, Brahmaputra Valley Regional Weavers Co-operative Society Ltd., PP. 120.
- Sarof, D.N. 1982. *Indian Craft, Development and Potential*. New Delhi, Vikas Publishing House Pvt. Ltd., PP. 118-198.
- Tylor Edward. B. 1871. Primitive Culture: Researches into the Development of Mythology, Philosophy, Religion, Language, Art and Custom (Vol. 1) London, John Murray.
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Indigenous Religious Institution and Conflict Management in Northern Shewa of Oromia, Ethiopia

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Abstract: This article explored how a local religious institution operated to manage conflict among individuals in Ethiopia. The name of the institution is qualluu¹ which is a word used in the Oromo language belonging to the Cushitic language family². Qaalluu means a person on which spirit descends or spiritual leader of Oromo indigenous religion. Qaalluu is a person also serves as a guardian and interpreter of law of Waaqaa (God) and the compound where qaalluu resides functions as an institution for dispute settlement and prayer because of its sacredness. It is a religious institution that provides conflict resolution in addition to its religious service. Therefore, it is because of its holiness that people bring their conflict cases here to get solutions. The case studies in this article revealed that there are various factors that made people to opt for conflict resolution at qaalluu. Unlike state court, qaalluu institution is highly value oriented and embedded in the religious belief system of the society. People believe that qaalluu has 'divine power' to punish offenders and it has the capacity to distinguish truth from falsehood via the power of ayyaanaa (sprit). Some of the cases that are judged by the qaalluu lack evidence while the cases that have evidences are brought to the state court. It is believed that the ayyaanaa (sprit) will disclose the wrongdoers with evidence. This is the major reason why local people sought help from this sacred institution to resolve their conflict and settle disputes.

Key words: Oromo, Qaalluu, conflict resolution, shanachaa (jury elders), dhugaa (truth), ayyaanaa (sprit)

INTRODUCTION

Conflict is ubiquitous in human society (Lederach, 1996; Jürgen *et al.*, 2006. People have developed various means to end and resolve conflicts among themselves across the globe. A multitude of approaches and strategies or mechanisms have been used to resolve conflicts in traditional and modern ways. Some of the approaches and mechanisms used are traditional and some are bureaucratic and more formal modern strategies.

The Oromo people of the study area used to bring their cases of dispute to the *qaalluu* and I have found that most of the cases were resolved. A group of elders called *shanachaa*³ come together and investigate the case thoroughly. These elders resolved the cases based on their knowledge of Oromo culture. The elders do not have other roles than resolving conflict. I will point out in detail how it worked in the next sections.

The data for this article were collected in 2012 by employing many complementary methodological tools. Interviews, case studies, focused group discussions and observations were extensively used. Many subjects were involved in the research, including community elders (men and women), youth, and local government officials. Some of the interviewees are those serving as shanachaa (jury elders) and are thus knowledgeable about the conflict resolution issues at the institution. I also interviewed the qaalluu Agarii Tulluu⁴ himself. In addition, two government officials working in the state court system were also interviewed about the relationship between *qaalluu* and state court systems.

GEOGRAPHICAL LOCATION

Just at the foot of Qoree Roobaa hill lay a *qaalluu* institution named *Oofa Abbukkoo*⁵, facing a splendid meadow named Hurufa Goodaa Roobaa to the west. The *qaalluu* who head this institution is an old man named Agarii Tulluu. This particular *qaalluu* institution is located at a particular place called Qoree Roobaa in Sululta *Woreda* (district) of North Shewa zone of Oromia regional state of Ethiopia located at ten Kilometers north of Sululta town and 23 Kilometers away from Addis Ababa to the north.

Conceptualizing Conflict

A conflict may occur in a situation when two or more parties strive to acquire the same scarce resources simultaneously. Conflict might take place because of opposing interest that included frustration, goal divergence and power (Swanstorm and Weissmann, 2005: 9). Coser (1956) argues that conflict is instinctual for human being and that it is unavoidable and happens everywhere in human society.

On the other hand, some scholars perceive conflict as important part of society and a cause for socio-cultural development. For instance, Bohannan (1967) justified conflict in terms of cultural development and renovation of social order. Furthermore, scholars have agreed on the importance of conflict in societal change (Stewart, 1998; Bercovitch *et al*, 2009; Gluckman, 1956; Schellenberg, 1996; Gulliver, 1963). The central argument which brings the point of these scholars together is the inseparability of conflict from social life and impossibility of conflict-free society. Moreover, David Weeks summed up the importance of conflict and he mentioned 'conflict is an inevitable outcome of human diversity and a world without conflict is not desirable, because it would mean a world without diversity' (Agada 2008: 25). As no one can avoid conflict, the study area for this paper is not exceptional. Different types of conflict occur between neighbors and among family as shown under case studies in this article.

BASIC SOURCES OF CONFLICT

Conflicts do not burst out without causes. Some of the conflicts just arise out of a sudden encounter. This is usually the case with inter-personal conflicts where two individuals suddenly engage in conflict just out of a sudden incident. For instance, drunken husbands are also found to be the cause of

conflict in the family. This result in the conflict between the husband and the wife and may ultimately involve their children. Additionally, some causes of conflict maybe over property inheritance, scarce resources and marital disputes. Natural resources such as land and water have been the causes of many destructive conflicts in Africa mainly because of their economic potentials and scarcity. According to Coser (1956: 7), conflict is inevitable in African traditional society because of land encroachment, territory dislocation and house sequestration. Conflicts are caused because of competition over resources which might lead individuals and groups to disagreement. Resource conflicts start over grazing land, water points, fertile land and livestock theft mainly in rural Africa (Assefa, 2005: 48; Abdalla, 2002: 11).

Marxist scholars analyzed conflict in terms of production relations and class struggle. According to them, unemployment, poverty, insecurity and class consciousness caused conflict (Tonder *et al*, 2008: 374; Jeong, 2008: 52). On the other hand, Okoh (2005: 92) explained about the cause of conflict as the result of different interests, ideas, ideologies and orientations which is intrinsic at all levels of socio-economic interactions of human life.

Cross-Cultural Experiences of Traditional Conflict Resolution

There are several traditional conflict resolution institutions in Africa even though some of them have no legal recognitions. Just to call few; bashingantahe in Burundi, dare in Zimbabwe, abunzi and qacaca in Rwanda (Mutisi, 2011), and Jaarsummaa and qaalluu institutions among the Oromo society in Ethiopia. These institutions had long history and played pivotal roles in resolution of conflicts and re-construction of social cohesion in post-conflict periods. For instance, gacaca court in Rwanda is playing conspicuous role in restoration of peace. In this system, people gathered under sheltered tree to see cases and pass decisions (Ingelaere, 2008: 33). In Sudan too, there is a traditional system called *judiyya* which is a form of arbitration that works for reconciliation and restoration of social relationships in post-conflict periods. Judiyya passes decision to enforce the wrongdoer for compensation in case loss is incurred (El-Tom, 2012: 108). Gibbs (1963: 7) has studied the formal and informal disputes settlement among the Kpelle of Liberia. He showed the role of paramount chief and the process of conflict resolution via the system called the berei mu meni saa. He analyzed the pros and cons of courtroom and the house palaver hearings. Gibbs praised the therapeutic role of the moot in the bringing about reconciliations.

In Ethiopia also, there are plenty of local conflict resolution styles. Several studies have been conducted on different ethnic groups in the country. For example:

Kelemwork (2011: 42) has contributed scholarly work about Afar customary law called *mad'aa*. He pointed out how local community resolved conflict through an institution named *gereb*. Melese (2008: 40) has studied traditional conflict settling methods of Walayita people via the traditional

system called *awassiya*, which means reconciliation. He showed how council of elders locally called *deria cimma* work to end conflict and strengthen social relations to prevent future conflict arising out of revenge.

Jaarsummaa (elders' reconciliation) is functional among all Oromo clans nowadays though qaalluu institution is found in few areas only. According to Assefa (2005), jaarsummaa is the system which binds reconciliation, mediation and arbitration together. He also pointed out qaalluu as all-knowing and the one who identifies truth from falsehood. People believe that qaalluu has 'divine power' to penalize wrongdoers and false speakers. As a result, disputant parties provide accurate information and speak the truth which helps qaalluu to arrive at the right decision.

Indigenous Conflict Resolution at the Qaalluu Oofa Abbukkoo

One should elucidate what the term qaalluu entail before one embarks on the task of discussing conflict resolution by this particular institution and the mechanisms involved in the process. This is found to be pertinent to understand the conceptual background in which conflict resolution at the qaalluu institution is framed. To begin with, the qaalluu institution was an important institution of the traditional Oromo religion. Oromo are the largest ethnic group in Ethiopia. Historically it is believed that Oromo nation is subdivided into two great moieties called Borena and Barentu in the first half of sixteenth century (Asmarom, 2000). The Oromo who have settled in northern Shewa of Oromia regional state belong to the *Tulama*⁶ group. *Tulama* itself is subdivided into three sub-tribes called Dachi, Bacho and Jille. I have studied the *Tulama* Oromo tribe who were settled in this area and belonged to the Gumbichu family of the Bacho sub-tribe. Historically speaking, obviously, this group of the Oromo settled here after the 16th century Oromo population movement and expansion.

Before the expansion of other religions and Oromo incorporation to Ethiopia's empire state in 1880s, they have been practicing their indigenous religion. The Oromo traditional religion is centered on a belief in a supreme deity called Waaqaa (God). Waaqaa is considered as the source of everything-the source of all life and knowledge. He is also considered as 'pure, intolerant of injustice, crime, sin and falsehood' (Mohammed 2005:142).

According to Mohammed (2005: 144), the term qaalluu is derived from the verb qaluu, which means 'to sacrifice'. This correlates to one of the functions the qaalluu performs in traditional Oromo religion. That is, qaalluu is the one who carried out ritual sacrifices in the traditional Oromo religion. It is also believed that Waaqaa (God) speaks through the qaalluu to the people. Qaalluu guards and interprets the law of Waaqaa. Qaalluu is also said to be knowledgeable about the traditions and laws of the Oromo. Since qaalluu is considered a man of peace, he does not carry arms. This explanation of Mohammed about the qaalluu is based on the historical qaalluu who was said to have lived at the Oromo cradle lands of Bale and Borana.

On the other hand, a Swedish anthropologist, Knutsson, who studied the qaalluu institution among the Macca⁷ Oromo defined qaalluu in this way: 'a ritual expert who has a special relationship to one or several ayana, which possess him at regular intervals' (Knutsson 1967: 64). An important part of Knutsson's definition is the concept of ayyaanaa (spirit). The ayyaanaa are divine agents that made the contact between human and superhuman possible. The idea is that qaalluu is serving as a spirit medium for the ayyaanaa that possesses him/her and speaks through him/her to the public. Because of their association to the ayyaanaa, the qaalluu are also named as ayyaantuu or warra ayyaanaa (people of ayyaanaa). Thus, spirit possession is part of the Macca qaalluu.

The position of a qaalluu can be assumed both by male and female. However, the male usually predominates. Unlike the gadaa⁸ positions, the position of the qaalluu is hereditary. Qaalluu is thought to be of divine origin. According to Knutsson, qaalluu is different from the widely known term qallicha. He writes that the later is involved in black magic activities and it is of low status (Knutsson, 1967: 64).

Historically, the Oromo used to have a spiritual father, the supreme qualluu, named Abbaa Muudaa (father of anointment) at their cradle land in Bale. He is described as the father of anointment because he used to anoint and bless those who came to him with butter. Even after they were dispersed to the different corners of the horn of Africa after the 16th century, the Oromo pilgrims called jila (pilgrims) used to visit the land of Abbaa Muudaa from as far as Wallaga in the west, Wallo in the north, Hararghe in the east and Kenya in the south up until the dawn of the 20th century, when the pilgrimage was finally banned by emperor Menelik II following the conquest and incorporation of the Oromo land into the modern empire state of Ethiopia. It is said that Abbaa Muudaa used to teach the jila (pilgrims) who visited him, that they should not fight among themselves, and that they should also not give their lands to the Abyssinians. Menelik II saw that such maneuver could lead to stirring up of pan-Oromo rebellion against him and banned the pilgrimage to the land of Abbaa Muudaa in 1900 (Mohammed, 2005: 146). Consequently, different qaalluu started to emerge after 1900s because the other Oromo groups were not able to contact the Abbaa Muudaa owing to the Menelik ban. The first of such qaalluus emerged among the Oromo of Macca. It was from Macca that Qaalluu expanded to the Oromo of Tulama (Serawit, 2009: 24). The man heading the qualluu institution in my field area also confirmed that he came from Macca Oromo.

Mechanisms of Conflict Resolution

One of the social utilities the qualluu institution of Oofa Abbukkoo serves (besides the religious service) to those who believe in and accept, is conflict resolution. The fascinating aspect of conflict resolution here is that the nature of conflicts treated are those conflicts for which *raqaa* (evidence) is lacking.

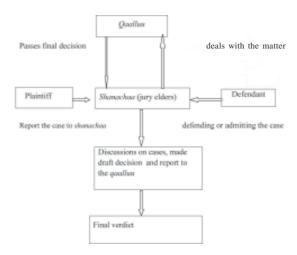
People usually take their case to the *qaalluu* when they suspect somebody for committing crime but have no proof of it. The assumption is that the *ayyaanaa* (sprit) will identify the criminals on behalf of *qaalluu*. The qaalluu Agarii Tulluu himself told me having said to those who presented their cases to him that I say, if you have evidence for your case, go to the court but if you do not have evidence come to me'. It seems that cases that have no *ragaa* (evidence) are believed to be better handled at the qaalluu institution from the assumption that ayyaanaa (the spirit) sees what has been done being concealed from the sight of an ordinary man. According to Knutsson (1967: 103), qaalluu is also considered as the guardian of dhugaa (truth).

Therefore, through access to the supernatural, qaalluu is capable of knowing what others do not know and, as a guardian of dhugaa he/she has the religious and moral authority to show the dhugaa of the harm and restore peace.

Someone who sits at the qaalluu compound and hears the conflict resolution proceedings, one of the frequently spoken words he/she hears is the term dhugaa. The elders who reconcile the conflicting parties usually utter the phrases: dhugaa hin dhoksiin (do not conceal the truth) and dhugaa kennii dhugaa fudhu (give the truth and take the truth). These phrases are uttered in the process of persuading conflicting parties to admit the crime they have committed against each other. They take time and enquire the dhugaa (truth) behind the conflicts strictly.

THE PROCESS

The process of conflict resolution at the qualluu institution follows certain steps which are described below; the first step of conflict resolution at the qaalluu institution starts from presenting one's case to the qaalluu. The case presenter can present case either if he/she suspects that someone has committed a crime against him/her or if he/she exactly knows who committed the crime but does not have evidence. So, the first step should be that the plaintiff should bring his/her case to the attention of the qaalluu. The qaalluu then orders him/her to choose someone who will communicate the accusation to the defendant. The messenger thus tells the case to the defendant. The defendant is given three chances to appear to the qualluu compound and prove him/ herself innocent of the alleged crime. In case the defendant has accepted the order but busy during the first three orders and if he/she notified then he/she might be given the fourth chance. If the defendant has accepted the order and come to the gaalluu compound, he/she is made to appear before a group of elders at the qualluu institution called the shanachaa. The shanachaa works like the executive body of the qaalluu institution. It is this shanachaa that sees into the cases of conflict issues and resolves it. But how the conflict resolved if the defendant refuses to appear before the shanachaa? If the defendant appears before the shanachaa, the case is settled through discussions and arbitrations. The following diagram shows how it works:



The following case shows how both plaintiff and defendant appear at the *qaalluu* institution to resolve conflict.

Case 1: Family conflict

The conflict between two families arose out of a sudden encounter. The situation was like this: The son of Bekele was trying to water his family's cattle at a village watering point when one of the cows suddenly crashed the utensil Aberash (Gutema's wife) was using for washing. Consequently, the infuriated Aberash lashed the boy and a pregnant cow. She also insulted the boy saying: 'you new comers and intruders'. The weeping boy went home and reported what he faced at the hand of Aberash. Now it was the turn of the Bekele's family to respond. The daughter of Abebech (Bekele's wife) and Abebech insulted Aberash. They showered her with insults containing strong words: you whore, evil and witch/sorcerer. This was the case presented before the shanachaa at the qaalluu institution. The effort to reconcile the two families progressed in such a way that the elders sat on one row and the accuser and the accused also sat together facing the elders. First, Aberash was asked whether she had committed what had been complained. She admitted that she had beaten the boy but denied that she had beaten the cow and insulted the boy. She rather indicated that she was also abused by them. Now the Bekele family was asked if they had insulted her. Abebech admitted that her daughter did. The elders then separately inquired the families to reach decision.

After much debate the elders finally decided that both should be punished. They punished Aberash for beating someone's child. They contended that had she beaten him on wrong place she could have killed him and besides she has no right to beat someone else's son. Considering that she did not injured him that caused bleeding they punished her with 500 birr (25 USD) for the swelling that caused because of beating. In addition, they contended that Abebech's daughter insulted Aberash with psychologically shocking and socially disgraceful words and thus should be punished. Considering that it was Aberash who triggered the conflict they fined him with 400 birr (20 USD). Finally, the decision was communicated and the two parties accepted. The elders stood up and made them to kiss each other. Then the accuser rose up

and said that he was happy that the *dhugaa* of his family had been discovered and that he did not want to take the money from his neighbor. He forgave his neighbor. The accused also said that his family did not want to take the compensation from his neighbor. He was happy that the *dhugaa* was discovered. Consequently, each one of them gave *dhugaa* and took *dhugaa* in return

However, if the defendant refuses to appear before the shanachaa, a different procedure is followed. In that case, the plaintiff presents his/her case to the ayyaanaa in the form of curse. As the defendant refused to appear to tell the dhugaa and the case of the plaintiff is not heard by the shanachaa, it is believed that the case will be heard and accordingly treated by ayyaanaa (spirit). The plaintiff curses he/she who committed the crime against him/her at a sacred place in one quarter of the qaalluu compound called the siidaa⁹. Only people who observed laguu¹⁰ (prohibition) are either allowed praying or cursing at this place. It is believed that the ayyaanaa hears the prayers and curses of the plaintiff and punishes the defendant. It may take long or short time for the ayyaanaa to punish the defendant.

Case 2: Theft

Darro and Bacha are neighbors. Darro is a sheep farmer and has many sheep. His neighbor, Bacha, in cooperation with Tufa had stolen a sheep. They sold it to someone and shared the money. Darro presented this case before the *shanachaa* (jury elders). The *shanachaa* ordered the alleged criminals to appear before the *shanachaa* at the *qaalluu*. The messenger reported that the Bacha and Tufa refused to come to the *qaalluu* compound because they were Sunday student at the Ethiopian Orthodox Church. The *shanachaa* were baffled by the state of affair they encountered. They wanted the Bacha and Tufa to know the *dhugaa* (truth) behind what had happened but they refused to come. After discussing among themselves, the *shanachaa* decided that once the *dhugaa* (truth) is concealed, Darro should present his case to *ayyaanaa* (spirit) by means of curse. Darro was given some days to perform set of prohibitions to enter to a scared place called *siidaa* in *qaalluu* compound to curse both Bacha and Tufa.

In the above case, Darro suspected both Bacha and Tufa for his lost sheep. Darro is the follower of *qaalluu* where two suspected criminals are followers of Orthodox Christianity. Had Darro had evidence that Bacha and Tufa have sold his sheep, he would have reported to the police. However due to lack of *ragaa* (evidence) he took the case to the *qaalluu* hoping the *ayyaanaa* will find the perpetrators. After the refusal by the suspected criminals to come to *qaalluu* compound, Darro was ordered by jury elders to take the last option which is cursing both criminals by the name of *ayyaanaa*. The conflict between Darro and, Bacha and Tufa is not resolved. Therefore, there is no compensation for the lost sheep. This case was not taken to the court as Darro believes in the power of the *ayyaanaa* to punish the suspected criminals. Regarding the curse up on the refusal of the defendant to come to *qaalluu* compound or concealing *dhugaa*, it is believed that even if the defendant dies, the consequence of his/her wrongdoing against the other can be incurred by the members of his/her family. So, the wrath of the *ayyaanaa* is believed to come on the family. It is

thus believed that the consequence of wrong doing against the dhuqaa of others is not ended with death. It is believed that someone who is cursed because he/she has committed crime against someone and refused to appear before the *qaalluu* and tell the truth may be punished to death by the *ayyaanaa*. When someone dies, it is customary for family members to consult those people who are able to contact the spirit of the dead. These people are called dheker dubbiftuu. It is believed that if anyone dies his/her dhekeraa (spirit of the dead) lives on. When the family members consult the dheker dubbiftuu, the spirit of the man who died from curse speaks and warns his/her family that they should go to the qaalluu in whose name he/she is cursed and perform a procedure called hiikoo (setting free)11. This is taken as a confirmation that he/she has died from a curse. At that point, the family of the one who died from curse should go to the *qaalluu* and address the crime committed. The family, that is together called lukoo, goes to the qaalluu to set themselves free from what has been committed. Being assisted by ritual people at the qualluu institution, a certain ritual is performed and the curse is lifted. The curse is lifted through a process called aagii tufuu (lifting curse). It is the one who did the wrong at the beginning and who now lifts the curse through aagii tufuu. Through the divine intervention, the harmed gets his/her dhugaa at the end and the conflict is resolved with the restoration of dhugaa. In addition, if someone believed that some misfortune has befallen him/her because someone has cursed him/ her in the name of a certain ayyaanaa, he/she has the right to appeal to the qaalluu to have the curse lifted. Here too, the curse is lifted through the process of aagii tufuu and the prevailing conflict is resolved in this way.

The other process of resolving conflict with the intervention of the divine is through the process called kakuu (swearing an oath). This process takes place if the defendant insists that he/she is innocent and does not commit the alleged crime. It is not advisable to end a conflict situation either with swearing an oath or curse. These mechanisms are the last way out in the conflict resolution process because curse and swearing an oath are believed to be very bad particularly for the one who committed the crime and his/her family. While the former is resorted to after strong attempts of bringing the one committed a crime before the gaalluu, the second is resorted to after the shanachaa deeply enquire the defendant and the defendant insists that he/ she is innocent. Usually even if the defendant denies a charge at the first instance, he/she does not insist given the psychological strength of the persuasion taking place there. The shanachaa usually start their mediation activity keeping in mind the defendant about the power of the ayyaanaa. They make it clear what the ayyaanaa is capable of doing for the defendant if he/ she admits and at the same time what the ayyaanaa is capable of doing against him/her if he/she denies speaking the dhuqaa. However, if the defendant is totally confident that he/she is free of the alleged crime, he/she can say that he/she has never committed the crime. At that point, the plaintiff has the right

to ask the *shanachaa* the following question: 'let him/her be judged according to the law of this compound'.

In that case the defendant should prove him/her innocent by swearing an oath in the name of the *ayyaanaa*. At that point it is believed that the defendant is innocent. Therefore, the plaintiff has to compensate the defendant as it is thought that he/she wrongly brought him before the qaalluu. The whole idea of swearing an oath is that even if someone wishes to lie the *shanachaa*, he/she cannot lie seeing all *ayyaanaa*. If he/she does so, she/he shall be punished by the *ayyaanaa* itself. The punishment will come sooner or later on the one who committed the crime or on his/her family members. In case such thing happens, the procedure is followed such that the wrath of the ayyaanaa is lifted. One has to perform the hiikoo procedure described above to get freed. Here one can conclude that one who did wrong to someone and supressed the truth and falsely swears an oath in the name of the *ayyaanaa* he/she not only offends the wronged but also the *ayyaanaa*.

The most common procedure of resolving a conflict at the *qaalluu* institution is the normal arbitration process mediated by the *shanachaa* just in the form of arbitration. This procedure is followed if the defendant admits, which he/she usually does given the fear of the *ayyaanaa* and the strong persuasion efforts of the *shanachaa*. In this case, the role of the *shanachaa* is exactly the same as any ordinary arbitration except that they at times employ the name of the *ayyaanaa*.

Conflict case hearings and conflict resolution at the *qaalluu Oofa Abbukkoo* are usually carried out on days when people are not busy. Sunday is usually a conflict resolution day as there is no work on this day. Saints day like Mary, Gabriel, Michael are also used for resolving conflict¹². Some of the people who come to observe *qaalluu* are Christians, mainly Ethiopian Orthodox. This incongruity has been substantiated by Lewis (1990: 45) that the people are Christian in the most nominal sense although the church played virtually no role other than serving for a burial site.

Proceeding at the Qaalluu and Hierarchy of Decision Making

Hearing of a conflict case at the *qaalluu* institution follows certain order. First, the plaintiff and the defendant are made to sit beside each other in front of the *shanachaa*. The *shanachaa* then asks the plaintiff to present his/her case. Having heard the claim of the plaintiff, the *shanachaa* asks the defendant if he/she has committed the crime presented by the plaintiff. They usually remind the defendant that he/she should not hide the *dhugaa*. In the next step the *shanachaa* separately discuss the matter presented with the plaintiff and the defendant to investigate the case thoroughly. In the process of the conflict resolution, the *shanachaa* discuss the issue among themselves and call either the plaintiff or the defendant to ask for clarification in order to discuss the issue at hand thoroughly. When the *shanachaa* agree among themselves that they have found a better compromise to reconcile the conflicting parties, they

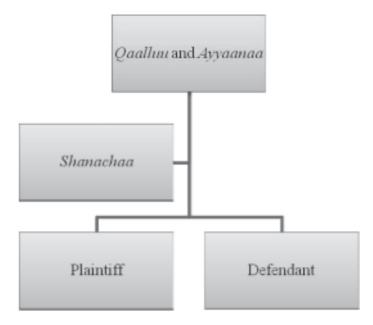
make the plaintiff and the defendant sit beside each other and notify the decision. The decision and compensation they make depends on the seriousness of the issue. When they are about to announce the decision, the shanachaa try to simplify the matter and pacify the conflicting parties through proverb like: 'truth must come first for genuine reconciliation'. If they successfully reconcile the conflicting parties, they make them kiss and hug each other and finally the shanachaa bless the reconciled party. If the conflicting parties are not satisfied by the decision of the shanachaa, they have the right to appeal to the qaalluu. Sometimes the matter becomes so complex that the shanachaa disagree among themselves about its solution. When such state of affair happens, they refer the case to the qaalluu. In this case, the final decision is given by qaalluu. He listens the decision of the group of elders and exerts his supreme authority to minimize the fines or to prove the decision of elders wrong. People accept the decision of qaalluu because they believe that he is representative of Waaqaa and gives the right decisions.

The arbitrators I witnessed at the *qaalluu* house are dominated by males. All the *shanachaa* who are carrying out the function of conflict resolution are males. However, I am informed that if one believes that a certain woman knows the case being treated, she can be included in the reconciliation process. In addition, outside conflict resolution, when someone comes to the *qaalluu* compound, particularly siidaa, for thanks giving or prayers, he/she may have special women elders called *beerran jaaloo* just in front of him/her.

As described above, it is the shanachaa who can see into many issues of conflict resolution. After the shanachaa have managed or failed to resolve the conflicts, they have to provide the qaalluu with fissii (report). To the qaalluu they explain who accused whom and how they resolved it. Having heard the case, the qaalluu gives a final ratification. Sometimes he may reverse the decision. At times he may amend the decision. But mostly he accepts the decision of the shanachaa. As some informants told me, in rare cases, the case can be presented before the ayyaanaa for final decision. However, others declined to tell me anything about this complaining that doing such thing contributes to conflicts. So, one can see the hierarchy of conflict resolution at the qaalluu institution. At the bottom, we have the shanachaa who are involved in actual reconciliation process. If they fail to resolve a conflict they refer it to the qaalluu, the normal qaalluu when he is not possessed. In rare cases, the case is presented to the ayyaanaa when the gaalluu is possessed. The ayyaanaa (sprit) gives the final verdict. Hierarchically it seems to be as follows:

Qaalluu Institution vis-à-vis the State Court System

The relation between the *qaalluu* and the state court system is rather interesting. Sometimes it happens that the plaintiff may request the court that



the case be better handled by the shanachaa at the *qaalluu* institution. If the defendant consents, the court writes letter to the *qaalluu* to resolve the conflict and report back the result to the court.

In other cases, the court may arrest someone from suspicion and yet lacks evidence. In that case they informally utilize the *qaalluu*. They bring the one who allegedly committed the crime to the *qaalluu*. The *shanachaa* and the *qaalluu* can easily persuade the wrongdoer because he/she fears the *ayyaanaa*. They use psychological manipulation because they know that the wrongdoer fears the *ayyaanaa* of the *qaalluu* which can bring wrath to him and his family. They do this while police is waiting outside and the persuasion is done behind the curtain. Such acts usually produced results. If the wrongdoer admits that he/she has committed the crime, a police is called inside to listen the confession of the wrongdoer in the presence of the *qaalluu*. Now the police can frame their charge on the fact that the wrongdoer has admitted his/her wrong doing in front of the elders. This is to say, after the court identifies the wrongdoer on behalf of *qaalluu* the formal process of court starts at the court itself. Both state court and *qaalluu* institution are working together in this regard.

Case 3: How qaalluu helped the court

Habebe and Macca were brothers who lived on the same premise they inherited from their father. They were having conflicts over a piece of farmland and grazing field for years. One day the two brothers went to market which is 15km away from their home. Habebe approached Macca and they were drinking alcohol together until night at the marketplace. While they were returning to their village, Habebe killed Macca and threw him to a ditch. When he reached his home, Macca's family asked Habebe whether he saw Macca at market

and he replied that he had not seen Macca. Macca's family reported the case to the police on the daybreak of the market day. After assessing the relationship between them, the police arrested Habebe. However, Habebe repeatedly defended that he was innocent. The police investigated that Habebe frequently went to qaalluu compound and found the importance of taking him to the qaalluu for further investigation. Accordingly, Habebe was taken there and appeared in front of shanachaa (jury elders) and qaalluu himself. Having in his mind the fear of the ayyaanaa (sprit) that might bring wrath on him or his family if he concealed truth at the qaalluu institution, he admitted that he killed Macca in front of jury elders and qaalluu but in the absence of police who were just allowed to stay outside. Consequently, a police is called in to take Habebe's confession and the formal court procedures followed.

The qaalluu also has relation with village elders, who in turn have relations with the kebele¹³ administration. Sometimes it happens that the village elders' council may not be able to settle a conflict. So, they send the case to the qaalluu to resolve the conflict. They may demand the result back from the qaalluu. Such cases usually get resolved at the qaalluu compound. Then, the qaalluu notifies the result of the reconciliation with a letter bearing his stamp. Sometimes there can also be cases which are treated at the qualluu institution to some extent and then referred back to jaarsa gandaa (village elders) for finalization. Such things usually happen if the shanachaa believe that they are not able to give final verdict because they have limited knowledge on some issues. Normally criminal cases like homicide and abduction are not brought at the qaalluu court. However, the qaalluu institution in some ways intrvenes in such cases. First, as described above, if the court has no sufficient evidence, the qaalluu institution may informally produce results as the murderer may admit the crime. Second, if the murderer is caught and detained, the qaalluu institution may have a role in bringing the family of the perpetrator and the deceased together and attempt reconciliation to avoid further escalation of conflict between the parties. The qualluu reconciles the social relations via the tradition called *qumaa baasuu* (blood compensation). The qualluu facilitates the collection of money that the slayer's relatives should pay for the slain family as compensation.

Strengths and Weaknesses of the Qaalluu Religious Institution

Like other indigenous conflict resolution institutions, the *qaalluu* offers culturally acceptable and stronger ways to resolve conflict and its strength should be assessed in its context. One of the strengths of the *qaalluu* conflict resolution is that it deals with cases that have no evidence. Such cases cannot be dealt with in modern courts because of the lack of evidence. As a religious figure, *qaalluu* commands respect and fear among those who believe and have confidence in the institution. Accordingly, the likelihood of admitting a crime at the *qaalluu* institution is very high owing to the fear of *ayyaanaa* (sprit). That is why one of my informants remarked let me be alone at the house of *Waaqaa* (God), I may not conceal *dhugaa* even at the court and it is not paper but *Waaqaa* that gives *dhugaa*'.

After a conflict is resolved at the *qaalluu* institution, it means that it has got a divine sanction. It is clear that the *qaalluu* has no police force of its own with which it enforces its decisions, but he has a spiritual and moral authority over the disputants. They respect the *qaalluu* and his decisions because they believe that the *ayyaanaa* of the *qaalluu* sees them and punishes them if they transgress the promise they made to the *qaalluu*. Seen from this angle, the conflict resolution at the *qaalluu* institution seems sustainable, even after the advent of the western styled law courts. In addition, at the *qaalluu* institution, the plaintiff not only gets his/her *dhugaa* discovered but also gets compensated. This again seems to contribute to the permanence of the resolution.

Like any other indigenous institutions Alula and Getachew (2008: 79) discussed, the conflict resolution at the qualluu institution focuses on reconciliation and social cohesion rather than on punishment. By deeply enquiring into the dhuqaa the conflict resolution here focuses on healing the wounds than physically punishing the defendant. This does not mean that there is no punishment. The first step is to find the dhugaa and then the next step is to heal the wound through reconciliation and forgiving. Compensation is also given. The resolution here works to bring the future social life to normal rather than simply punishing the defendant. In general, one can say that a plaintiff can get peace because his/her dhugaa is disclosed and also gets compensated. In the modern court case once the defendant is punished (say with imprisonment) the plaintiff gets no compensation. He/she cannot also get peace as future feuding may follow. Resolving conflict at qaalluu takes place for a long time through debates and discussions which finally results in reconciliation. So, it is participatory in nature. The plaintiff and the defendant are not exposed to strange court procedures which involve going to distant places and hiring of advocates with money. It is free of charge except that they provide the shanachaa with some drinking entertainments at the end of the reconciliation process. The qaalluu himself told me that his shanachaa does not get anything out of the deal and offering drink as entertainment itself is not compulsory but people usually offer. As such because the *qaalluu* enjoys a role of social control through divine power the decisions here have better chance of being accepted.

However, in as much *qaalluu* has its strength, it has also some weak spots. To begin with, there is not a single female who is serving as a member of the *shanachaa*. Therefore, the role of women in the conflict resolution at the *qaalluu* institution is limited. One can also hear bias reflected in the speech of the *shanachaa* when they are seeing cases involving women. There are statements anticipating the inferiority of women's knowledge although counterviews are also found. For example, one of the shanachaa remarked: 'Sometimes women are more knowledgeable than men' and the *shanachaa* also remarked that 'usually women make error'.

Some people may get away with their crimes by simply swearing an oath in the name of the ayyaanaa. In that case they will be free at large until the spirit inflicts its wrath on them (if any). So, the plaintiff may not get immediate justice. On the other hand, the question of accessibility can be an issue here. In fact the *qaalluu* gives service to whoever comes to seek justice at his house. The problem arises when the plaintiff and the defendant have different beliefs in the power of the qaalluu. In such cases, while one comes to the qaalluu institution the other may refuse to do so. People who do not believe qualluu as messenger or followers of other religions might refuse to appear before the qaalluu court because she/he is not a follower. In such cases it may be difficult for the shanachaa to come up with appropriate compromise for the evidence could be incomplete. So, the conflicting parties may not agree on shanachaa decisions. In addition, as I witnessed the conflict resolution sessions at the qaalluu institution, there is no standard of fixing payment for compensation for some crimes. Different elders propose different amounts and finally reach on consensus. This is to mean, compensation payment for intentional and unintentional crime, and compensation for men and women committing homicides are quite different which is determined by elders. Most of the time people accept the elders' decision for fear of some sets of social exclusion like excommunications and ignorance of participation in social affairs which can be taken as coercive element to support elders' decision.

CONCLUSION

In Ethiopia, there are numerous and diversified ethnic groups which have their own unique culture of conflict management. There are several indigenous conflict resolution mechanisms among the Oromo people of which resolving conflict via qaalluu is one. Qaalluu is a religious institution that gives religious services and resolves conflict. Most of the time cases which have no ragaa (evidences) brought to the qaalluu court. This is done because people believe the qaalluu can provide better decision than formal state court by virtue of its sprit. According to Assefa (2005: 54), people believe that qaalluu has 'divine power' to penalize wrongdoers and victims. As a result, many people preferred this indigenous institution than state court and come to the qualluu compound to reveal truth and get justice. Under qaalluu, there are a group of elders selected on the basis of their knowledge of society's culture and custom. They used to resolve conflicts by investigating the cases and report the decision to the qaalluu. If the qaalluu agrees with their decision he ratified the verdict and if not, he reorders them to add or subtract the compensation they made. The amount of compensation for any wrongdoing fluctuates on the basis of seriousness of the case.

The relation between *qaalluu* and the Orthodox Church seems syncretic. The photos of saints are found being posted on the wall of *qaalluu* house. Few individuals who serve in the *qaalluu* compound are orthodox Christians and

they have the symbol of True Cross on their neck. I asked the *qaalluu* himself why Christians were there and he told me that he even pays salary for church priests when the church failed to do so.

To wrap up, people preferred local conflict handling mechanism because of its easiness, efficiency and strengthening of social cohesion. This goes in line with Gulliver's (1979: 18) idea of studying conflict as choosing alternative ways of handling situations and should be based on the contexts. Under western court system, one is victorious and the other is loser. As a result the defeated might attempt for revenge. But under traditional way of handling conflict, both the conflicting parties have to agree with the decision of the shanachaa and accept it. Therefore, the approach of resolving conflict under qualluu follows win-win solutions.

ENDNOTES

- 1 A person upon whom spirit descends
- The Oromo is the ethnic group inhabiting Ethiopia and northern Kenya. With around 38 million members, they constitute the single largest ethnicity in Ethiopia and the wider Horn of Africa, at approximately 40% of Ethiopia's population according to the 2015 census.
- 3 jury elders
- 4 Person who serves as qaalluu
- 5 Oofa Abbukkoo is the spiritual name of qaalluu
- 6 The Tulama are those groups of the Oromo who have settled in Northern and Eastern Shewa
- 7 Macca Oromo refer to those groups of the Oromo who settled in Western Shawa, Wallaga, Jimma and Ilubabor areas. Knutsson mainly studied the *qaalluu* institution among the Macca of West Shawa though he also visited other Oromo areas and groups.
- 8 Gadaa is a democratic political organization of the Oromo people
- 9 A sacred place in the compound of qaalluu
- 10 *Laguu* refers to a set of prohibitions. Some state of affair are believed to make someone impure. For instance one who performed sex the previous night, a menstruating woman, etc are not allowed to enter the *siidaa* because such things are considered *laguu*
- 11 The word *hiikoo* is derived from the Oromo word *hiikuu*, which literally means to set free. In this case the family should set themselves free of the curse
- 12 Even if they are visiting the *qaalluu* and abide by its rules, the community around the *qaalluu* Oofa Abbukkoo is also Orthodox Christians. So, they observe the Saints days. It is common to see cross on the neck of those coming to the *qaalluu* to have their cases settled. It is also common to hear that the ringtones of mobiles of some of those coming to the *qaalluu* for conflict resolution is Ethiopian Orthodox Church songs. What amazed me above all was that I saw the photos of Mary carrying Jesus and that of Michael stabbing the dragon on the wall of the *qaalluu* house while I was invited for lunch. Therefore, it is not surprising if the Saints' day is a day of conflict resolution at this particular *qaalluu* institution
- 13 Kebele is the smallest unit of administration under federal structure of Ethiopia.

REFERENCES

- Abdalla, Bujra 2002. African Conflicts: Their Causes and Their Political and Social Environment. Addis Ababa, DPMF Occasional Paper, No. 4.
- Agada, Solomon 2008. The Challenges of United Nations Peacekeeping in Africa: Case Study of Somalia. A thesis presented in partial completion of the requirements of the Certificate- of Training in United Nations Peace Support Operations. Peace Operations Training Institute.
- Alula Pankhurst and Getachew Assefa 2008. Grassroots Justice in Ethiopia: The Contribution of Customary Dispute Resolution. Addis Ababa, CFEE.
- Asmarom, Legesse 2000. Oromo Democracy: An Indigenous African Political System. Trenton, The Red Sea Press
- Assefa Abebe 2005. Indigenous Mechanisms for Prevention and Resolution of Conflict: The Experience of the Oromo. In *Conflict in the Horn: Prevention and Resolution*. Proceedings of the second National workshop of the Ethiopian chapter of OSSREA. Addis Ababa, Pp.50-76.
- Bercovitch, J., V. Kremenyuk, and I.W. Zartman 2009. The Sage Handbook of Conflict Resolution. London, Sage Publication.
- Bohannan, Paul 1967. Introduction. In, *Law & Warfare: Studies in the Anthropology of Conflict.* Edited by Paul Bohannan, Texas, University of Texas Press. Pp xv-xiv.
- Coser, Lewis 1956. The Function of Social Conflict. New York, The Free Press.
- El- Tom, Abdullahi 2012. From War to Peace and Reconciliation in Darfur, Sudan: Prospects for the Judiyya. In *Integrating Traditional and Modern Conflict Resolution: Experiences from selected cases in Eastern and the Horn of Africa*. Edited by Martha Mutisi and Kwesi Sansculotte-Greenidge, Africa Dialogue Monograph Series No. 2/2012. Pp. 99-120.
- Gibbs, James 1963. The *Kpelle* Moot: A Therapeutic Model for the Informal Settlement of Disputes. *Africa: Journal of the International African Institute* 33: 1-11.
- Gluckman, Max 1956. Customs and Conflict in Africa. Oxford, Basil Blackwell Publishing Limited.
- Gulliver, P.H 1963. Social Control in African Society: A Study of the Arusha: Agricultural Masai of Northern Tanganyika. London, Rutledge and Kegan Paul.
- Gulliver, P.H 1979. Disputes and Negotiations: A Cross-cultural Perspective. London, Academic Press, Inc.
- Ingelaere, Bert 2008. The Gacaca Courts in Rwanda. In *Traditional Justice and Reconciliation after Violent Conflict: Learning From African Experiences*. Edited by Luc Huyse and Mark Salter, International IDEA. Pp. 25-58.
- Jeong, How-Won 2008. *Understanding Conflict and Conflict Analysis*. Los Angeles and London, Sage Publication.
- Jurgen. et.al. 2006 .Conflict: A literature Review, University of Duisburg-Essen Institute for Political Science, Duisburg, Germany, available@ www.europeanization.de/ accessed on June 9, 2015
- Kelemework Tafere 2011. Conflict and Alternative Dispute Resolution among the Afar Pastoralists of Ethiopia. *African Journal of History and Culture.* 3: 38-47.
- Knutsson, Karl 1967. Authority and Change: A Study of the Kallu Institution among the Macca [Oromo] of Ethiopia. Goteborg, Elanders Boktryckeri Akiebolag.

- Lederach, John 1996. *Preparing for Peace*: Conflict Transformation across Cultures. New York, Syracuse University Press.
- Lewis, Herbert 1990. Gada, Big Man, K'allu: Political Succession among the Eastern Mech'a Oromo. *Journal of Northeast African Studies*. 12: 43-64.
- Mellese Madda 2008. The role of Elders in Resolving Conflicts: the Case of Walayta People of Southern Ethiopia. In, *Making Peace in Ethiopia: Five Cases of Traditional Mechanisms for Conflict resolution*. Edited by Tarekegn Adebo and Hannah Tsadik: Addis Ababa. Pp. 2-47.
- Mohammed Hassen 2005. Pilgrimage to the Abba Muudaa. The Journal of Oromo Studies. 12: 142-157.
- Mutisi, Martha 2011. The Abunzi Mediation in Rwanda: Opportunities for Engaging with Traditional Institutions of Conflict Resolutions. Mount Edgecomb, African Centre for Constructive Resolution of Disputes Working Paper issue 012. Pp. 1-5.
- Okoh, Rosemary 2005. Conflict management in the Niger Delta Region of Nigeria: A Participatory Approach. *African Journal on Conflict Resolution*. 5: 91-144.
- Schellenberg, James 1996. Conflict Resolution: Theory, Research and Practice. New York, State University of New York Press.
- Serawit Bekele 2009. Hybridization and Coexistence of Qallu Cabsa Institution with Orthodox
- Christianity in Debralibanos Area. Unpublished MA thesis submitted to Department of Indigenous Cultural Studies, Addis, Ababa University.
- Stewart, Susan 1998. Conflict Resolution: A Foundation Guide. Winchester, Waterside Press.
- Swanstrom, Niklas and Weissmann Mikael 2005. Conflict, Conflict Prevention and Conflict Management and beyond: a Conceptual Exploration. A concept paper published by Central Asia-Caucasus Institute and Silk Road Studies. Uppsala, Sweden.
- Tonder, Chris Van *et al.* 2008. The Causes of Conflict in Public and Private Sector Organizations in South Africa. *Managing Global Transitions*. 6: 373-401.
- Address for communication: Yonas Tesema Amaya, Department of History and Heritage Management Dire Dawa University, Ethiopia, P.O. Box 1362, Email ID: yonitase@gmail.com

BOOK REVIEW

Prehistory of South Asia (The Lower Palaeolithic or Formative Era of Hunting-Gathering) Authors K. Paddayya and Sushma G. Deo. The Mythic Society, Bengaluru. 2017. Pp xxviii+152. Illustrations 79. ISBN number 978-81-932702-3-3. Price Rupees 395 (hard bound) and Rupees 360 (paper back)

The book in hand is,.. "a supplement to the Volume 1, dealing with Stone Age Bharata", a project in progress at the Mythic Society, Bengaluru (p.xiii), and is authored by two eminent pre-historians of the country, Prof. K. Paddayya and Prof. Sushma Deo. Besides adding substantially to the prestigious series on the History and Culture of Bharata, it also pays befitting tribute to Sir Robert Bruce Foote, who laid the foundation for the prehistoric studies in South Asia. The value of this publication enhances further, as it takes the intricacies of palaeo-anthropology to the general readers, who often fail to appreciate significance of Stone Age archaeology. Both, the authors and the publisher institute, thus, need to be applauded.

The four fold division of the theme of the book, — I. Introduction; — II. South Asia; — III Principal Aspects of the Lower Palaeolithic; and — IV. Conclusions, logically lays emphasis on the background, nature of archaeological and anthropological findings and interpretation of the Palaeolithic period of South Asia.

The historiography, the first part of the Introduction (Section 1), brings out an interesting facet of the making of the discipline of prehistoric archaeology. Though, technically included within the broad banner of archaeology, the credit for the birth of prehistory does not go to its parent discipline, archaeology, only. Efforts of a number of scientific branches, like, geology, paleontology and anthropology prompted discovery and recognition of early man. For instance, the biological scientists, who could establish history of animal kingdom through the model of evolution, argue man to be the most evolved species of the series. In this frame mans' origin was hypothesized from an ancestral ape like species. The question left to be resolved was to identify the species which could be accepted as man. The discovery of artifacts and hominid fossils, in Africa and Europe of the nineteenth and the early twentieth century, not only resolved the issue, but, resulted into the growth of a scientific discipline to study the early man, which is Prehistory. The brief summary of the early findings of Europe and Africa given by the authors of this book, thus is very useful.

Likewise, contribution of earth scientists to the history of the Stone Age Man, too is very important. On account of the geological time table and life of organisms, they, have prepared a time-table of the earth. Not only each species of animal kingdom gets a place in this, but, it also draws the outline of the major climatic changes. Primary, Secondary, Tertiary and Quaternary, are the four divisions identified, in which man appears in the early part of the Quaternary. This epoch, the Pleistocene is marked by climatic cycles of cold and warm and humid and dry conditions. Incidentally, the present day annual climatic cycle is assigned to the Holocene period, which began around 10, 000 BP, and continues till today. This also is the period when the physique of man and animal acquired the present form. Surprisingly, though Profs Padayya and Deo have taken care of discussing palaeo-climate of Stone Age of South Asia, in somewhat detail, this background has escaped their attention.

The three main questions faced by a prehistorian, — who was the earliest man — when and where did he emerge; —had been fundamental to the study of early man. Since answer to these lies in the findings of scientific disciplines like anthropology, palaeontology

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and geology the scope of prehistory extends much beyond historical studies. However, the main task of an archaeologist studying prehistoric man, even then is challenging. He or she has to discover, date and scrutinize evidence to identify man from the whole lot of primates. The culture remains associated with the early man receives particular focus, because, as a creator of artefacts, his identification becomes unquestionable. It has rightly been explained by the authors of this book, that the diagnostic character of man is creation of his culture. Since, the most basic material culture remain of the prehistoric times are tools, man is identified as 'the tool maker'.

The reviewer is of the opinion that, if this capacity of man is stretched further, man may be accepted as the only member of animal kingdom who had the capacity to conquer nature. By initiating tool making, man took first step forward to win over his surroundings. Instead of depending for his needs on the nature, he developed technologies for artificial modification/alteration or creation of products. The diagnostic characteristic of human race, therefore, also is his capacity to win over the nature. It is, however, a matter of concern now that, by progressive advancement of technologies man has reached such a point, where his capabilities endanger his own existence.

The historiography of Palaeolithic researches, including the paleoclimatic and archaeological findings of South Asia, summarized in the Section II: The Prehistory of South Asia, too forms the desired back ground to the theme of the book, — 'the formative era of the hunting-gathering or the food acquiring strategies of the Lower Palaeolithic period'. Covered in sixty-two pages (pp. 61-122), Section III, is the real crust of this book, The authors have deliberated upon the — 'Principal Aspects of the Lower Palaeolithic' in this part. Major findings of the Lower Palaeolithic of South Asia, in this section rightly lay emphasis on the primary context sites like, Hunsgi, Paisra, etc., — where evidence for human behavior, is recorded. In the process besides, recording technology and morphology of stone tools, the authors have discussed nature of resources of raw material, edible items and climatic conditions of the regions. These details have helped authors to reconstruct the Palaeolithic subsistence of South Asia, successfully in this book.

The part 'Diversity in Unity: Intra-Regional Organizational Variability' (pp. 81-122), of Section III, is very significant. It not only brings forth reconstruction of dwelling tendencies, food acquiring mechanism and of course variability's of tool-kits vis-à-vis Palaeolthic communities, but it provides explanation to a few basic questions related to the behavior of early Palaeolithic man. Both the techno-typological groups of the Lower Palaeolithic period of South Asia,— the Soanian and the Acheulian,— which appear to be confined to separate geographical and ecological zones, for instance, are said to practice hunting-gathering subsistence. The Soanian tool-kit is characterized by broad cutting edged tools, while the Acheulian collections have a range of pointed heavy duty tools. One wonders, what were the food gathering strategies prevalent in these two? Though debatable, one may find it interesting to read quotation of Paterson and Drummond, given in this book. The ... "Soan groups were essentially simple food-gatherers and exploited plant foods and small animals" (p. 87). Involved mostly in chopping hacking activities, the community was basically "peace loving". Contrary to this the hunting activities were more aggressive in the case of man producing and utilizing Acheulian tool-kit. Besides other forms of food collecting, big game hunting has been visualized for this group. Cleaver, the axe shaped specimen of Acheulian tool-kit, perhaps was more in demand in the semi-arid regions where vegetation cutting was prevalent. The dispersal pattern of cleavers in Paisra valley, where remains of huts were recorded in association with this tool by us (the reviewer and Prof. Pant) does suggest this possibility. Reconstruction of semi-arid zone ecological adaptation by Acheulian man of South Asia, is particularly demonstrative of the holistic approach of Profs. Paddayya and Deo.

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Written in lucid style and giving a comprehensive view of Palaeolithic subsistence of South Asia, this book has wide range of readership. Besides, it is a significant addition to the libraries of history and archaeology in general and prehistory of Asia in particular. One wishes, however, that the quality of the illustrations of this book was better.

Vidula Jayaswal

Present Position: Fellow Prof. R.C. Sharma Chair Art & Archaeology, JNANA-PRAVAHA, The Centre for Cultural Studies and Research. Varanasi. Former Position: Head & Professor Dept. Ancient Indian History, Culture & Archaeology, BANARAS HINDU UNIVERSITY, Varanasi

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Editor, translator, or compiler instead of author

Lattimore, Richmond [Translator] 1951. The Iliad of Homer. Chicago, University of Chicago Press.

Danda, Ajit K. and Rajat K. Das (eds.) 2012. Alternative Voices of Anthropology. Kolkata, The Indian Anthropological Society.

Editor, translator, or compiler in addition to author

Barthes, Roland 2009. Mythologies. [Selected and Translated by Annette Lavers.] London, Vintage Books.

Radhakrishnana, S. [Translator and notes] 1970. The Bhagavadgita. Bombay, Blackie & Sons.

Chapter or other part of a book

Choi, Hyup 2012. Korean Anthropology in Historical Perspective. In: Alternative Voices of Anthropology, ed. by Ajit K. Danda and Rajat K. Das, pp. 117-135. Kolkata, The Indian Anthropological Society.

Books in vernacular language

Devi, Mahasweta 1418B (2011). *Aranyer Adhikar* (Right of the Forest). Kolkata, Karuna Prakashani. [Bengali].

Book published electronically

Kurland, Philip B. and Ralph Lerner (eds.) 1987. The Founders' Constitution. Chicago, University of Chicago Press. http://press-pubs.uchicago.edu/founders/, accessed on January 13, 2016.

Journal article

Article in a print journal

Kar, R. K. 2012. The Concept of Culture vis-à-vis Cultural System. J. Indian Anth. Soc. 47: 117-127.

Prabhu, V. and Tanuja Kalita 2013. Ethics and Legality of Euthanasia in Indian Context. EJAIB 23: 46-50.

Article in an online journal

Kossinets, Gueorgi, and Duncan J. Watts 2009. Origins of Homophily in an Evolving Social Network. Am. J. Sociol. 115: 405–50. DOI: 10.1086/599247. http://www.journals.uchicago.edu/toc/ajs/current, accessed on February 28, 2010.

Article in a newspaper or popular magazine

Mendelsohn, Daniel 2010. "But Enough about Me," New Yorker. January 25.

Stolberg, Sheryl Gay, and Robert Pear 2010. "Wary Centrists Posing Challenge in Health Care Vote," New York Times. February 27. http://www.nytimes.com/2010/02/28/us/politics/28health.html, accessed on February 28, 2010.

Bandyopadhyay, Sumahan 2011. 'Hul Maha: Asamapta Andoloner Shapath Diwas,' (Rebellion Day: Promise on the Day of an Unending Revolution), Akdin, July 1, Page 4 [Bengali].

Book review

Ray, Subha 2009. *Morphology of Primates and Human Evolution*. By Professor R. P. Srivastava. J. Indian Anth. Soc. 44: 250-252.

Thesis or dissertation

Keot, Baijayanta 2007. Folklore and Nationalism with Special Reference to Assam. Ph. D. thesis submitted to Department of Cultural Studies, Tezpur University, Assam.

Paper presented at a meeting or conference

Adelman, Rachel 2009. "Such Stuff as Dreams Are Made On': God's Footstool in the Aramaic Targumim and Midrashic Tradition." Paper presented at the Annual Meeting for the Society of Biblical Literature, New Orleans, Louisiana, November 21–24.

Website

American Anthropological Association 1998. Code of Ethics of the American Anthropological Association. http://www.aaanet.org/committees/ethics/ethcode.htm, accessed on March 29, 2017.

McCutcheon, W. A. 1983. Industrial Archaeology: A Case Study in Northern Ireland, World Archaeology. 15: 161-172 http://www.jstor.org/stable/124649, accessed on February 23, 2012.

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Corrigendum for JIAS 2016, Volume 51, Issue 3

- 1. Page 202, OBITUARY: Prof. I. P. Singh did not die in 2017 as has been shown under his photograph. His actual date of death is 27-09-2016.
- 2. Page 199, BOOK REVIEW: ISBN Number 978-93-858830-1-9

ANNOUNCEMENT

The Indian Anthropological Society announces with pride and pleasure the yearlong celebration of its sixty years of formal existence as the oldest professional body of anthropologists in India, in the year 2018.

The detailed programme will be communicated to the members shortly.

ACKNOWLEDGEMENT

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