Within the close vicinity of Amphal City along the Airport Road stands Amphal College still strong solemn and shining. One of the few premier colleges of Manipur this college had a humble beginning. Feeling the dire need of the time trend some devoted and determined people took the venture of establishing this college purely with public contributions first at the community hall at Mongmeibung Amphal East District on 20 August 1952. With painstaking and steady struggles behind slow changes the college had to be shifted from place to place. For quite sometime it again continued at Ananda Singh Academy then at Tombisana High School and later at Churachand High School.

At was during the doldrums of this college that one co operative society donated all its belongings including funds to Amphal College. Moreover a donor from Kwakeithel Lamdong donated a part of his paddy fields to enable the college to take its proper shape. Henceforward Amphal College flourished forth with its prospects in store. In 1960 the college became a full fledged day college. In 1962 the Government of Manipur granted the college the status of an Aided College followed by the opening of Science stream in the same year. Ultimately in 1979 Amphal College turned to be a full converted Government College of Manipur By 1980, the UGC recognised the college. Earlier this college was affiliated to Gauhati University but now it is affiliated to Manipur University.

Today Imphal College remains one of the leading colleges in Morth East India. Its developmental progress is encouraging. The College has been assessed and accredited by MAAC Mational Assessment and Accreditation Council and awarded "Grade B" with the CGP Apoint of 2.84 Cycle 2, valid till Sept 2022) as the highest among the Government Colleges of Manipur.

INVICTUS

FICE OF THE PRINCIPA

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Imphal College Research Journal, an annual Journal of the College, is a multifaceted volume covering a wide spectrum of subjects ranging from Sciences, Arts to Humanities. The present volume contains 16 scholarly articles contributed by academics from different fields, revealing many fascinating literary, social, political, scientific and historical aspects.

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IMPHAL COLLEGE





Volume V





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2022 Issue

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Editorial

INVICTUS, Imphal College Research Journal (Vol. 5. 2022 (Issue) is an intellectual journey passing through the realms of gold for those who are hungry for information, knowledge and wisdom in some particular subjects. The dire need of the hour, indeed, as accomplished stories, facts and ideas rule the world? We venture forth this journey knowing fully well that Imphal College contains multitudes; it is a fertile soil for systematic inquiries into study materials and sources for twenty disciplines in Arts, Sciences and Humanities including four B.Voc courses. As such, we never suffer from the dearth of spirited and great minds, critical as well as creative.

Unfortunately, our attempt to bring out this timely issue wavered a lot ouring to the blow of the covid pandemic, that resulted into the complete closure of the Press.

Today, celebrating the end of this curse on the present humanity at large, this issue sees the light of the day. We record our sincere thanks to all the sixteen article contributors, who have given us lots of reasons to be deeply grateful to them. As a matter of fact, it is they who have doubled the glory of the college by way of giving the world all the possibilities out of their pain and quest for entering the hearts of the matters.

- Editor

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K. Anil Sharma



Wonder is the beginning of wisdom.

- Socrates

A house that has a library in it has a soul. - Plato

It's through our deepest moments that we should focus to see the light.

- Aristotle

Guidelines for Contributors to Imphal College Research Journal

Aims and Scope

Launching of Imphal College Research Journal, is a logical forward step in our endeavours to achieving higher scientific and academic objective of gathering, analysing, and disseminating knowledge. The Journal will initially be a annual publication. It will publish review reports on members and important events in the field of education.

Submission of Manuscripts

Manuscripts of snippets, short research communications and articles, notes and commentaries are invited for the next issue of the Journal. Send your manuscript prepared in MS Word in double space along with three hard copies and text in soft copy at least three months in advance of the publication.

Wehreas more elaborate details for the preparation of the manuscript used in the text issues, more specific enquires of immediate nature can be addressed to the Editor, Imphal College Research Journal. Research paper should not normaly exceed 2500 words, excluding one or two photographs and 2-3 sketches, or line diagrams, computer genrated or very neatly drarwn with India ink or tracing paper.

Short communication & Discussions not more than 500-1000 words on papers and technical reports will be welcome for publication. The editor may, however, waive these limits to encourage high relevance of the contribution to topical research areas and also for such topics that may not be treated as per suggestion to the members of the Editorial Board.

Notes to Contributors

While fuller guidelines to authors will be given in the forthcoming issue of the Journal the following suggestions, for the present, should suffice for those, who may wish to send contribution for the next issue.

Manuscripts (MS) should be written in English

MS should preferably be prepared on a word processor and printed in at least 12 font size in double space, leaving wide margin (not less than 2.5cm) on each side and include an abstrat of not more than 300 words.

The title page should include the name(s) of the author(s), their affiliation, fax & email numbers (if any), etc. In case of more than our author, please indicate to whom the correspondence should be made.

Reference in the text should have the surname of the author(s) followed by the year of publication. All references cited in the paper should be given in the reference list and vice versa.

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JUXTAPOSING NATIONAL EDUCATION POLICY (NEP) WITH THE STATE OF HIGHER EDUCATION SYSTEM IN MANIPUR

Md. Farijuddin Khan¹

The NEP, 2020, made headlines across India for two good reasons. First, the latest national education policy evolved as a radical rejig that would impact the entire educational system from the primary to university level. Secondly, it was passed at a time when national debates and discussions across the country did not escape the issue of the rise in the trend of youth unemployment. Does the NEP 2020 cater to the aspirations of youth – especially those in the collegiate level of education? Will the NEP address the core problem of educated unemployed youth in a country of nearly one and half billion people?

It looks not difficult to understand the structure of the new education policy. A cursory look that appeared in many newspapers after the Act was passed in 2021 highlighted that the new educational policy underscored the need for a systemic rejig at the higher level of India's educational system. The core philosophy behind such structural change is the need to streamline colleges and universities' curricula to augment the demands of a vibrant economic powerhouse. It connotes redefining the rationale of the higher education system in India. Consequently, the NEP seems to target a system of higher learning institutions that could cater to the market needs of twenty-first-century India. Furthermore, produce skilled/employable graduates and experts whose knowledge and expertise could propel India to a new height of advancement and prosperity.

First and foremost, it has cleared the path for setting up a *single regulatory body, HECI*, for the country's higher education system. With this development, there are some critical changes. The **first** change is the discontinuation of *M.Phil. degrees* from Universities. This change drew widespread criticism from many educationalists and even some universities protests. The **second** significant change is scrapping the mandatory 3-year B.Sc./BA programmes and replacing them with 3/4-year multiple exits and the entry-degree scheme of the undergraduate programme. However, students would be given an appropriate certificate/diploma/degree depending on their decision to exit at any stage after completing at least an annual course comprising a minimum of two semesters.

For example, a student who drops out after completing an annual academic year would be awarded a certificate. With this, the *Credit Based Choice System (CBCS)* has been introduced in the higher education system. **Third**, the main change comes from a digitized *Academic Bank of Credit*. According to provisions

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in the NEP, a student's academic credits which s/he obtained would be accessible to the student and related institutes. Students' credits at each academic level shall be deposited in the Academic Credit Bank. Students can use their earned credits to take admission to another institution to continue their studies for the remaining year/s of their graduation courses. **Finally**, students can pursue a direct Ph.D. after completing the four-year "Bachelors with Research" undergraduate programme from any recognized institute/University. Thus, the mandatory rule of acquiring a M.A./M.Sc. Degree for pursuing PhD programs at Universities has also been done away with.

The state of Higher Education in the State

The higher education system in India aims to create subject-matter experts in various disciplines. The new education policy intends to break this convention by making higher education a domain of interdisciplinarity learning and mutual benefits. This is a long-due change. The state of higher education in Manipur converges with such conventional goals. The collegiate-level education system has been the backbone of the higher education system in the State. Manipur University (MU), a central University, has at least 34 affiliated colleges across the State, as per a Government data. These colleges are multidisciplinary in nature and, fundamentally, the cradle for transforming school students into research scholars. Besides this central University, Dhanamanjuri University (DMU), located in Imphal, is another leading State University catering to general education in the State. It has currently 5 (five) constituent colleges. A 2017 State legislation provided the basis for the University, and, today, it is in the process of metamorphosing into an autonomous University. Besides these two major Universities, there are a few notable Universities, such as the Central Agricultural University, Manipur Technical University, Manipur University of Culture, and Indira Gandhi National Tribal University, Regional Campus. Also, some private colleges/Universities in the State offer degrees up to the PhD level.

A survey report (2018-19) by the *All India Survey of Higher Education (AISHE)*, backed by the then MHRD and now the Ministry of Education, revealed the following figures about the state of higher education in Manipur at multiple levels.

	Courses Offered	No. of students
1.	Undergraduate	89,764
2.	Post Graduate	4231
3.	M.Phil.	03
4.	PhD.	726
5.	PG Diploma	239
6.	Diploma	1814
7.	Certificate	70
	Total	96,847



With the introduction of the NEP, the figures at each level shown above are poised to change drastically. The impact of the new education policy on the higher education system of the state links to its successful implementation across the collegiate education system.

Implementing the National Education Policy (NEP): Key Challenges

The successful implementation and smooth rolling of the provisions contained in the new education policy commands a critical examination and analysis of the state of the structure in government colleges. Almost all colleges face shortfalls in infrastructure and teaching faculty strength. For example, a cursory look at the faculty distribution across the inter-disciplinary Departments of the College reveals the disparity in faculty distribution. In the Social Sciences block, a few key Departments offering Honours courses in undergraduate degree programmes have two faculty members against an average strength of six to seven posts. This is a significant hurdle given that the NEP has increased the number of Core courses offered in every Departmental curriculum mandated by the respective Academic Councils of Manipur University.

Moreover, other mandatory credit courses offered at different semesters cater to a skilled-based curriculum, which in some cases, might need the help of subject-matter experts/faculties to teach. In the absence of adequate teachers who are trained in specific subjects, colleges may require to hire these faculties on a contractual basis in the long run. This is one of the genuine challenges many experts have noted. Besides this key challenge of hiring additional faculties to meet the course structure other than the core subjects, some faculties have already aired their views on the need to increase the number of laboratories in science blocks. Many Departments have also reflected on their thought about the requirement to purchase more desktop computers. For example, they reminded that courses in Statistics would require more computers to cater to the minimum need to run skilled-enhancement courses/subjects successfully.

Besides the infrastructural and lack of faculty strength in Departments, other challenges include the availability of text and reference books for newly added core subjects, compulsory courses of Skilled Enhancement, and Value Addition Courses; maintaining optimum the required student-teacher ratio per semester; building a system of proportional seat-intake mechanism to maintain a balanced student number every semester in every department of a college. Moreover, provision for regular training of teachers in the form of certificate-based workshops or refresher programs under the aegis of the UGC or the newly created HECI will be an essential exercise to update the knowledge and experience of teaching faculties. These would require serious deliberation and adoption of the best practical approaches by all stakeholders – colleges, the University, and the Government. Thus, active coordination and cooperation among the stakeholders will be crucial in determining the successful implementation outcome.

Mandatory Implementation of NEP: A Few Pointers

The National Education Policy of 2020 aims to take the nation's education system to the highest academic achievement and scientific progress. It seeks uniformity in the education system of the entire country. In the case of India's higher education system, the need for uniformity in the application of rules



is essential to bring about necessary amendments in the system. Thus, a seeming uniformity in the procedural approach to implementation of the NEP across the country's length and breadth could coherently serve larger national interests in the long run. In this regard, the following suggestions may be found helpful for a successful implementation of NEP in the collegiate system of education in the State:

- I. Mandatory Workshop at each College under the supervision of the concerned Principal to deliberate on the requirements for successful implementation in the College.
- II. The organization of such a Workshop may be felicitated by those faculty members who have participated in workshops organized by the Manipur University or any national-level platform.
- III. A Government financial scheme to support experts among teaching faculties in Government/aided colleges who have the potential and willingness to develop curriculum-based textbooks for undergraduate courses.
- IV. Recruitment of qualified faculty members through a system of transparent and accountable process preferably recruited by a Constitutional body.
- V. Additional NEP-oriented mass training of existing faculties on a regular basis within a time span of two years at the State and National levels.
- VI. Point-based reward system may be initiated by the concerned authority for colleges which have achieved maximum criteria while fulfiling the mandate of successful implementation at their level.

Way Forward

One of the implications of implementting the NEP would be a better representation of India's performance in the higher education sector in major global development indices. Another goal is to produce more skilled, employable youths. A few critical challenges raised by the country's collegiate education system need not be neglected for a better chance to make it a successful major reform in India's history. The NEP is indeed a bold reform to augment India's aspiration to become a leading global knowledge production and dissemination hub. India's goal of being a '*Viswa Guru*' to the world community will be achieved in a true sense if all stakeholders in India's vast educational ecosystem grasp the essence of the national policy and work positively to overcome some initial challenges.

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DECENTRALIZATION AND HUMAN NATURE: GANDHI'S CONCEPT

Dr Koijam Dhaneshwori Devi¹

Introduction

According to Gandhi, the State represents violence in a concentrated and organized form. It cannot be weaned away from violence because it is soulless machinery.[1] Thus, when the State represents violence and has no soul, the economic and political powers should not be concentrated but decentralised completely. Gandhi looked "upon an increase in the power of the state with the greatest fear because, although while apparently doing good by minimizing exploitation, it does the greatest harm to mankind destroying individuality, which lies at the root of all progress."[2] To Gandhi, decentralization is the only way to eliminate exploitation of the weaker section in society and to bring welfare and happiness to the millions. Hence, Gandhi advocated the decentralization of political power. The Gandhian decentralized political order is based on two considerations: First, the individual should prepare himself in order to rule over himself. Self rule (Swaraj) is one of the prime ideals which the individual should aspire to achieve. Second, each village should be economically self-supporting and politically autonomous. Thus, political power is to be decentralized for self-governing individuals and villages. [3]

To Gandhi, concentration or centralization of power is a danger to democracy. It distorts all democratic values. As a system, it is inconsistent with non-violent structure of society. It is essential for all round development of individuals including his self-realization, and his society at various levels. It provides a congenial condition and atmosphere to develop a sense of social responsibility, equality, love, fraternity, belonging and oneness in the minds of every citizen thereby helping the building up of a non-violent society.

Gandhi's concept of decentralization

Gandhi advocated decentralization of power both in the political as well as economic sphere because centralization curbs individual initiative and stands in the way of self-realization. According to him decentralization of political and economic power provides for the working of democracy based upon individual freedom and initiative and for the individual being allowed to participate in the government of his country. It would also regulate automatically both the production and distribution of the commodities necessary to human life; and both the production and the consumption of these would be in the same locality rather than having production concentrated in particular area only, thus necessitating regulations

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for the distribution of products and wealth. He held the view that without economic decentralization, political decentralization would be meaningless.

In the political sphere he favoured curtailment of the authority of the state and grant of more autonomy to the village community. He said: "Society based on non-violence can only consist of groups settled in villages in which voluntary co-operation is the condition of dignified and peaceful existence." [3] That is to say he insisted on the creation of self-sufficing autonomous village communities. Gandhi asserted that in a decentralized society the individuals shall enjoy complete freedom. Such a society shall be non-violent in nature and hence, there shall be no place for military, police or law courts in it. Regarding decentralization in the economic field he favoured replacement of the large scale industry by cottage industry. He asserted that through cottage industries alone the spiritual values could be properly understood and appreciated. Thus Gandhi advocated both political and economic decentralization. According to Gandhi, "people under such decentralized economic and political system will be quite competent to run and manage their Panchayats and other local self-governing institutions." [4] Gandhi held the view that independence must mean that of the people, not of the rulers of the people. The ruler should depend on the will of those ruled. Thus, the rulers have to be servants of the people, ready to do the will of the ruled. Independence must begin at the bottom. Gandhi's concept of decentralization can be studied under three heads: social, political and economic.

(i) Social decentralization

Gandhi firmly believed in decentralized social system. His view on social decentralization begins from the family. In the family life the relationship between husband and wife should be that of true friends and not that of master and servant. They have a joint responsibility in the maintenance and strengthening of home/family and thus supplementing each other's labours. The custom of husbands regarding their wives as property was severely criticized by Gandhi. Gandhi lamented that in Hindu households husbands do not consult their wives. A husband regards his wife as his property. Gandhi was thus against their domination of the wife by her husband. This means that power is unrealized in the hands of husband in the family. Instead, he wanted proper sharing of the responsibility of household management and family administration between the husband and wife and that women should have a role in making decision of the family. He was of the opinion that women should not be confined in the kitchen like a slave. He said that man had converted her into a domestic drudge and an instrument of his pleasure, instead of regarding her as his helpmate and better half. The result is a semi-paralysis of our society. Woman has rightly been called the mother of the race. Men owe it to her and to themselves to undo the great wrong that they have done her. He was also of the opinion that woman is not born merely to cook food; it should be done both by man and woman. To Gandhi domestic slavery of women is a symbol of man's barbarism. According to him domestic work should not take the whole of a woman's time. He wrote: "Of all the evils for which man has made himself responsible, none is so degrading, so shocking or so brutal as his abuse of the better half of humanity..." [5] Thus he was against the utter domination of the wife by the husband. He was in favour of women resisting their husbands on certain occasions. He said: "The wife has a perfect right to



take her own course and meekly brave the consequences when she knows herself to be in the right and when her resistance is for a nobler purpose." [6]

Thus, Gandhi firmly believed that women who represent half of the society should be made equal to men. There should be no domination of women by men. She should be respected as mother and sister in the society. In other words, he admitted no distinction between man and woman except such as has been made by nature and can be seen with our eyes. For these reasons domination of women by men and concentration of power only in the hands of men is against the concept of Gandhi's social decentralization.

Gandhi was also equally opposed to parents' domination and concentration of power over their children. In his view when children are fully grown up, the parents can only exercise their nominal power of supervision over them. Parents should not treat children as their subordinate but as friends. They should make their children self-reliant and well able to earn an honest living by their works. [7] Gandhi advocated decentralized society on the basis of non-violence, truth, bread-labour, trusteeship, democracy, ideal state, sarvodaya etc. He aimed at the establishment of a new social order based on the twin foundations of truth and non-violence in which the exploitation of man by man will disappear in all its forms, inequality will be replaced by equality, competition by co-operation and hatred by good will and love. [8]

Thus Gandhi contemplated a society in which all would have their rightful place and each would enjoy freedom and participation in the management of the affairs of the community. He wanted to rebuild the nation from the bottom upwards and establish a new social order on freedom, justice, equality and fraternity. Gandhi thus advocated sarvodaya society in which there will be freedom and equality for all; there will be no class and caste; no exploitation and injustice but equal opportunity for each for the fullest development of his/her personality.

(ii) Political decentralization

Gandhi was against the concentration of power in the hands of the state and pleaded for decentralization of power from it. The need for decentralization arises from the fact that centralization means concentration of power in the few people with the likelihood of its abuse. Hence, he wanted to establish political organization of the country on non-violent basis through village communities. He said: "I suggest that if India is to evolve along non-violent lines it will have to decentralize many things. Centralization cannot be sustained and defended without adequate force." [9]

Ahimsa or Non-violence which has been one of the basic concepts of Gandhi will not be possible without decentralization of power because centralization leads to exploitation. Hence, he advocated decentralization of power: social, political and economic. To Gandhi political decentralization is essential for a non-violent social order as well as to bring individual moral development in the society. For spiritual and moral development of the individual there is need for decentralization of power.

Gandhi was of the firm opinion that exploitation is the essence of violence and that it harms the personality of individuals. He believed that exploitation becomes a reality when power is concentrated in a single body like the state. He also said: "The state represents violence in a concentrated and organized



form. The individual has a soul, but as the state is a soulless machine, it can never be weaned from violence to which it owes its very existence." [10] *Swaraj*, a non-violent state and *Ramraj* are significant milestones in Gandhi's concept of decentralization in its comprehensive form. Village *Swaraj* is another crucial element of Gandhi's concept of decentralization. Gandhi in a consistent and articulate fashion pleaded for village *swaraj*. It means that every village must be an independent and self-contained until in itself. He was convinced that "the small communities can certainly act as forces for the stabilization of personality by creating a nucleus of organic socio-psychological density. An intense civic and social participation is possible." [11]

According to Gandhi, the real Indian lives in its villages and stressed that "India does not live in its towns but in its villages." [12] Thus villages held an important place in his scheme of life and social organization. He advocated for the development of rural life and hold that Indian villages were the backbone of India. It is in this context that Gandhi had expressed: "If the villages perish, India will perish too. It will be no more India. Her own mission in the world will get lost." [13] Hence he strongly opposed the exploitation of villages, and termed it as an organized violence which is contrary to his plan of decentralization. He put forward his voice that "If we want Swaraj to be built on non-violence, we will have to give the villages their proper place."[14] Gandhi's concept of decentralization seeks to revive and revitalise the concept of self-sufficient village communities and set up 'panchayat raj' in place of the present mechanism of a top heavy structure of government.

(iii) Economic decentralization

Gandhi's economic theory provides a new and realistic approach to contemporary problems of poverty, hunger and degradation. Beginning with the position that exploitation is at the root of all violence, Gandhi built his economic ideas in such a manner that will stop exploitation of man by man. His panacea is to do away with concentration of economic power by proposing economic decentralization at various levels of the power hierarchy of the Indian society. He advocated for a highly decentralized rural economy as opposed to highly centralized competitive economy. As stated earlier, centralization is inconsistent with the non-violent set up of society, because it results in the concentration of wealth in the fewer hands with the possibility of the abuse of such power and gives rise to class antagonism. [15] As a result, while only a few roll in luxury, many do not get even the bare necessities of life. [16] According to Gandhi the moral aspects cannot be ignored in any economic activity. Any activity which has an adverse effect on the well-being of man and society does not deserve to exist. Even if the activity is economically viable and commercially beneficial, it is socially and morally undesirable. It cannot be taken up if it disregards the moral values. [17] True economics stands for social justice and promotes the good of all. [18]

Gandhi believed that decentralization of economic power could fruitfully serve the interest of the community by bringing about rapid development of small scale and cottage industries. And to achieve this end, Gandhi advocated for universal use of khadi. He believed that this will help not only in promoting self employment and self sufficiency to the poor masses and development of village economy but also in fostering patriotism among the masses. All these also at length will help in the realization of a



communitarian village system that would look after food, clothing, shelter and educational needs of every individual in the rural area. [19]

Gandhi was of the option that industrialization should be discouraged to minimise exploitation on the one hand, and developing full employment on the other. Industrialization leads to passive or active exploitation of the villages and it encourages competition. Industrialization replaces manpower and hence it adds to unemployment. In a country like India, where millions of labourers in the villages do not get work for even six months in a year, industrialization will not only increase unemployment but also will force labourers to migrate to urban areas. This will ruin villagers.

Therefore, his emphasis was on all-out endeavour for 'production by masses' in contrast to 'mass production'. Direct involvement of the people would eliminate alienation. There would be no divorce between work and the ownership of means of production. Physical work has its advantages for the wellbeing of human beings as Gandhi believed in bread-labour. It is also required for the fuller development of man. For him, "Man cannot develop his mind by simply writing and reading or making speeches all day long." [20]

Decentralization and human nature

Decentralization is a philosophical concept of Gandhi which is borne out of his understanding of human nature. According to Gandhi's understanding of human nature, moral development is necessary as the foundation of life. But moral development of man requires not only knowledge. Certain conditions like non-violence, voluntary performance of good deeds and individual freedom are essential for the moral development of man. And all these things can be there only in a decentralized social set up. Because, in a centralized social set up, power will be concentrated in the hands of few which will endanger individual freedom and limit the scope of self development on their part. It will also lead to misuse of power by the few against many thereby leading to exploitation of the people. In other words, a centralized social system will perpetuate violence or exploitation of man by man, and this will ultimately go against the interests of moral development of man. He rightly believed that exploitation becomes a reality when there is centralization of power. In other words, centralization is instrumental for exploitation which will lead to violence. Exploitation will also at length deny opportunities for personality development of the individuals. As he said: "The end to be achieved is human happiness combined with full mental and moral development. I use the adjective moral as synonymous with spiritual. This end can be achieved under decentralization. " [21] Thus he believed that without decentralization it was impossible to ensure individual freedom and mental and moral growth of man. Herein lie the correlation between his understanding human nature and his advocacy of decentralization of power.

Besides, moral development of man which according to Gandhi is one of the basic purposes of human existence requires that any action done should be done voluntarily, without coercion and with a good intention. For him, "It is not enough that an act done by us is in itself good; it should have been done with the intention to do good. That is to say, whether an act is moral or otherwise depends upon the



intention of the doer." [22] However, when there is centralization of power, subjugation of man to man also will follow which would mean that the possibility of man behaving under coercion or mechanically will be there. This will definitely be in contradiction with the interests of individual moral development because for him any action that is dictated by fear or by coercion of any kind ceases to be moral. He said: "No action which is not voluntary cannot be called moral. So long as we act like machines, there can be no question of morality." [23] In other words, there will be no moral development when man acts under coercion. And it was with a view to counter this danger in the path of moral development that he advocated decentralization of power in all its comprehensiveness. Thus, his concept of decentralization of power is closely related with his understanding of human nature and his concern for the moral development of man.

Conclusion

Decentralization is the only way to eliminate exploitation of the weaker section in society and to bring welfare and happiness to the millions. Gandhi advocated the decentralization of political power. Decentralized political order is based on two considerations: Self rule (Swaraj) and self-supporting and politically autonomous. Decentralization of political and economic power provides for the working of democracy based upon individual freedom and initiative and for the individual being allowed to participate in the government of his country. Social decentralization begins from the family. Gandhi was equally opposed to parents' domination and concentration of power over their children. Gandhi thus advocated sarvodaya society. He wanted to establish political organization on non-violent basis through village communities. *Swaraj*, a non-violent state and *Ramraj* are significant milestones in Gandhi's concept of decentralization. He advocated for a highly decentralized rural economy. He believed that use of khadi will help self employment and self sufficiency to the poor masses and development of village economy. Without decentralization it was impossible to ensure individual freedom. Thus there is correlation between his understanding human nature and his advocacy of decentralization of power.

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POLITICAL EXPLOITS OF MANIPUR IN THE CHINDWIN VALLEY (1467-1748)

Yumkhaibam Shyam Singh¹

In the political history of South Asia, the kingdom of Manipur was, at one time, one of the most powerful kingdoms which had its political control over the vast valley of the Chindwin River (now in Burma). Though this kingdom was a tiny mountainous one, its people namely Manipuris were brave and united one. It was because of this bravery that the kings of Manipur had not only expanded their territories over a vast area in the said valley but also they could defend their sovereignty against other neighboring powers of Southeast Asia. Once when the British Indian Government wanted to maintain peace in its eastern frontiers, George Swinton, Chief Secretary to the Government, expressed: "The Munneepore country, which is inhabited by a brave and hardy race, who have frequently opposed a noble resistance to their Burmese invaders would thereby accrue to the security and tranquility of our North-E Frontier."

During the period under study Manipur was ruled over by powerful kings, like- Kyamba (1467-1508), Kabomba (1523-1542), Mungyamba (1562-1597), Khagemba (1597-1652), Khunjaoba (1652-1666), Paikhomba (1666-1697), Charairongba (1697-1709) and Garibaniwaza (1709-1748). By the middle of the fifteenth century A.D., there was a powerful Shan kingdom of Pong in the upper Chindwin valley. After the Pong-Manipur Treaty of 1470, Manipur became an undisputed owner of a vast territory in the Chindwin valley. R.B. Pemberton writes in The Eastern Frontier of India, "...we have but one event of any importance recorded, which is said to have taken place in the year 1475, during the reign of the Rajah Kyamba; when the refractory Khumbat, at that time dependent upon the kings of Pong, was attacked and expelled from his territory by the united forces of Pong and Muneepoor, and the Kubo valley was formally annexed to the latter country, in virtue of an alliance"² On the political exploits of Manipur under Raja Garibaniwaza, Maung Hting Aung, in A History of Burma, writes, "The entire western bank of the Irrawaddy lay at their mercy and finally the king (Mahadammayaza) had to send all available troops to the troubled regions. But these troops lacked a supreme commander with an imaginative plan and they took up isolated defensive positions, which the fierce Manipuri horsemen merely bypassed."³ G.E. Harvey also expresses in his Outline of Burmese History: Mahadammayaza-dipati, king of Burma angered at his commanders' failure to repel the Manipuris, used to expose them in the sun with a sword on their necks, saying "if a failure like this comes to my golden ears again I will chastise you with my sword."⁴ Gangmumei Kabui, in the *History* of Manipur- Volume One, also writes: "They (Rajas of Manipur) were strong and determined rulers who were endowed with great political insight and military prowess which put them in good stead in such a dare-devil change in the Nation's life."⁵ Once again, D.G.E. Hall, in *A History of South-East Asia*, expresses:

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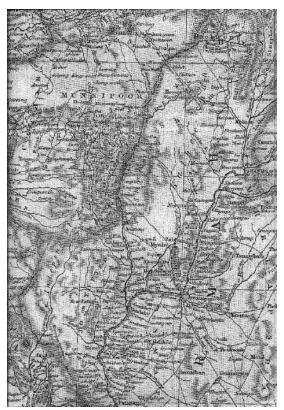


"Under Gharib Newaz... its expert horsemen became the terror of Upper Burma. He destroyed villages and pagodas and got away with their loot before they could be intercepted." ⁶ But, these scholars do not give a clear picture of the political developments on the area under study, and also the related works of consolidation done by Manipuri kings on the conquered areas of the valley. Therefore, this paper is a sincere attempt to fill up the missing part of this study. The source materials are archival, Chronicles and secondary source books.

Political condition of the Chindwin valley

The valley of the Chindwin River (now in Burma) was not an integrated entity during the period under study. Therefore, the making of modern Burma (Ava) was a late development. In the thirteenth and

fourteenth centuries, the lower Chindwin valley and also the lower Burma of today were ruled by the Mons and the Tibeto Burmans. These Burmans were known as the Pvu by the Arakanese. The Chinese describe Burma about A.D. 800 as containing eighteen states and nine walled towns all of which were dependent on the Pyu. Their capital was Prome. Later, Prome was overthrown by internal dissensions among the tribes. But, these Tobeto-Burman tribesmen erupted into the central Irrawaddy valley in the mid-ninth century and, in the fifties of the 11th century A.D., Aniruddha created the Pangan Empire at a place called Pagan. This dynasty came to an abrupt end after 1287 A.D. and for some two and half centuries following the fall of Pangan, Burma was in a state of confusion. The Burmese eventually emerged again as a unifying political factor in the 1540s under the leadership of the princes of Toungoo. In 1635, they shifted their capital to Ava withdrawing from active commercial and diplomatic contacts with the outside world. During this time in Ava, "the kings were mere figure heads almost palace prisoners; a coterie of royal ministers dominated the government."⁷ The Toungoo Dynasty was in power till 1752.



Courtesy: Waba Publications-Mainland South-East Asia in 1832 (an extract)



Among immigrants in the said valley the Tai Shans were the last. These races came owing to causes such as drought and ethnic pressure in successive infiltrations, each driving the predecessor further south.⁸ Later a powerful Shan kingdom of Pong was established in the upper Chindwin valley. From the Shan chronicle procured by Pemberton, the first king of Pong was "Kool-liee" whose reign is dated as far as the 80th year of the Christian era.⁹ In the thirteenth and fourteenth centuries, this Pong kingdom became very powerful. It occupied "the country between the frontier of the Yunnan and the hills separating the Kubbo valley form Manipur, extending north apparently to the mountains which bound Assam, on the south-east and south, as far down as the parallel of 23°35′."¹⁰ To the Manipuris, this Shan principality was known as the kingdom of Pong, of which the city called by Burmahs Mogaung, and by the Shans Mongmaorong, was the capital. The people, they (Manipuris) generally called Kubo, and distinguished them, as they were dependent on Munneepoor or Ava, by the terms Mieethiee Kubo, or Awa Kubo, which expressions are synonymous with the names Kasi Shan and Mrelap Shan applied by the Burmahs to the same people and country.¹¹ Hence, during the period under study, Manipur had to have diplomatic relations with two ruling families i.e., the Shan kingdom of Pong and the Tibeto-Burman kingdom.

Pong-Burman relation and Manipur:

Once in 1364, the Shan king of Pong Thokyenbwa invaded and demolished Zakang (Sagaing). The king also captured Penya which was on the eastern side of the Irrawaddy River. The Burmese chronicle Maha Yazwen is told to have mentioned in its sixth volume about the destruction of the two cities effected by the Shan king Thokyenbwa.¹² By 1445 A.D., the Pong kingdom comprised of Manpha, Moonjeet, Moongyang, Kaksa and Khumbat. Later, the people of Khambat, under its local chief, tried to throw off their allegiance to the king of Pong. Consequently, a joint army of Pong and the Manipuris under King Kyamba invaded Kyang Khambat, and, defeating it, a large part of the valley became a part of Manipur from 1470 A.D. It shows that there had been a cordial relationship between Manipur and the Pong kingdom. The Pong King died about the year 1512, and was succeeded by his son Soopengpha, in whose reign the Burmese first attacked and defeated Pong. Later, in retaliation, the Pongs invaded the Burmese in 1526 and destroyed the capital, killed the king, and over-ran the whole country as far as Toungoo and Prome. But, in the last part of the 16th century A.D., when Sookopha was ruling over the kingdom of Pong "his territory was subsequently invaded by the Burmahs, his capital taken, and himself compelled to fly to Khampti, where he was discovered and betrayed to the Burmese by two of his slaves, Tooyang and Sicerang..."¹³ By the year 1734, the Burmese again invaded Pong, and the Pong chronicle is said to have recorded that "about this time, two princes of Pong, called Mongpo and Kyathon, fled to Rajah Gureeb Nuwaz of Muneepur... and solicited his protection against the Burmahs: he attacked and destroyed the town of Meetoo, and established the two princes at Moongkhong, in the month of May, bestowed his daughter Yenjeejoyaee in marriage to the eldest."¹⁴ In conformity with the ancient Shan chronicle, Cheitharol Kumbaba writes, "On 29 Lamda, Tuesday, the king of Pong requested Manipur to invade Ava."¹⁵ Garibaniwaza promptly responded to and by invading and reaching Sagaing in 1739, the Pong kingdom



was freed from the pressure of Ava. After the successful invasion, on 11 Fairen, Monday, 1740, the elder brother of Pong (Mangpo) was enthroned by Garibaniwaza. The gifts presented to the new king of pong were the king's robe and a palanquin (Taprang Ngamba). To the younger brother (Kyathon), Garibaniwaza gave the traditional Manipuri robe of king's brother.¹⁶ On 22 june, 1740, the king and the queen of Pong came to Manipur, and on Friday, the 30th instant, there was an entertaining boat race in which the main deity, the priest, Raja Garibaniwaza and the Raja of Pong were on different boats.²⁰ Thus, Manipur not only defeated the Toungoo kings of Ava but also enjoyed the regard of being a superior power from the ruling family of the Pong kingdom.

Political exploits under Kyamba (1467-1508)

The political influence of Manipur in the valley of the Chindwin River started even before completing its own integration in the valley of Manipur. Before the reign of Kyamba his father Ningthoukhomba conquered Akla. The Cheitharol Kumbaba writes, "In 1365 Saka (1443 A.D.) king Ningthoukhomba conquered Kabaw Akla. Chengchari Changchakang, Khekchari Khekchakang, Kharairong Mantang Lakpa Meekhekpasung and Khompasung were the prisoners of war."¹⁷ Thangwai Ningthouba (Kyamba) son of Ningthoukhomba ascended the throne of Manipur in 1467. It was because of the power and capability of Manipur that the Pong king (Choupha Khekhomba) proposed Thangwai Ningthouba (later Kyamba) to participate in a military expedition to the trans-Chindwin basin which was the home of several Shan principalities. It was also the ambition of Thangwai Ningthouba to conquer Kyang. The Pong Meitei Lamyen *Lairik* (a book of Pong-Meitei territorial distribution) is told to have mentioned, that "both the forces of Manipur and Pong would come to an appointed place for the expedition when the orchid, Khongan Melei bloomed."¹⁸ Accordingly, king Ningthouba led his army to the appointed place. Cheitharol Kumbaba mentions that when the king arrived at the foothills of Tengnoupal, Ningthouba performed sacrifice of a mithun for the victory of his military expedition.¹⁹ The allied armies, thereafter, invaded Kyang Khampat which was in the Kabaw valley. In this joint invasion Ningthouba showed his strength and courage. K. Yaiskul Singh writes, "In the war one hundred Manipuri cavalrymen, marching ahead, demolished Kyang Khampat and the joint army won the war."²⁰ Its chief Chaosengba was captured along with other female members of his family.²¹ The victory over the chief of Kyang was celebrated with by re-naming king Ningthouba as Kyamba which meant the conqueror of Kyang. There was a great celebration for the victory in which both the kings participated. In the celebration Kyamba and the king of Pong Choupha Khekhomba cordially crossed a 600 ft wide bridge made of silver constructed on the river Chindwin. The two kings shared their seat on a golden throne placed on a golden mat, ate on a single golden plate and had water from one common golden vessel.²² There was exchange of gifts between the two kings. The Pong king presented a mouth organ player to Kyamba in exchange of a drummer named Sekta.²³ Among the gifts given by Choupha Khekhomba, as Yumjao Singh mentions, there were an image of God Bishnu and a golden container called Kwagok (chewing pan container).²⁴



After the conquest of Kyang Khampat, the two parties signed a treaty of friendship which fixed the boundary between Manipur and Pong kingdom. Cheitharol Kumbaba mentions the territorial boundaries of the two independent kingdoms in clear terms:

"Moongkhong Mungyang was to be the north-eastern border of Manipur and the land of dwarf mango groves was for Pong; in the east, the territory of Manipur limits up to the Loijiri Hills, in the south up to Miyotung dwarf mango hills. Regarding Samsok (Thoungdut), the eastern portion was for Pong and the western portion was for Manipur."²⁵

Hence, Kabaw valley which constitutes west Samsok, Khampat and Kule became the territory of Manipur. It was the first treaty concluded between sovereign Manipur and a foreign sovereign power which was recorded in the chronicles and the *Pong Meitei Lamyen Lairik*. The treaty justified the international recognition of the sovereign kingdom of Manipur by a power in the upper Chindwin valley. It also highlights the respectable political status of Manipur in the valley of the Chindwin River.

Exploits under Kabomba to Charairongba (1523-1709)

Kabomba ascended the throne of Manipur in 1523. Cassay Shan, which became a territorial possession of Manipur, was still under the control of Manipur. But being at a distant place from Manipur valley, the people of Samsok revolted to restore independence. W. Yumjao Singh writes that, king Kabomba marched to Samsok (in the Chindwin valley) in1534 and suppressed it.²⁶ The people of the said valley (Kabaws) again revolted in 1542, but it was put down without much difficulty."²⁷ Mungyamba/Thangwai Ningthem Kyamba (1562-1597) was another important king of Manipur who had marched many times in the said river valley to maintain the political control of Manipur. He invaded Moongkhong Mungyang in 1565. The Meitei Ningthourol mentions that on the issue of border with Ava (Burma) he invaded Shenbi Moongkhong Kabaw Mungyang crossing the river Ningthee (Chindwin) and defeated it. For this reason the Raia was named Mungyamba.²⁸ G. Kabui also writes. "He (Mungyamba) captured several guns, a golden statue of a cock and five chiefs including two with the title of Chaopha (Sawbwa of Shan) like Chaopha Mangtra and Chaopha Womsing."²⁹ The guns captured could be procured by those Shans from the Portuguese. Mungyamba also made the chief of Akla and other one-hundred chiefs his prisoners.³⁰ W. Yumjao Singh mentions that the king also killed the king of Kabaw Mangsha in1568.³¹ On the invasion of Bayinnaung (Toungoo king) G. Kabui makes this statement, "It is possible that during his (Mungyamba) early rule, Bayinnaung defeated some Shan states. But in 1565, Manipur invaded Kabaw valley and defeated the rulers of these principalities in Kabow valley: this indicating Manipur's sovereignty over them."³² Hence, Manipur remained an independent and powerful Kingdom during the second half of the sixteenth century till 1597 A.D.

Khagemba (1597-1652) was another king of great importance during the period under study. The Kabaw valley which consisted of Shan principalities like Samsok, Tammu, Kyang and Khambat had been the territory of Manipur since Kyamba. Raja Khagemba's campaigns in the valley directed against tributary states who wanted to remain free from the control of Manipur. Invading Kyang in 1602, the Raja made 177



enemies as prisoners and also captured its chief Chou Seng and his wife Chou Soi along with stone masons who were temple builders. The Raja also invaded Kyang subsequently in 1624 and 1647 A.D. These military campaigns had quelled the Shan principalities, but Khagemba came into conflict with the kings of Toungoo dynasty as they were trying to establish their hold over the Shan territories of the Kabaw valley. Thus, the Burmese invaded the eastern frontiers of the Kabaw valley in 1648 and 1651 A.D. The invading Burmese Army were defeated and repulsed. In the years 1653 and1659 Raja Khunjaoba (1652-1666) invaded Samsok and captured cattle, buffaloes and elephants as the spoils of the war. He also raided the Chakpa Angoching village near the Chindwin River. G. Kabui writes, "The king defeated the Ava and captured their chief Choupha Mangtra. He also raided Mangsa, a small Shan village in Kabaw valley in 1657 which was completely destroyed."³³

During the time of Paikhomba (1666-1697), Samsok was invaded in 1692, and captured fifteen prisoners and seized shields, swords guns and horses. In the following year, an expedition was sent to gather paddy from Samsok. The Burmese invasion across the river Chindwin in 1692 was repulsed. In1697, Raja Charairongba (1697-1709) ascended the throne of Manipur. As the Kabaw valley had been the territory of Manipur since the fifteenth century A.D., there had been at least some trade and social relationship between Manipur and Ava. In 1702, the king of Ava, Chephong Leimaba/Sanay (1698-1714), sent emissaries asking for the hand of a Manipuri princess. The *Meitei Ningthourol* mentions that, during the time of king Charairongba his daughter Chakpa Makhoungambi was betrothed to Chephong Leimaba, the king of Ava, and thus, maintained cordial relationship between the two kings. After giving birth to a son, Chakpa Makhoungambi was removed from the status of queen, and accordingly, Charairongba prepared for an invasion of Ava in 1709.³⁴

Political exploits under Raja Garibaniwaza (1709-1748)

Raja Charairongba died in 1709, and after forty days, his son Garibaniwaza ascended the throne of Manipur. Raja Garibaniwaza's contemporary Burmese Toungoo kings were Sanay (1698-1714), Taninganway Min (1714-1733) and Maha Dhammaraza Dipadi (1733-1752). This powerful Raja fought the Burmese not only on the soil of Kabaw valley but also in the heart of Ava (mainly in the Doab region of the Chindwin and the Irrawaddy Rivers). On his invasions and lightning raids over the region G.E. Harvey writes:

"The country bred famous ponies; in those days every man had two or three, and polo, played forty aside throughout the villages, produced a race of horsemen. Under their raja Gharib Newaz 1714-54 (?) the Manipuri raiders became a terror; from 1742 till his death they came nearly every other year, sweeping the country up to Ava and carrying off loot, cattle, and thousands of people. Once they massacred two-third of a royal army including the commander who was drunk."³⁵

Just after ascending the throne of Manipur, Raja Garibaniwaza planned to fulfill the last wish of his father for avenging the Burmese. When the Raja was making arrangements for the said objective, a Burmese envoy arrived at the capital of Manipur. The Cheitharol Kumbaba records, "In 1716 a Burmese



envoy of 156 members led by six persons from Samsok arrived at the capital of Manipur seeking the hand of a princess of Manipur."³⁶ The clever Raja thought it a good chance of teaching a lesson to the Burmese, and eschewing a conspiracy, accepted the betrothal of the princess. The Raja informed the emissaries that, the princess would be given a year after and the Burmese had to receive the princess on the bank of the Chindwin River. In the mean time, Manipuris completed all arrangements for an attack on the reception party of the Burmese king. Accordingly, at the appointed time and place, Garibaniwaza sent a military force in the disguise of the marriage party. W. Yumjao Singh writes, "The Manipuris arranged so many palanguins covered with long curtains, where, instead of the bride, brave Manipuri warriors with weapons were carried."37 Before reaching Samsok, the Manipur army under the command of Usham Koren Keirungba, sent detachments at different strategic locations. According to the agreement, the Burmese party with many nobles arrived in Samsok on their boats. When the palanguins were brought near the party of the Burmese king, those Manipuri warriors who were in the palanguins came out and there ensued a terror of killing many Burmese nobles and warriors. Many jumped in the water of the Chindwin River. Both sides lost many, but the Manipuris won the scuffle. On the side of Manipur, ten including Hidang Khagokpa were shot dead. The Manipuris captured 90 men and 110 women alive.³⁸ It is said that the Raja himself supervised the ambush over the Burmese marriage party. This rebuff was an act of revenge to the Burmese king showing that the power and capability of Manipur should be honored by the Burmese.

King Taninganway Min, without any delay, invaded Manipur. At that time, the Manipuri cavalry wing, equipped with a deadly sling known as Arambai, easily defeated the invading force. Famous Arambai expert of Manipur- Lamthok Poliba (a man of Polem clan), who had shown extraordinary valor was duly rewarded for the success.³⁹ In this battle against the invading Burmese, Manipuris captured 157 Burmese soldiers, 160 muskets and 10 horses. In the month of March, 1718, under the instruction of the king, all the Tangkhul chiefs were made friends with court nobles and prepared for invasion to Samsok.⁴⁰ Raja Garibaniwaza marched to the Kabaw valley many times to clear the infiltrating Burmese army. G. Kabui writes that the Raja defeated the Burmese at Khoukep Loupathong. He captured a Shan Buddhist Pagoda, 1000 boats, 10 horse saddles, 200 muskets, Chinese carpets and swords.⁴¹ In one of the invasions, probably in March, 1719, an advance party of Manipur army comprising Ngangbam Keirungba, Shanthenba Keirungba, Kabaw Kopeng and Sapam Shelungba marched to Samsok. In the ensuing war they killed ten Burmese and fourteen were also made prisoners. After three days of the advance party, king Garibaniwaza himself went to the Kabaw valley and reached the border and in a day's war Manipuris including Akhanba Hidang and Lairen Muba lost their lives. The Raja captured 25 Burmese.⁴²

In the month of June 1720, Haobam Ahallup Lakpa and Ngangbam Keirungba marched to Samsok. In July 1721, Manipuri Muslims under the command of Haobam Pukhranba invaded Samsok and came back after nine days with sixty-seven prisoners. In the same year (1721), Raja Garibaniwaza led his army to Tongdoi Mawao. Both the Commissioners of Tumu and Mangsha betrothed their daughters to the reigning king.⁴³ In March 1722, Ushaba Shelungba Kopen led the Manipuri warriors, and invading Samsok, came back with twelve prisoners of war. In May 1722, Hidangmayum Potsangba and Thangjam Cheksha went



to control the situation in Samsok. The same was also done by Wayenba Naharup Lakpa in the month of August 1722. He captured ten Burmese. The Cheitharol Kumbaba again records:

"In the month of November 1722, the queen's father Yaiskul Lakpa went to control Samsok. Next year in March, Garibaniwaza invaded Chanta. The Manipur army under Yumlembam Kopen controlled Samsok and the king, invading Chanta, devastated it by burning and then captured 460 prisoners. The king then marched to Samsok and besieged it. In June 1723, the Raja came back after suppressing Samsok."⁴⁴

In the month of December 1723, the Burmese in retaliation, invaded Manipur, but they were defeated by the Manipuris. About 2000 Burmese, either killed or wounded, were in the hands of Manipuris. In 1724, Garibaniwaza made an invasion of Burma repulsing the latter's army which had crossed the Chindwin River.⁴⁵ E.W. Dun also writes: "In 1725, Garibaniwaza attacked and defeated a Burmese force at the mouth of the Maglung River; the following year repulsed an army of 30,000 men, which had penetrated into the valley, and captured three entire divisions."⁴⁶ For about ten years after this, there was no Burmese invasion, and thus, Manipur put its extra labor in consolidating its territories in the Chindwin valley. In 1735, Garibaniwaza crossed the Ningthee River, attacked and destroyed the town of Myedoo on the bank of the Moo River, and carried off numerous captives. Two years subsequently, he successfully defeated two Burmese armies amounting to 7000 foot, 700 horses, and 20 elephants, and devastated the whole country from the bank of the Khodoung Khyoung to Deebayen.⁴⁷ Therefore, from this year, the political exploits of Manipur in the said river valley reached a new horizon. E.W. Dun again makes this statement:

'In 1738 he (Garibaniwaza) crossed the Ningthee river, attacked and dispersed a Burmese army of 15,000 foot, 3000 horse, and 30 elephants; and at the termination of the rains of the same year, at the head of a force of 20,000 men, marched between the Burmese army, three divisions of which occupied the towns of Matsen, Dabayen, and Myedu, and, to use the language of the Burmese historians, "without stopping" attacked and carried the stockade positions around the ancient capital of Sagaing, of which he obtained possession.¹⁴⁸

On the invasions of Raja Garibaniwaza to this Doab region between the Chindwin and the Irrawaddy Rivers, G.E. Harvey expresses:

"In 1738 they (Manipuris) burnt every house and monastery under the walls of Ava and stormed the stockade built to protect the Kaunghmudaw Pagoda, slaughtering the garrison like cattle in a pen and killing a minister of the Hluttaw Council; the old door-leaves of the Pagoda's eastern gateway shew a gash made by the sword of Garib Newaz when he was forcing the entrance."⁴⁹

On the said invasion, with some difference in the period, the Cheithrol Kumbaba records: "On Tuesday, 26 Firen, 1740 A.D., the king invaded Burma, reaching Chekang, captured huge spoils. He also captured the Kongmatu Pagoda (Kaunghmudaw Pagoda) and entered it with lightening speed through its four main doors. The Burmese were sacked, and they had sleepless nights."⁵⁰ Although the last invasion of Raja Garibaniwaza in the river valley of the Chindwin against Ava was suspended due to a belief, his political

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exploits scaled the highest watermark of the achievements of Manipur in the said valley. It seems that Raja Garibaniwaza invaded Burma repeatedly because he wanted to defend the territorial integrity of Manipur and friendly Pong kingdom; secondly, he also wanted to convince Burma to respect the power and sovereignty of Manipur to maintain peaceful co-existence in the region.

Consolidation works of Manipur in the valley

Indeed, Manipur became the undisputed owner of a vast territory in the valley by 1470 A.D. But, the consolidation of the newly acquired territories was a long process. Some facts which can justify the consolidation of the acquired territories in the valley are given below: First, during the time of Khagemba, he posted officials at important places like Tammu and Angoching Hills. He also sent his forces time and again to suppress any act of rebellion. Secondly, in 1693, Raia Paikhomba sent an expedition to Samsok to gather paddy. The paddy gathered was kept at the royal granary at Mangsha.⁵¹ It shows that the consolidation of Manipur in Kabaw Mangsha was complete. Thirdly, in 1716, when a Manipuri princess was betrothed to the king of Ava, the marriage party of Manipur escorted the bride up to the western bank of the Chindwin River. It shows that the said river was the boundary between Manipur and Burma. Fourthly, the Cheitharol Kumbaba records, "In October 1721, under the command of Ngangbam Keirungba, the people of Kabaw invaded Samsok."⁵² It shows that the Kabaws (people of the Kabaw valley) were loyal to Manipur. The same source also expresses that, in November 1721, Sapam Moiramba Shelungba and some Manipuris went to Samsok to harvest paddy, and in December, so many Manipuris under Yaiskul Lakpa (queen's father) went to Samsok to harvest paddy.⁵³ Fifthly, in 1724, when the invading Burmese army was repulsed by the Raja of Manipur beyond the Ningthee, "the people of Samsok who fled were asked to come back, and on Sunday, the 13th March, 1725, the king of Manipur, after performing funeral rites of those killed, went up to the Ningthee to have rest."54 It justifies that Samsok was under the direct administration of Manipur. Accepting it G. Kabui also writes, "Samsok was a great source of revenue because of the tribute in form of paddy."⁵⁵ Sixthly, Cheitharol Kumbaba again records: "On Tuesday, the 2^{nd} January, 1738 (Leipakpokpa, 3^{rd} Wakching), Moirang Yumthangba, who had gone to Samsok to improve irrigation canals also came back."⁵⁶ Lastly, the same source also expresses: "On 9th Lamda, 1738, Nongthonba Yumthangba left for the Kabaw valley to develop land."57 These statements justify that the Kabaw valley was the undisputed territory of Manipur for years and it was also consolidated by the kings of Manipur.

From the above discussion it is concluded that Manipur had a firm political hold over the territories of the Chindwin valley for centuries. R.B. Pemberton rightly expresses:

"Emerging from their mountain strongholds, they wage successful war in the fertile valley of the Irrawattee, attacked and reduced the most important Burmese towns and villages, on the banks of the Moo, Kyendwen (Chindwin), and Irrawattee rivers, and at last plant their standards in the capital itself. The truth of this portion of their (Manipuris) historical annals receive most unexpected and satisfactory corroboration, from the records of Ava, in which all the principal



circumstances are narrated, nearly as we find them in the chronicles of Muneepoor, with trifling variation of 3 or 4 years in the dates assigned to the different events...⁷⁵⁸

Manipur, thus, had a lion's share in the politics of the Chindwin valley during the period under study. It is because of this political control of Manipur for a long time over this valley that till today there are many Manipuri settlements in the said river valley.

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HISTORY OF FEMINISM AND ITS IMPLICATION IN NORTHEASTERN INDIA

Gonmei Lanbilung Kabui¹

Feminism is the belief in the social, economic and political equality of sex. It is the realization of the biological instinct and feeling embedded and intuited of the female gender. Feminism appeals to the biological equality between the genders. It goes to the gender sanitization. Sometimes, it raises to the hyper feminism and sense of revenge against the male gender. It becomes a complex area of study. A husband commits adultery, wife indulges in the act of adultery as the revenge on her husband, It is not the sense of feminism. Male gender often practices polygamy. If the husband practice of polygamy countered by his wife in polyandry, it is not the sense of feminism. The two genders of human kind the instinct and feeling endowed may not be the same according to the different of the physical structure. New gender called transgender as the third gender has been recognized. In this regard of the biological productive cells one child three parents further debate on feminism from the religious point, social view have been opened as the new dimension of the subject. Feminism is the respect to the feeling and instinct among the genders and beyond the male gender as kind of the biological order and realization of the feeling and instinct is feminism. (Feminism and Women Right Movement, Council of Europe)

Women and females were regarded in the early before and after AD as the sex object. Greek mythology portrayed women as the sex object and their right were restricted only to serve the men. Women were portrayed as the cause of destruction, war and death of men. (Women in the Greek Myth; Mary R. Lelfkowitz; published by JSTOR). However, the figures of women were portrayed in ancient India and ancient India religious texts were defended by Indian social scientists including historians , sociologists and politicians. Except a few religious text and laws most of the ancient India texts have been considered as the seed of feminism. In the Charcolithic Age of Indus civilization women were worshipped as Prakiti-Mother Goddess. Manu Smriti is considered as the ultimate guide of women to make men as the good husband. According to Jatakas, a Budhist text considers women as an obstacle to the salvation. The Grihya, Shrauta, Dharma and Kalpa Sutra are the moral guide to women. The ancient India laws and religious texts were the mixtures of feminism and male domination of society. (History of Ancientn India; Rama Shankar Triparthi). Celebrity in Jainism and Buddhism once again had opened a new dimension of the debate. Smriti Irani when she was the minister of Child and Women Development had said, "Indian women were not pleading but leading feminism". It was published by Hindustan Times.(Hindutan Times)

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Literatures were the main expression of feminism. In the ancient Greek literature women were portrayed as inferior and homes had been assigned as their place. In the Medieval age women were portrayed a little more than the object and candid. In the beginning of AD, Mary and morality of Mary had become the ideal of women in the Christian world. Celibacy had no more obstacle to the salvation. Virginity and good morality of Mary had challenged the Greek mythology. In the medieval age feminism and the rise of gender movement had to be judged from the English literature.

Literatures are the main vehicle of feminism. The status and position of women in society had been measured in the literature where they were portrayed. The study on the real instinct, sense, feeling, biological traits embedded in the female gender were exemplary not found in the medieval and modern history. Even female gender themselves have been surrendering their real feeling and instinct out of the fear of men and allowed to continue the male domination of society. Liberalism though had been begun in England and English literature in history had contributed the world civilization, feminism had been lagging in the ages. The English literature is the central point to be explored regarding the trending of feminism. English literature was considered to be amalgamated and integrated the European thought and ideas for the study of feminism. Broadly, the English literature may be classified into the Elizabethan and Victoria Ages to ascertain the degree of feminism. In the medieval period the Elizabethan age was the age of the flowering of English literature. William Shakespear (1564-1616) and William Worthsword (1770-1783) belonged to post Elizabethan age. The laureate writers belonged to men and their portraying of women were misleading and portraying were guided by the motive of the male domination over them. The Elizabethan age belonged to the renaissance. The notion of male domination of society and inferior of female to the male gender was not yet given up. However female gender as the ruler had been accepted in general in the English society. In the political philosophy of the renaissance period of Europe, Jeremy Bentham (1772-1748), the exponent of the utilitarian school of philosophy and individual was the centre of his political philosophy. His political philosophy had indirect influence on the development of feminism. Jeremy Bentham's works, "Marguis de condocet" and the most popular work was, "Fragment on the Government". Female writers were rare in the renaissance period in England covering the Elizabethan and post Elizabethan period. Most of the writers belonged to male gender and they were guided with the traditional motive of suppression the instinct and feeling of women endowed in them by the biological traits.(Modern Europe; C.J.H Hayes & Modern Europe since 1789; Charles Downer Hazen)

Toward the close of post Elizabethan and beginning of Victoria age feminism was indirectly infected by the prevailing of liberalism in England. Victoria as the Empress over the English colonies with her mother country had a great political impact on institution of women in society. Literature combined with the political development as so called liberalism in England coupled with the Factory a Act 1832 ,Slavery Act 1834, the Reform Act 1832 and Chartist movement 1867 had rung a new music in feminism. Women had begun to share in novels and poems along with men. However, women writers used the names of men as the pen names in their writing. Women feared to come openly with their real instinct and feeling. They did not dare to raise their voice of their real feeling and instinct against the men domination over them. On the other hand, men writer continued to upheld their position over the women. Alfred Lord Tenyson



(1809-1880) may be cited as the character of men writer. Alfred Lord Tenyson (1809-1880) in his poem he assigned and portrayed women's works at home. In the same way like men some women could not openly revolt against the classical literature of the male domination of society in the age. An instance was Elizabeth Gasket (1810-1865) in his poem, "Cranford," she made the place of woman, Bassie at home as the symbol and the place of women. Elizabeth Gaskell had no dare to challenge the tradition of the male domination of society. In France, the French female writer Gustave Flaubert(1821-1880) in her novel, " Madame Bovary Emma." She portrayed Emma life as danger and also as strategic heroine.

Not only in England the entire Europe including American continent women began to write their real instinct and feeling intuited by nature and biological structures .But most of their writing were in pseudonym and they wrote in mask used the names of male gender. They used pseudonym andmask in portraying their own character, feeling and instinct because of the fear of criticism in the men' dominated society.. In the early part of 19th century many women began to portray their own feeling, character and instinct in the mask of the male writes. It become the fashion of the European literature. A French woman, Amantile Lucile Aurore Dudevant (1804-1876) wrote in mask and pseudonym. Her pen name was George Sand. Her rustic romantic novels are"Indiana, the Devil Pool", La delite Fadette," She portrayed the real instinct of the female gender. Another English lady, Ann Evan wrote her novels in mask and pen name was George Eliot. Her famous romantic novel of fiction were" Middlemarch." Luisa May Alcott (1832-1885) was American born in Germany. She wrote the novels, "Little Women" in 1866-1869, "Little Man" and "Jo's Boy" in 1866. She was unmarried and she wrote her novels in mask and pseudonym. These novels content the real instinct and character of the female gender. She took up the pen name of A.M. Bernard. Another feminist was American novelist and her name was Meg Howrey. She took up the pen name of Megnus Flyte. She wrote the novels-"The City of Dark Magic" and" The Lost City". The two novels were coauthored with Christina Lynch. They took up the pen name of Megnus Flyte and the novels were published by Penguin Book Publishing Company in 2012-2013. (Britannica & HistoricUK)

On the other hand, some of the legal sanctions were also been achieved in generating the feeling and instinct of the female gender in England and its impact had been felt on over the world in their legal institutions. The flowering of feminism was turned with the incident of Monon Reid Carolina Norton or Carolina Elizabeth Sarah Norton.. She was married woman. She initiated the divorce of her husband after having three sons for the act of adultery. She attempted to convert into a criminal and then she complained to her friend, the then Prime Minister of England, Lord Melbourne. She led the campaign of feminism. Her political campaign of feminism led to the passing of the various acts of feminism. These acts are the Infant Act, Matrimonial Clause Act of1857 and Married Women Property Act of 1870 in England. It was the victory of feminism. It further encourages feminism with more questions of gender equality and empowerment of women.

In general, the wave of feminism may be examined into different wave- First wave, Second Wave and Third Wave in the early and later parts of 20th century. The first wave of gender equality and feminism was concentrating on the suffrage. The second wave was is the cultural inequality and third wave is focused

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on the norms and role of women in society. The third wave is assigned to the period of 1990-2020. Women as gender have not been denied the work as her biological character have provided. The issues of the feminism have been expanded to the problem of families. –Adoption of Childs, Right of Abortion, Right to choose partner beyond the territories.

Feminism and its implication to the North-eastern India

Northeast India is a belt of heterogenous tribes and communities. Theses tribes cover the tribes of Arunachal, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura.. Tribal women of Northeast India in the rural areas have been enjoying certain physical freedom. Both in the patriarchal and matriarchal pattern of and society. Women take the responsibility in the agricultural activities such ihum cultivation. cutting the forest, collect of firewood, root, beet from the jungle. This part has been included in the paper because the prevailing of feminism is not fully learnt by the people of the region. They work at home looking after the family, herds and sale and purchase goods from the markets. Northeastern region is the home of different culture and institutions. The region has been experiencing different social system from patriarchal to matriarchal pattern of family snd social system. Different groups of tribe are still operating their conventions. In general, rape, adultery, dispute over marriage, kidnapping, molestation, righ to inherit property, dispute over the custodian of infant are the limited occurrence. The Women Commission, Social Welfare Department and Family Court of the State have limited disposal of cases in their offices. However it shall not be taken that feminism is existed since past among the tribes of Northeast. The crimes relating to feminism are not allowed to leak to the social media both print and electronic medias. The old tribal bodies and convention are still struggling that their weakness and injustice to feminism shall not be exposed to the public. The tribal bodies make preference in the non intervention of the outside laws. The modesty of women, virtue of sacrifice of her own cause, blind obedient to customary laws have frequently have submitted their justice to the convention and village's bodies. Feminism is far away from the tribal women. In fact, rape case, case of adultery and other crimes against women are compensated by the fines in the term of pig and cow under their convention and customary laws without adequate provisions to the victims. Bridge prices are taken in the term of cow and bull including the iron hoe, spear and spade in the primitive way of culture. Women right of custodian of the infant has not been fully recognized by the tribal customary laws and conventions. It demonstrates that the customary laws and conventions are made by men to dominate the society and suppression of feminism. The tribal bodies and conventions do not aware and learn the biological instinct and feeling of women. Fines have been imposed on the women for the marriage of her own choice outside the tribe. Even the tribal women never attempt to learn their own feeling and instinct in the fear of male gender. They rather support the male domination of their village's society. A mother being the female gender she must respect her own feeling endowed by biology to her daughter in law. A daughter in law in the family must respect her own instinct and feeling to the daughters of the mother in law. Male member of the family shall also aware feminism.

In the valley of Manipur, campaigns of feminism are led by various government and non government organizations. Large number of both girls and women with education and skill have participated in the



service and tertiary sectors both in the state and outside the state and even abroad. In the electoral politics many women have been serving as the elected representatives. The women of Manipur stand the largest in number among the women of the Northeastern states who are working outside the state. It is the rare case that domestic violence, rape case, adultery related to feminism are happened.

The tribals of Meghalaya comprising the Khasis, Garos and Jaintias based on the matriarchal pattern of family and society crimes against the women are rare and various rights are enjoyed by the women under the tradition. The religion that has prevailed in Meghalaya is the syncretism. It is the doctrine of Bible but it is mixed with the traditional belief and culture. The cover of the religion is Christianity but the contains are local in element and institutions. Besides, Christinity, Shiang Khasi, traditional religion is also prevailing.. Local deities, habit of diet, marriage according to rule of clan, women right to acquire property are the dominant features of their social life.. One of the surprise of the tribe of Meghalaya in the matriarchal society is polity. Women were deprived the political right. Women are deprived the political right in the village and small tribal kingdom like the Raja of Jaintia and Dalloi and also Khasi Syiemship. The right to inherit the Sylemship, Dalloi and Raja were not in the favor of daughter. The succession of princess and the institution of queen have not been noticed in history. These institutions are not affected with the wave of feminism. Women enjoy the right to inherit property and women line is the descending of the family. Women have the right to divorce and inherit the heirs. Though not the political right women in Meghalaya are empowered various right by tradition. Apart from feminism, one contradiction to it is the marriage to the strangers. Some husbands being strangers or outsiders have no love of their kids and had disappeared forever. Here, male gender appears as the breeding agent rather than a father.

Among the Mizos and Nagas being inherited from the heterogeneous characters of society, there are no common body and common convention in the case of intra-tribe marriage. Perhaps, Christin law is the best suited to them. These tribes mostly embrace Christianity of the different denominations. If it is Inter-tribe marriage, it is the best in the regard of feminism and if it is based on the love marriage. Again , when Christianity has no law to determine the right to inherit property, the custodian right of the child and the right to divorce, laws relating to adultery, rape and molestation against the female gender, feminism has not root among the tribes of the Nagas and Mizos. But Nagas and Mizos women are bold enough to fight for their instincts and feeling. The Nagas and Mizos women are not aspiring the political right but the basic biological instincts such marriage, family, child and live. In the absence of common customary law which is more hampered by Christianity, they come forward for themselves with the courage. An instance is cited of a girl of Mizo and Naga but no particular to any tribe or community. A Das from Assam or a Kamei from Imphal in government posting to Nagaland had married to a Naga woman, This marriage is happened because of the charm and impression of the Naga's girl. The Naga woman shall struggle that her heirs shall inherit the surname of her own, not of her husband. Sometimes, she forfieted the pension of her husband after superannuation. Feminism does not penetrate in but rise from itself..

The tribes of Arunachal and their women hardly lead feminism. Feminism itself exist in the land of Arunachal. The wave of feminism in full swing may not be noticed there. The tribal customary laws and



conventions have to readjusted in the changing environment. The people of Arunachal take care of their women to the outsiders. Men from outside or strangers in the posting of their services there have crossed the limit. Once, the author of this paper come across an incident at the gate of Inner line Pass in Arunachal, a boy with a little drink with the aggressive mood spoke himself," You people come married tour girl and never come back."

The women of Assam including Koch, Chutiya, Boros, Rabha and Ahom are governed by tradition that have been inherited from the civilization and court etiquette as their had their own kingdoms in past. Many women participated in the service and tertiary sectors. More or less the women are influenced by the culture of the main stream of India. However, the percentage of women empowerment is below the expectation. Karbiang and Diphu district the wave of feminism has been surpassed by poverty. The same atmosphere of feminism is also noticed like Assam in Tripura. The various tribes and ethnic groups such Jamatia, Liang, Darlong, Dev Burman of Tripura are influenced from the court etiquette and civilization that they had in past. The acts against feminism are rare in Tripura. Feminism and women empowerment is also initiated by the government.

In conclusion feminism is not be interpreted as revenge to the male gender. If a husband commits adultery to another woman, wife shall not claim the same act. Feminism does not mean to achieve the pleasure of feeling and instinct without morality. Morality is the principles of the existence of live on the earth. It is connected with the religious sanction. Feminism does not mean the sale of one feeling and instinct for the pleasure. It is reason why religious texts permits limited freedom to the different genders. Feminism may also be reversed when it reaches cross -limit. The dress, ornaments and fashion of the both genders may be treated as the negative form of feminism. The women of Northeastern states bear the instinct of openness, freedom to work, courtesy and politeness to the outside world. They are at the cross road transforming into global community with the lapse of the stage of court's ethic and etiquette. Mostly with the Christian civilization without much court's ethic there are increasing demands in the services and jobs in many companies. Women without skill and technology but had been working in the lower stratum of office hierarchy outside the state and abroad .lt may not be desirable. Liberty to move and work without skill and technology they are liable to be viewed in the negative aspect of feminism.

ROLE OF FAMILY COUNSELING AND VOLUNTARY ACTION BUREAU IN DOMESTIC VIOLENCE: A CASESTUDY IN IMPHAL WEST DISTRICT, MANIPUR

Dr. Hanglem Pishakmacha Devi¹

Introduction

Women have been treated as objects' by the male dominated society in India and elsewhere. However, there is no uniform pattern of social, cultural and economic, distinction between men and women. Patriarchy is very strong in India, despite several movements for theupliftment of women launched by women's organization during pre and post independence period. Male supremacyemanates from caste, class patriarchy and sexuality of the male. Women are treatedas dalits (downtrodden and inferior) in their own families by parents, in-laws and even by their husband. In ancient India women occupied a very honorable place in society (Sharma 1989:124). But momentous changes took place during medieval period i.e. change from freedom to bondage and from honor to disgrace custom of sati, child marriage and prohibition of widow re-marriage werewidely prevalent.

Women's quest for equality with man has become universal. It has given birth to women's movement and feministic activities and associations. All over the world, feminism has its origin in social structure. They want to have equality with the framework of the existing highly rigid patriarchal society. At present women is equal to man in every sphere of life. She enjoys an equal status with man in law, because there were several reforms regarding the position of women in Indian society which brought up by our famousreformer Raja Ram Mohon Roy and Ishwar Chandra Vidyasagar. (Sharma 1989:125)

Today, women from all over the world were becoming more and moreconscious of their status within the family and in the society. In India, the problems affecting women's status are vast, complex and dynamic. Despite, the guarantees equality of opportunities for women in every sphere of activity still, women arecontinue to suffer from the innumerable instances of violence in mental, physical, sexual, or social and other. Rape, molestation and harassment on the streets, transport & work places, dowry, wife beating, divorce desertion etc, are arising day by day. Sadly, women, the mostvaluable but vial proportion of the country are still neglected by the society. Today, women are motivated and struggling for equal rights and human freedom from earlier bondage. She does not like traditionalism. She hates exploitation. (MSSWAB1992:1-2) The voice of women spread all over the world and is becoming global issue. In consideration the above facts recognizing the needs various stepshave already been taken up by various officials and non-officials agencies to provide relief to the victims of such incidents. Number of women organizations has come up to carry the torch of equality, justice and freedom. Besides helping women

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publish and disseminate information related women and holddiscussions seminars, workshop etc in the state, national and international levels.

The first five year plan (1951 – 1956) envisaged welfare measures for women. To spearhead welfare measures the Central Social Welfare Board (CSWB) was established in 1953 by the planning commission, which symbolizes the welfare approach to women's problems. The CSWB Delhi set up a VAB (voluntary action bureau) in 1982, to meet the challenge of atrocities on women and children. (MHRD 1988: XII). The VAB has a committee including eminent social workers representatives of voluntary organization. Members of parliament, police, doctors journalist and lawyers, social scientists etc, which meet periodically to guide the activities of theBureau and ensure proper implementation of the programme in achieving its goals. After the Bureau worked successfully, the central social welfare board (SCWB) set up similar, Bureau in every state and union territories to implement the similar programme directed by VAB, CSWB etc(MHRD 1988:189). In Manipur, the VAB was set up in the year 1984, through the Manipur State Social Welfare Advisory Board (MSSWAB) Imphal. This VAB has its sub-committee consists of various concern government and non-government agencies such as state social welfare department, police. Legal Aid Cells and representation from the health and eminent social workers. The main theme of VAB is that to protect those women and childrenin distress by providing para-legal support and rehabilitation even by taking the help of police / court and legal aid. While, family counseling centres (FCC) which is introduced by the planning commission, Government of India in 1983, provide direct counseling to the victims. (MSSWAB1992:1& What is Counseling 1993:2)

Objectives of the present study

The main objectives of the present study are:

- i) To find the trends of domestic violence in the state of Manipur particularly in Imphal West district.
- ii) To understand the consciousness of gender specific violence; and
- ii) To evaluate the function of VAB and FCC in solving such problems.

Methodology of the present study

The present study is mainly analytical one based on a specific case study of domestic violence in Imphal West District. Both primary and secondary sources are used. For the collection of primary dada, statistical tolls like interview, observation method, etc are used whenever necessary arises. Personal information consent (PIC) is taken before any interview to be taken from the concerned interviewee. Secondary sources are mainly taken from the related books and booklets published. The period of data collection is from 2011-15 of Imphal West District and then, the data are analysed statistically.

Results and Discussion



A. Area of Specialisation

The area of specialization of the present work is Domestic Violence Cases which handled by this above FCC, Imphal Police Station for the year 2011-2015, particularly in Imphal West District. As we know that Domestic violence occurs whenan intimate partner or a former intimate partner a husband or a wife, or boyfriend or girlfriend (or an ex) uses physical force or other abusive tactics to coerce or control his or her partner. Actually, violence is the result of economical, psychological social, culture, environmental and educational problems in the society. Domestic violence raises devastative emotional and physical wounds and sometimes it kills. Although men are also victims of domestic violence, women are twenties more likely than mento be victimized.

In Manipur, the VAB and family counseling centres (FCC) becamefunctional in the year 1984 through the MSSWAB, Imphal. Yet the atrocities of Domestic Violence resulting devastations emotional and physical wounds which may also be fatal ones still linger in the state. This is the crux of the problem. The present study attempts a relational study of domestic violence through the lens of FCC& VAB as well as assessment upon them in Imphal West District.

B. Objectives of the FCCs

The main objectives of the FCCs are:

- 1. To provide various program an atrocities against women and other relevant for the welfare of family.
- 2. To prove for legal aid, police assistance and counseling for theneedy persons.
- 3. To provide service to women battered exploited women with physical and emotional problems and women from lower socio-economic families.
- 4. To established such excellent man- women parent child and in-laws relationship that the social andemotional needs of each members of the family will be met.
- 5. To established sound work and study habits so that the economic,education and cultural needs of thefamily may be satisfied. This is often necessary before the couple's desire for children can be fulfilled.(What is Family Counseling 1993:3)

C. Discussion about Voluntary Action Bureau and Family Counseling

Broadly, the State VAB performs the following functions:

- (i) Implementation of FCC schemes.
- (ii) Monitor the performance of FCCS in their respective states through periodic visit & meetings with the counselors and FCC organizers.
- (iii) Act as a referred agency.



- (iv) To educate and mobilize public opinion against social crimes particularly those against women.
- (v) Conduct independent inquiry of all cases of death of young womenunder suspicious cases and take upfollow up action on collaboration of FCC.
- (vi) Organise legal literacy camps through FCC in the rural areas in order to carry the massage of the programme in to the interior.
- (vii) Organise orientation and refresher training for FCC counselors and organisers with the objectives of the programmes and ensure professional services to the victims.
- (viii)Collected and impart information regarding welfare activities conducted by welfare agencies to ensure better co-ordination betweenvoluntary organization and official machinery.
- (ix) Conduct studies and research on specific problems pertaining to women.
- (x) Preparation of literature, booklets, pamphlets, related to women issues and distribute to the public through voluntary organizations who areengaged in the welfare of women to extend their support and co-operation for running the programme of voluntary action bureau smoothly.(MSSAB 1992:3)

D. The Schemes of financial assistanceto voluntary organization to set up family counseling centres

The schemes of family counseling centre (FCC) was introduced as an experiment by the CSWB, New Delhi and got approved from the planningcommission, Govt. of India in 1983. These centres are given granted for providing preventive, curative and rehabilitative services to women who are victims of atrocities.

Distress women are provide services like crisis interventioninvestigation in dowry death cases, counseling incase of marital family mal adjustment; efforts for reconciliation in cases of separation and out of court settlement in marital cases or referral services like short stay, free legal aid, police assistance etc. by trained social workers.

As we know that counseling means giving advice to the people who need assistance. It is essentially a relationship, an interaction between two people, the counselor who is trained to give help and who seeks to assist the other by means of appropriate to the latter's need and life situation and the counselor who is in needof help and seek it. (MSSWAB1993:4)

Augustine Warner Jr. (politician) defines counseling as "a therapeutic growth process through which individuals are helped to define goals, make decisions and solved problems related to personal social educational and carrier concern". The counselor should first help the client selective conducive environment. In case that is not feasible, the second strategy of change should be attempted failing which the third strategy creation should be attempted and for implemented. (Bhakry1995:3)



Characteristics of counselingrelationship are as follows:

- (i) Counseling relationship is formal and structural and is characterized by specified duration, privacy and confidentiality.
- (ii) It continues till the client feels theneed for a special help which he /she cannot solve independently.
- (iii)The counseling relationship is limited to the therapeutic use and purpose.
- (iv)Although, it is limited, the relation is deeper and closer than the othersocial relationship.
- (v) The counseling relationship is powerful and thus effective because the principles of good human relationship are applied consciouslyand purposefully.(What is Family Counseling 1993:4)

E. Techniques for dealing with resistance

The main techniques for dealing with resistances in counseling are:

- (i) Counselor should be alert to client's assistance, but should not respond to it. Instead she should recognise that resistance is normal and should concentrate on understanding the clients unique defensive style.
- (ii) The good relationship supportive and accepting may help clarify thesituation and reduce the resistance.
- (iii) If the resistance is stronger, the counselor may redirect the interview to less threatening areas.
- (iv)The strongest technique is the direct confrontation or questionnaire. (What is Family Counseling 1993:5)

F. Basic principles for counseling

The basic principles for counseling aregiven below:

- (i) Respect: This means praising another person for what he is withwarmth and acceptance. The ability of the counselor lies in communicating to the counselee belief that every person possesses the inherent strength and capacity to make it in life and each person make his own decision.
- (ii) Authenticity and congruence: This implies genuineness, openness, realness and honesty.
- (iii) Empathy: Empathy is the ability toaccurately perceive what another person is experiencing and communicate that perception, what does the counselee think? How does (s)he really feel inside? What are then counselee's values, belief, inner conflict and hurts? A good counselor is continually sensitive to these issues, able to understand them and effective in communicative this understanding to the counselee by words or gestures.



- (iv) Confidentiality: Confidentiality and trust are most important in a counseling relationship.
- (v) Immediacy: Immediacy its dealing with the feelings between the counselee and the counselor. (Bhakry 1995:2)

The family of today is face with problems of a serious nature. It is an unstable family. The number of broken marriages is on the increase. Suicide by within the husband or wife is on the increase. The main causes of the instability of the family are less social protective in family crisis and replacement of domination by co-operation. There is sexual disharmony between husband and wife. So, the divorce rate has been increased day by day with the impact of western culture, and it affected the stability of India family system.

Today, in India, Ministry of Welfare, Central Social Welfare Board (CSWB) have launched a programme forthe solution of family problems. So, family counseling is an interactive process conjoining the counselee who needs assistance and the counselor who is trained and extracted to give assistance. (Bhakry1993:3)

G. Family Counseling Centres inManipur

The FCC scheme is being implemented since 1984 in Manipur under the CSWB through VAB of Manipur state social welfare Advisory Board (MSSWAB). At present, there are eleven FCC in the state including one innovative scheme at Imphal Police H/Q, Imphal which is the centre of the present work. These FCC, in the state has referral services for giving shelter and for convenient condition to those who are in distressed. (MSSWAB 1992:6)

H. Findings of the present study

It is found that there are 157 cases of Domestic violence which handled by FCC, Imphal police H/Q, Imphal from 2011-2015, particularly in Imphal (W), the number of cases increases yearly. That is only 9 cases in 2011 and 12 cases in 2012,

20 cases in 2013, 50 cases in 2014 and 66 cases in 2015 were reported. In such cases there are 27 complaints pleaded by malewhile 130 cases came from femalecomplainants, indicatives dominant number of female victims. The present study also discussed minutely considering the case studies of the victims, for example about, Divorce, extra marital relations, marriage crisis etc.



Noture of Cocc	2011		2012		2013		2014		2015	
Nature of Case	М	F	М	F	М	F	М	F	М	F
Divorce		3		3		6	1	8	1	13
Physically Assault						1		2	1	3
Extras Marital	1	1		2				2	1	
Family Crisis					1		1		1	1
Marriage Crisis		2		4	1	1	5	7	5	7
Family Maladjustment		1		1		1		1		1
Illicit						2				
Relationship										
Harassment				1	1		1	2	1	4
DomesticViolence						1		6		2
Marital Maladjustment		1			1			2		7
Kidnapped						1				
Bigamy						1				
Cube bending						1				2
Exploitation ofWomen						1		3		2
Molestation					1			2		
Treatment								1		2
Maintenance								3		3
Character Assasination								1		2
Sexually Exploitation								1		
Desertion									2	2
reconciliation									2	
Immoral Behaviour							1			3

The tables are as follows:TABLE – 1 NATURE OF CASE FOR THE YEAR 2011 – 2015

Source: Office of the FCC, Imphal Police H/Q, Imphal West, Manipur

TABLE – 2 : STATUS OF THE CASES FOR THE YEAR 2011-2015

	2011	2012	2013	2014	2015
Closed	4	2	16	26	45
Pending	5	10	3	24	20
	Cases in Re	ferral Service			
			1	0	1

Source: Office of the FCC, Imphal Police H/Q, Imphal West, Manipur

TABLE – 3



EDUCATIONAL STATUS OF THE CLIENTS FOR THE TEAR 2011-2013										
	2	011	20)12	2	013	2	014	20	015
Illiterate	М	F	М	F	М	F	М	F	М	F
		2					1	7		6
Literate	М	F	М	F	М	F	М	F	М	F
	1	6	Nill	12	4	16	9	33	14	46

EDUCATIONAL STATUS OF THE CLIENTS FOR THE YEAR 2011-2015

Source: Office of the FCC, Imphal Police H/Q, Imphal West, Manipur

TABLE – 4

MARITAL STATUS OF THE CLIENTS FOR THE YEAR 2011-2015

	2011		2012		2013		2014		2015	
	М	F	М	F	М	F	М	F	М	F
Married		6		9	3	16	4	31	10	46
Unmarried	1	2		3	1		6	9	4	6

Source: Office of the FCC, Imphal Police H/Q, Imphal West, Manipur

Conclusion

From the above findings, theconclusions seems to be that the awareness of right does not raises the status of women, non awareness lowers their feeling of satisfaction (with their status). The main barriers in the awareness of rights are illiteracy, excessive involvement in domestic chores, household constraints (that is attitudes of husband and in law)and economic dependence on males. It may be concluded that women are still sufferers and more awareness or schemes oriented towards gender equality areneeded. Further, the role of FCC and VAB would be made more effective as many inadequacies such as untimely release of govt. sanction may not hamper thesincerity of the employees.

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THE NAMBUL RIVER : A STUDY IN THE HYDROLOGICAL REGIMES OF THE LOKTAK LAKE, MANIPUR

Dr Th. Nabakumar Singh¹

1. Introduction

The Nambul River is a sub-tributary of the Manipur River system in the Manipur central basin. It does not join the Imphal or Manipur River, but it falls into the Loktak Lake known as Yangoi Maril. Nambul River is one of the eight major rivers of the Manipur Central basin – the Imphal or Manipur River, Iril River, Kongba River, Thoubal River, Nambul River, Nambol River, Khuga River, and Chakpi River. It plays a significant role discharging large volume of water in to the Loktak Lake. It was a perennial source of water for the Loktak Lake since the early period and was one of the very useful primary navigational inland waterways that connect the villages of the southern and central part of this valley and hills with the main commercial and market hub in Imphal Khwairamband in the past. This perennial river was an immense economic importance to Manipur until recent times, better known as 'Nambul Nala' with its tributary the 'Naga Nala'. But presently it has become severeness to the Loktak Lake due to its flow characteristics, quality of water, channel disposal and encroachments, and severity of floods in and around the Imphal city. It has a total 54.70 km length from its source to mouth. The catchment area of this river is very complex with an unimpressive topography in its upper part.

The objective of the study is to find out the problems faced by this river and its impacts on the hydrological regimes of the Loktak Lake and to suggest action plan for management planning of the Loktak Lake.

The methodology carefully observed geomorphic settings, drainage pattern and hydrological parameters of the sub-basin and its importance to the Loktak Lake. Available methods of basin analysis have been used based on related information supported by intensive field verifications. In order to understand geomorphic and hydrological characteristics of the Nambul River basin, this study will follow up on these non-linear parameters computing the laws of R. L. Sing (1974) and Betal (2011).

2. Study Area

The Nambul River basin is a sub-basin of 277.9 km² area within the Manipur River basin (6,332 km²). It occupies about 4.39 percent of the Manipur River basin in the central part of the state covering parts of Imphal West and Bishnupur districts. The basin lies over the underlying sedimentary rocks at an elevation of 760 meters to over 1500 meters from the mean sea level.

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3. Geomorphological Settings

The Nambul River basin with a total catchment area of 277.9 km² is a part of depress Manipur River basin (6,332 km²) in the central part of the state, resulted from the Indo-Myanmar tectonic origin due to the collision of the Indian plate and Myanmar plate at the end of Oligocene period and during Miocene times; and the area had become under sub-aerial condition with full of water. Erosion and depositional activities resulting reversal topography of synforms as anticlinal mountains and anti-forms of the syncline valleys (depressed basins). The synforms are well marked as a depress basin in the central part and antiforms are well defined as mountains of folded structure encompassing it over the underlying Disang Shale (Ibotombi, 1998). Parts of the depress basin and folded structures had tilted and subsided as a result of further tectonic activity; it formed subsided and tilted hanging wall blocks; and parts of the folded structures had remain as footwall blocks. These footwall blocks are hills and hillocks of the basin, resulting from denudation and tectonic activities. The depress basin and parts of the folded structure had become hanging wall blocks, possibly during the late Pliocene or early Pleistocene, but may be as late as Holocene (about 10,000 years ago). The subsided and hanging wall blocks or hills and hillocks had tilted and filled by water and, consequently had become lakes. It explained that the Manipur central valley or the Manipur River basin and the lakes of the basin are tectonic origin, formed by results of neo-tectonic activities, which occurred after prolonged denudation. The most prominent of them is Loktak Lake, as a remnant part of ancient neo-tectonic lakes. The alluviums brought by the streams and rivers had gradually deposited over the lateral strike slip basin or pull part basin or Tran-tensional basin, which experiencing subsequent tilting and subsidence resulted to the formation of this basin and sub-basin of the Nambul River..

Structure

The rock structure of the Nambul River sub-basin is includes into geomorphology of the Manipur River basin belonging to the Himalayan young fold mountain system, which came into existence after Tertiary folding of the sedimentary strata some 40-90 million years ago. It includes in a part of Assam-Myanmar geological unit, which was formed as a part of the Himalayan mountain system during the early Tertiary period. The structural and topographic feature of the basin includes into the close proximity, in which regional plate margins and the cycle of conservation programmed of the rocks had undergone during the geological past. The tectonic settings of the basin had an excellent distinct entity with other parts of the N. E. India, because of its unique geographical position with the Indo-Myanmar Range geological units, as the region is an integral part of it. The succession and formations of the rocks can be visualized from the Ukhrul limestone in Cretaceous to Imphal alluvium (Manipur River basin) in recent (Holocene) in order to ages.

The alluviums of the sub-basin were also recent origin of 100-200 meters depth, deposited during the past 10,000 years ago, above the underlying Disang rocks. They are mainly composed of dark grey to black clay, silt and sands above the underlying Disang shale represented by clay to boulder size rock materials along the foothills and old river valleys, thought, to be older alluviums by Oldham (1883). The age of these alluviums had been assigned to be recent and might be extended up to the Pleistocene and



probably more older, since no litho units are represented during the post Tipam period in the state. The rocks of this sub-basin are predominantly tertiary sediments. It is observed that the basin is a part and parcel of the Purvachal Himalaya (eastern Himalaya). The structure of the region is a continuation of the Himalayan Mountain System starting from the north-east. It is a part of Indo-Myanmar Mobile Belt; one of the geological provinces of North-East India and adjoining region.

4. Basin Analysis

The topography of the Nambul River sub-basin is almost striking feature with a gradient toward south from north, well drained by it. This sub-basin is an alluvial plain with 838 mts in the north, 790 mts in the middle and 786 mts and below in the south from the mean sea level. It had become a lacustrine plain under sub-aerial conditions. There are certain hillocks standing above the alluvium; these hillocks are parts of the eroded residual synclinal structure scattered within the basin like the Langol hills. The western part of the basin is represented by piedmont zone and alluvial fans along the foothills.

The soil of basin is alluvium deposited on slight stratification under sedimentation. They have fair amount of organic matter and food nutrients, composed of sand, clay, silts and sediments of fluvial origin with considerable thickness of about 106 to 153 meters. They have clay loam texture, grey to pale brown colour and contain good amount of potash and phosphorous, fair amount of nitrogen and organic matters and less acidic containing fair amount of plants food ingredients.

The climate of the basin is humid sub-tropical climatic condition with hot and wet summer, cold and dry winter, characterized by South West Monsoon. The mean annual temperature of the sub-basin is from 12.61°C to 26°C. December (12.89°C) and January (12.16°C) are the coldest months, February (14.95°C) and March (18.51°C) are ideal and comfortable months, April (21.7°C) and May (24.18°C) are driest months, June (25.72°C), July (26.00°C) and August (25.670C) are hottest months and October (20.00°C) and November (17.46°C) are mild months. The average annual rainfall of the sub-basin is 120 cm to 200 cm. December (0.08 cm) to February (2.86 cm) are driest months, March (16.21 cm) to May (12.53 cm) have moderate rainfall, June (24.76 cm) to September (14.40 cm) are wettest months, October (11.88 cm) and November (5.10 cm) are transition period (Retreating monsoon) of less rainfall in the sub-basin. Average humidity varies from 70% to 90% and when the humidity is high in the basin the weather is oppressive.

5. Drainage Analysis

The Nambul River system is formed by 125 tributaries originating from different sources of the Kangchup-Singda Hills Range of Kangpokpi hill district of Manipur. From the source Abu-Lok, Luwanglee River, and Singda River are important streams. These three steams have been associated by 125 sub-streams or sub-tributaries in its upper part. Abu-Lok, Luwanglee and Singda Rivers from its upper part of



Singda Hills Range joined together at Iroisemba in the lower slope of the foothills near the Langol Hill Range of Manipur Central valley in Imphal West distrct formed a river and from where the river is called the *Nambul River* flowing towards the south. The Naga-Nala joins the Nambul River in the heart of the Imphal City near Khwi-Bazar. There are more than 72 small streams, ditchs and drenches have been joined the Nambul River within the greater Imphal area in its middle course. The river Nambol joined the Nambul River in its lower course at Yangoi-Karaong in Bishnupr distrct near Mayang-Imphal of Imphal West district. From where, the Nambul River is known as *Yangoi River or Yangoi Turel*. Lastly it has been emitting into the Loktak Lake to form the *Yangoi Maril* in Loktak. The Nambul River has a total length of about 54.70 km; of which this river crosses the Imphal city area for about 18.36 km.

1	2	3
River	Catchment's Area in km ²	Percentage of the total catchment area
1. Manipur River	6,054.1	95.61
2. Nambul River	277.9	4.39
Total	6,332.0	100.00

Table 1. Catchment's Area of the Nambul River Basin in Manipur River Basin

The upper part of this River system is narrow and deep with long rocky pools, recoils and shrinks, and reservoirs, making to unimpressive small channels forded at several places with shallow stickle of water. They flow through the thick forest and narrow gorges. The middle part of it is a sub-basin, where they brought good amount of silts and sediments and urban solid waste during the rains. The water regime of this river is perennial with changing its volume of water seasonally. The courses of the streams are rather straight in the upper part and sinuous in the middle and lower parts at places. The drainage pattern of the Nambul River system is dendritic in its upper and middle courses and centripetal into the Loktak Lake in its lower part (Fig. 1).



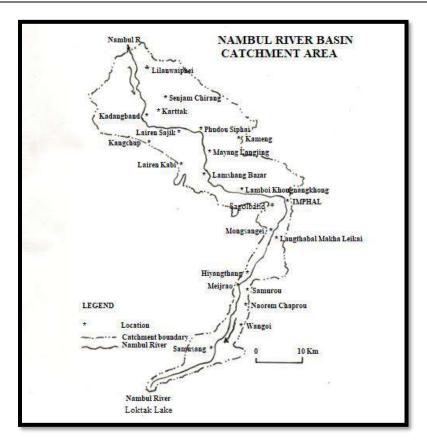


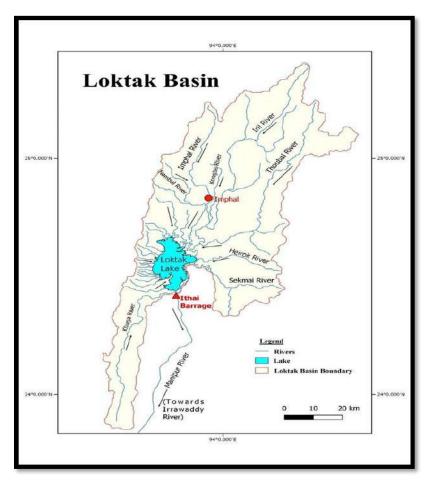
Fig. 1

The Nambul River sub-basin covers 277.9 km² catchment areas (4.39 percent) of the total catchment area of the Manipur River Basin (6,332.0 km²).

6. Importance of Nambul River in the Loktak Hydrology

Manipur River system is one of the perennial sources of water in the Loktak hydrological regime in Manipur. There are 32 streams falling into the Loktak Lake originating from the Manaipur Western Hills. They fed the Loktak Lake diretly (Fig. 2). Nambul River, Nambol River, Khujairok River, Thongjaorok River, Narak Khong, Hentak Khong, Irumbi River, Lamnganbi River and others importat rivers and streams directly fed water into the Loktak Lake.







Imphal, Iril, Kongba, Thoubal are important rivers indirectly fed water into the Loktak Lake through Khordak Channel. The Khordak channel plays a very important role in the water regimes of the Loktak Lake; it is an instrumental to Loktak Lake, as it is a controlling factor to maintain the water level of the Loktak Lake in alternate seasons. It deepened to facilitate inflow of Manipur River water to the Loktak Lake during the lean seasons and outflow of lake water during the rains to minimize the over topping water of the lake. Rain and seepages is only the source of water in the Loktak basin, because there no ice-cape topography in the state. The Manipur River basin receives and average annual rainfall of 120-200 cm. The Manipur River basin with a total catchments area of about 6,332 km² could be trapped annual average yield of about 0.5129 million hectare meter of water (hmw); of which Loktak Lake could be restore minimum 10-20 percent of it; the major part of it flows as river water through the southern hills of the state to fall into the



Chindwin River of Irrawaddy River System. Loktak is confronting various issues and problems of its hydrological regimes, whether scarcity or excess of water. Changes of hydrological regimes in the basin affected various changes in the ecosystem and functions of the Loktak and its associated wetlands; high siltation and sedimentation into the lake from the denuded higher slope are important issues of the Loktak hydrology. It has been estimated about 2.3 million cubic meter of silts had been deposited into the Lake during the past 30 years resulting ever changing hydrological regimes of the lake; the water holding capacity of the Loktak was about 600 million cubic meters during 1980's with 5.74 meters depth, but since 2010,s it reduced to 300 million cubic meters with 2.09 mts depth; it realized that Loktak is nearly half to depth.

Among the western fed rivers of the Loktak Lake, the Nambul River with its total catchments area of 277.9 km² and total length of about 54.70 km discharging at an average quantum of 380 (pre-monsoon) to 740 (post-monsoon) cumecs of water into the Loktak Lake. It play most important role among the direct fed rivers of the Loktak Lake with perennial flow of water throughout the year. The Nambul River is one of the main perennial sources of water for the Loktak Lake. It was also a primary inland waterway connected the villages of the southern and eastern part of the central valley and hills of the state with the main commercial hub Imphal during the past. This river was an immense economic importance to Manipur until recent times. It has been designated as 'Nambul Nala' (Nabul drain) and one of its tributary in the heart of the Imphal city as 'Naga Nala' by the town planners of the state.

Nambul River was the breeding ground of Acanthophthalmus Panngial (Nganap), Mystus bleekeri (Ngasehep) and G. Manipurensis (Ngamu Singum) fishes as indigenous fishes of the state until past few years. However, today, over exploitation and high pollution of this river caused them to disappeared two decades ago and Nambul water had become a '*death water*' (none-usable water).

7. Problems of the Nambul River

Imphal city is the most important culprit of the Nambul River. The Nambul River cross the Imphal city area for about 18.36 km; and from Iroisemba to Heiranngoithong about 9.1 km is most important high risk polluted solid waste throwing zone into it. It has been identified that a length of about 4.75 km in the core area of the Imphal city is the most polluted zone. From these polluted zone an estimated quantum of 50.32 metric tons of silts per day of urban solid waste and 15.97 million liters per day of combine sewers as waste water has been received by the Nambul River directly, and unlimitedly it thrown into the Loktak Lake, and thus, deteriorating the Loktak Lake quality seriously. The Nambul River is most high risk polluted solid waste and silt deposit River among others contaminating the lake water of the Loktak threatening severeness of the lake life and its environment. The Nambul River deposited about 2,121 cum of sewage annually into the Loktak. Due to over exploitation and over pollution of sewage, soild waste and silt, the Nambul River has become a '*Death Water River*' in the state. This death water has been seriously affected the lake life of the Loktak. Until or unless precautionary measures have been taken up, Loktak may become a gloomy '*death water lake*' (none-usable lake water) and the Nambul River also may become a '*Sorrow of Loktak*' in future generation. The main cause of the silts and sediments with urban sewage and solid mass

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brought down by the river Nambul into the Loktak Lake is deforestation in its upper catchment areas. Nambul had become a giant river due to its severity during floods; the main cause of it is due to its channel disposal by silts, sediments, urban waste and encroachments in its middle and lower courses.

8. Management Planning for Nambul River

To check Nambul river water quality a strategic action plan has been already formulated as a project to design before it reaches the Loktak Lake, under the National River Conservation plan. This ensures to improve or restore the Loktak Lake qualities within 15 years design period with follow up action plan of the National River Conservation Plan (NRCP) have to be started. The system design and mechanism of the schemes under this National River Conservation Plan are;

- 1. Tapping, collecting, intercepting and diverting the waste-water discharged outfall of the river Nambul as proposed within the polluted zone.
- 2. Treatment of the collected and intercepted waste-water (combine and sewer) through the wastewater sewage treatment plant system.
- 3. Reducing of nutrients, heavy metals, pathogens etc, from the treated waste-water by using a sprinkle irrigation system and flow back it to the river, as a recycling process.

Under this mechanism it will have three ponds as;-

- (i) Anaerobic pond; It will receives high organic loading (>3000 kg BOD per hectare per day) with a primary function of BOD removal at warm climate in absence of dissolve oxygen and algae. It is observe that the Biochemical Oxygen Demand (BOD) indicates the pollution load of the Nambul River receives about 150 mg/liter (average) of BOD of untreated combine sewage within the polluted zone. An estimated BOD load has been made at a tune of 6, 00,000 kg per day by the Nambul River alone. The level of BOD has been increasing at a rate of 1.2 mg/liter (1980'S) and 1.8 mg/liter per year since 1990's, as on today³. The average BOD load during 1990-2005 was reported as 9.25 mg/liter at the upper section, 20.83 mg/liter at the mid-stream and 10.47 mg/liter at the downstream section. Besides, the BOD of about 25,000 FC/100 ml, of the inlets of Nambul River within the core-polluted zone has been found.
- (ii) Faculative Ponds Faculative ponds will have two systems as;
 - (a) Primary Faculative Pond- This receives raw wastewater.

(b) Secondary Faculative Pond - It will receives, settled wastewater, usually the effluents from the anaerobic pond. It will work for removal of BOD at low surface loading (100-400 kg BOD/ha. Per day) to permit the development of a healthy algal population as the oxygen for BOD removal by the pond bacteria is mostly generated by algal photosynthesis.



(iii) Maturation Pond;- Which receives the effluent from facultative ponds, well oxygenated through out the day, much more divers of the algal population and primary function of removal of excreted pathogens, but small removal of BOD.

Dumping of solid waste within the polluted area of Imphal city and dumping of waste into the Nambul River, and ultimately reach into the Loktak Lake should be restricted, because of the Nambul River water have been polluted at certain degree. The waste-water characteristic and water guality of the Loktak Lake is considerable on its pollution level at present, even for irrigation facilities. Irrigation with untreated wastewater is very hazardous to health and very high risk for bacterial infection such as cholera, typhoid, cold and fever. World Health Organization (WHO) restricted the Fc concentration at <1000 Fc per 100 ml, for fish-ponds. However, the outfall of the Nambul River have been reported at a range of 7,500-24,000 Fc U/100 ml, at the polluted zone of Imphal city and ultimately it discharged at Loktak Lake. Therefore, Nambul River conservation integrated programmed on sprinkle irrigation facilities for removal of nutrients, heavy metals and pathogens should be incorporated by using the treated waste-water and before flow back into the river. This practice will be helpful in reducing the eutrophication as well as bacteriological pollution rate of the river and the Loktak Lake. It is felt that until or unless to check the discharge of urban waste into the Loktak Lake through the river Nambul particularly, and river Nambol, Imphal, Moirang and others, the improvement of the Loktak Lake quality will be difficult. Ultimately, the following-up Nambul River conservation programmed will be the most priority action programmed for the conservation of the river itself and the Loktak Lake.

Conclusion

Nambul River, a sub tributary of the Manipur River system is one of the perennial source of water for the Loktak Lake. It passes through the heart of the Imphal city, the main market hub of the state and had become severeness to the Loktak Lake, because of its disposal of silt and sediments and urban solid waste, deteriorating the water of the Loktak Lake threatening the lake environment by over pollution of its death water. To check the problems created by the river Nambul, a strategic action plan, under the National River Conservation Plan (NRCP) is highly required for collecting, intercepting, and diverting the waste water discharge outflow of the river Nambul into the Loktak Lake. A River Nambul Conservation Plan will be most priority action plan for the safeness of itself and the Loktak Lake.



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INCLUSIVE WATER RESOURCES MANAGEMENT FOR SUSTAINABLE DEVELOPMENT: A CASE STUDY OF LOKTAK LAKE IN MANIPUR, INDIA

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Introduction

In the present decades, water resource management is growing in its importance and it has become a critical issue for Sustainable Development of a region. This is because water is central to the production and preservation of a host of benefits and services for people. It is also at the heart of adaptation to climate change, serving as the crucial link between the climate system, human society and the environment. (Karin, B.2012) The aim of sustainable development is to define viable schemes combining the economic, social, and environmental aspects of human activity. The ultimate goal of sustainable development is to find a coherent and long-lasting balance between these three aspects.

Sustainable development is the product of a set of transformations in which the exploitation of natural resources and orientation of technological and institutional modifications are in harmony with present and future needs. (Bhatia.2010). Social concerns in one country can have impacts that reach beyond national borders. Social sector issues are closely linked to economic issues such as poverty. In any society, it is the poor who are least likely to receive adequate health care, education, and family planning services. Higher birth rates may result, making it difficult for these families to meet their basic needs and break out of the cycle of poverty. Social issues are also linked with environmental concerns. In many countries, contaminated water and polluted air are responsible for an increase in water-borne diseases and respiratory problems, all of which place an extra burden on local health care systems. It is only when information about social conditions is combined with economic and environmental data that the full impact of development decisions on the quality of life can be understood. (Brundtland Commission, 1987).

Sustainable development is a process for meeting human development goals while sustaining the ability of natural systems to continue to provide the natural resources and ecosystem services upon which the economy and society is dependent. Even though the modern concept of sustainable development is derived mostly from the 1987 Brundtland Report, it is rooted in earlier ideas about sustainable forest management and twentieth century environmental concerns.(Brundtland Commission, 1987; Nyangena, W. and Sikei, G. 2012). In 1992, the UN Conference on Environment and Development published in 1992 the Earth Charter, which outlines the building of a just, sustainable, and peaceful global society in the 21st century (Edward B. 2006). The action plan Agenda 21 for sustainable development that recognizes

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these interdependent pillars. It emphasises that in sustainable development everyone is a user and provider of information. It stresses the need to change from old sector-centered ways of doing business to new approaches that involve cross-sectoral co-ordination and the integration of environmental and social concerns into all development processes. (United Nations, 2014; Boulanger, Paul-Marie 2008)

The world will not be able to meet the great development challenges of the 21st century – access to safe drinking water and sanitation for all, livable cities, food security, energy security, jobs through economic growth, and healthy ecosystems – without improving how countries manage their water resources. Water-resources management issues have become so pressing that the World Economic Forum named water as one of its top challenges two years in a row, in 2013 and 2014. Countries cannot grow sustainably, or strengthen their resilience to climate change, without smart water management that takes into account decreasing water availability and quality, and the need for deliberative allocation based on social, environmental, and economic needs. (Karin, B. 2012). "Water, energy, and land (WEL) are identified, by the team behind the European Report on Development 2012, as the most critical resources needed for inclusive and sustainable growth. Countries need to find adopting strategies that allows these natural resources to contribute more to inclusive, sustainable growth. (UNDESA,2015).

This paper deals with the case study on the project entitled "Sustainable development and water resources management of Loktak lake" in Manipur state, India. The project was funded by India-Canada Environment Facility (ICEF) and was jointly implemented by Loktak Development Authority (LDA), Manipur and Wetlands International South-Asia (WISA) New Delhi. The project was initiated in the year 1999 and was completed in 2005. It was a good experience to be a part of the project as Sociologist beyond the academic confinement. It provides an opportunity to be with the marginalized communities who were associated/ related with the lake for their livelihood in particular and major stakeholders in general. The project had the following major components namely,

Water Management Forestry Fisheries Development Community participation and Development Data Management.

Firstly, for successful implementation and achievement of objectives of the project, the inclusion of the marginal groups is necessary in all the components listed above such as in the forestry section for a proper catchment area treatment, in fisheries for development of fisheries, enhancement of productivity, fishing techniques etc. Secondly, the community participation and development section deals with the communities to carry out all the activities needed for achieving the objective and goals of the project in all the components of the project.

Methodology

The paper employed analysis of secondary data from various sources, such as Census reports of 2001& 2011, participant observation, analysis of project reports, sample socio-economic survey and



interview with the leaders of the stakeholders. Participatory Rural Appraisal (PRA) was predominantly used to extract information from the communities. In PRA exercises information are more shared and owned by the local communities. Amongst many applications, PRA has been used in natural resources management (soil and water conservation, forestry, fisheries, wildlife, village planning etc). Evidence to date shows validity and reliability in information shared by rural people through PRA. (Chambers, R. 1992) The interviews of beneficiaries under various development programmes of the project were also held to explore the positive and negative aspects of the new initiatives. The data from LDA regarding the ongoing projects were also collected to assess the impacts of the initiatives.

Discussion

Loktak Lake is the largest natural freshwater lake in the north eastern region of India and plays an important role in the ecological and economic security of the region. The lake is rich in biodiversity and has been designated as a wetland of International Importance under Ramsar Convention in 1990.¹(Endnotes) (Ramsar.org 2009; Rajkumari, S. et al 2007). The lake is oval in shape with maximum length and width of 26 km and 13 km respectively. It has direct catchment area of 980 sq. km. and indirect catchment of 7157 sq. km. There are 55 rural and urban settlements around the lake with a total population of about 100,000 people. A large number of fishermen live at the periphery of the lake and about 4000 people live in the 688 floating huts inside the lake floating huts for fishing activities. There are approximately 1,21,000 people living in 546 hill villages in the catchment areas practising shifting cultivation. (Basu, D et al 2009; Khwairakpam, G. et al 2009; Loktak, 1999, ,2002, 2003, 2009, 2010, 2011, 2015; Wetlands International, 1999).

Identification of Threats and their Impacts: Based on the analysis of various issues confronting Loktak Lake, the root-cause problems can be traced to loss of vegetation cover in the catchment area and construction of Ithai Barrage. (Barrage constructed to control the outflow of water from the lake for power generation) The degradation of the catchment area has led to the problems of siltation and increased inflow of nutrients.

The construction of Ithai Barrage have led to the following problems as: changes in hydrological regimes thereby affecting ecological processes and functions of the wetland; inundation of agricultural lands and displacement of people from flooded lands; loss of fish population and diversity; and decrease in the thickness of floating biomass of varying thickness which is locally known as phumdis , in the Keibul Lamjao National Park (KLNP) inside the south west part of the lake thereby threatening the survival of brow antlered deer which is locally called Sangai. (Loktak, 2002).

Ithai Barrage

The above problems have affected the lake as follows :



Siltation: Jhum (shifting) cultivation, extensive deforestation and unscientific land use practices in the catchment area are responsible for deposition of approximately 336,325 tons of silt annually in the Lake (Loktak, 1999)

Weed Infestation: The proliferation of phumdis and aquatic weeds have led to the reduced water holding capacity, deterioration of water quality, interference in navigation, and overall aesthetic value of the Lake.

Decrease in Power Generation: The decrease in water holding capacity due to siltation, weed infestation and proliferation of phumdis has reduced power generation capacity of the Lake.

Loss of Biodiversity: The populations of migratory and resident waterfowl has declined during the last few decades due to poaching and changes in ecological character of the wetland.

Decrease in Fisheries Production: Over exploitation, indiscriminate methods of fishing, extensive growth of phumdis and weeds are responsible for decrease in fisheries production.

Changes in the Composition of Fish Species: Construction of Ithai Barrage across Manipur river has interfered with the migration of fishes from Chindwin-Irrawady river system of Myanmar and Consequently brought changes in the species composition.

Flooding: The construction of Ithai Barrage and decrease in absorption capacity of the Lake has resulted in inundation of the peripheral, agricultural and settlement areas.

Pollution: Inflow of organo-chlorine pesticides and chemical fertilizers used in the agricultural practices around the Lake, municipal wastes brought by Nambul river that runs through Imphal, capital city of Manipur state, soil nutrients from the denuded catchment area and domestic sewage from settlements in and around the Lake are responsible for deterioration of water quality.

Other Issues

Lack of community inclusion in the planning and implementation for conservation and development programmes; encroachment pressures on lands created from dredged and excavated material; and fish pond encroachments into the Lake (related to decline in fisheries); absence of policy and regulatory mechanisms at the government level for conservation of the Lake and its resources; inadequate technical and managerial skills and coordination among different agencies concerned with Loktak Lake management resulting in conflicting interests; absence of baseline data on hydrology, siltation, ecology, socioeconomic aspects, catchment area, flora, fauna, etc. and their interrelationships; ineffectiveness of implementing agencies at different levels and lack of appropriate strategies and ineffective implementation of developmental programmes. (Loktak,1999, Singh, N.K et al 2014; Rajkumari, S. et al 2007; Wetland, International 1999; State of Environment Report, Manipur, 2009; Sankalp India Foundation, 2009, ENVIS Centre: Manipur 2009).



Findings

Any attempt for the benefit of the marginal communities involves a systematic understanding of the overall socioeconomic conditions of the people included in the study. By means of community participation and planning of various Development Programmesin consultation with the communities, the project tries to identify the issues, needs and aspirations of the communities within the scope of the project and translate them into various programmes for attaining maximum benefit to the marginal communities. Inclusion of the communities in to the project was done by adopting the Participatory Rural Appraisal (PRA) techniques. Traditional innovativeness are well addressed in combination with modern technical inputs whenever required. Their apprehensions and misconceptions were discussed in an open manner. In order to highlight the inclusion of marginalized communities and their innovative inputs the following few Inclusive Sustainable Programmes undertaken can be briefly stated:

Inclusive Sustainable Programmes

A. Catchment Area Treatment

Participatory approaches are followed for understanding needs of the local communities. Processes were developed to involve local communities through Participatory Rural Appraisal exercises in selected villages of the hill areas. New initiatives were developed for regulating soil, water and nutrients from the catchment area. The village community, particularly women are involved in raising nurseries of appropriate species, having both economic and ecological importance. Saplings are raised and then planted by local communities in their own private lands. They take care of the afforested areas and it is expected that the tree planted, once fully developed, will provide them the economic benefits. While it is not possible to take afforestation in the entire catchment area, demonstration projects were initiated in selected areas. This was replicated by other villages at the catchment area depending upon the success and needs. Technical assistance were provided in the afforestation programmes and undertaking small scale engineering measures like contour trenching, vegetation, gully plugging etc. to control soil erosion in the catchment area (Rajkumar, S and Gupta, A 2007).

B. Sustainable Fisheries Development

Sustainable fisheries development component of the project enhances fish yield and diversity by adopting sound improvised techniques that reduce impacts of different fishing methods and practices and by developing mechanisms for fish migration, stocking fish seed and regulating fishing in the Lake. In order to fulfil the mission of the project, specific studies were undertaken to collect data on the fish utilization, fish resources, and impacts of fishing methods and practices. Based on the data, strategies to enhance fish yield, fish diversity and revenue for benefit of the fishermen and local communities were developed and implemented. PRA exercises were carried out in 27 villages. The needs and priorities of fishermen were identified and qualitative and quantitative estimation of fish species utilized was also carried out. Surveys were conducted in 10 markets in and around the lake to assess the economic gains/losses through fishing activities. Survey were conducted for identification of indigenous and exotic



species. As a result of the survey, 31 species of fish were observed. A list of fishes collected during the 4 months study was analysed and compared with fish species reported earlier to assess the interval of appearance and disappearance of fish species. A preliminary survey on migratory fish diversity in some tributaries of the Chindwin River System was undertaken. A list of different fishing methods practiced in the lake was collected from the households of 4 islands inside the Lake i.e. Karang, Sendra, Thanga and Ithing.

Karang Island village inside the lake

C. Community Participation

The community development component of the project focussed its activities on generating awareness about the project goals, objectives and its components. The main aspects dealt were assessment of community structure, socioeconomic status, resource utilisation pattern, community needs and their aspirations. The inclusion of local communities in planning and management of Loktak Lake is crucial to the success of project on sustainable development of Loktak Lake. Ensuring participation of all stakeholders requires understanding of their needs and sharing of authority and responsibility for resource management according to arrangements, which are understood and agreed by all parties. The process is lengthy and requires long-term commitment from all concerned stakeholder groups. The ultimate objective of co-management is empowerment of impoverished majority, promoting equity in the access to and control of resources, greater involvement of women, sustainability and system orientation.

D. Demonstration Projects

A low cost sanitation programme to control leaching of human waste and nutrients into the lake was implemented in three island villages around Loktak lake. Under this programme low cost toilets were constructed with equal contribution by the concerned community and the project. The programme was implemented by two community groups, Karang Sanitation Committee, and Ithing Welfare Committee. These groups comprise of members of elected village representatives (panchayats), local NGOs and volunteers for the programme in planning and monitoring. A memorandum of understanding (MoU) was signed between the community representatives and LDA representatives. As per the MoU the island community bear the cost of wood, tins or other materials of roofing; labour charges for unskilled labour or the beneficiary household can also contribute his labour and transportation of materials by boat to the village from the nearest village.

Low cost sanitation construction materials

The LDA provide the cost of construction material, charges for skilled labour and the transportation costs of materials up to the nearest motorable point in the village. More importantly, prior to the commencement of the programme technician from the Indian Concrete Institute was engaged for



imparting basic training on masonry skills for construction of low cost sanitation projects to the villagers. Thus trained volunteers can be engaged in the future expansion of similar programmes.

E. Indigenous Irrigation Project, Tingkai Khunou

An Indigenous Irrigation Project was implemented at Tingkai Khunou, a hill village in Khujairok micro watershed in the Senapati District of Manipur. The project involved augmentation of the water availability of the terrace fields with the construction of a new irrigation canal, with community involvement. Project was initiated with the excavation work by the villagers. Financial assistance was provided to the project for compensating the working days of the community members involved in the project. Work for the canal was completed within a short span of 8 months period. As an impact of the project, paddy production in 30 Ha of community land has tripled.

Foundation Stone in Indigenous Irrigation

Project, Tingkai Khunou

Consequently there is now a sense of food security in the village. No incidence of shifting cultivation (jhumming) has been reported from the village community till date.

F. Additional / Alternate Income Generation Programmes

a. Paddy cum Pisciculture /cultured fishery

A demonstration project integrating pissiculture with paddy cultivation was implemented in five lakeshore villages in a total area of 18 Ha. This farming system is the integration of 3 important major fish kinds as: Catla catla (30%), Cyprinus carpio (40%) and Labeo rohita (30%) with any one of the high yielding rice varieties such as KD I/ KD II/ KD III (High yielding rice varieties which are very popular amongst the farmers of the Manipur state). Under this project, 9000 fingerlings per hectare have been provided to the farmers with waterlogged lands. The project was implemented through the local elected bodies and the local youth clubs to identify the beneficiaries. The project operated through a MoU signed between the beneficiary and the project, under which the beneficiary will provide an equal number of fingerlings provided to him to another beneficiary identified jointly by the LDA, local elected bodies and the local youth clubs. (Loktak, 2002)

Release of fingerlings in paddy field

b. Duckery cum Pisciculture

An integrated farming project integrating duckery with pisciculture has been taken up in 15 villages in a total area of 22 Ha. Two demonstration plots have been selected from these villages by the gram panchayats(local elected bodies) and the local youth clubs with technical assistance from LDA. As per the MOU drawn between the selected beneficiary and LDA, each beneficiary will supply the required inputs to another beneficiary identified jointly by LDA and local community after the first harvest. The project operates through an MoU signed between the beneficiary and the project, under which the beneficiary



provide an equal number of ducklings and fingerlings provided by the project to another beneficiary jointly identified by the LDA, Gram Panchayat and the Youth Clubs.

Duck farming in Toubul

c. Piggery cum Pissiculture

A demonstration project on integration of piggery with pisciculture were implemented in Sadar Joute and Bungte Chiru, two hill villages of the Loktak catchment area. The project was implemented by the Village Authority, Sadar Joute and Bungte Chiru Women's Society, Khunka comprising of 132 members. The project was governed by an MoU, as per clauses in the MoU these villages shall, provide equal number of fish fingerlings and piglets to another village jointly identified by these authorities and LDA after one year. 60 piglets and 24000 fingerlings was provided to Sadar Joute Village Authority while another 10 piglets and 4000 fingerlings have been provided to B.Chiru Women's Society. Linkage was established with the Manipur State Veterinary Department for imparting training on maintenance of the piggeries. On successful implementation, these projects shall provide sufficient incomes to desist from forestry based livelihood options.

Piggery cum pisciculture in Sadar Joute

d. Handicrafts and Handlooms

A demonstration project on additional income generation handloom and handicrafts was undertaken in Sadar Joute, a hill village of the Loktak catchment. The project operates through self-help groups and benefit 500 women folk. The beneficiaries have been provided with one time assistance of free yarn in the beginning and training on management of self-help groups. Linkages have also been developed with potential markets to provide the beneficiaries with buyers.

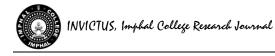
Handloom in Sadar Joute

e. Horticulture

Horticulture projects were implementation in 32 hill villages with the main objective of providing people with an alternate source of income to forestry based occupations and jhum (shifting cultivation) cultivation. The beneficiaries of the project were identified jointly by the village authority, local youth clubs and women organizations. Under a common understanding, the community provides the labour and land, while the project contributes the suckers of indigenous species of banana and pine, bamboo fencing and technical assistance. The plantation was done with the supervision of the project officials. Plantation of leguminous species in the plot helps retain the fertility of the soil through its nitrogen fixing properties. Till date, 673 households of 32 villages have been benefited by the project.

f. Community Owned Fish Hatchery at Toubul

A modified version of Chinese type circular fish hatchery having production capacity of 2 million spawn per operation and a Fish Seed Farm (3.5 Ha) was constructed at Toubul village on the western side of the lake for restocking of rare and over exploited fish species in the lake. As per the MoU governing the project was signed by the Toubul Welfare Committee (TWC) and the LDA, 50% of the annual seed



production shall be released into the lake while the rest shall be sold to the existing fish farms at subsidized rates. The proceeds from the hatchery shall be used for village developmental works.

Fish Hatchery at Toubul

g. Strengthening of existing fish seed farms

An additional income generation scheme through strengthening of existing hatcheries was initiated in the lakeshore villages. Under this project, fish fingerlings are provided to people with existing fish farms, which have been rendered dysfunctional dua to lack of capital or technique. The project operates through a MoU, in which the total number of fingerlings provided as seed assistance have to be released into the lake within a year. At present, this project is under operation in Laphu Pat Tera, wherein seed assistance of Rs. 18,000 was provided to a self help group of 6 members having three ponds of half acre each. Besides releasing the fingerlings into the lake, it has also ensured a constant supply of fish spawns at subsidized rates to the nearby fish farmers.

h. Alternate Source of energy

A project on introduction of smokeless chullahs (cooking stove) was implemented in the villages in and around Loktak lake. The model ' Pubali' (developed by TBU, Guwahati) was adopted for the project as it reduces overall fuel consumption by 60% and halves the overall cooking time besides reducing health hazards due to lesser soot deposition. The villagers have been trained on construction and maintenance of these chullahs, and are initially given a part of the total construction cost as incentive. A total number of 2073 households in 47 villages have been benefited under the project and 9 trainings on maintenance and construction of the same have been conducted.

Training on construction of smokeless chullah

- i. Community Capacity Building
 - 1) Self Help Groups

Self Help Groups have been formed under this project to assist individuals / community groups gain a set of skills and attitude to solve their common problems and achieve self-reliance. Ten SHGs have been formed under this project, of which eight are women groups. Four groups have been formed in the lakeshore villages, one in the phums and five in the hill villages. Seven groups have started credit and savings operations within themselves. All these groups have been provided with training on the management and conflict resolutions of SHGs.

2) Training and Workshops

Training and workshops have been organized under the project to enhance the capacity of the communities to initiate collective decisions in issues of common interest. The various themes that have been covered till date are:

- Community Resource Management
- PRA applications for Participatory Watershed Management
- Promotion of Alternate Sources of Energy



- Capacity Building of Women
- Improvement of Loktak Lake Fisheries
- Population Stabilization
- Role of Women in Conservation and Management of Loktak Lake

Conclusion

Based on the findings of the study, the following conclusions are hereby presented as:

The project of Loktak Lake Water Resource Management is a project for sustainable development because it fulfils the conditions of development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It focused on three main thrust areas of human well being: economic, socio-political and ecological/environmental conditions. The project aims to spur economic and social development, particularly for rural people in developing countries and societies, while ensuring that environmental integrity is sustained for future generations. Loktak Development Project is sustainable development as its practices are environmentally-friendly, that allows the production of crops or livestock without damage to human or natural systems. It also involves preventing adverse effects to soil, water, biodiversity, surrounding or downstream resources—as well as to those working or living on the farm or in neighboring areas. The project also perform and meet the principles of the sustainable The activities implemented in the project is for the inclusion of the people who are development. dependent upon the natural resources for their sustenance. The success of the project to a very extent was due to the inclusion of the peoples' knowledge and ready acceptance of the plannings brought forward by them. With due importance given to the role of people's participation and their involvement in each every step from planning to benefit sharing the project of such mega nature could see the desired result within the span of the project. In addition to the material improvement in the lives of the people the project did bring a positive outlook in themselves by making them confident to be a part of the mainstream society with equality. The local communities realized the hazards of over exploitation of natural resources which is limited in supply to cater to the needs of ever growing population. Consequently, the communities have become familiarize with the proper planning procedure and usefulness of the collective efforts to overcome the constraints of the nature in its resources.

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EXCERPTS FROM CHILDREN'S KHAMBA AND THOIBI

Ng. Iboton Singh¹

The great plan

Many, many thousands of years ago Manipur was under vast expanse of water. The water gradually flowed out through the rock crevices, and a large valley came into view. It was a beautiful sight surrounded by undulating hills on all sides. When it became dry enough, grass and other vegetation began to grow. Birds and beasts came to feed and sport in these vast tracts of land. Men came to settle here. May be, the first settlers came from some higher regions or the nearby hills. More people came and were charmed by its fertile soil and beautiful sights. Atiya Guru Sidaba, the Supreme Creator, was pleased, for the land was His chosen place and loved it happily settled upon. Now He sent Thawa, Chenga, Yuha and Yucheng to guard the four corners of this little paradise. Later, He sent four more gods – Koubru, Marjing, Wangbren and Thangjing to assist the first four. The land was blessed and grew prosperous under its guardian spirits.

The gods obeyed the command of the Supreme Creator and went to different directions. Lord Thangjing proceeded towards the south-west and chose as his abode one of the peaks of the hills overlooking the great Loktak Lake and the plains around it. The hills were named after him. He ruled from there. In those days the valley of Manipur was divided into different independent kingdoms. Each kingdom was ruled by one of the seven clans. The most powerful among them were Moirang, the Meitei, Luwang and Khuman. The region on the south western bank of the Loktak was of great scenic beauty and rich in soil. It was inhabited by the people of Moirang clan and came to be known as Moirang. Lord Thangjing made his presence felt to the people living below. The people began to worship and pay yearly tribute to him. It became a grand religious ceremony. After several generations a big temple of the Lord was built in the valley facing the Thangjing Hills. So the temple faces west.

Lord Thangjing was pleased as the people prospered under his guardianship. But as time went on he began to see some funny patterns of behaviour of the people. They did not always do what he would like them to do. They grew more and more selfish and cruel. They seemed to depart from the path of virtue as their mind became corrupt. Lord Thangjing mediated long and finally came up with a plan. He had now

^{*} With the kind consent of the author from his unpublished works.

¹ An eminent man of letters



conceived a plan or way to teach the people the fine qualities of virtue like love and sacrifice. He prayed to Atiya Guru Sidaba. When the Supreme Creator appeared before him, Thangjing laid out his plan.

Guru Sidaba was pleased and said, "Invoke Panthoibi and your wish shall be fulfilled."

Thangjing meditated on Panthoibi and when the goddess appeared before him he said, "O holy Mother! I have a great plan hatching in my mind. Please come down and be born as a human. I will be your companion. Together, we shall teach the people the supreme example of love and sacrifice."

Mother Panthoibi divined everything that was in the mind of Thangjing and knew it was the wish of the Supreme Lord. She smiled and blessed Thangjing, "So be it!"

Thus Panthoibi and Thangjing were born, common people still believe, seven times as humans. Panthoibi became a woman in the person of Konu. Thangjing was born as Shama Lamganba. Then came the pairs, one after another, in the succeeding generations – *Akoijamba* and *Phou-oibi, Henjunaha* and *Leima Laikhulembi, Khuyol Haoba* and *Yaithing Konu, Kadeng Thangjahanba* and *Tonu Laijinglembi, Ura Naha Khongjomba* and *Pidonnu, Wanglen Pungdingheiba* and *Sappa Chanu Silheibi* and *Khamba* and *Thoibi*. The gods and the goddess's, when they were born, would always feel, think and do like any other ordinary people. But their actions, and their ideals showed that which was divine in them. Khamba and Thoibi were born last during the reign of Chingkhu Telheiba. The stories are so popular and the people here have almost lived and grown with them.

The rescue

In the palace and the house of Chingkhu Telheiba and his brother Jubaraj life went on in gay abandon. The birth of Thoibi was a great joy in the royal family. Like an oasis in a barren desert, the young child became the source of perennial bliss to all the members of the royal family. The king adopted her and she became a princess. Her frolicking nature and angelic countenance charmed all around her. Moreover Chingkhuba's Moirang was at its peak of richness and power. Everybody was happy and lived without fear, everybody save the two orphans.

Even though Moirang happened to forget the two children at that time, there were still other people who could never forget the daring exploits of Puremba. In his time his fame had spread far and wide. His daring exploits were a constant talk everywhere. He had many friends who would always stand by him. One such was Kabui Salang Maiba, a chieftain of a Kabui village in the hill. During his youth he had fought and travelled a lot with Puremba. Salang Maiba was a man of resources. He was well versed in the arts of war and medicine. He was old but still feared and respected. He heard the news of the death of Puremba and Ngangkhaleima. Living far away in the hills, he did not come immediately to Moirang. When he later learnt that the children had been neglected even by people like Chaoba and Thonglen, he was furious. He came down and marched towards the kingdom of Chingkhu Telheiba. At first he thought of raising the storm of his fury in the palace, but soon decided against it. He went straight to the house of his friend. When he got there he was deeply moved by what he saw. The house was big, but uncared for a long time. It was in a bad condition. When he saw the children his heart was filled with sadness. He wept and suddenly



turned towards the direction of the temple of Lord Thangjing as if to complain – "O Lord! What have you done to these poor children?" Salang Maiba approached the young girl, told her that he was Salang Maiba, her father's friend. At first Khamnu felt scared, but when she heard the name she came to her senses. While still quite young, she had often heard her father talk about the friendship and bravery of Salang Maiba. She had heard the story so much so that it always held a corner in her tender mind. Khamnu, still a child, looked the old man in the eyes. She felt a small lump rise in her throat. Unable to control the rising emotion any further, she burst out weeping. O God, the child had suffered long!

"Dear child, this is not a safe place for you," said Salang Maiba. "I am taking you to my place. It is a long way from here. We shall start at cock crow."

So the following morning, while it was still dark, they were prepared for the long journey ahead. Salang Maiba had his own plan, too. He made his coming a secret. Now he would not make anyone in Moirang know about his leaving with the two children. Khamnu picked up the child, put him on her back tied with a cloth, and went to her father's old cowshed. All the other cattle had gone when the house was deserted. Only a bull stayed behind. It was a red bull, fierce and wild. Nobody could go near it. The bull had been her father's favourite. It would not go even when she tried to drive it away. Later she began to regard the bull as her own father. She now untied it and said with eyes almost in tear –

"Farewell, father. Go and feed in the great Loktak Lake, a better home for you. But I will keep this rope with me."

They set out at once while no one was astir. Salang Maiba took the child from Khamnu and carried it in his arms. When they came to the foothills of the village it was still early. Up the narrow trial, through tall trees and thick bushes, Khamnu followed the old man. She was tired but found the adventure quite exciting. When they neared the house, Salang Maiba called his wife. As he handed over the children to her, he told her everything that had happened. Salang Maibi (wife of Salang Maiba) helped the children wash and fed them with what she had already prepared. Soon the elders of the village were called. Salang Maiba said:

"Now, listen carefully. The girl and this little baby are children of a friend close to me. So, they are my children. Don't ask where they come from or who their parents are. They will stay with me for some time. See that not the king nor anyone in the valley knows the children are with me. Also see that nothing harms them."

That was an order; Salang Maiba was a powerful man. He had great authority not only at his own village but at other adjoining villages, too. His orders were always obeyed. Salang Maibi treated Khamnu like her own daughter. She would no longer go from door to door to beg. She and her brother were in safe hands.

True to type



The years rolled by quickly, and Khamnu was a full grown girl now. Like a bud slowly opening its petals, she felt the growing inside her. But she was not like any other girls around her. She was well cared for by the old man and woman. She was loved by all. The girls her age easily befriended her, talked with her, played with her. She joined the old man and woman on their farm in the rugged slopes of the hill. She knew what it all meant when other young men cast furtive glances at her. She also knew that she was different from all of them. She did not say anything, but she always tried to remain detached. The rugged terrains, the narrow trails winding through them, the masses of thick, green foliage stretching all around, the salubrious mountain breeze – all these attracted her. She felt homely amidst them. But she still felt that she did not rightly belong here. From the beginning she had suffered pain and hunger. She knew she had been shunned by the people she respected and thought close to her. In spite of all the love and attention she was given here, she still felt lonely. She had learnt patience, and was waiting for her little brother to grow up. The wise old man, Salang Maiba, kept a close watch and knew what the girl had in her mind. He knew one day or other the boy and the girl would go back to their father's homeland.

Khamnu watched her little brother steadily grow up to be a fine boy. He was tall and handsome, very wide in the shoulder and narrow in the hip. His build was athletic and he was exceptionally strong. To old Salang Maiba, the young Khamba was the very image of his father. He soon taught the boy all the arts of self defence and fighting of which he (the Maiba) was a master. The boy was quick to learn. His enormous strength, good reflex and mental alertness always impressed Salang Maiba. Besides these, even as a boy Khamba had always done a man's work. In cutting terraces for cultivation, in cutting wood for fuel, in hunting wild games he had always done as a grown up man should or even more. Watching all these, the old man was happy and wept silently as he thought of his good old friend, Puremba.

There was an incident often narrated about Khamba when he was fully grown up. One late afternoon Khamba and Salang Maiba were returning from their terraced farm. On their way back, as Salang Maiba told the village folks later, they met a tiger standing in their way. Suddenly pushing away Salang Maiba and signaling him to remain quiet, Khamba slowly marched towards the tiger. They faced each other – man and beast. Their eyes met and held. After what seemed a long moment the tiger shied away and retreated. The story soon spread like wild fire and, later, was told again and again in the adjoining villages, and wherever the village folk gathered or by the camfires in the hills. Salang Maiba was extremely pleased and knew the moment for the boy to return had come.

After the incident a change slowly came over Khamba. His mates and even the elderly people in the village began to look upon him with some respect. He had always thought Salang Maiba was his father. But when he saw that even the old man was beginning to regard him with a certain sense of silent respect, he was not happy.

One late evening he asked his sister, "Sister, who are we? Are the old people our real parents?"

Khamnu was nearly shocked to hear it. A shaft of pain shot through her tender limbs.

"What are you talking about?" Khamnu nearly protested. "Who told you such things?"



"None, I just wonder," said Khamba.

That night the brother and sister hardly slept. The wise old man knew that the secret could not be kept long. So, when they were alone, the old man told the boy that Puremba, the great hero, was his father. He told the boy all that had happened, why and how they had come to stay with him. Khamba listened to the stories in silent awe. He wept. His sister and the old Maibi wept. All wept together.

"So, it is now time," said Salang Maiba, "that you return home. You have a great future awaiting you. We start this very afternoon. I still want you to lie low."

Then, after a tearful farewell to the old woman and the other village folks the brother and sister, escorted by Salang Maiba, set out for Moirang.

His first day out

To Khamba everything was new. He had been brought up in the hills. The old man never allowed him to visit the plains below. For the first time he saw the great Loktak Lake, an awful sight to him. The fields and meadows, rich in pasture, were stretching all around. The cluster of houses in the villages, and what looked like a blur of the crowded town area in the dim twilight – it gladdened his heart to see all these things. When they got home, it was almost dark. The old man and his sister wanted it that way. Another sight that impressed Khamba was the house. It was big, though in bad condition. It, he thought, bespoke the man who built it. He was glad to be here, his father's home.

After Salang Maiba went back, the brother and sister were alone once more. What they had brought from Salang Village were soon finished. They had to start again from scratch. The great problem was that Khamnu and Khamba were total strangers in the area now. Before she left her father's house, she was but a small child. Women she used to work for, and who used to suckle his little brother, must have been quite old or long dead. There was no one she knew about the place. They thought the house was haunted and avoided it. When some people asked her how she had come to stay in the house, she simply told them a friend of hers brought them to stay here. Nothing more was said or asked after that. However, she tried to get to know a few neighbours around and followed them fishing in the Loktak lake. The lake is a great place for fishing and also abounds with other vegetables. She also went, in the company of other people, to the nearby hills to collect firewood. She soon came to know that the fish and vegetables she caught and gathered from the lake, and the firewood she collected from the hills could be sold. And she sold them in the market. In this fashion the brother and sister tried to sustain themselves.

Khamnu thought that the time for disclosing their identity had not come yet. What's more, she always took great care of his brother.

One day Khamba said to his sister, "Sister, you have always toiled and borne the burden. You are like a mother to me. Now, I am grown up and strong. I'll go out and look for work to help you."



On hearing these words Khamnu said with eyes near to tears, "Listen, you are still a child to me. People are not always good. We have no one to call our own. Don't go. I can still earn enough for both of us."

She was always worried about Khamba. She guarded him like a precious jewel. She would not allow him to go out and mix with other people for fear some misfortune or other might befall him.

Days and nights, like a caged lion, Khamba remained huddled within the precincts of his father's house. But the lure of the outside world was too strong to resist. So, one day, while his sister was away fishing in the lake, he came out from his house. What a wide world! What a beautiful sight! Hail to the Almighty who created, he said to himself, such a nice place for His creatures to inhabit! He envied the birds flying high above. He strolled through the field and marched towards the edges where houses were perched along. He wanted to do something. How could he help his sister? He finally came upon a big house, much bigger than any other around it. It must belong, he thought, to a rich man. As he opened the gate and entered, he found the house was beautiful. Compared to the other houses he had seen on the way, it was like a small palace. There was a big outhouse in front of the main structure, where a few women were engaged in knitting. The area of the whole precincts was large. Its breadth and length were proportionate. There were gardens and orchards; cowsheds and other storehouses were in proper places. He also noticed a stately-looking man lounging about in the porch with a few attendants.

He noted all these at one sweep of glance. But to his great wonder, nobody turned to look at him. So he approached the stately-looking man seated in the porch and said, "Sir, I am a poor boy. I am looking for work. Please give me something to do."

At once all eyes turned to him. The stately-looking man, the attendants, those women at work – all were surprised at the spectacular sight before them. Tall and handsome, wide in the shoulder and narrow at the heap, to them Khamba looked like some god descending from the heaven. The stately-looking man was no other than Chingkhuba, the crown prince.

"What do you want, young man?" said the prince. "What is your name? Who are your parents? I don't think I have seen you around here."

"Sir, my name is Khamba. I have no one and live at a far away place from here. Please give me some work to do."

Himself straight and to the point, the Jubraj was rather pleased with the straight forwardness of the boy. The Jubaraj was also impressed by the boy's well developed physique. He hit upon an idea. He called one of his attendants and said to him, "Take the boy to my shed. Let my bull be tended."

The Jubaraj's bull was notorious. Like a wild freak of nature, it could not be handled. No one could go near it. It was always kept well- locked. The attendant took Khamba to the cowshed and, pointing to the bull inside, said, "There, the bull. Lead it quietly. Take it to the fields. It is wild, take care."



Khamba walked into the shed. As he was about to unfasten the rope off the post inside, the bull charged upon him. Khamba had already anticipated such a move. He swung sharply and landed his iron fist on the forehead of the bull. The force of the blow was so great that the bull groaned and was instantly tamed. As he came leading out the bull by its tether, all were astonished and speechless. However, the Jubraj told him to be careful. As he turned to say "I will, Sir," he caught sight of the girl standing a bit closer to him. What a beautiful girl! She must have been an angel, he thought. For a fraction of a moment their eyes met and held, then, Khamba turned and marched off leading the bull as if it were a mere calf.

As he opened the gate, he untied the rope and set the bull free. Like the man himself, the bull had been long kept fastened. The moment the rope was taken off from its neck, the bull ran away, its tails pitched high.

In those days, cultivation of crops, fishing in the lake and streams, going to the hills for wood and other wild games were the main works of the people. Besides these, cattle were also counted as a valuable part of one's property. So there were grazing fields. The cattle would be brought and made to graze in the open fields freely. Individual persons would come with their cows, while rich people employed cowherds for their larger stocks. Grown up boys, even the elderly people, would come to the fields. Except a few strays, the cattle always grazed in groups. So, the people coming to tend their cows had found enough time for diversion for other activities, like games and sports. Of which Mukna was the most favourite. "Cow-herding", as it was called in those days, became an important vocation as well as a pastime. The boys were engaged in such games by the time Khamba released the Jubraj's bull.

The bull rushed right through the groups of cattle grazing leisurely. In panic the cattle dispersed and ran to every direction their legs would carry them. The cowherds stopped their game and watched in horror the havoc played upon the herds. Like a demon the bull charged at anything that was before it. Both the cows and the men scattered pell-mell. Finally one of the men shouted, "It is the Jubraj's bull. Run, run."

Khamba, who had just arrived at the spot, knew something was wrong and asked the man why he was shouting like that.

The man turned to him angrily and said. "Don't you see? It is the Jubraj's bull scattering the herd. It is not a bull, it is a demon. Who set it free? We will go and complain to the King."

Others standing around chimed in, "Yes, we'll go to the king."

Khamba looked at them and smiled. "Well, I set it free," said Khamba. "It has been kept roped for a long time. So I brought it here. Why, let it play a little."

His casual manner and remark rather angered the men. One of them retorted, "Why, you... How dare you! Catch the bull, take it away. Or we'll go to the king right away."

Now, it could not be helped. So, taking some lengths of rope from them and telling them not to worry, Khamba turned and strode off. As he came near the bull, it ran away. Khamba followed it, and it started running at still greater speed. Khamba was annoyed, muttered to himself "You, you little rascal!



We'll see" and, making his loin-cloth tightly adjusted, started chasing the bull. It was a beautiful sight – the man and the bull racing across the fields. The cowherds watched the scene spellbound. The bull was swift, but still swifter was Khamba. He closed the distance in no time and caught it by its tail. The bull was still scared, and as it turned to look at its earlier tormentor, Khamba took it by its horns. The bull did not give any resistance now. Khamba tied it with its own tether. He joined it to the lengths of rope taken from the cowherds. He looked around, found a stout stump nearby. He roped the bull to it.

Seeing that it could not do anything against the man, it turned to the rich pasture around and started to graze leisurely.

The cowherds came rushing to where Khamba sat. They were wild with praise for the man they had never seen before. They asked who he was, where he came from, how he had performed that unthought-of feat. Khamba evaded all the questions and only said, "It is just a calf. Let it graze."

At sundown he led the bull home. The news of his extraordinary feat had already reached there. The Jubraj, his wives and daughter, and all the attendants – all gathered around him. They were all agog with curiosity for the adventure. As he had done with the cowherds, he brushed away all the questions saying that it was nothing but all in a day's work. But they knew it was much more than that. They knew there was something extraordinary about the young man. He was given lots of gifts – food and clothing. The gifts were wrapped into to a huge bundle. It was heavy, but he easily put it on his shoulder and, after necessary salutations, went home.

At home Khamnu had already heard the news of a strange young man wrestling with the Jubraj's wild bull. She suspected that it might have been her own brother. When Khamba told her everything that had happened, Khamnu was frightened. Soon, she thought, people would start asking questions about her brother. She was afraid that bad things might happen. The time had not come yet and she was more than ever determined to put him strictly within the confines of her house. Khamba could not do anything but obey her sister. He knew her sister well. He stayed at home. He did not take even a step beyond his house. But he could not prevent his mind wandering to the rich pastureland where he had raced with the bull, particularly to the home where the lovely pair of eyes talked in riddles.

The Race and great rivalry

People were in high spirits at the unexpected turn of the day's event. As the dusk approached they began to leave the temple precincts. Only those who attended to the sacred ritual of the Lord stayed there.

Chaoba Nongthonba turned to his son and said, "Pheiroijamba, something inside me tells me that the boy is not an ordinary person. I have a hunch, but I cannot be sure. Follow him and find out his particulars. And make it a secret."

Under instruction of his father, Pheiroijamba kept a close watch on Khamba and followed him at a distance. What surprised him most was that the princess and her maid Senu also went with the man. As they came to a house, another woman came out and led them in. In the gathering dusk, Pheiroijamba came



close to the wall of the house and overheard the conversation inside. Princes Thoibi, as she expressed her great joy, said that it was time for the brother and sister to become public and to declare that they were the son and daughter of Puremba. The princess also said that she would tell her father the Jubaraj everything. Pheiroijamba hastened away and told his father all he had heard.

Early, the next day, Chaoba and his son Pheiroijamba came to the house of the children.

"Child," Chaoba said to Khamnu, "we overheard everything. We have been ungrateful. The king is awaiting you."

Thus Khamnu and Khamba followed Chaoba to the palace. The King, his brother the Jubaraj, Thonglen and other nobles were there. Chaoba presented the brother and sister to the king.

"Your highness, this is the boy I told you about," Chaoba said, and turning to Thonglen, went on "Dear friend, look at them. Do they remind you of anything?"

Puzzled, Thonglen stared at the boy and the girl. Something like a thin of mist of memories began to form in his mind, but he could not understand what it really was. Chaoba then told the court everything. Thonglen jumped out from his seat, embraced Khamnu and Khamba and wept. He danced, he was wild with excitement to find his son and daughter long neglected and forgotten. There was great rejoicings all around. Khamba looked like his great father come back to life. The king was pleased and immediately put him in his *panna*.

All were happy when the Jubaraj stood up and said to the king, "Sire, till recently Nongban had been the strongest, the bravest of the lot. So you put him in your group. For quite a long time now, Nongban had held sway. Often the men serving in my *panna* have been taunted and beaten. Please give me Khamba to lead my men."

The proposal was good and just. The king agreed to it. There was further rejoicings and merriments.

One of the main items for the ritual service of Lord Thangjing was offering flowers. The two pannas would send their men to gather flowers for this event. For the present occasion the King and his ministers decided, however, to send only Nongban and Khamba. The task was usually dangerous. The men had to descend to deep narrow gorges, walk through dense growths, climb steep slopes. They would usually look for the season's first blooms. For many years in the past Nongban had been the leader of such expeditions. He knew the areas where the flowers grew in plenty. When they came to such a place, Nongban said to Khabma, "Well, how about a bite of lunch? I think we could do with it and a little rest."

Each untied his bundle of lunch. "Why, this poor wretch! What could he have for lunch?", thought Nongban. But when Khamba untied his bundle, and when the bundle gave off a rich aroma, Nongban was startled and asked "Who cooked your lunch?" Khamba replied that his sister had cooked it, though in fact the lunch pack was brought by the princess. Nongban got suspicious. He now wanted to harass Khamba.



"Friend, this area is our family reserve. Flowers from the same area cannot be offered to Lord Thangjing. Look over there – those beautiful mountain peaks. That is where your father used to gather flowers from."

Khamba, as a new hand, did not know anything. But he also disliked the arrogant nature of this man. So, without saying a word, Khamba went away to the direction Nongban had pointed out. He started climbing the steep slopes. The narrow trails up were often hazardous, but he pushed on. When he got near the top, he looked around. He did not see any flower. He went from one area to another but to no purpose. Very much exhausted, he sat at the foot of a tall tree nearby. He was now sad and, in his desperation, prayed to Lord Thangjing. He looked up the tall tree and suddenly he caught sight of a bunch of golden hued flowers on one of the branches of the tree. In great excitement he looked up the other trees around him. To his utter delight he found the branches full of flowers, flowers of different hues. He climbed the trees and plucked as many bunches of flowers as he could.

They were beautiful orchids, flowers of rare species never before seen. The king, the Jubaraj and all the lords and ladies gathered before the temple were delighted. The flowers Khamba brought were offered first to Lord Thangjing. Drums were beat, gongs were sounded, prayers were sung, dances were performed. The princes had a desire to dance with Khamba. So they did a duet, the first ever during the course of the great ceremonial festival. They made a beautiful pair that delighted all.

The dance delighted all but one. Nongban could not sit properly. The seat under him seemed to burn. He was furious. He hated the young man who had beaten him in Mukna, who had brought flowers much more beautiful than his. He wanted to avenge himself. He wanted to punish this young man who was going to snatch the princess from his clutch. How should he punish him? Well, tomorrow is the great race, he suddenly came to realise. That evening, after returning from the temple precincts, he made plans with his men.

Race was one of the chief events of the great festival. The King, the Jubaraj, the nobles and all the people were delighted to find the right match for Nongban. This year the king and his ministers wanted the race to be a long distance one. The race had to be started from Kwakta, a place pretty far from the temple at Moirang. All the people came out and gathered themselves at suitable places along the road. They looked forward to a great contest. Nongban, Khamba, Namoijamba and other contestants were lined up at the starting point. When the signal was given, they shot off. Nongban and Khamba ran ahead of the others. At first the two did not run fast enough. When they had covered the first few distances, a group of men standing on the roadside came upon Khamba and tried to block him in. Quite startled, Khamba tried to push them away. When they would not move away, Khamba got angry and beat them up. When he started again he saw that Nongbam had run far ahead of him. Khamba was not worried. He could easily overtake. He knew the obstacles were set up by Nongbam. But he found still other obstacles at more than two places. And he ran with the greatest speed he had never known before.



In front of the temple a wooden post with a lion head on it was fixed. The finish was to touch the post. The temple arena was filled with people to watch the race, to enjoy the exciting finish. From a distance the two athletes – Khamba and Nongban were seen coming neck and neck. Suddenly the people began to fall into two groups. Men and women of the two pannas took sides and shouted for their respective runners. The air was filled with suspense. Thonglen shouted at the top of his voice, "Dear Khamba, your father the great runner touched the lion head. Buck up, son!"

The distance to the finish was not great now. Khamba heard Thonglen's voice above the din of other noises. Then he did the strangest thing that had ever been seen. Like an arrow he shot up, leaving Nongban several paces behind. As he drew near the post, he jumped up. He jumped an arm's length higher than his father had done and brought down the lion's head.

The race was won. Khamba had outdone Nongban in every respect – in strength and skill. He was unbeatable now, the hero.

SOCIAL CHALLENGES AND PERFORMING ARTS (MANIPUR)

Dr Gurumayum Bijoykumar Sharma¹

It is a good idea to think that one must live as a worthy person honourably. But when one starts to perform his acts, then there one must get the challenges. Whatever the performing arts are, challenges are always there in the line of performing arts. Social challenges and performing arts are always co-related. Sometimes performing arts become dazzling. Common people like it. But it is impossible for them to be a perfect performance. To be a perfect performer, one needs to have inborn-quality. Sometimes artists stay aloof from the society and they feel pleasing in mixing with mere small groups of same interest. If people don't understand their behaviour, they are considered proud or mad and they are taunted.

In our state, most of the people take less care in performing arts. They don't comprehend it thoroughly. Even it is mistaken by them. However performing art is a thing that we can feel proud of most people neglects it. Yet, there are artists, and Scholars who absorb soulfully their minds in arts. But, more researchers and more analytical outlooks are in dire need.

Now-a-days, NEP (National Education Policy-2020) gives a great place to Vocational Education. Even though it has future prospect, it is still becoming a considerable one as it is not implemented practically. What it means is that those who are extra-ordinary in dance, music, theatre are not given a great place in society as is given a great place in society as is given to doctor, engineer, Technical or General Education, there is a loud cry, for them there is plenty of Scholarships and fellowships. But for performing arts, the incentive is a mere thing. Its certificate is considered a piece of extra-curricular activities. For the class of General Education there is no question of place. However for the learning place of dance and music, there is a big question. Talented child artists get confused in this matter. They have to go to the respected particular teacher's house to study or learn about music or dance or theatre like informal education. In doing so, they are found in society as weak student in academic line.

In this state, it can be said that there is no proper University (now in unsatisfied condition) for performing arts which has proper infrastructures. There is no particulars designated place which opens many departments of performing arts to nourish the future generation. Here and there, some persons who take interest in arts start opening some schools or organizations privately in their home, to rear up the

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arts. However this is also in the starting point or stage. Most people lack to know the unique aspects and characteristics of dance, music and theatre. If the fees are somewhat high, then there is problem of scarcity of student. So arts remain name sake for those who take interest in arts.

It will be good to organise Seminar, Conference, Symposium and Workshop very often for the artists. It is merely happened. It will be better to have practices, to experiment, to analyse the piece of art before production. It requires a great help from the side of Govt. it needs a great support from the NGOs and National Academy. In different fields, respective awards should be given. The steps taken up by the Ministry of Culture, Sangeet Natak Akademi are good examples. However, this is a need to increase the incentive awards, because artists have to live. So advantages should be given to re-start their lives.

Manipur is a land of Music, Dance, Theatre and rich culture. But the small children are produced in dance show, imitating the Hollywood and Bollywood styles and dolling up extremely only to produce excitement. They enact the acts of mature lad and lass. Spectators do clapping and offer money. Parents and elders take interest in this festive mood. It brings a question that what shall be the future condition of the children who are addicted to the acting of love song and money offered by the spectators. Dance and Music are dazzling things. Those artists who are very popular in their growing stage, due to over-dose-feeling of self-possessiveness, get lost their artists lives by getting into couple life very early in age. So, since childhood, they have to be streamlined, they have to be awakened; however it is a big challenge.

Each and every person can study the book, but every person can't sing, dance and paint aesthetically. Most people don't understand it that it requires the inborn quality, without it, dancing, singing, painting are impossible most parents think that painting, singing, dancing disturb the study. To support and to encourage the talent of child artist is a very rare in Manipur. However, if there is room of getting money then dancing, singing, painting are permitted to continue.

Dance, Music, Theatre- are all team work. From the root, from the starting point, like-minded people need to gather together. It is already mentioned above that there is no prospect of success if there is no inborn quality. When the production is produced by a like-minded people, a rarely found group in a harmonious way, then the production will be watchable and pleasing. For example, if a song is very popular, then the beauty of the lyric, the creation of the tune and the music orchestra, all are insuperable. More above, production unit to present the song to the public is required. So in producing such thing, each person involved in the production always requires to gather together. However it will be a challenge. They will find many a social challenge. Time is very important one, whether late or not, when trying to get the desired target, artists are looked upon so dirty characters. The work needs commitment, yet the artist can't cope with the household chore, then it brings mistrust among the artists. It breaks the strength of the unity. This is also a gift of social system.

In rendering service to the people, the grave challenges faced by the devoted artists are unemployment, discrimination, transgender behaviours problem etc. above this lot of challenges; the jealousness and the back-biting among themselves are also major issues. Even they insult one another. Rumour and suppression are also occurred. There is no respect for the other gurus. Even the gurus behave



partially towards the students. Those students, who are going to be leading figures, are transformed into timid and fading characters. Enmity arises out of groupism. Affluent family's son beave fruits and sons coming from the simple and powerless family can't raise their heads and can't come out with flying colours. These burning problems are still happening. Those who are out of corruption don't get anything but only depression. Electronic media is so much developed and advanced. In this time, the artists, just simply studying, will be depressing in future. So, they need to have the conscience to aware the situation. They may be expert in particular field, but as they remain unhonourably. This is happening how in this society. So, the concerned authority needs to give required guidelines. It is a must.

Because of the influence of the affluent party, sometimes, one can't get his/her rightful role. One does full rehearsal for a song. However, the producer gives the song to another singer. This is happening in Manipur. This kills the emerging artists. This is a burning problem. Some lucky artists may florist but some artists forfeit some others shining opportunity. Popular lucky artist always gets the silver spoon from others hand mouth.

Artist gets chance to go outside Manipur and outside India. Such outing may last one mouth or one year. If the artist happens to be a bread-earner of the family, then it invites jeering from the society. Devoting to the art, when he/she acts artistically, people consider them priceless. They are taken as those who live by selling their flesh.

Covid-19 has increased the states of the artists. They have got the chance of becoming popularity in the social media. But their living standard is decreasing day by day. Because, social media in taken easily, not prestigiously and wages for online class or performance and increased. The fate of artists who can't buy mobile phone, who can't recharge their phone, is not shining. Their fate is doomed. There is labour, then there is food. However for hem, their endeavour brings no gain. For a creative work, peaceful mind is a must. But for living, they have to hold the spade.

It is a great challenge to those who devote their lives to arts.

- 1. Government's eye or support is a must in this condition to cure the disadvantages faced by artists.
- 2. Unity and harmony among the artist fraternity is required. They must go in hand together. They must honour one another.
- 3. Wealthy persons must sacrifice their wealth for the art instead of seeing it stimulating their sensual pleasure. In such case, the arts and artist must prosper.
- 4. There must be good relationship between Govt. and artists to materialise their vision and mission of arts into reality.
- 5. Family's full support should be given. Beside honouring, society must render a great help to the artists.
- 6. Intellectuals and NGOs must give knowledge to the artist and lead to right path. Knowledge sharing is to be practiced.
- 7. Those artists, who get honoured in the state level, must be given the incentive awards, scholarship or fellowship and honorarium to make their living. MLAs or Minsters get pension



throughout their lives though they don't get elected again. Likewise, pension must be given to the eminent artists.

- 8. In the competition, they must have impartiality in giving judgement. Selfishness is to be sacrificed.
- 9. According to the pace of time, award is to bounded and is to be given honouring the respective fields of the arts.
- 10. We must respect and honour the artist earnestly who are hallowed by their inborn quality and blessed by GOD. This is a truth. When we know their truth, then the artist can live shining in this society.

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EASTERN INDIAN POETRY – CROSSING THE BOARDERS

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Where the World has not been broken up into fragments by narrow domestic walls...

Tagore

Eastern India is the birthplace of the first Asian poet who won Nobel Prize for Literature, the poet who sings for *the world not broken up into fragments by narrow domestic walls*. Obviously, this region remains the most multicultural part of the nation. It is vast; *it contains multitudes*. Physically, it stretches from the Bay of Bengal to the Himalayan ranges, from the Loktak lake to the forests of Assam, from the Ganges and the Brahmaputra to the deltas and Sunderban. This again, is the meeting point of the North East States and the mainland India perfecting the nation's glorious totality, wherein 68% of its strategic borders are shared into the neighbouring countries of Bangladesh, Bhutan, China and Myanmar. And *since antiquity, the region has been a place of romance, exotic beings, haunting memories and landscapes, remarkable experiences*.

In fact, the region's sharp topographical features give birth to the confluence of so many cultures and so many ethnic groups that there are many parts where even the national language is not properly known to. This is what we call the forest of Indian diversities celebrating multiculturality in the way poetry celebrates expressions. Coming to the point, Eastern Indian poetry addresses the inclusiveness of all her differences and varieties which are god's plenty. From time immemorial, one common thread binds the poetry together, in that the poetry of the father-figures of every language have a distinctly religious origin, characterised by prayers to the great beyond and nature, romantic love, cultural nationalism and mysticism in purely lyrical forms. Their pens glorify the long traditions along with the adoration of the young wooded forests, blue hills, red rivers, fresh-water lakes, rain-clouds, swamps and bushes. To them, every word has a cultural memory. That is how Toru Dutta wrote. That is what Tagore perceived as most worthy of preservation. That is what Nilmani Phookan followed, and what Dr Kamal yielded to. Crossing the borders was not their main concern. They knew no barriers. Discrimination of any sort was not in their blood.

This to say that there was a time when the father-figures of our ethnic groups sang of oneness, no matter what languages they belonged to. We still read what Tagore writes elaborately about creative unity.

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Worshipping words as divine our poets envisioned every culture as constituting a common heritage of sensibilities, thinking processes, belief systems, etc. This is how Nilmani Phookan idealises an innocent world of peace and prosperity:

From here/The waters stretch/Far beyond the horizon.../A dove comes flying/A blade of grass in its bill.../Now no one is dying anywhere/No child/Nor old man/From here/One sees the sun going down/And /The moon rising.../An earth warm with love (Poems)

But the spirit of serious questioning into the unity in diversities has been made felt and heard as a tendency of our modern poets. It is made clearer in the lines of Nilakanta:

We are the natives of Manipur, Hindus /The descendants of Aryan Ascetics sages/And Indian/We have been shouting in pitched voice and with pride/For the cultural heritage We have received./And witnessing within the trends of history/India as mother/India as father/As ours/But when touched by the twilight of science/When traced the footprints and ancestors/There emerges a new vista.../A unique ethnic group.../It's Meiteis./In unguarded moments it's made to feel/Humiliated to be the Hindus/It's made to perceive mother India/Not as the mother. /But this is not the end of the quest /The wings of ideas are fluttering /As the flight of bees./From one flower to the other.../There stands out an image/As Uma Maheswar/Half the profile in image of a Kira/And the other half in the Hindu/Image of Andhanariswar/The Indian culture/Composite with Arya Anarya, Dravir Nishad Kirat.../It's the composite culture of India/Endorsed with heavenhigh ideas of mankind.

And in the same poem, the father of Modern Manipuri Poetry goes on crossing the borders:

My loving mother, Manipur/I mistook thee for a beggar/But thou art not a dependant.../In the process of history/We took a lot from others/But thy gifts are also god's bounty/All indulged into the common wealth/We meet the petals of Meitei/When opened the flower of Hindu/Yet when the petals of Meitei is separated/We find the flowering of Hindus/When seen the forehead/Thou takes the facial look of Meitei/When glanced at the backside/Thou looks like the image of Hindu/Mother! In the tedious eyes of thy son/ Ayangleima, the dancer/Appears dancing the tandapa of Shiva;/In the swansong of Pena/Along the rhythm of Gopis /In the tune of late-night flutes./O Manipur, O India/Both are one to one/There is no difference between differences/There is unity in diversity/It's a single flower – the lotus/To me. (Manipuri)

But, after the flute comes the trumpet, as it were. Behind the slow changes of history, gathering storms tend to cross the borders in voicing their pains and anguish out of their marginal experiences, immediate as well as remote. It naturally undergoes a pilgrimage from the world divine to the life human in articulating the down-to-earth issues. The silence of centuries becomes eloquent. Nothing is impossible in the world of imagination. In that they all seem to celebrate fragmentations, glorifying the world where



things fall apart the centre cannot hold. Feeling a deep sense of self-pity, they perceive of what they are because of where they are. They treat their soil as undernourished and marginalised, physically as well as psychologically. Their poetry thus becomes overtly political. This is mainly because of economic reasons. They feel as it they were looked upon with prejudiced eyes and seeing as the dwellers of forests, hills, lakes and rivers, swamps and bushes. They are represented as guns, coffin-bearers and grave diggers, represented as the picture of stupidity, poverty and backwardness, insurgency, violence, anxiety and unrest. On the whole, they see themselves as uprooted, living in fractured lands, disturbed areas, in conflict zones, the new heart of darkness. It doesn't mean to say that they remain confined to their own jargons. Rather, man's eternal yearning for his cultural roots remains what their poetry is all about. Mamang Dai is one such sensitive soul addressing her colonised subjects to Remember because/ Nothing is ended/ but it is changed. (The Missing Link), Robin S Ngangom unfolding a social up rootedness: I need a homeland/ where I can recognise myself/just a map or even a tree or a stone/ to mark a spot I could return to/ like an animal/ even when there's nothing to return for (Poem for Joseph); Desmond L. Kharmaw-phlang having the same deep sigh: I never get tired of talking about my home town/... Long ago, the men went beyond the Surma/ to trade, to bring home women/ to nurture their seed/ Later came the British/... Quite suddenly, the British left... But in the waving walk of time/ there came those from the sweltering plains/ from everywhere/ You stricken Land, how they love/ Your teeming soil, your bruised children/ one of them told me, "you know/ yours is a truly metropolitan city" (The Conquest). Here, again, the barriers against our central humanism are breaking down in the poetic language of protest, anger, whisper or thunder. One may see such an irony of our commonplace life in the pen of an Oriyan poetess, Sucheta Mishra:

> There was a time/ when she was barred from entering the market/ Now she could bring/ the entire market into her drawing room.

(Women Empowerment).

This nowness, this everydayness of our common marketplace along with global consumerism calls for an essentialised cultural identity as reflected in our poetry. This is naturally how our poetry, consciously or unconsciously, travels from time to time, from place to place, from language to language and from culture to culture. Apart from the multi indigenous societies, Eastern Indian poets have something in common within an emotional experience. We have common feelings and understanding, common habitation and vegetation, common background of ethnicity, root and climatic condition, common simplicity and straight forwardness, common more or less talkativeness with less flattery all along with common old patterns of village life, folk cultures, myths, legends, etc. As parts form the whole, each distinct culture is drawn to get to know each other and one another, thereby crossing the borders underneath.

To sum up, our literary culture is basically multicultural. The heaven of our poetry is illuminating as each star is contributing to its wholeness, to its totality. Writing poetry is a conscious activity. It stems from collective consciousness, and done around our pure passionate experience and sincere intelligence. As human heart contains everything, every mood and tension, our poetry no doubt is where pain becomes



art and where dreams meet memories. Poetry is the last frontier of humanising process. It is not mere saying. It is making also. It is nation-building along the path of a well-cultured existence. And contextually, towards an unprejudiced Indianness. This is our historic necessity: to build up the monumental Indian humanism with the transforming might of poetry. I conclude with some poetic lines by a Manipuri poet, who responds to the question: **Are there borders between human hearts?**

The flowers were there saying No, The water and the waves and wind And clouds are saying Not here The rains and rivers and the rainbows Are singing Not even here The blind and beggars and the bonded Are shaking heads Never Never And the wounded and dying birds Are singing in parting tunes; Make our blood your ink And our death your poem; Across all time and all space Never say goodbye to poetry.

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SOME COUPLED FIXED POINT THEOREMS IN FUZZY CONE METRIC SPACES

N. Priyobarta Singh¹

Abstract

In this manuscript, we prove the existence and uniqueness of a coupled common fixed point theorems of self-maps in fuzzy cone metric space. **Keyword:** Cone metric space, fuzzy metric space, t-norm, fuzzy cone metric space, coupled common fixed point. **MSC**[2010]: 47H10, 54H25.

1 Introduction

In 1965, Zadeh [1] introduced the concept of fuzzy sets. Since then many authors have expansively developed the theory of fuzzy sets and its applications. The concept of fuzzy metric space was introduced by Kramosil and Michalek [2] and generalized the statistical (probabilistic) metric space. Afterward, Grabiec [3] defined the completeness of the fuzzy metric space and extended the Banach contraction principle to fuzzy metric spaces. The notion of compatible mappings to fuzzy metric spaces was extended by Mishra et al. [4] and proved some common fixed point theorems. B.D. Pant et. al. [5] proved coupled common fixed point theorems for two pairs of mappings satisfying ϕ -contractive condition in fuzzy metric spaces, by employing the notions of compatibility and sequential continuity (alternately subcompatible and reciprocally continuous). In recent years, several authors worked various fixed point theorems employing more general contractive condition.

In 2007, Huang and Zhang [6] introduced the concept of cone metric space and proved some fixed point theorems for contractive mappings. T.C Singh and Y.R. Singh [7, 8] proved the existence and uniqueness of a common coupled fixed point theorem in complete cone metric space for a pair of mappings satisfying a generalised contractive condition and proved triple fixed point theorems for mappings satisfying weak contractions under F-invariant set. One can see the research papers in [17, 18] and references there in.

Recently, Tarkan Oner et al. [9] itroduced the concept of fuzzy cone metric space that generalized the corresponding notions of fuzzy metric space by George and Veeramani [10]

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and proved the fuzzy cone Banach contraction theorem.

The aim of our work is to prove the existence and uniqueness of a coupled common fixed point theorems of self-maps in fuzzy cone metric space.

2 Preliminaries

In this section, we start with some basic concepts on fuzzy cone metric spaces.

Definition 2.1. [1] Let X be any set. A fuzzy set A in X is a function with domain X and values in [0, 1].

Definition 2.2. [6] Let E be a real Banach space, θ the zero of E and P a subset of E. Then P is called a cone if and only if

1) P is closed, nonempty and $P \neq \{\theta\}$,

2) If $a, b \in R$, $a, b \ge 0$ and $x, y \in P$, then $ax + by \in P$,

3) If both $x \in P$ and $-x \in P$, then $x = \theta$.

For a given cone P, a partial ordering \leq on E with respect to P is defined by $x \leq y$ if and only if $y - x \in P$. The notation $x \prec y$ will stand for $x \leq y$ and $x \neq y$, while $x \ll y$ will stand for $y - x \in int(P)$. Throughout this paper, we assume that all cones has nonempty interior.

The cone P is called normal if there exists a constant K > 0 such that for all $t, s \in E$, $\theta \leq t \leq s$ implies $||t|| \leq K ||s||$ and the least positive number K satisfying this properties is called normal constant of P [6]. Rezapour and Hamlbarani [11] showed that there are no cones with normal constant K < 1 and there exist cones of normal constant 1, and cones of normal constant M > K for each K > 1.

Definition 2.3. [6] A cone metric space is an ordered (X, d), where X is any set and $d: X \times X \to E$ is a mapping satisfying:

CM1) $\theta \leq d(x, y)$ for all $x, y \in X$, CM2) $d(x, y) = \theta$ if and only if x = y,

CM3) d(x,y) = d(y,x) for all $x, y \in X$,

CM4) $d(x,z) \preceq d(x,y) + d(y,z)$ for all $x, y, z \in X$.

Definition 2.4. [6] Let (X, d) be a cone metric space, $x \in X$ and $\{x_n\}$ be a sequence in X. Then

i) $\{x_n\}$ is said to converge to x if for any $c \in E$ with $c \gg 0$ there exists a natural number n_0 such that $d(x_n, x) \ll c$ for all $n \ge n_0$. We denote this by $\lim_{n\to\infty} x_n = x$ or $x_n \to x$ as $n \to \infty$.

ii) $\{x_n\}$ is said to be a Cauchy sequence if for any $c \in E$ with $c \gg \theta$ there exists a natural number n_0 such that $d(x_n, x_m) \ll c$ for all $n, m \ge n_0$.

iii) (X, d) is said to be a complete cone metric space if every Cauchy sequence is convergent.

Definition 2.5. [12] A binary operation $* : [0,1] \times [0,1] \rightarrow [0,1]$ is a continuous t-norm if * satisfies the following conditions;



is associative and commutative, is continuous, a ∗ 1 = *a* for all *a* ∈ [0, 1],
 a ∗ *b* ≤ *c* ∗ *d* whenever *a* ≤ *c* and *b* ≤ *d*, *a*, *b*, *c*, *d* ∈ [0, 1].

Example 1. a * b = ab.

Example 2. $a * b = \min\{a, b\}$.

Definition 2.6. [10] A 3-tuple (X, M, *) is said to be a fuzzy metric space if X is an arbitrary set, * is a continuous t-norm and M is a fuzzy set on $X^2 \times (0, \infty)$ satisfying the following conditions;

 $\begin{array}{l} FM1) \ M(x,y,t) > 0, \\ FM2) \ M(x,y,t) = 1 \ if \ and \ only \ if \ x = y, \\ FM3) \ M(x,y,t) = M(y,x,t), \\ FM4) \ M(x,y,t) * M(y,z,s) \leq M(x,z,t+s), \\ FM5) \ M(x,y,.) : (0,\infty) \to [0,1] \ is \ continuous, \ x,y,z \in X \ and \ t,s > 0. \end{array}$

Definition 2.7. [10] Let (X, M, *) be a fuzzy metric space, $x \in X$ and $\{x_n\}$ be a sequence in X. Then

i) $\{x_n\}$ is said to converge to x if for any t > 0 and any $r \in (0,1)$ there exists a natural number n_0 such that $M(x_n, x, t) > 1 - r$ for all $n \ge n_0$. We denote this by $\lim_{n\to\infty} x_n = x$ or $x_n \to x$ as $n \to \infty$.

ii) $\{x_n\}$ is said to be a Cauchy sequence if for any $r \in (0, 1)$ and any t > 0 there exists a natural number n_0 such that $M(x_n, x_m, t) > 1 - r$ for all $n, m \ge n_0$.

iii) (X, M, *) is said to be a complete metric space if every Cauchy sequence is convergent.

Definition 2.8. [9] A 3-tuple (X, M, *) is said to be a fuzzy cone metric space if P is a cone of E, X is an arbitrary set, * is a continuous t-norm and M is a fuzzy set on $X^2 \times int(P)$ satisfying the following conditions;

For all $x, y, z \in X$ and $t, s \in int(P)$ (that is $t \gg \theta, s \gg \theta$) FCM1) M(x, y, t) > 0, FCM2) M(x, y, t) = 1 if and only if x = y, FCM3) M(x, y, t) = M(y, x, t), FCM4) $M(x, y, t) * M(y, z, s) \leq M(x, z, t + s)$, FCM5) $M(x, y, .) : int(P) \rightarrow [0, 1]$ is continuous.

If $E = \mathbb{R}$, $P = [0, \infty)$ and a * b = ab, then every fuzzy metric spaces became a fuzzy cone metric spaces.

Example 3. [9] Let $E = \mathbb{R}^2$. Then $P = \{(k_1, k_2) : k_1, k_2 \ge 0\} \subset E$ is a normal cone with normal constant K = 1. Let $X = \mathbb{R}$, a * b = ab and $M : X^2 \times int(P) \to [0, 1]$ defined by $M(x, y, t) = \frac{1}{|x-y|}$ for all $x, y \in X$ and $t \gg \theta$.

Definition 2.9. [9] Let (X, M, *) be a fuzzy cone metric space, $x \in X$ and $\{x_n\}$ be a sequence in X. Then

i) $\{x_n\}$ is said to converge to x if for any $t \gg \theta$ and any $r \in (0,1)$ there exists a natural



number n_0 such that $M(x_n, x, t) > 1 - r$ for all $n \ge n_0$. We denote this by $\lim_{n\to\infty} x_n = x$ or $x_n \to x$ as $n \to \infty$.

ii) $\{x_n\}$ is said to be a Cauchy sequence if for any $0 < \varepsilon < 1$ and any $t \gg 0$ there exists a natural number n_0 such that $M(x_n, x_m, t) > 1 - \varepsilon$ for all $n, m \ge n_0$.

iii) (X, M, *) is called complete if every Cauchy sequence is convergent.

Definition 2.10. [9] Let (X, M, *) be a fuzzy cone metric space. A subset A of X is said to be FC-bounded if there exists $t \gg 0$ and $r \in (0,1)$ such that M(x,y,t) > 1 - r for all $x, y \in A$.

Definition 2.11. [13, 14, 15] Let X be a nonempty set. An element $(x, y) \in X \times X$ is called i) a coupled fixed point of the mapping $f : X \times X \to X$ if x = f(x, y) and y = f(y, x). ii) a coupled coincidence point of mappings $f : X \times X \to X$ and $T : X \to X$ if T(x) = f(x, y)and T(y) = f(y, x).

iii) a common coupled fixed point of mappings $f : X \times X \to X$ and $T : X \to X$ if x = T(x) = f(x, y) and y = T(y) = f(y, x).

Definition 2.12. [15] Let X be a nonempty set. An element $x \in X$ is called a common fixed point of mappings $f: X \times X \to X$ and $T: X \to X$ if x = T(x) = f(x, x).

Definition 2.13. [15] Let X be a nonempty set. The mappings $f : X \times X \to X$ and $T : X \to X$ are called commutative if T(f(x, y)) = f(T(x), T(y)) for all $y, x \in X$.

3 Main Results

In order to prove our results, we shall first use a function ϕ . It is defined as $\phi : [0,1] \to [0,1]$ satisfies the following properties

- 1. ϕ is strictly decreasing and left continuous;
- 2. $\phi(\lambda) = 0$ if and only if $\lambda = 1$.

Obviously, $\lim_{\lambda \to 1^-} \phi(\lambda) = \phi(1) = 0$.

Theorem 3.1. Let (X, M, *) be an complete fuzzy cone metric space. Let $f : X \times X \to X$ and $T : X \to X$ be two functions such that

$$\phi\left(M(f(x,y),f(u,v),t)\right) \le k(t).\phi\left(M(T(x),T(u),t)\right) * M(T(y),T(v),t)\right)$$
(1)

for all $t \gg \theta$ and for all $(x, y), (u, v) \in X \times X$ and $(x, y) \neq (u, v)$ where $k : int(P) \rightarrow [0, 1)$ and $\phi : [0, 1] \rightarrow [0, 1]$ satisfy the foregoing properties: (1) and (2), $f(X \times X) \subset T(X)$ and T is continuous and commutative with f. Then there exists a unique common fixed point $x \in X$ of the mappings f and T such that x = T(x) = f(x, x).

Proof. Let $x_0, y_0 \in X$ be two arbitrary points. Since $f(X \times X) \subset T(X)$, we can choose $x_1, y_1 \in X$ such that $T(x_1) = f(x_0, y_0)$ and $T(y_1) = f(x_0, y_0)$. Again, from $f(X \times X) \subset T(X)$

T(X), we can choose $x_2, y_2 \in X$ such that $T(x_2) = f(x_1, y_1)$ and $T(y_2) = f(y_1, x_1)$. Continuing this process, we can construct two sequences $\{x_n\}$ and $\{y_n\}$ in X such that, for all $n \in N$

$$T(x_{n+1}) = f(x_n, y_n)$$
 and $T(y_{n+1}) = f(y_n, x_n).$ (2)

Now, let

$$\begin{aligned} \tau_n(t) &= M(T(x_n), T(x_{n+1}), t)), \\ \theta_n(t) &= M(T(y_n), T(y_{n+1}), t)), \end{aligned}$$

and

 $\delta_n(t) = \tau_n(t) * \theta_n(t)$

for all $n \in N \cup \{0\}$ and $t \gg \theta$. Then we have two cases:

Case 1: If there exists $n_0 \in N \cup \{0\}$ such that $\tau_{n_0}(t) = \theta_{n_0}(t) = 1$, that is, $T(x_{n_0}) = T(x_{n_0+1})$ and $T(y_{n_0}) = T(y_{n_0+1})$. Then $T(x_{n_0}) = f(x_{n_0}, y_{n_0})$ and $T(y_{n_0}) = f(y_{n_0}, x_{n_0})$, then it follows that (x_{n_0}, y_{n_0}) is a coupled coincidence point of f and T.

Case 2: For any $n \in N \cup \{0\}$, $0 < \tau_n(t) < 1$ or $0 < \theta_n(t) < 1$, that is, $T(x_n) \neq T(x_{n+1})$ or $T(y_n) \neq T(y_{n+1})$. Then we might take the following three cases:

(i) If
$$T(x_n) \neq T(x_{n+1})$$
 and $T(y_n) = T(y_{n+1})$, then $\theta_n(t) = 1$. Using (1), we obtain

$$\begin{aligned} \phi(\tau_n(t)) &= \phi(M(T(x_n), T(x_{n+1}), t)) \\ &= \phi(M(f(x_{n-1}, y_{n-1}), f(x_n, y_n), t))) \\ &\leq k(t).\phi(M(T(x_{n-1}), T(x_n), t) * M(T(y_{n-1}), T(y_n), t))) \\ &\leq k(t).\phi(\delta_{n-1}(t)) \\ &< \phi(\delta_{n-1}(t)). \end{aligned}$$

Since ϕ is strictly decreasing, we have, $\tau_n(t) > \delta_{n-1}(t)$ for all $t \gg \theta$. Since $\theta_n(t) = 1$, $\delta_n(t) > \delta_{n-1}(t)$ for all $t \gg \theta$.

(ii) If $T(x_n) = T(x_{n+1})$ and $T(y_n) \neq T(y_{n+1})$, then we have also $\delta_n(t) > \delta_{n-1}(t)$ for all $t \gg \theta$, as in (i) above.

(iii) If $T(x_n) = T(x_{n+1})$ and $T(y_n) \neq T(y_{n+1})$, that is $0 < \tau_n(t) < 1$ and $0 < \theta_n(t) < 1$. Using similar ways as in (i) and (ii) above, we obtain that: $\tau_n(t) > \delta_{n-1}(t)$ and $\theta_n(t) > \delta_{n-1}(t)$ for all $t \gg \theta$. Thus, $\tau_n(t) * \theta_n(t) > \delta_{n-1}(t)$ for all $t \gg \theta$. Hence, $\delta_n(t) > \delta_{n-1}(t)$ for all $t \gg \theta$.

Now in the three cases (i), (ii) and (iii) above and since $\delta_n(t)$ is bounded and increasing, it converges to some $\delta(t)$, and we write

$$\lim_{n \to \infty} \delta_n(t) = \delta(t). \tag{3}$$

Suppose that $\delta(t) \in (0, 1)$. Since $\theta_n(t) \in (0, 1]$ and $\tau_n(t) \in (0, 1]$ are bounded and increasing, there exist subsequences $\{\theta_{n_k}(t)\}$ and $\{\tau_{n_k}(t)\}$ of $\{\theta_n(t)\}$ and $\{\tau_n(t)\}$ respectively, such that $\theta_{n_k}(t) \to \theta(t)$ and $\tau_{n_k}(t) \to \tau(t)$ as $k \to \infty$.

By the continuity of the operation *, we obtain: $\tau_{n_k}(t) * \theta_{n_k}(t) \to \tau(t) * \theta(t)$ as $k \to \infty$, and since $\delta_{n_k}(t) \to \delta(t)$, by the uniqueness of the limit, we obtain that $\tau(t) * \theta(t) = \delta(t)$.

Note that $\phi(\tau_{n_{k+1}}(t)) \leq k(t).\phi(\delta_{n_k}(t))$ and by taking the limit as $k \to \infty$, we get $\phi(\tau(t)) \leq k(t)\phi(\delta(t)) < \phi(\delta(t))$. Hence $\tau(t) > \delta(t)$ and with the same way we also obtain that $\theta(t) > \delta(t)$. Thus $\tau(t) * \theta(t) > \delta(t)$. Hence $\delta(t) > \delta(t)$, which is a contradiction. Therefore, in all cases above we have

 $\delta(t) \equiv 1 \text{ and } \lim_{n \to \infty} \delta_n(t) = 1.$ (4)

Thus by the uniqueness of the limit, $\tau_n(t) = \theta_n(t) = 1$.

Next, we show that the sequences $\{T(x_n)\}$ and $\{T(y_n)\}$ are M-Cauchy sequences. Suppose, on the contrary, that at least one of $\{T(x_n)\}$ or $\{T(y_n)\}$ is not an M-Cauchy sequence, then there exists $\epsilon \in (0, 1)$ and subsequences $\{T(x_{p(n)})\}$, $\{T(x_{q(n)})\}$ of $\{T(x_n)\}$ and $\{T(y_{p(n)})\}$, $\{T(y_{q(n)})\}$ of $\{T(y_n)\}$ with $p(n) > q(n) \ge n$ and

$$M(T(x_{p(n)}), T(x_{q(n)}), t) * M(T(y_{p(n)}), T(y_{q(n)}), t) \le 1 - \epsilon, \ \forall \ t \gg \theta.$$
(5)

Furthermore, corresponding to q(n), we can choose p(n) in such away that it is the smallest integer with $p(n) > q(n) \ge n$ and

$$M(T(x_{p(n)-1}), T(x_{q(n)-1}), t) * M(T(y_{p(n)-1}), T(y_{q(n)-1}), t) > 1 - \epsilon, \ \forall \ t \gg \theta.$$
(6)

and

$$M(T(x_{p(n)}), T(x_{q(n)-1}), t) * M(T(y_{p(n)}), T(y_{q(n)-1}), t) > 1 - \epsilon, \ \forall \ t \gg \theta.$$
(7)

For each $n \in N \cup \{0\}$, let

$$\delta_n(t) = M(T(x_{p(n)}), T(x_{q(n)}), t) * M(T(y_{p(n)}), T(y_{q(n)}), t).$$
(8)

From (3) and (FCM - 4), we obtain that

$$1 - \epsilon \geq \delta_n(t)$$

$$\geq M(T(x_{p(n)}), T(x_{q(n)-1}), \frac{t}{2}) * M(T(x_{q(n)-1}), T(x_{q(n)}), \frac{t}{2}) *$$

$$M(T(y_{p(n)}), T(y_{q(n)-1}), \frac{t}{2}) * M(T(y_{q(n)-1}), T(y_{q(n)}), \frac{t}{2})$$

$$\geq \delta_{q(n)-1}(\frac{t}{2}) * (1 - \epsilon).$$

Since $\lim_{n\to\infty} \delta_{q(n)-1}(\frac{t}{2}) = 1$, for every $t \gg \theta$, then by taking the limit as $n \to \infty$ it follows that

$$\lim_{n \to \infty} \delta_n(t) = 1 - \epsilon, \text{ for every } t \gg \theta.$$
(9)

Moreover, by (1)

$$\phi(M(T(x_{p(n)}), T(x_{q(n)}), t)) = \phi(M(f(T(x_{p(n)-1}), T(y_{p(n)-1})), f(T(x_{q(n)-1}), T(y_{q(n)-1}), t))) \\
\leq k(t).\phi(M(T(x_{p(n)-1}), T(x_{q(n)-1}), t) * M(T(y_{p(n)-1}), T(y_{q(n)-1}), t))) \\
< \phi(M(T(x_{p(n)-1}), T(x_{q(n)-1}), t) * M(T(y_{p(n)-1}), T(y_{q(n)-1}), t)).$$

By monotonicity of ϕ , we obtain that

$$M(T(x_{p(n)}), T(x_{q(n)}), t) > M(T(x_{p(n)-1}), T(x_{q(n)-1}), t) * M(T(y_{p(n)-1}), T(y_{q(n)-1}), t).$$

Similarly,

$$M(T(y_{p(n)}), T(y_{q(n)}), t) > M(T(x_{p(n)-1}), T(x_{q(n)-1}), t) * M(T(y_{p(n)-1}), T(y_{q(n)-1}), t).$$

Thus

$$M(T(x_{p(n)}), T(x_{q(n)}), t) * M(T(y_{p(n)}), T(y_{q(n)}), t) > M(T(x_{p(n)-1}), T(x_{q(n)-1}), t) * M(T(y_{p(n)-1}), T(y_{q(n)-1}), t).$$

Therefore, by (5), (6), (8) and (9) we obtain that

$$1 - \epsilon \geq \delta_n(t) \\ > M(T(x_{p(n)-1}), T(x_{q(n)-1}), t) * M(T(y_{p(n)-1}), T(y_{q(n)-1}), t) \\ > 1 - \epsilon,$$

for every $t \gg \theta$. Which leads to a contradiction. In particular, for each $\epsilon \in (0, 1)$ there exists $n_0 \in N \cup \{0\}$ such that

$$M(T(x_m), T(x_n), t) * M(T(y_m), T(y_n), t) \leq 1 - \epsilon, \forall m, n \geq n_0.$$

Obviously, for any $p \in N$, with $m = n_0 + p$ and $n = n_0 + p + 1$ we obtain,

$$M(T(x_{n_0+p}), T(x_{n_0+p+1}), t) * M(T(y_{n_0+p}), T(y_{n_0+p+1}), t) \leq 1 - \epsilon.$$

Thus the sequence $\{\delta_{n_0+p}(t)\}_{p\geq 1}$ is monotone and bounded with respect to p and $0 < \delta_{n_0+p}(t) \leq 1-\epsilon$. Thus $\lim_{p\to\infty} \delta_{n_0+p}(t) = \delta(t) \leq 1-\epsilon$, for all $t \gg \theta$. So $0 < \delta(t) \leq 1-\epsilon$. But by (4), $\delta(t) = 1$, therefore $0 < 1 \leq 1-\epsilon$, which is a contradiction since $\epsilon > 0$.

Hence, the sequences $\{T(x_n)\}$ and $\{T(y_n)\}$ are M-Cauchy sequences in the M-complete fuzzy metric space X. Therefore, we conclude that there exist points $x, y \in X$ such that

$$\lim_{n \to \infty} T(x_n) = x \text{ and } \lim_{n \to \infty} T(y_n) = y.$$
(10)

From (10) and continuity of T, $\lim_{n\to\infty} T(T(x_n)) = T(x)$ and $\lim_{n\to\infty} T(T(y_n)) = T(y)$.

But $T(T(x_{n+1})) = T(f(x_n, y_n)) = f(T(x_n), T(y_n))$ and $T(T(y_{n+1})) = T(f(y_n, x_n)) = f(T(y_n), T(x_n))$, since T commutes with f.



Now we show that T(x) = f(x, y) and T(y) = f(y, x), that is (x, y) is a coupled coincidence point of f and T. Note that

$$\begin{split} \phi\Big(M(T(T(x_{n+1})), f(x, y), t)\Big) &= \phi\Big(M(T(f(x_n, y_n)), f(x, y), t)\Big) \\ &= \phi\Big(M(f(T(x_n), T(y_n)), f(x, y), t)\Big) \\ &\leq k(t).\phi\Big(M(T(x_n), x, t) * M(T(y_n), y, t)\Big). \end{split}$$

Again, by the monotonicity of ϕ , we obtain that

$$M(T(T(x_{n+1})), f(x, y), t) \ > \ M(T(x_n), x, t) * M(T(y_n), y, t), \ \text{ as } \ n \to \infty.$$

By taking the limit as $n \to \infty$, we obtain that

$$M(T(x), f(x, y), t) \geq M(x, x, t) * M(y, y, t) \geq 1.$$

So T(x) = f(x, y), and with the same way we get T(y) = f(y, x). Now, we show that T(x) = y and T(y) = x:

I) If $T(x) = T(y_n)$, by the uniqueness of the limit and since $\lim_{n\to\infty} T(y_n) = y$, then we have T(x) = y.

II) We assume that $T(x) \neq T(y_n)$, hence by inequality (1) above,

$$\phi \Big(M(T(x), T(y_n), t) \Big) = \phi \Big(M(f(x, y), f(y_{n-1}, x_{n-1}), t) \Big) \\
\leq k(t) \cdot \phi \Big(M(T(x), T(y_{n-1}), t) * M(T(y), T(x_{n-1}), t) \Big) \\
< \phi \Big(M(T(x), T(y_{n-1}), t) \\
* M(T(y), T(x_{n-1}), t) \Big), \forall t \gg \theta.$$
(11)

Then by the monotonicity of ϕ , we get

$$M(T(x), T(y_n), t) > M(T(x), T(y_{n-1}), t) * M(T(y), T(x_{n-1}), t).$$
(12)

In the same way, we obtain

$$M(T(y), T(x_n), t) > M(T(x), T(y_{n-1}), t) * M(T(y), T(x_{n-1}), t).$$
(13)

From (12) and (13), it follows that

$$M(T(x), T(y_n), t) * M(T(y), T(x_n), t)$$

> $M(T(x), T(y_{n-1}), t) * M(T(y), T(x_{n-1}), t).$ (14)

Now, let $\beta_n(t) = M(T(x), T(y_n), t) * M(T(y), T(x_n), t)$, then the sequence $\{\beta_n(t)\}$ is increasing and bounded, thus there exists $\beta(t) \in (0, 1]$ such that

$$\lim_{n\to\infty}\beta_n(t) = \beta(t).$$

Since M and * are continuous, then by the uniqueness of the limit, we get

 $\beta(t) = M(T(x), y, t) * M(T(y), x, t).$

If $\beta(t) \in (0, 1)$, then from (11) above, we obtain that

$$\phi\bigg(M(T(x), T(y_n), t)\bigg) \leq k(t) \cdot \phi\bigg(M(T(x), T(y_{n-1}), t) * M(T(y), T(x_{n-1}), t)\bigg)$$

By taking the limit, as $n \to \infty$, we get

$$\phi\left(M(T(x), y, t)\right) \leq k(t) \cdot \phi\left(M(T(x), y, t) * M(T(y), x, t)\right) < \phi\left(M(T(x), y, t) * M(T(y), x, t)\right).$$
(15)

Which implies that,

$$M(T(x), y, t) > M(T(x), y, t) * M(T(y), x, t).$$
(16)

In the same way, we obtain that

$$M(T(y), x, t) > M(T(x), y, t) * M(T(y), x, t).$$
(17)

From (16) and (17), we get

$$M(T(x), y, t) * M(T(y), x, t) > M(T(x), y, t) * M(T(y), x, t).$$

That is $\beta(t) > \beta(t)$, which is a contradiction. Therefore, $\lim_{n\to\infty} \beta_n(t) = 1$, and by the uniqueness of the limit, we obtain M(T(x), y, t) * M(T(y), x, t) = 1, thus M(T(x), y, t) = 1 and M(T(y), x, t) = 1. That is T(x) = y and T(y) = x. But, T(x) = f(x, y) and T(y) = f(y, x), so y = T(x) = f(x, y) and x = T(y) = f(y, x).

Finally, we prove that x = y. If, on the contrary $x \neq y$, then

$$\begin{split} \phi \Big(M(x,y,t) \Big) &= \phi \Big(M(f(x,y),f(y,x),t) \Big) \\ &\leq k(t).\phi \Big(M(x,y,t) * M(y,x,t) \Big) \\ &< \phi \Big(M(x,y,t) \Big), \ \forall \ t \gg \theta. \end{split}$$

Since ϕ is strictly decreasing, M(x, y, t) > M(x, y, t), which is a contradiction. Thus, x = y. Therefore, x = T(x) = f(x, x), that is x is a common fixed point of the mappings f and T.

To prove the uniqueness of the common fixed point x of f and T, suppose that $z \neq x$ is another common fixed point of f and T. Then



$$M(z,x,t)=M(f(z,x),f(x,z),t)=M(T(z),T(x),t).$$

Since $z \neq x$, we have

$$\begin{split} \phi\Big(M(z,x,t)\Big) &= \phi\Big(M(f(z,x),f(x,z),t)\Big) \\ &\leq k(t).\phi\Big(M(T(z),T(x),t)*M(T(x),T(z),t)\Big) \\ &< \phi\Big(M(T(z),T(x),t)*M(T(x),T(z),t)\Big) \\ &= \phi\Big(M(z,x,t)*M(x,z,t)\Big) \\ &< \phi\Big(M(z,x,t)\Big), \,\forall \, t \gg \theta. \end{split}$$

Since ϕ is strictly decreasing, M(z, x, t) > M(z, x, t), which is a contradiction, thus x = z. Therefore, f and T have a unique common fixed point $x \in X$.

Theorem 3.2. Let (X, M, *) be an *M*-complete fuzzy cone metric space. Let $f : X \times X \to X$ and $T : X \to X$ be two functions such that

$$\phi\bigg(M(f(x,y),f(u,v),t)\bigg) \le k(t).\phi\bigg(\sqrt{M(T(x),T(u),t)} * \sqrt{M(T(y),T(v),t)}\bigg),$$

for all $t \gg \theta$ and for all $(x, y), (u, v) \in X \times X$ and $(x, y) \neq (u, v)$ where $k : int(P) \rightarrow [0, 1)$ and $\phi : [0, 1] \rightarrow [0, 1]$ satisfy the foregoing properties: (1) and (2) above, $f(X \times X) \subset T(X)$ and T is continuous and commutative with f. Then there exists a unique common fixed point $x \in X$ such that x = T(x) = f(x, x).

Proof. The proof of Theorem 3.2 is similar to the proof of Theorem 3.1 above.

Conclusion

We prove the existence and uniqueness of a coupled common fixed point theorems of selfmaps in fuzzy cone metric space. Our results generalize the results of fixed point theorems by employing fuzzy cone metric space.

Competing interests

The authors declare that they have no competing interests.

Author's contributions

All the authors contributed equally in preparation of the final manuscript. All the authors read and approved the final manuscript.



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BIOLOGY OF THE ENDEMIC ORNAMENTAL POTENTIAL FISH, AN IMPORTANT TOOL FOR THE CONSERVATION AND SUSTAINABLE DEVELOPMENT

Keisham Shanta Devi¹ and Oinam Ibochouba Singh²

Introduction

Northeast India is one of the biodiversity hotspots which host a large number and variety of the world species with high concentration of endemic species. The fauna was considered quite uniform having high potential for aquarium .the newly discovered species had remained unnoticed for decades because of their small size, inhabiting specialized environment mostly in remote areas which is difficult to access or areas difficult to explore. Fish has been associated with human since time immemorial. Fish has an important role in recreation and sports. The fascinating of potentially ornamental fishes have attracted people by their attractive colouration, peaceful nature, tiny sizes and its suitability for keeping in captivity and adaptability for living in confinement. They play an important role in recreation, sports and economic development of the state and nation. Nearly 200 species of ornamental fishes are exported from India (Mandal et al. 2007). The total value of ornamental fishes from India is about Rs.30 million and 50% export as ornamental fishes through Kolkata port (Archana & Mahapalia, 2012).

Apart from high endemic and speciation process, the rate of habitat destruction in this region is alarmingly high. The threats to freshwater biodiversity can be grouped under five interacting categories: overexploitation, water pollution, flow modification, destruction or degradation of habitat and invasion by exotic species (Dudgeon et al., 2006). Additional threat now, more seriously for cold- blooded organisms is the climate change (Vishwanath, 2021). Here in this paper present the food& feeding habit of an endemic species *B.dogarsinghi* having high ornamental potential from Khuga river, a tributary of Chindwin river.

Materials and Methods

Specimens of *B.dogarsinghi* were collected from the Khuga River for one year. A total of 70 specimens of size ranging from 49.1-86.2 mm TL were examined for the analysis of gut contents, the food

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of the fish was identified by the "Points method" (Hynes, 1950). The gut contents were removed sorted and identified upto genetic level with a compound microscope. Feeding habits were observed in the field.

For the study of alimentary canal the head of the fish were severed. From the body, a few inches behind the operculum and cut across the mouth passing through one of the angle of the jaw. The specimen was fixed on tray and structure and arrangement of buccopharynx was studied. The types of gill rakers were also observed. Intestines was taken out from the body of the fish and studied.

Results and Discussion

The alimentary canal of *B.dogarsinghi* is modified according to its feeding habit. It is morphologically distinguished as a non-tubular part consisting of mouth and buccopharynx and tubular region comprising of oesophagus, intestinal bulb, intestine and rectum.

Food Analysis:- The percentage of different groups of food items was calculated from the gut content of about 70 fishes in the size groups 49.1-86.2 mm. in TL. The food contents of *B.dogarsinghi* reveal the occurrence of filamentous algae, chironomous larvae, worms belonging to oligochaete, like the appendages and wings of insects in good amount. The gut was found to contain sand particles.

Feeding intensity:- The condition of feeding was determined from the degree of distension of the intestine bulb and the same has been classified as full, ³/₄ full, ¹/₂ full, ¹/₄ full and empty. The feeding intensity of the fish *B.dogarsinghi* was high from Feb. to Aug. and a good numbers of the intestine bulb being either ful or ¹/₂ full. This observation correlated to the post spawning period. Empty intestine bulb was high during Aug. to Oct. This corresponds to the spawning period. Cuvier and Valencienness (1828-48) also indicated the relation between the structure of alimentary and nature of feeding in fishes.

The anatomical features of the alimentary canal of *B.dogarsinghi* are structurally and functionally well adapted to their food and feeding habits. It is well known fact that the stomachs less fishes are provided with pharyngeal chewing device which permit ingested food reach the intestine in a fragmented condition. In *B.dogarsinghi*, the pharyngeal teeth work against a bony callous pad forming on effective grinding apparatus for crushing food.

The length of the gut in relation to that of the total length varies greatly in different species. In general, the carnivorous species have a shorter intestine, the omnivores a longer one and the herbivores the longest due to obvious reasons emanating from digestion of specific type of food.

The fish having a long highly coiled and stomach less alimentary canal confirm that it is a herbivorous fish. However, presence of intestinal bulb compensates the absence of stomach in this fish as described by Lagler (1952). According to many workers (Das and Moitra, 1963; Biswas, 1985 Biswas and Phukon, 1996), RLG value has direct relationship with the feeling types of fish. A lower value indicate intake of animal matter in the diet where as higher value suggests dependence on plant matter in large quantities.

The feeding intensity of the species was low during Aug. to Oct. It may be attributed to the development of gonad, which occupies the major space of the abdominal cavity which is described as



spawning fast by many workers (Frost, 1954; Lawler, 1965). The present observation on the nature of gut content, structure of mouth, and nature of gill rakers suggests that *B.dogarsinghi* is an omnivorous bottom feeder.

Conclusion

Study on the food and feeding habit of endemic ornamental fish would be useful in rearing of ornamental fish in captivity for aquarium trade, biology of fish helps in identifying breeding grounds, declaring closed fishing season, increase their population and Legal banning on the indiscriminate catch of brood and juveniles in important. Awareness should be given to the local people thus helping in their conservation measures as well as in increasing food fish production and economic development of the state.

Acknowledgment

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COMPARISON OF ENERGY INTERACTION PARAMETERS FOR THE COMPLEXATION OF Pr (III) WITH URIDINE IN ABSENCE AND PRESENCE OF Zn (II) IN AQUEOUS AND AQUATED ORGANIC SOLVENTS USING 4f-4f TRANSITION SPECTRA AS PROBE

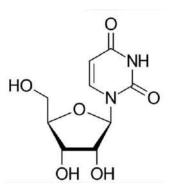
T. Kriyananda Singh¹

Introduction

In view of the extensive application of lanthanide elements in agriculture industries and biomolecular reactions, it has become more important to understand the behaviours of lanthanide ions in biological system (Brittain *et ah*, 1978 and Evan, 1990). So lanthanide coordination chemistry in solution state is of great importance with the increasing use of lanthanids as probes in the exploration of the structural functions of biomolecular reactions (Misra, 1985; Bukeitynska and Ngoethey, 1987; Holz and Thompson, 1988 and Devlin *et al*, 1988). This is particularly due to their ability to replace Ca (II) ions in specific manner (Einsphar and Bugg, 1984 and Martin, 1983). Shah (2001) studied comparative 4f-4f transition spectra of Pr (III) with lysozyme by using

energy interaction parameters to explain the behaviour of binding between them. Mehta *et al.* (2001) also studied the mode of binding between Pr (III) and Nd (III) with lysozyme in presence of Zn (II), a soft metal ion, by employing intensity parameters. The ligand we choose, uridine (Fig. 1). is a naturally occurring nucleoside. It has both oxygen and nitrogen donor sites viz., carbonyl, and pepetide linkage of pyrimidine nucleus and hydroxylic groups of ribose sugar of uridine. In molecular biology, nucleosides and nucleotides, the building blocks of nucleic acids, take a very important role.

Electronic spectral studies on the conformation of the uridine molecule and its interaction with lanthanide cations in a aqueous medium have led to an understanding of the nature and reactivity of the biochemical reactions involving such species (Birnbaum *et al.*, 1976). Complexes with ligands like polyaminepolycarboxylates and 8-





hydroxyquinoline (nitrogen and oxygen donors) were studied (Moeller and Hessen, 1963; Cefola *et al*, 1962 and Freasire *et al*, 1956). Since Pr (III) resembles to Ca (II), its complexation can provide information about

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the co-cordination characteristics of diamagnetic molecule, i.e. Ca (II) with biomolecules during biochemical reactions, hence paramagnetic lanthanides are good spectral probes for exploring the biological roles of Ca (II) by isomorphous substitution. The present work discusses the quantitative spectral energy interaction parameters of Pr (III) complex with uridine in absence and presence of Zn (II) in aqueous and aquated organie solvents at pH6 and 298K. The present work reports the sensitivity of ligand mediated pseudohypersensitivity of $3H_4 \rightarrow 3p_0$, $3H_4 \rightarrow 3p_2$ and $3H_4 \rightarrow ^{1}D_2$ transitions of Pr (III) and utilized the magnitude and variation of slater-condon (F_k), Lande spin orbit coupling (ξ_{41}), nephelauxetic ratio (β) bonding (b^{1/2}). Racah (E_k) and covalency (8) parameters for the complexation of Pr (III) with uridine in absence and presence of Zn (II).

Materials and Methods

Praseodymium (III) nitrate of 99.9 % purity was purchased from M/s Indian Rare Earths Ltd. and uridine from SISCO PVT, LTD, Mumbai. The solvents used are CH₃, CN, CH₃OH, DMF and dioxane of A/R grade from E. Mark. The saturated solutions of ligands and Pr (III) nitrate of 10¹² M were prepared in different solvents. Absorption spectra of each solution at pH6 and at temperature 298 were recorded on Perkin Elmer Lamda-35UV-vis spectrophotometer upgraded with high resolution and expansion of scale in the region 350-900nm and using water circulating thermostat model of HAAKE DC 10.

Nephelauxetic ratio has long been regarded as a measure of covalency (Peopock, 1964; Jorgen and Judd, 1964 and Henrie *et al.*, 1976). The Nephelauxetic effect has been interpreted in terms of Slater-Condon and Racah parameters (inter electronic repulsion parameters) as well as by the ratio of the complex ion and free ion (Sinha and Schmidtke, 1965; Sinha, 1966; Sinha and Mehata, 1972 and Condon, 1963).

$$\beta = \frac{F_{k}^{c}}{F_{k}^{f}} \text{ or } \beta = \frac{F_{c}^{k}}{F_{f}^{k}}$$
(1)

where F_k (K = 2, 4, 6) is the Slater-Condon parameter and E^k the Racah parameters C and f stand for complex and free ions respectively. The bonding parameter ($b^{1/2}$) is inter-related to Nephelauxetic effect as

$$\mathbf{b}^{1/2} = \left[\frac{1-\beta}{2}\right]^{1/2} \tag{2}$$

The electrostatic term E_0 is expressed in terms of the product of Slater radial integral known as Slater-Condon parameter, F_k and is given by

$$E_0 = \sum_{k=0}^{k=6} K_k F_k$$
(3)

The Slater-Condon parameters are also known as direct-integral and is decreasing function of K as given by the relation,

by



$$F_{i}^{k} = \int_{0}^{\infty} \frac{r^{K}_{<}}{r^{K+1}_{>}} R_{i}^{2}(\mathbf{r}_{i}) R_{j}^{2}(\mathbf{r}_{j}) r_{i}^{2} r_{j}^{2} d\mathbf{r}_{j} d\mathbf{r}_{j}$$
(4)

where R is the 4f-radial wave function; $r < and r_>$ are the radii of near and more distant electrons; and *i* and *j*, the ith and jth electrons under consideration. Condon and Shortley (1963) redefined F^K integrals in terms of reduced integral F_k related to each other and the relation is

$$F_{\rm K} = \frac{F^{\rm K}}{D_{\rm k}} \tag{(5)}$$

Combining relation (4) and (5), the reduced Slater-Condon integral can be written as:

$$F_{\rm K} = \frac{1}{D_{\rm k}} \int_{f}^{\infty} \int_{0}^{\infty} r^{\rm K} r^{\rm K+1} R^2_{\rm i}(r_{\rm i}) R^2_{\rm j}(r_{\rm j}) T^2_{\rm i} r^2_{\rm j} dr_{\rm j} dr_{\rm j}$$
(6)

where D_{κ} is the denominator and F_{κ} are coefficient of linear combination and represent the angular part of the interaction FK is the expectation value of scalar product $[(C_1^{(k)}C_2^{(k)})]$.

The Racah energy interaction parameter Kki are linear combinations of Fk given by

$$E^{3} = \frac{70F_{2} + 231F_{4} + 20.02F_{6}}{9}$$

$$E^{2} = \frac{F_{2} - 3F_{4} + 7F_{6}}{9}; \quad E^{3} = \frac{5F_{2} + 6F_{4} - 9F_{6}}{3}; \quad (7)$$

The energy, E_{SO} arising from the most important magnetic interaction, which are spin orbit interaction may be written as

$$E_{so} = A_{so}\xi 4f \tag{8}$$

where A_{SO} is the angular part of spin orbit interaction and ξ_{4r} is the radial integral and is known Lande's parameter. By first order approximation the energy E_j of the jth level is given by Wong (1961) as

$$E_{j}(F_{k},\xi_{4\ell}) = E_{0j}(F_{k}^{0},\xi_{4\ell}) + \frac{\partial E_{j}}{\partial F_{k}}\Delta F_{k} + \frac{\partial F_{k}}{\partial F_{k}}\Delta \xi_{4\ell} \qquad (9)$$

where E_{0i} is the zero order energy of the jth level. The value of F_k and ξ_{4f} are given

$$F_{k} = F_{k}^{o} + \Delta F_{k}$$

$$\xi_{4f} = \xi_{0,4f}^{o} + \Delta \xi_{4f}$$
(10)

The difference between the observed $E_{\rm j}$ value and the zero order values, $\Delta E_{\rm j}$ is evaluated by

$$\Delta E_{j} = \sum_{k=2,4,6} \frac{\partial E_{j}}{\partial F_{k}} \Delta F_{k} + \frac{\partial F_{j}}{\partial \xi_{af}} \Delta \xi_{af}$$
(11)

By using the zero order energy and partial derivatives of Pr (III) ion given by Wong (1963), the above equation can be solved by least square technique and the value of $\Delta \xi_{\rm str}$ can be found out. From these the value of F₂ and $\xi_{\rm str}$ are found out by using relation (10). The estimated values of F₄ and F₆ are calculated by the relations,

$$\frac{F_4}{F_2} = 0.1380 \text{ and } \frac{F_4}{F_2} = 0.0150$$
 (12)

The per cent covalency parameter (δ) representing the Nephelauxetic effect was given by the relation

$$\delta = \frac{1 - \beta}{\beta}$$
(13)



Results and Discussion

From the Fig, 2a-d we see there is a red shift as uridine is added to Pr (III) and further longer wave length is observed on addition of Zn (II). Table 1 shows the variation of the magnitude of energy interaction parameters like Slater-Condon (F_k), Lande factor (ξ_{4f}), Racah energy (E_k), Nephelauxetic ratio (β), bonding (b^{1/2}) and percentage co-valency (δ) for Pr (III), Pr (III) : uridine and Pr (III) : Uridine : Zn (II) in aqueous and different aquated organic solvents. There is a slight decrease in the value of F_k , ξ_{4k} and E_k as the complexation goes on which lead to increase in the values of Nephelauxetic ratio.

For special studies on the structures of co-ordination compounds of lanthanides in solution, any evidence of the relationship between the Nephelauxetic band shift and the structure is of special interest. Jorgensen and Ryan (1966) noticed the dependence of Nephelauxetic effect on the co-ordination number. It was suggested that shortening in the metal ligand distance occurs with decrease in the co-ordination number. Langhlin and Conway (1963) studied the absorption spectra of Pr (III) ion in the iso-structural crystals CeCl₃, NdCl₃ SmCl₃ and GdCl₃ and they concluded that with identical structures of complexes (CN = 9 and D_{3h} symmetry), there exists a linear relationship between wave no of ³H₄ ³P_{0,1,2} transitions in the spectra of Pr3+ and distance between praseodymium and ligand, R(Ln-0)[R(Ln - 0)] is the mean Ln-oxygen distance in the complexes with ligands coordinated via oxygen atom]. It was observed that increase in the value of R increases the band shift towards the short wave region. Yatsimirskii and Davidenko (1966) and Yatsimirskii *et al.* (1970) pointed out a close linear correlation between R(Ln = 0) and wave number of some f-f transitions in the absorption spectra of some praseodymium and neodymium complexes having different co-ordination number and symmetries. To interpret the correlation and analysis of the relationship between Nephelauxetic effect and geometry, energy parameters have been derived and evaluated for complex compound using the angular overlap model, the value of 'n' is proportional to the Nephelauxetic effect as

$$n = \left[\begin{array}{c} 1 - \beta^{1/2} \\ \beta^{1/2} \end{array} \right] \tag{14}$$

It may also be expressed as

$$n = \begin{bmatrix} H^2_L \\ H_{M^-} H_L \end{pmatrix}^2 \quad (S * R)^2 N$$
 (15)

where N is the co-ordination number, H_M and H_L are coulomb integrals of atomic orbital; S the orverlap integral; R the radius of the orbit. For compounds with ligand coordinated through identical donor atoms, the term of Eq. (14) is a constant and Eq. (15) becomes

$$n = \text{constant} \quad (S * R)^2 N \tag{16}$$



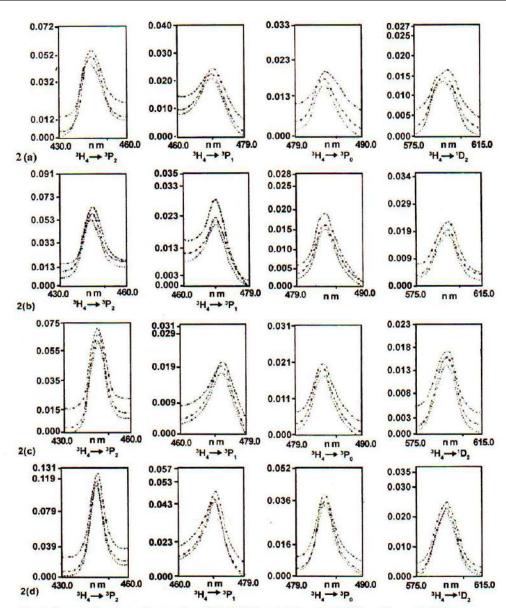


Fig. 2. Comparative absorption spectra of (a) Pr(III) (---), P. (-x-x-) & Pr(III); uridine :Zn(II) (-x - x x) in CH₂CN. (b) Pr(III) (---); Pr(III); uridine (1:1) (-x-x-) and Pr(III); uridine :Zn(II) (1:1:1) xx -xx-) in dioxane (c) Pr(III) (---), Pr(III); uridine (1:1) (-x-x-) and Pr(III); uridine :Zn(II) (1:1:1) (-xx-xx-) in CH₂OH (d) Comparative absorption spectra of Pr(III) (---), Pr(III); uridine (1:1) (-x-x-) and Pr(III); uridine (1:1) (-x-x-) and Pr(III); uridine :Zn(II) (1:1:1) (-x-x-) and Pr(III); uridine :Zn(III) (1:1:1) (-x-x-) in DMF.



Table 1. Computed value of energy interaction Slator-Condon F_k (cm⁻¹), spin orbit interaction ξ_{tt} (cm⁻¹), Racah energy E^x (cm⁻¹), Nephelauxetic ratio (β), bonding (b^{1/2}) and covalency (δ) parameters of Pr (III), Pr (III): guanosine (1:1) and Pr (III): uridine : Zn (II) (1:1:1) systems in aqueous and different aquated organic solvents (50:50) at pH = 6 and 298K are given below.

aquated organic sorr				o and	arone are	Brien beion.				
System	F ₂	F4	F ₆	E _{4r}	E	E ²	E3	β	P1/2	δ
1. Solvent-water										
	309.08	42.67	4.66		3509.5473					
	309.06				3509.3318		586.4415			
Pr.(III) uridine :Zn(II)	309.02	42.65	4.64	721.36	3508.9318	23.7454	586.3747	0.9462	0.1644	5.7263
2. Solvent- CH ₁ OH										
					3508.1918					
Pr (III): uridine	308.94	42.64	4.66	721.05	3508.0528	23.7394	586.2277	0.9452	0.1648	5.7601
Pr.(III): uridine :Zn(II)	308.91	42.64	4.66	720.92	3507.7248	23.7372	586.1730	0.9455	0.1649	5.7626
3. Solvent- CH ₃ CN	100100	201222331								
Pr (III)	309.01	42.65	4.66	721.39	3508.8208	23.7446	586.3560	0.9455	0.1644	5.7260
					3508.7308					
Pr.(III): uridine Zn(II)	308 97	42 64	4 66	721 26	3508 3738	23 7416	586 2814	0.9498	0.1646	5.7423
4. Solvent-DMF	300.77	46.04	4.00	121.20	2200.2120	20.7110	200.2011	012100		
	208 05	42.64	1 66	720 47	3508,1908	23 7403	586.2509	0 9446	0 1654	5 805
					3507.8548					
Pr.(III): uridine :Zn(II)	200.93	42.04	4.05	720.31	3507.0178	23.7301	586 0547			
	308.89	42.03	4.05	120.20	3307.0176	23.1324	580.0547	0.9431	0.1057	5.021
5. Solvent-Dioxane	200.00	12 11	111	731 31	3508.4278	22 7410	586.2905	0.0440	0 1646	5 745
Pr (III)	308.98	42.65								
Pr (III): uridine	308.93	42.64	4.00	720.00	3507.9118	23.7384	586.2042	0.9430	0.1035	5.005
Pr.(III): uridine :Zn(II)		42.63	4.66	720.61	3507.4968	23.7350	586.1349	0.9455	0.1054	5.805
6. Solvent-CH3OH:(CH ₃ CN	00000	1000						0.1/20	
	308.97	42.64	4.66	720.64	3508 3068	23.7411	586.2702	0.9450	0.1652	5.791
Pr (III): uridine	308.96	42.64	4.66	720.55	3508.2388	23.7407	586.2588	0.9451	0.1653	5.794
Pr.(III): uridine :Zn(II)		42.63	4.66	720.44	3507.3498	23.7346	586.1103	0.9453	0.1034	5.798
7. Solvent-CH3OH:D	OMF							121121121	11 11 14 14 14 14 14 14 14 14 14 14 14 1	50 Y U 1 2 2
Pr (III)	308.94	42.64	4,66	720.48	3508.0208	23.7392	586.2224	0.9450	0.1655	5.807
Pr (III): uridine	308.93	42.64	4.66	720.33	3507.7385	23.7385	586.2050	0.9452	0.1656	5.820
Pr.(III): uridine Zn(II)	308.90	42.64	4.65	720.24	3507.6768	23.7365	586.1550	0.9455	0.1658	5.831
8.Solvent-CH,OH:D										
Pr (III)	308.98	42.65	4.66	721.50	3508.4348	23.7440	586.2910	6 0.9456	0.1643	5.722
Pr (III): uridine	308.97	42.64	4.66	721.42	3508.3068	23.7411	586.2702	0.9457	0.1644	5.730
Pr.(III): uridine :Zn(II)	308.94	42.64	4.66	721.19	3507.9998	23.7390	586.2184	0.9459	0.1647	5.753
9. Solvent-CH,CN:D										
Pr (III)		42 65	4 66	721.27	3509.0118	23.7459	586.3880	0.9452	0.1644	5.731
Pr (III): uridine	309 01	42 65	4 66	721.08	3508.8228	23.7446	586.356	1 0.9454	0.1647	5.748
Pr.(III): uridine :Zn(II)	308 07	42 64	4 66	721 13	3508 3158	23 7412	586 272	7 0.9450	5 0.1647	5.752
		42.04	4.00	1			200.212			
10. Solvent-DMF:Die	oxane	12 (1	1 15	720 62	3507.8008	22 7277	596 1957	0.0450	0 1654	5 700
	308.92	42.04	4.05	720.02	3506.7728	23.7377	500.103	0.9450	0 1661	5 856
Pr (III): uridine	308.83	42.03	4.05	720.07	3506.7728	23./138	585 2224	0.9452	0.1600	5 876
Pr.(III): uridine:Zn(II)	308.41	42.57	4.65	/18.10	3506.0368	23.0987	383.2223	0.9430	0.1090	3.0/0
11. Solvent-CH,CN:	Dioxan	e	1000					0.0450	0.1646	6 7 4 7
Pr (III)	309.01	42.65	4.66	721.17	3508.7698	23.7443	586.3476	0.9450	0.1646	5.742
Pr (III): uridine	308.93	42.64	4.66	720.74	3507.8558	23.7381	586.1948	0.945	0.1652	5.788
Pr.(III): uridine:Zn(II)	308.85	42.63	4.65	720.63	3507.0078	23.7323	586.0531	0.945:	5 0.1652	5.787

The above Eq. (16) represents nephelauxetic effect as a function of two variables, S^*R and N which vary with changes in lanthanides ligand distance in opposite directions. However, any variation in the value of R leads to a larger change in $(S^*R)^2$ compared to that in N.



Table 2. Computed and observed values of energies (cm-1) and RMS values for Pr (III), Pr (III):guanosine (1:1) and Pr (III): uridine : Zn (II) (1:1:1) in aqueous and different aquated organic solvents (50:50) at pH = 6 and 298K are given below.

System	³ H ₄ E _{obs}	³ P ₂ E _{cal}	³ H ₄ E _{obs}	³ P ₁ E _{cal}	³ H ₄ E _{obs}	³ P ₀ E _{cal}	³ H ₄ E _{obs}	¹ D ₂ E _{cal}	RMS
1. Solvent-water									
Pr. (III)					20742.25				
Pr(III): uridine					20741.71				
Pr(III):uridine :Zn(II)	22491.11	22446.39	21318.77	21236.13	20740.85	20677.42	16947.71	17130.75	107.64
2. Solvent-CH ₃ OH									
Pr. (III)	22494.14	22440.56	21309.68	21230.44	20738.27	20672.30	16937.37	17126.93	111.16
Pr(III): uridine					20737.41				
Pr(III): uridine :Zn(II)	22492.12	22437.96	21306.05	21227.70	20735.26	20669.49	16936.22	17125.14	110.78
3. Solvent-CH ₃ CN									
Pr. (III)	22488.58	22445.85	21316.95	21235.55	20.739.99	20676.78	16949.72	17130.37	106.15
Pr(III): uridine	22487.57	22443.20	21316.04	21234.90	20739.56	20676.18	16949.43	17129.94	106.03
Pr(III): uridine :Zn(II)	22484.53	22442.55	21314.22	21232.28	20737.84	20673.77	16946.27	17128.19	106.85
4. Solvent-DMF									
Pr. (III)	22489.59	22437.48	21320.13	21228.01	20671.14	20671.32	16925.15	17125.15	120.00
Pr(III): uridine	22483.52	22434.67	21315.59	2125.29	20739.56	20668.75	16921.04	17123.32	118.81
Pr(III): uridine :Zn(II)	22478.97	22430.87	21311.95	21221.72	20738.70	20665.79	16915.88	17120.88	120.20
5. Solvent - Dioxan									
Pr. (III)	22490.60	22442.61	21314.68	21232.41	20738.70	20674.01	16941.68	17128.26	116.61
Pr(III): uridine	22487.06	22436.79	21313.77	21227.05	20738.27	20669.78	16927.62	17124.58	115.67
Pr(III): uridine :Zn(II)	22485.04	22434.04	21308.78	21224.27	20736.12	20667.11	16926.19	17122.74	115.25
6. Solvent-CH ₃ OH:									
Pr. (III)		22439.01	21318.32	21229.39	20740.85	20672.17	16925.91	17126.10	117.75
Pr(III): uridine	22489.59	22438.18	21316.95	21228.63	20740.85	20671.59	16925.62	17125.58	117.49
Pr(III): uridine :Zn(II)	22486.05	22433.82	21312.86	21223.88	20734.40	20666.45	16923.61	17122.52	117.07
7. Solvent-CH3OH:				1.0000000					
Pr. (III)		22436.50	21314.68	21226.99	20739.99	20670.09	16923.04	17124.48	118.28
Pr(III); uridine			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		20739.99				
Pr(III): uridine :Zn(II)									
8. Solvent-CH,OH:									
Pr. (III)		22444.14	21312.41	21233.62	20737.41	20674.61	16947.13	17129.14	106.91
Pr(III); uridine					20736.98				
Pr(III): uridine :Zn(II)									
9.Solvent-CH3CN:D			21000.10	21227.01		10011101	105 10151		
Pr. (III)		22446 43	21307 41	21236 28	20742.57	20677 75	16950.01	17130.82	105.62
Pr(III): uridine					20742.14				
Pr(III): uridine :Zn(II)									
10.Solvent-DMF:Die		22111.00	21505.00	#1#J1.11	20730.70	20075.17	10/10/10	1/14/.00	100.2
Pr. (III)		77435 01	21314 22	21226 10	20737.84	20669.01	16024 47	17124 00	117 27
Pr(III): uridine					20734.40				
Pr(III): uridine :Zn(II)									
		22100.74	e12/0.40	21203.01	20123.00	20040.39	10300.70	11166.34	110.30
11.Solvent-CH3CN:			01010 (0	01004.00	20240.02	00/8/ 0/	1 (0 (0 **	12100 55	116.95
Pr. (III)			21319.68		20740.85			17129.55	
Pr(III): uridine					20737.41			17124.62	
Pr(III): :Zn(II)	22489.59	22432.77	21313.32	21222.54	20731.39	20664.70	16920.75	17121.70	118.63

As a result, the Nephelauxetic effect increases when the co-ordination number decreases. The Ln-O distance shortens in spite of the addition nature of β and decrease in the number of the co-ordinating ligand.



The variation in the value of E^{κ} (K = 2,4,6); corresponds to that in the value of F_{κ} , since they are interrelated. Misra and Joshi, 1979 and Misra and Singh, 1981. Observed a general decrease in the value of F_{κ} , E^{κ} and ξ_{4t} parameters as compared to the corresponding parameters of the free ion. The ${}^{3}H_{4} \rightarrow {}^{3}P_{0}, {}^{3}H_{4} \rightarrow {}^{3}P_{2}$ and ${}^{3}H_{4} \rightarrow {}^{1}D_{2}$ transition of Pr (III) do not obey selection rules but they have found to show substantial sensitivity reflected through wide variation of oscillator strengths and energies with even minor changes in the immediate co-ordination environment around it even in the presence of structurally related ligand (Misra and Joseph, 1992 and Misra, 1990) and they are termed as ligand mediated pseudo hypersensitive or pseudo hypersensitive transitions. Due to extremely fast water exchange rate and very small crystal field stabilization energy the conversion from one geometry to another is very convenient and facile. Karraker (1967) showed that the shape, energy and oscillator strength of hypersensitive or pseudo hypensitive transitions can be correlated with coordination number and diagnostic of immediate coordination environment around lanthanides ions.

The comparative absorption spectra of Pr (III) ion, Pr (III): uridine (in 1:1 molar ratio) and Pr (III): uridine : Zn(II) (in 1:1:1 molar ratio) in different aqueous and aquated organic solvents (50 %) are given in Fig. 2a,b,c,d. The addition of uridine in Pr (III) resulted in a marginal red shift of 4f-4f transition bands and the further addition of Zn (II) to Pr (III): uridine gave further shift towards the longer wavelength. This shows the stimulated effect of Zn (II) towards the complexation of Pr (III) with uridine. Table 1 gives the computed values of Slator-Condon (F_K), Racah (E^K) and Lande (ξ_{4f}), Nephelauxetic parameters (β), bonding parameters ($b^{1/2}$) and covalency (δ) of Pr (III), Pr (III): uridine and Pr (III):urudine:Zn(II) in aqueous and aquated organic solvents. Table 2 gives the computed and observed values of energies for the various transition bands and root mean square deviation (RMS) showing the correctness of the various energy parameters. One can clearly see that the variation of solvent nature and composition has significant effect on the energy parameters of the different 4f-4f transition bands.

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LOCAL SELF-GOVERNMENTS: ROUTE TO SUISTANABLE DEVELOPMENT IN THE NORTH-EAST INDIA

Dr Loitongbam Dorendro Singh¹

Abstract

In the last few decades all over the world concerns have been expressed on the way our environment is getting degraded and its effect to the humanity's survival on this planet earth. If the present rate of environmental destruction and degradation continues scot-free, it is predicted the results would be catastrophic, threatening the very survival of life on earth. Although, the severity of the problem has been recognised all over the world, much needs to be done as necessary actions to combat the problem. These environmental problems and the threat they have posed have led to considering 'Sustainable Development' as a global priority. At the United Nations (UN) Sustainable Development Summit on 25th September 2015. world leaders adopted the 2030 Agenda for Sustainable Development, a set of 17 Sustainable Development Goals (SDGs) and 169 targets to end poverty, fight inequality and injustice, and tackle climate change by 2030. Drawing up roadmap and strategies at the international, national and sub-national levels for adopting environmentally benign technologies and initiating outreach environmental and development programmes involving 'locals' (localising). Localising is the process of taking into account at the sub-national contexts (Local Self Governments) in the achievement of the 2030 Agenda, from the setting of goals and targets, to determining the means of implementation and using indicators to measure and monitor progress. All of the SDGs have targets directly related to the responsibilities of local and regional governments, particularly to their role in delivering basic services. That's why local and regional governments must be at the heart of 2030 Agenda.

Introduction

Local Self Governments (LSGs) signifies a democratic decentralized government in the sense that it is elected body and responsive to the needs of the people of a limited geographical area. The local selfgoverning body is endowed with autonomy in legal, political, administrative, functional and financial matters. It enjoys the power of decision making on all matters within its functional geographical area and is accountable to the local people for the exercise of powers and functions and use of public funds devolved upon it by the higher-level government. On the other hand, a Local Government, is an agent of central or

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the state government and performs only the agency role and functions. It does not enjoy the decisionmaking power and financial autonomy.

The World Development Report (1999-2000) states that decentralization entails the transfer of political, fiscal and administrative powers to sub-national units of government. People around the world are demanding self-determination and influence in the decisions of their government, a physical dispersal of delivery system to a large number of convenient locations is identified by the label of localization. Localization is motivated by the desire to provide clients an easy access to goods and services.

The World Bank, various United Nations Agencies, USAID and several other bilateral donors have embraced decentralization as one of the major governance reforms on their agenda, and invested significant resources towards decentralization programs. At the United Nations (UN) Sustainable Development Summit on 25th September 2015, World Leaders adopted the 2030 agenda for Sustainable Development, a set of 17 Sustainable Development Goals (SDGs) and 169 targets to end poverty, fight inequality and injustice, and the tackle climate change by 2030. While implementing the goals the role of local self-governments is at the center of discussion. In fact, the term 'localization' is most commonly used.

While the SDGs are global, their achievement will depend on our ability to make them a reality in our cities, towns and villages. All of the SDGs have targets directly related to the responsibilities of local and regional governments, particularly to their role in delivering basic services. That's why local and regional governments must be at the heart of the 2030 Agenda. "Local spaces are ultimately the key site of delivery and development and, as such, local government is central to the success of sustainable development." (South African Local Government Association SALGA).

The achievement of the SDGs depends, more than ever, on the ability of local and regional governments to promote integrated, inclusive and sustainable territorial development. As stressed in the Synthesis Report of the UN Secretary General, "many of the investments to achieve the Sustainable Development Goals will take place at the subnational level and be led by local authorities." National legal and political frameworks still have a long way to go in recognizing this, and national and international advocacy work on behalf of local and regional governments remains necessary. "Subnational governments should not be seen as mere implementers of the agenda. Subnational governments are policy makers, catalysts of change and the level of government best placed to link the global goals with local communities." [The Sustainable Development Goals: What Local Governments Need to Know, United Cities and Local Governments UCLG].

Maximizing self-governance in the North-East India

Sustainable development in the North East Region of India requires decentralized governance and planning, which calls for maximization of self-governance. This requires the creation and activation of governance institutions right from the village level upward. There is a need for a complete U-turn in the development strategy and the planning process towards designing and implementing people-centric and



futuristic programmes based on harnessing the natural resources of the region. Only such a strategy can ensure sustainable development in the North East Region of India. Sustainable development requires capacity development of people as well as institutions, and here, education and skill development will be a cornerstone of the sustainable development in the region. Empowerment of the people comes from their active participation in governance and control over resources, to determine resource allocation to various public services and determine the developmental strategy. Devolution of power to villages is necessary for participatory decentralized governance and economic progress. In areas covered under Part IX and IX-A of the Constitution, (Part IX deals the Panchayats and IX-A deals The Municipalities) the Panchayati Raj institutions needs to be strengthened. However, large parts of the region are covered under Schedule VI of the Constitution and in these areas, village development councils will have to be activated and evolved to undertake grassroots planning.

Systems of decentralized governance in North East India show a wide diversity, unparalleled in any other region of the country. While Panchayati Raj system fully covers two of the eight States of the region Sikkim and Arunachal Pradesh, three other States Mizoram, Meghalaya and Nagaland are entirely exempted and have their own local systems. The remaining three States Assam, Tripura and Manipur have both Panchayati Raj and non-Panchayati Raj areas existing side by side. Although Sikkim, Arunachal Pradesh and parts of Assam, Tripura and Manipur are covered under the provisions of Part IX of the Constitution, the extent of Power devolved upon Panchayats in these States is uneven. Sikkim has been adjudged the 3rd best State in the country in the implementation of Panchayati Raj; Assam the best for activity mapping; Tripura and Manipur among the better State for their pattern of devolution and Arunachal Pradesh has been commended for recent steps taken to move towards effective devolution. Yet, in all five States, there is considerable scope for advancing the cause of devolution.

Many hope that the process of decentralization will facilitate greater participation of communities in problem analysis, project identification, planning, implementation as well as oversight which in turn will increase ownership and the livelihood of sustainability of such initiatives. Theorists, practitioners and advocates believe that decentralization can lead to a number of positive outcomes. These include: democratization and the participation (Crook and Manor 1998), mode of sharing powers, rural development (Uphoff and Esman1998, Ribot2002); public service performance (World Bank 2000); poverty alleviation (Crook and Sverrisson 2001) relief of fiscal crisis (Olowee 2001); political and macro-economic stability (World Bank 2009). Most of the local benefits from decentralization are believed to come from increased popular participation which, in turn, leads to increase in democracy, efficiency and equity. The decentralization reform also ensures the participation and inclusion of marginalized governance that is participatory and reflective of all the interests is one of the most effective ways to facilitate sustainable development. These are expected to come about by bringing government closer to the people and the increasing local participation. Hence, decentralization can be considered as a route for promoting sustainable development in the north-east India.

Conclusion



Finally, In the north-east India the key message is the role of the Local Self Governments (LSGs) in promoting sustainable development Goals SDGs, within their territories and, therefore are necessary partners in the implementation of the SDGs. As the closest level of government to the people, Local Self Governments are well placed to raise awareness about the importance of the SDGs and their relevance to local communities. Locally elected leaders, in particular, have a democratic mandate to lead local development and can be held accountable by citizens if they fail to do so.

As implied by the very concept of 'localizing', what it means will ultimately depend on the context and specific characteristic of countries decentralization systems.

THE 'MEITEI' WAY OF LIFE

David Khomdram¹

Abstract:

The title should not be misunderstood as the way of life from a religious point of view. But rather a way of life integral to the culture that has been handed down the generation in the form of lore. Here, the paper attempts to rejuvenate the autochthonic culture from the chaos which has been blurring the ethnic identity through a series of misinterpretations. Without the slightest instance of ethnocentric tendency, or ethnocentrism, the paper revisits certain lore from a new perspective. The perspective delves in search of the cohesive force that fundamentally binds the elements of the society (Meitei society), and also illuminates the ethnical character, without ever proposing a grand theory of morality in general, or a viable social theory. The alleged orthodoxy of the Meitei is, we infer, based on the consistent reprising of the lore; which is full of tales of Gods and miracles. When there is a consistent reiteration of the lore, there is also a consistent reminder of the fundamental cohesive force which is a blending, of a sublime/divine sentiment and its own projection of a morality.

Keywords: love; epics; lore; Meitei; morality

The 'Meitei' Way of Life

Out of the manifold aspects of life, we learn many things from history. Of all the things, the knowledge that has been showered by history upon humanity is unimaginably extensive. The priceless illumination in terms of awareness; as preparation to advance ourselves upon the evenly pervaded darkness of the futuristic realm, in terms of consoling one and the many to the unreachable past that affects sentiments of the present, and in terms of revisiting the moments that have been exploded into a cosmic reaction whose fundamental characteristic is essentially an unfathomable distance between it and the present reality; the virtual moments which is presentable into multiple forms except in reality. This illumination is sufficient enough to handle the reciprocity of life. There may be a different interpretation of history in a different context with a different kind of reasoning, ultimately making a counter claims against those things that we have just listed above. But the fact is that both of us are true, will be true, without any doubt, and this does not tantamount to brute sophistry.

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Again, among the manifold aspects of life, there are some aspects, which is so fundamental that it even transcends the normal purview of human knowledge. This does not mean that it is ungraspable, but it does mean that it is not meant for everyone. For instance, the moral aspect of life is, for most, an allergic situation where it is, most of the time, contrasted with the 'general' expediency or prudence. This sometimes resulted in moral caricature, ridiculing most of the things that deny them of their ambition and passion. Deep within the crevices of this moral caricature, also dwells a sublime sentiment, a balanced one, with all the charm of representing itself to be the core of the structure called human life, or generally, life. We use the term 'sentiment' due to the limitation of formulating an epistemic exact character. We simply use the word 'love' to represent it. Here, we do not intend to theorize on this notion, rather we are attempting to explicate the functional significance of pure love in a culture, and society, and also the significance of those cultures and societies that adopted 'love' as the core principle of sustaining the system.

Recently, in a function, renowned film-maker, Aribam Shyam Sharma stated, "Manipur being endowed with rich culture and aesthetic values has huge potential for production of good films." He stated this during the concluding event of the Golden Jubilee Celebration of Manipuri Cinema. (Courtesy – epao.net) He seems to imply that Manipur cinema can grow if the filmmaker tries to infuse the richness of the Manipuri way of life. His statement is truly inspiring and at the same time a proven fact through his achievements. This again implies that the present ongoing journey of Manipuri cinema is lacking the same intention. Exposing certain cultural symbols and monuments in a staged carnival does not necessarily imbibe the true essence of the rich heritage among the peoples. Cultural heritage is an organic whole that requires a master artisan like Eigya Shyam, to exhibit it in its true form.

Gossiping and storytelling has been the motivating factors which instil and imbibes the significance of a particular culture. It is truly more effective than a thesis or an assertion. That being said, there is also the necessity for the right vessel to acknowledge and embrace, and also to accommodate the lesson in its true form. Most believed that the scarcity lies in numbers; numbers of motivators and the number of expositions, since the impact exerted by a particular creativity, is surprisingly effective, and hence increasing the number would also increase the impact. But, I believe that the scarcity lies in the number of vessels, the quality of it, and not the projector or the artisans. The global history of change, revolution, and realization are evident enough to prove that there is the necessity of, at most, one person to convince the sublimity of a certain kind of truth. Let this be a debate for another day. Therefore, what always falls short is the inability to grasp the moral of the story. The recent demotion of our capacity of understanding at this stage has many factors. The chief factor might be the narcissistic hedonism that has already pervaded like an epidemic in the minds of the many.

With the advent of realization of oneself, as a part of a culture, of Manipuri culture, or Meitei culture, many things within the culture, have been conglomerated with non-ethnic elements. This does not mean to arouse the conflict that has been there in terms of exponents or opponents, or taking sides delivering the ethnocentric mentality, but knowing this too, is a way of realizing the fact that such assimilation



sometimes blurred the truth; the truth that has been handed down since the dawn of this culture. The necessity of this clarity is mostly in the form of an inference, but if the logic that is inherent in a particular culture, specifically designed with a purpose, conforming to the geographical, ethnical, and historical significance, is left unused then, this will tantamount to the partial ignorance which is far more worst, and sinister, than a complete ignorance.

The conglomeration is elegantly observed by the Sahitya Akademi awardee Elangbam Nilakanta Singh, in his poem *Manipuri*, which is also a part of the compiled poetry book titled *Tirtha Yatra*, translated into English by Moirangthem Priyobrata Singh. The extract looks like this;

"My loving mother, Manipur, I mistook you for a beggar But you are not a dependent, I doubt if foreign goods were treated as ours But all these are our own fate In the process of history We took a lot from others But the gifts are also countless All indulged in the common wealth We meet the petals of Meitei When opened the flower of Hindu Yet when the petal of Meitei is separated We find the flowering of Hindu...." (Singh, 2012, p. 27)

The import of the Hindu religion is another context, but the total annulling of the structure of reasoning which is historically and culturally innate in our society is foolishness. The generality of human rationality is inevitable, but the structure of reasoning depends upon the nature of the civilization, which is further influenced by a variety of factors. We are not sure what these factors should be, because it is simply beyond the reach of empirical research. But on the other hand, the differences itself is evident across civilizations. In an observable instance of the two old civilizations and the differences in the fundamental structure of reasoning, Max Muller writes, "The sciences of Logic and of Grammar were, as far as history allows us to judge, invented or originally conceived by two nations only, by Hindus and Greeks." (Muller, 2001, p. 59) Both the nations had their claims of precedence over the other, but Muller suggests that "...it will be best to consider both Greek and Indian philosophy as autochthonic, and to derive from their mutual similarities only this consolatory conviction, that in philosophy also there is a certain amount of truth which forms the common heirloom of all mankind, and may be discovered by all nations if they search for it with honesty and perseverance." (Muller, 2001, pp. 60-61)

In the light of the above argument, and also in the light of the religious and cultural assimilation observed by E. Nilakanta, we can infer that though there are assimilations in terms of mixing up, the autochthonic character in few other aspects, such as the types of reasoning should remain intact and



persists throughout across time, ready to be realized in time. This autochthonic reasoning inadvertently serves as a bond in, a society against degradation, segregation, etc. When the Greeks reasoned, it can be structurally presented in the following manner; if for instance, I want to infer that the hill is fiery from the courtyard of my home, I need to perceive the occurrence of smoke on the hill. Thus the following argument follows;

Wherever there is smoke, there is fire. There is smoke on the hill. Therefore, the hill is fiery.

On the other hand, the Indians would argue the same situation as;

The hill is fiery. For it smokes. What smokes is fiery. The hill is smoking. Therefore it is fiery.

Many Western logicians claim that out of the five lines in Indian syllogism [structure of reasoning], two lines are manifestly superfluous.¹ Sir William Hamilton claims that "The Hindu syllogism is merely a clumsy agglutination of ...counter-forms, being enounced, 1st, analytically, 2nd, synthetically." (Ganeri, 2001, p. 10). But the exponents of Indian Logic like Ganeri, Muller, and Ballantyne would claim otherwise. Ganeri writes, "...the five-step format... is not to present the premises and conclusion of a formal deduction, but to describe the correct form for conducting a debate." (Ganeri, 2001, p. 10)

The recasting of the structure of the argument looks like this;

- (1) "What is your thesis? That the hill has fire on it.
- (2) Why? Because there is smoke there.
- (3) So what? Where there is smoke, there is fire: e.g. the kitchen.
- (4) And? The hill is such a smokey place.
- (5) So? Therefore, it has fire." (Ganeri, 2001, p. 10)

The whole argument suggests the distinctions between the Greek civilization and the Indian's. Though they seem to infer the same conclusion, the structure of reasoning is different. It is due to the fact that the Greeks, on the one hand, crave for the valid knowledge instantly and on the other hand the Indian attempt to convince the audience. This is because the entire Indian culture, and also the epistemic foundation was

¹ See H.Ritter's *History of Philosophy*, 1846, p-365



designed on the basis of debate. Thus the difference between civilizations can be seen in their approach, and this can be extended in many other aspects.

Similarly, the renowned poet Khwairakpam Chaoba in his essay Khamba Thoibi Wāri Amasung *Māhākāvya* (The tale of Khamba Thoibi and Epics; A comparative study) argued that the two civilizations-Hindu and Meitei, though assimilated in the events of history, culturally, each has its own way of doing things, such as propagating the way of life, promoting certain morality or the universal characteristic of morality itself, or even the rhetorical exercises in terms of motivating and convincing the above principles, instilling the essence deep within the human mind and emotions. There he presented the irrefragable position to prove the richness of the Meitei culture by staging it side by side with the other popular Hindu epics. Epics for us and others with similar intensity of cosmogony stand to be the manual of life, where multiple aspects of life, including morality, have been dealt with and guided through multiple possible human situations; that needs to be considered crucial for the sake of judgments or decisions, so as to transcend the very situation in a more ethical and prudential way. Chaoba writes, "Kanana veena gi eshei shakliba gayakki shoor kholhek, schhanda tabada nungairi, kanana Khamba Thoibi gi warimakheidang taduna haraori.....khamba thoibigi awangba niti taduna pukningda anouba shiksha ama phangnaba taalli..." [This is not an exact translation, but we are trying to present the gist of the claim. Chaoba writes, "While some enjoy to the blissful notes of the veena, some others are fondly inclined only to the tales of Khamba and Thoibi, trying to educate themselves through the nobility of the principles of life depicted there.] (Chaoba, 1973, p. 1). He insists that somehow the larger part of Meitei's life is inadvertently influenced by the tale; despite there is also the intoxicating music which can seduce one's faith towards its sublimity. Though this enchanting music is the product of cultural assimilation, the people exhibit some kind of restraints to the seduction. We believe the restraint is an effect caused by the consistent exposition to the Meitei culture elaborated in the tales such as Khamba-Thoibi. This restraint is somehow unbelievable in the context of a society which is deemed to be primitive by the mainland intellectuals. According to Chaoba, the culture symbolizes the characters in the tale as an exemplification, in setting a moral standard. For instance, 'one is as beautiful as Thoibi', or 'he seems to be Khamba' means they tend towards perfection, a depiction of the state of *numero uno*. (Chaoba, 1973) These standards, according to Chaoba, are engraved in the blood and bones of Meitei society. His basic intention was to prove that Meitei society and its culture do not lack the profound principles of life. This intention is due to the popular perception, that always sides with the other non-ethnic epics and lore, and its glorification against their own, thus proved grand, culture. Chaoba did make an intense analysis and comparison between the tale of Khamba-Thoibi and other epics considering most of the central principles that define the fundamentals of life. For instance, the deciding ground for Mahabharata – on the battlefield of Kurukshetra, slogans were thus made;

"Yathā Dharma Tathā Kṛṣṇa,

Yathā Kṛṣṇa Tathā Jai" (Chaoba, 1973)

[Where there is Dharma/Righteousness, there is Kṛṣṇa /Almighty, and where there is Kṛṣṇa there is Victory].



Again, in the battle of Khoirentak, between Khamba(symbol of good) and Nongban(symbol of evil), in the similar tones of the Mahābhārata, slogans emerge, and these slogans become the beacon that guides the decisions in life;

"Epudhou Thangjing na Kubire Landaba na Lakchare Nongyai na Mai Pakle." (Chaoba, 1973, p. 7) [Blessed by the Almighty, Righteousness always triumphs, Victory to Nongyai]¹

The observation of the great poet is enlightening us in such a way that the same moral reasoning, which has been consistently practised in conformity to the principles laid down in one of the biggest epics such as Mahabharata, can be applied similarly in Khamba-Thoibi. This means, for Chaoba, that the tales which represent the Meitei culture, such as Khamba-Thoibi, can be glorified like that of Mahabharata because, the richness that is evident here is comparatively equivalent to any other epic. This is not comparing Khamba-Thoibi on the parameters set by Mahabharata, but an exposition to clarify the richness which has been overlooked by its own people.

That being said, the string that binds a society through its culture cannot be entirely represented, solely by the method of reasoning alone. For instance, the Hindu society is integrated through two key elements among many; Dharma as morality, and of course the 'reasoning' as debate. Then, what binds the Manipuri society, or Meitei society? What is the unique fundamental principle that has been able to sustain the status of Meitei society qualitatively? What is the uniqueness of the 'principle' that deviates itself from the assimilated yet dominant and popular Hindu culture? My limited reading leads us to the fundamental elements that has been successfully sustained and elevated in the oral literature associated with the folklores of the Meitei civilization. Despite the conflicts that persist among the various versions of the folklores and works of literature, with regard to its contents and many other things, this fundamental element is venerably sustained. Above that, any society with a civilization-al history having a genesis of its own, invites conspirators whose conspiracy arises out of some empirical observations with reference to some written hypothesis. This is because this part of the culture, the genesis, is always engraved within the oral literature, and the nature of oral literature and its vulnerability contradicts the approaches of modern empirical sciences and its related understanding.

Nilakanta's words also indicate the existence of some kind of chaos, chaos as the present picture of reality, that represents the instability in maintaining a sound theory, and history, of the culture of this society; the Meitei society. In other words, this chaos represents the incompetency of the culturally corrupted and blurred minds, seduced by the egotistic calculus. This egotistic calculus is distorting the entire culture because their hands reach out in every domain; from the dining table to the administration

¹ This translation is solely attempted by the writer of this paper just for the sake of understanding and for the sake of the arguments. This may sometime overlook the aesthetic sense.



or politics. This ailing society needs to be revitalized by the fundamental element that runs deep in the Meitei way of life.

The particular Meitei society, which extends from the creation, based on the genesis, is not fundamentally structured by rationality in terms of reciprocity, or the stiff stoic mentality. This is a sentimental integration. When we speak about sentimental integration, we are not simply talking about the national integration among the diversity, through some symbolic representation of mass sentiments. This sentimentalism is a pure sentiment unguided by some moralities or some kind of objectives in a larger context. It is an unbiased sentiment characterized as directionless, impartial and ecstatic.

Before we trace this fundamental sentiment, before we categorically infer the 'centre' through arguments and shreds of evidence, there is the ultimate necessity to taste its functionality within the culture. When we utter 'within the culture', we are technically using the phrase to represent the 'lore' that intimately, always elaborate and explicate, and makes the indiscernible culture discernible. Most scholars and poets have agreed that the tale of Khamba and Thoibi is part of the larger picture of the lore associated with the incarnations of Lord Thangjing. The tale of the seven incarnations of Lord Thangjing, or the Seven Avatars, is based on the provincial region of Moirang. It is believed, as also claimed by the poets and scholars, that Khamba and Thoibi is one among the incarnations. The tale, associated with the seven incarnations and the entire gamut of life and its principle, is essentially developed upon the notion of 'love'.

The intention behind reiterating these references to the lore, is not to propose the significance of it in terms of establishing its authority, but rather the realization of the significance of it as the principle of life by embracing it as a choice, as a product of will, while also knowing the richness of it in all its aspects.

In the beginning, according to Sarangthem Boramni, the tale of seven incarnations started with the love story of two pigeons, which was unfulfilled in their embodiment as a pigeon. By the will of the Almighty, to sustain the tale of love, seven different incarnations were purposefully adopted. These incarnations on the one hand are the incarnation of the two pigeons, and the same incarnations including the pigeons are extendedly understood as the incarnations of the Almighty himself. The origin of the story or the way it has been interpreted can be seen in its variations which rather could be the possibility of the presence of the masters indulging in rigorous hermeneutics. This is just a speculation from our side. But our duty is to study the fundamental ambition that the lore(s) propagates in making the lives of Meitei society unique, and at the same time to sustain the bonding among men.

In Sarangthem Boramni's *Moirang Saiyon Taret*, he begins with the tragic story of the two pigeons that ended their lives in the hand of a hunter. Both Boramni and T.C. Hodson contend that the first human king was Iwang Fang Ponglenhanba, and in his reign, the first human incarnation took place (Boramni, 2021) & (Hodson, 2010). The tale of the first incarnation is popularly known in the lore as the tale of *Henjunaha-Lairoulembi*. Subsequently, according to Boramni, the incarnation follows as; *Shamba Naha Lamganba-Khamnung Yaidingkonu, Wanglen Pungdinghanba-Chakpram Yainu Phishaheibi, Nganba-Sangloulembi, Khoyon Haoba-Yaithingkonu, Khamba-Thoibi, and Kadeng Thangjahanba-Tonu*



Laijinglembi. (Boramni, 2021) This information is entirely cited from Boramni's book. There are separate versions of the incarnations, separately narrated by different scholars with different aesthetic tastes. The tale of *Khamba-Thoiba* was grandly expounded by Hiham Anganghal in free verses¹; the tale of *Kadeng Thangjahanba-Tonu Laijinglembi* is again rhetorically elaborated in the work of Hijam Guno² and many other scholars. These are some of the popular works of literature, and their reputations do not need my further elucidation here.

That being said, what is significant for us, or what intrigue us, is the amount of influence that the lore should exert upon the lives of the Meiteis. This exertion, too, has many aspects, and among them, we intend to focus on the principle of bonding, that functions within the lore. One universal element that has been sustained throughout the different incarnations is the notion of love. The tales began with love between a boy and a girl, and are expanded or developed along different characters. The will of the Almighty, as mentioned by Shri Boramni, was such that, the unfulfilled love of the two birds should ultimately be fulfilled in another lifetime. (Boramni, 2021, p. 10) What we infer from the tales is more about expressing rather than fulfilling. This is the intriguing part because the notion of love, popularly, is associated with a certain element of desire, and desire is always on the path to fulfilment. Most would argue on the disjunction between love and desire, but some would still insist the other way round. This could be a topic for another discourse, but we are not delving into it here.

In all the incarnations, love has been depicted in such a way that everything about life is subordinate to 'it'. The tale of *Henjunaha-Lairoulembi*, which is also the first incarnation, is magnanimously dedicated to the notion of love. I will not repeat the story because every member of the society is overly familiar with the tale. From a laymen's perspective, it has been normally conceived and narrated as a part of the lore to educate the ethics and morality of being obedient, respecting the traditions, the value of elderly advice, and so on. On the other hand, catastrophic decisions were taken for the sake of love. Again, there are misunderstandings on the notion of love which is generally exemplified in the context of a boy and a girl. I would argue that depicting love, and integrating, in it, the moral sense, is difficult in the domain of family love, or self-love. When a moral sense is integrated into the notion of love, then it should be influenced by will as 'reason'. The connotation of this sense is ambiguous when rationality is brought into the picture because reason has manifold capacities when interpreted from different standpoints. We are considering the account by Immanuel Kant (1724-1804), a German philosopher and mathematician, and a professor at the University of Konigsberg. He insists that morality should not be a product of the whims and fancies of some person or a group. It should be a product of reason in the form of a will, or moral will, that should ultimately become a universal law applicable to everyone. He writes, "...act only according to that maxim through which you can at the same time will that it become a universal law." (Kant, 2011, pp. IV-421). Therefore, when love is engrained with a sense of morality, then that particular love should also transcend anything which is a product of brute animality, in the form of desire, and should express the Kantian

¹ See Hijam Anganghal's Khamba-Thoibi Sheireng

² See Hijam Guno's Tonu Laijinglembi Seitharol



character. But we are astounded by the fact that the love which was sustained in the sphere of Meitei lore is always inherently characterized by the sense of morality. Therefore, what we witness in the lore, the love that is expounded in the context of a couple, though the expression is pervaded in all the relations involved, is to groom it with a sense of morality so that it can transcend from mere attachment born out of desire and other cravings.

In the incarnations, the notion of love was projected in terms of its eternality. It does not matter whether there is a bodily reunion between the two; rather what matters are the expressions of love and its impact on the society, in the personal relations, social morality, the king's morality, etc. In another version of *Henjunaha-Lairoulembi* composed by Baryl Thanga (Laishram Biramangol), the entire tale is being channelized in the stream of love. The love that happens between Henjunaha and Lairoulembi and the demise of Henjunaha comes under the master plan of Supreme Lord Thangjing. The Almighty intends to teach the human world the 'life' after death.¹ Therefore, by killing Henjunaha, the Lord introduced him to the world of Death and all the consequences the souls suffer in the form of penance for one's worldly deeds. The Lord ultimately revived Henjunaha's soul and gave him the opportunity to narrate his journey in the underworld. (Thanga, 2012) My opinion is, that every society must be presuming that this type of master plan is necessary at the dawn of human civilization to establish the morality deeply within the human soul. Here, in Thanga's version, what we infer is that the Supreme Lord, for the sake of His love for His creation, initiated the master plan. He conducted the master plan through love; between Henjunaha and Lairoulembi, between mother and a son, between parents and their daughter, between the king and his subjects. Henjunaha lost his life for the sake of love; Lairoulembi sacrifice her life for the sake of love; the king is thoroughly involved in the matter for the love of his subjects, etc. Above all, Thanga's rendering of the story, also incorporates the pure love that was shining in the realm of Death. The Lord of the realm of death, Khamnung Thongarel Sidaba, let the souls to undergo their penance for the sake of His love and care for those souls. The ruler of the realm of Death is not the mere executioner who enjoys punishing, but the Lord who truly love the human souls, and pure love can only be expressed through intense care, and this intense care is again conveyed in the form of punishment because the penance was the only path to purification. Therefore, the ultimate will of the Lord is the purification of the souls and retrieving the souls to their pristine glory. Finally, in the ending note, Thanga writes;

"Yangleihanbei Mapari, Henjunaha Nawagi Wari sina loirakpa, Iwang Ningthou Telheiba Moirang Ningthou Mapuren, Leipak miyam pumbadi Mitlu eera ehouna, khoirum minok tamnakhi. Kege Sana Leimayon, Keithel aka akum da Lokloi miyam punbada, Shabi-Shanou anigi Khamnung Lamkoi wari na, pothafam bu oinare." (Thanga, 2012, p. 152)

¹ In Sarangthem Boramni's version, the event of resurrection happens in the incarnation of *Shamba Naha Lamganba-Khamnung Yaithingkonu* during the reign of Iwang Telheiba. But the resurrection was not purely in human form.



[S. Boramni's account of Henjunaha-Lairoulembi is staged during the reign of Fang Fang Ponglenhanba, whereas Thanga mentioned Iwang Telheiba in his book. There can be some variations on the historical account, but we took no interest in those facts.]

This means, that the story narrated by Henjunaha becomes the household story of the time, and this further means that the whole gamut of the story reached out to the public, in every dining hall, in every courtyard, at every crossroad, directly or indirectly, imbibing the public with the right morality encapsulated in the glorified notion of love.

Similarly, in the other incarnations, the entire tales are garnished by some kind of plot(s); unclear whether they are just the figments of imagination or some unproven facts, but they are truly functioning to glorify the notion of love, although there are differences in the plots and events. In another instance, Hijam Guno's version of the tale of Kadeng Thangjahanba-Tonu Laijinglembi, out of the six or more versions of the same tale, which is also one of the incarnations out of the seven, and also a literary masterpiece of Guno, again, magnanimously presented- the love emboldened Meitei way of life. Since we already acknowledge the fact that there are certain variations in the plots among the different versions, I think, the notion of incarnation, the pretext of the romance, and the notion of love accelerated in proportion to the plots and the ceremonial tones throughout the tale, is common to all or at least in some of them. Hijam Guno carried the storyline in a ceremonial style celebrating the rich culture and also the richness of the language itself. This is marked by most of the scholars and at the same time true for the majority of the readers. The general plot of Kadeng Thangjahanba-Tonu Laijinglembi is crafted in the reign of Laijing Punshiba. A charming young man, Kadeng, fell in love with the beautiful Tonu, and they promised to one another, and in the presence of the Almighty, that they will not part, both body and soul, except to each other. While Kadeng went on to an assignment tasked by the King, Tonu was betrothed to the King. A prophecy of saving the kingdom and its people from possible natural disaster, compels this unwanted marriage. This ultimately led to the emotional breakdown of the two love birds. But in Hijam Guno's version, the King, when he realized the promised love between Kadeng and Tonu, he simply set Tonu free to be reunited with Kadeng. (Guno, 2015)

Again, the vehicle of love is exalted satisfactorily by Guno. The tale that began with the sublime love between Kadeng and Tonu, is also full of loves, in its multitudes of characters, like that of Henjunaha-Lairoulembi. The 'love' is not confined only to the romance of a male and female. The whole spectrum of love that is exhibited in the tale is extended from God's love towards his creation, a king's love for his citizen and vice versa, the unrelenting love between friends, and to the significance of unperceived love that persists in other forms of life¹. From the inception of Kadeng-Tonu's romance, the twist in the plot is seen from the Supreme Lord's conditional commandment/prophecy:

"...Moirang kouba lamnungshi keidei mangfagabano! Sharam Ngaram ningthiba heigi leigi leichanbu,

¹ See Hijam Guno's *Tonu Laijinglembi Seitharol*, chapter-5



Chamma chamma khujing oi tamjaraku khudonbu. Uttramang shanglangmeida shumna ngahong chakhonghan Chingu eepuk pelhallu, Ningthou nangi ningjaman kubigani warunu!" (Guno, 2015, p. 56)

This commandment led to the engagement of Kadeng in the huge task of gathering the necessary things for the offerings. The underlying motive in the commandment is to further expound on the other forms of love that are evident in the tale. The moment Kadeng heard the commandment, without a speck of second thought of his personal love that lies unfulfilled with Tonu, he voluntarily consigned himself to the task. Guno's account of Kadeng's decision;

"Pokpu pokla sigani, Sinabatei pokpara, Leibak yaipha maraan nga, Eihak ama mangfeina; Kege Ngangoi Mapu o, Sharam chamma Fabado,

Nanai thoudang oijaba Sana nongdam tambiyu, Loidam thabum amada sharam suba ngamdraba, Nanai eibu Eeningthou, yarou shahut sinduna Sharenbudi chanbiyu, wasakchari nanaina." (Guno, 2015, p. 57)

The above account unveils the ultimate love for the sake of the king, the land, beyond personal yearning. This further will lay down the possibility of other kinds of love. For instance, numerous incidents plotted within the tale highlight and exclusively revealed the sublime love(s); the love that could possibly flourish within the animal kingdom, particularly Sangai; the love between a father and a daughter, and between the friends- Thoinu and Tonu. After the incident of the king's marriage with Tonu, which was nothing related to any kind of appetency from both sides, but rather an act carried out for the sake of the king's responsibility inclined toward the welfare of his people, the intensity of the divinity that was sustained in the above-mentioned love, was multiplied both qualitatively and quantitatively. When Kadeng heard the news of the incident, he obviously broke down but his senses came alive when he realized the fact that it was the prophecy of the Lord. In Guno's words;

" Shamu naton mallaba pambom ching gum kanbado, Khanghoudana hikthare. Kadeng khaangngi ngeihaktu, Maya thak-kha ni krak chik swar shangna honthajei. ' Laigi nongdam haiba ko, Khoiyum Mabu yaobara', Khallamlaga Kadeng hangatlakle Palem-ka," (Guno, 2015, p. 140)

This realization is intense and it also exhibits tolerance, and patience, deeply influenced by the love emboldened by morality. It means the entire conflicts and dilemma that could have arisen in his absence was immediately comprehended, and also the complete awareness of one's duty towards his king, respect, and loyalty beyond one's personal necessities. Kadeng hid his sentiments from the world, and from the king, practically weighing the morality or the imperatives. We are personally astounded when the king



knew the selfless love between Tonu and Kadeng, he handover Tonu to Kadeng. This emendation is also done not in pride and power but, out of sheer love for his people. This is evident when the king converse with the first queen;

"Ningthou sagei kannaba, Chingu mayathang bu ngak Tonu koubi nanaobu, Leima likthang challu ngei, Nanai Kadeng Thangjaba, Ana shengumnaredo. Ningthou eigi eeraan na, Kadeng-Tonu anibu singngel leisa khaidokla,.." (Guno, 2015, p. 178)

" Ningthou oiba Eihakna Eesagi ta mathiba leibakkina khandaba, Macha manai warasu, wage wajou leithokpa Pamde Eido Ibemma, leibak nabu chingnaba Eihaknasu lallaba, una una khangdasa Karam leini Ibemma!" (Guno, 2015, p. 180)

Therefore, the entire storyline is essentially carried by the notion of love in every possible aspect. Since our attempt is to preserve the notion of love in its absolute sense inherently constitutive of a powerful moral sense, there is no doubt of the existence of sheer love, with the same sense, that pervades throughout the lore. This sheer love devoid, of all the elements of desire, is also the cohesive force that binds the Meitei society. The cohesive force also implies that this notion of love should also guide an individual life from a subjective point of view. This also suggests that such sublime love should also be the ruling rod for any kind of personal expediency. These things are anticipated in the ancient lore, especially in the tales of seven Moirang Shaiyon.

Conclusion

Due to the constraints in space and time, we are not dealing with all the incarnations. But the contemplation dedicated to the cohesive force that has been embraced by the story and lore, and its role and significance in the Meitei way of life is the fundamental thesis of this paper. Above the observation conducted by Shri Khwairakpam Chaoba, there are other numerous researches that have successfully explained the essence of Khamba-Thoibi Sheireng (Anganghal, 1986). The tale of Khamba-Thoibi still remains to be the most popular among all the incarnations and we do not need to reprise it here. Our limited observation - limited in the sense that we are not covering the entire lore here - drives us to the conclusion that, though there are ample amount of norms; norms as morality, norms as law, norms as reciprocity, etc. – both social and individual – which can be traced within and beyond the Meitei culture, is also reflected in these epics and lore. But the kind of morality/norms here, which is autochthonic and universal at the same time, is always encapsulated in the notion of love, and love always seems to be, simultaneously, both the determining factor of events, and also the cohesive force that preserve the society



from straying away due to the outcome of these events. Hence, the Meitei way of life through our lens is essentially the life that is always preserved in the realm of ultimate humanity which normally transcends, or always attempts to transcend, the narrow sense of life – the sense of life which is violently driven by the basic human desire – and achieve the simple terrestrial life enamoured by the notion of love; love understood in its absolute sense excluding everything about desire, pleasure, expediency, etc. and reinforced by the self-generated morality; morality generated by the very notion of love. And we shall attempt to unearth the morality generated by the notion of love in some other time.

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MAKHUAM LANDSLIDE: A PERSPECTIVE

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Landslide is a natural process operates today, operated throughout geological time and will operate as and when situation favours. None of us can stop it. However, we can minimise it, if we feel so. The main force is the gravitation, which never ceases to act. The recent disaster that took place at coordinates of $24^{\circ}48'12.76''N$ and



FIGURE 1: Makhuam Landslide (courtesy: imphalreviews.in)

93°40'27.41" E with the elevation of 570m msl at Makhuam village, Noney District of Manipur in the wee hour of June 29, 2022 midnight shocked the entire nation

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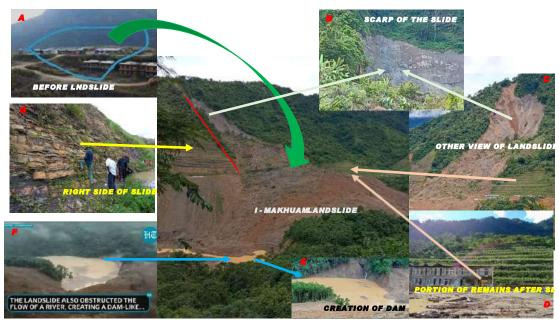


FIGURE 2: Various views of the landslide, its consequences and features

It's one of the nastiest disasters in recent times in the Indo Myanmar Hill Ranges (IMR) that extinguish 61 lives out of 79, except 18 people are rescued. Rest of them either buried in the debris or drowned by the impounding water due to the blockade of the Ijai (Iyai) river course by the sliding materials. An area of about 31 hectares has been affected, hampering the pace of NFR construction work also losing crores of rupees. Apart from this, it cleaned out i) the barrack of 107 Territorial army, ii) an NFR camp, iii) a labour camp for construction workers and iv) half the portion of Tupul station yard including a part of the double storey building (Figure 2D).

The area belongs to Barail Group of rocks comprising fragile lithology of thinly bedded shales, sandstones, siltstones and sometimes, clay and mudstone. Besides, the Ijai (Iyai) river is running along a major fault.

As per Geological Society of India (GSI), the cause of Landslide in Manipur is due to

- i) slope modification for construction,
- ii) quarrying for construction materials,
- iii) road widening,
- iv) fragile lithology,
- v) complex geological structures,



vi) heavy rainfall.

Our perspective: The area where the Tupul Station yard had constructed seems to be an old landslide zone, since there is no continuity of the stratigraphic column which is available in the left side of the slide (Figure 2G). The course of the Ijai river is not straight at this point. It appears that a spur was made due to the accumulation of old slide debris making the river into a curve course. Dumping of huge pile of slope modification materials in order to create the requisite space for a station yard may also pose another threat to the stability of slope.

Lithologically, it is weak and structurally major fault lies at the vicinity of the slide along with minor faults. It appears the slide took place at the intersection of two discontinuity planes (Figure 2 B). One of the discontinuity planes is the slip surface of the recent slide which appears to coincide with the slip surface of the old slide. From structural point of view, it is observed that dip direction of one of the joint sets coincides with the slope direction while other two sets cut across the bedding. In such condition, seepages through the joints particularly along the J_1 can deform the slope mass and initiate slope failure.

Manipur in general, highways in particular is characterized by highly erodible soil particles; silt followed by sand and clay respectively (Joyraj et al. 2022). Prior to the incident, there is heavy rainfall of 375.6 mm and 329.9 mm in May and June, 2022 respectively (Table 1). Such incessant and intensive rainfall can detach soils easily and may become a triggering factor for the initiation of shallow landslide. If proper drainage facility is not available in the slope, it readily seeps into the debris of the old slide and dumping materials from slope modification thereby saturate easily and cross the limit of its resistance. Moreover, construction of heavy civil engineering structures (Figure 2 A) in the unstable slope may pose extra load to slope material. Such extra load can initiate failure when natural moisture content is greater than plastic limits of such loose soils or slope masses.

Year (yyyy)	Month (month)	Rainfall (mm)	Year (yyyy)	Month (month)	Rainfall (mm)
2020	January	38.6	2021	April	72
2020	February	4.2	2021	May	185.2
2020	March	10	2021	June	114
2020	April	137.8	2021	July	102.8
2020	May	152.8	2021	August	115.4
2020	June	206	2021	September	147.4
2020	July	233.2	2021	October	54.6
2020	August	109.2	2021	November	0

 Table 1: Rainfall data of previous years of Noney District



2020	September	195.2	2021	December	43.4		
2020	October	290.3	2022	January	7.8		
2020	November	17.4	2022	February	40.4		
2020	December	0	2022	March	19.6		
2021	January	8.2	2022	April	53.8		
2021	February	0.2	2022	May	375.6		
2021	March	67.6	2022	June	329.9		
COUDO							

SOURCE : DIRECTORATE OF ENVIRONMENT & CLIMATE CHANGE, GOVERNMENT OF MANIPUR, POROMPAT, IMPHAL-EAST, MANIPUR-795005

Combining all these factors, the worst ever disaster may take place. Despite of all these facts, we cannot escape from this grave situation, using the new trend of technologies; we need to accomplish the project by all available means.

Reference

Joyraj ST*, Maisnam PS, Soibam I (2022) Geotechnical and Structural Analyses on Senam and Kotlen Slides along National Highway, NH-37 (53) of Manipur, Northeast India. Himalayan Geology 43(1A):61-72.