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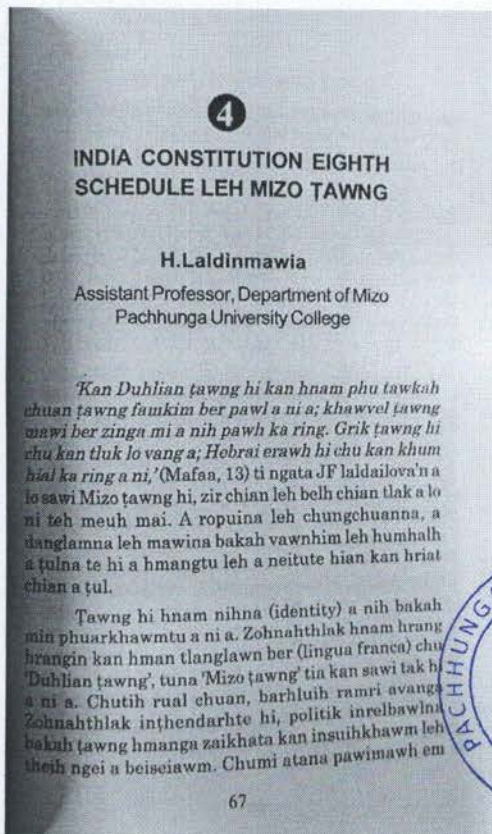

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Strain dependence of electronic properties and effective masses of monolayer ZnO from density functional theory

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ABSTRACT

This work focuses on the calculation of electronic properties and effective masses of ZnO monolayer under homogeneous biaxial strains. We have employed density functional theory (DFT) with generalized gradient approximation (PBE-GGA) as exchange correlation. The optimized lattice constant of 2D-ZnO monolayer is found to be 3.31 Å. The structure remains stable in its hexagonal lattice within the range of biaxial strain chosen in this work, from $\pm 1.32\%$ to $\pm 2.20\%$. Under normal condition 2D-ZnO monolayer exhibits a direct band gap with electron transitions along Γ - Γ symmetry points. However, under compression and extension the majority carrier flips from n -type to p -type, respectively. The variation of energy band gaps within UV-IR energy range predicts this material to be a potential candidate for optoelectronics. The calculated effective masses of both electrons and holes are in good agreement with the available data.

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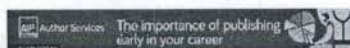
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Cut Slope Stability Analysis of Rangvumal Landslide Along Aizawl Airport Road, Northeast India

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Abstract

Rangvumal landslide covers an area of 15,318.4 m², at the western limb of Aizawl anticline along NH-54, the State of Mizoram lifeline and airport road. Landslide experienced in the area after slope modification for building construction followed by rainfalls on June and September in 2014. One building collapsed, landslide debris affected Cold Storage building, disrupted one part of 132 VV power line that connecting western towns of the State, and frequently interrupted traffic for more than 3 years. The landslide can be classified as debris slide and earth slide of translational type. Proper mitigation measures are suggested after geotechnical and Limit Equilibrium Method (LEM) analyses.

Keywords

Airport Road Earth Slides Limit Equilibrium Method (LEM) Proper Mitigation Measures Translational Type
These keywords were added by machine and not by the authors. This process is experimental and the keywords may be updated as the learning algorithm improves.
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Notes

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GOVERNANCE AND DEVELOPMENT IN
NORTHEAST INDIA:
A MIZORAM READER

Editor
Prof. K.Vidyasagar Reddy


Coordinator
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GOVERNANCE AND DEVELOPMENT IN NORTHEAST INDIA: A MIZORAM READER

Editor

Prof.K.Vidyasagar Reddy

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December 2019

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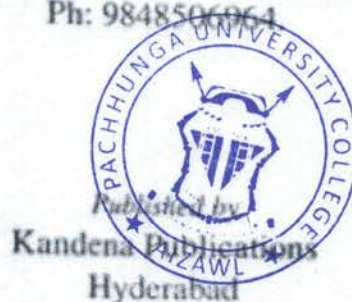
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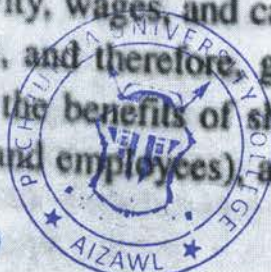
27. Sustainable Development Goals and Urban Development in Aizawl

H.C. Lalchhuanawma

Asst. Professor, PUC, Aizawl

Development induced large scale destruction, deterioration of environment and depletion of natural resources have led to the birth of the paradigm in the development discourse which is known as Sustainable development. The definition of Sustainable development by the World Commission on Environment and Development-1987 also known as the Brundtland Report '*Our Common Future*' is by far the most common and agreeable definition of sustainable development which says that 'Sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs.' The developmental need of the present generation is met as well as leaving enough sustenance capability of the environment to meet the future generations. According to Minh Thu Pham¹ of the United Nations Foundation, sustainable development is the development in different spheres without jeopardizing the future.

In the recent decades, urbanization in India has increased at very fast pace². The unique feature of India's urbanization is that a major chunk of urban population is concentrated mainly in class I cities (those with population 1 lakh and more) which accounted for about 70% of the total urban population in 2011; this has led to 'Top heavy' urbanization in India. Presently, 31% of India's population lives in urban area and their contribution account for over 63% of India's GDP. It is expected that by 2020, the contribution to GDP by urban sector in India will increase to 70-75 %. The number of cities and towns in India has increased over time, i.e. from 1915 in 1901 to 7935 in 2011. Most importantly, number of Class I cities increased from 24 in 1901 to 468 in 2011. The choice of urban locations for analysis is for the following reasons: First, urban centres provide a higher demand for manufactured goods than rural areas. Secondly, urban areas provide higher level infrastructure such as road, water, electricity, etc. which are essential to set up new industries. Finally, large cities (or agglomerations) have higher productivity, wages, and capital per worker (i.e., higher economies of agglomeration), and therefore, greater efficiency benefits. In addition, large cities provide the benefits of sharing (e.g. local infrastructure), matching (e.g. employers and employees), and learning (e.g. new technologies).



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POLITICAL THEORY

Andrew Hacker: "Political Theory is a combination of a disinterested search for the principles of good state and good society on the one hand, and a disinterested search for knowledge of political and social reality on the other."

WC Coker: "When political government and its forms and activities are studied not simply as facts to be described and compared and judged in reference to their immediate and temporary effects, but as facts to be understood and appraised in relation to the constant needs, desires and opinions of men, then we have political theory".

The Wikipedia defines Political Science as "a social science discipline that deals with the state and systems of government; the scientific analysis of political activity and behaviour". In spite of the absence of a universally accepted definition of the term Political Science, this definition is fairly acceptable. It may be noted here that the term 'Politics' is often used as another name for the discipline of Political Science.

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Scattering of SH-waves from a corrugated interface between two dissimilar nematic elastomers

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Abstract

This paper is concerned with the problem of reflection and transmission of elastic waves due to incident qSH-wave at a corrugated interface between two dissimilar nematic elastomer half-spaces. The expression of the phase velocity corresponding to qSH-wave is obtained. It is observed that this phase velocity depends on the angle of propagation of the elastic waves. There exist an irregularly reflected and transmitted waves besides the regular ones due to undulated nature of the interface. The expression of the amplitude ratios corresponding to the reflected and transmitted waves for the incident qSH-wave is derived by using an appropriate boundary conditions. The ratios corresponding to the irregular waves are found to be functions of elastic constants, angle of incidence, relaxation times, corrugation and frequency parameters. The amplitude ratios are computed numerically for a particular model at different values of corrugation and frequency parameters. The energy distribution of various reflected and transmitted waves are also obtained analytically and numerically and discussed the effects of corrugation and frequency parameter.

Key words: Nematic elastomers, qSH-wave, amplitude and energy ratios, corrugation and frequency parameter.

1. Introduction

Nematic elastomers (NEs) are soft materials, rubber-like liquid crystalline possessing both the properties of elastic degrees of freedom of ordinary rubber and also the internal, orientational degree of freedom of liquid crystals (de Gennes, 1980). The interplay between elastic and orientational changes is responsible for many fascinating properties of such materials that are different from the classical elastic solids and liquid crystals (de Gennes and Prost, 1995). Long macromolecules with rare intermolecular transversal bonds are a characteristic element of such NEs. They simultaneously combine the elastic properties of rubbers with the anisotropy of liquid crystals (Terentjev and Warner, 2001). Besides their unusual static properties, NEs have an interesting strong mechanical characteristics. It is found that an internal relaxation of the nematic director leads to a dynamic mechanical softening. It resembles soft elasticity characterized by vanishing shear stresses for a range

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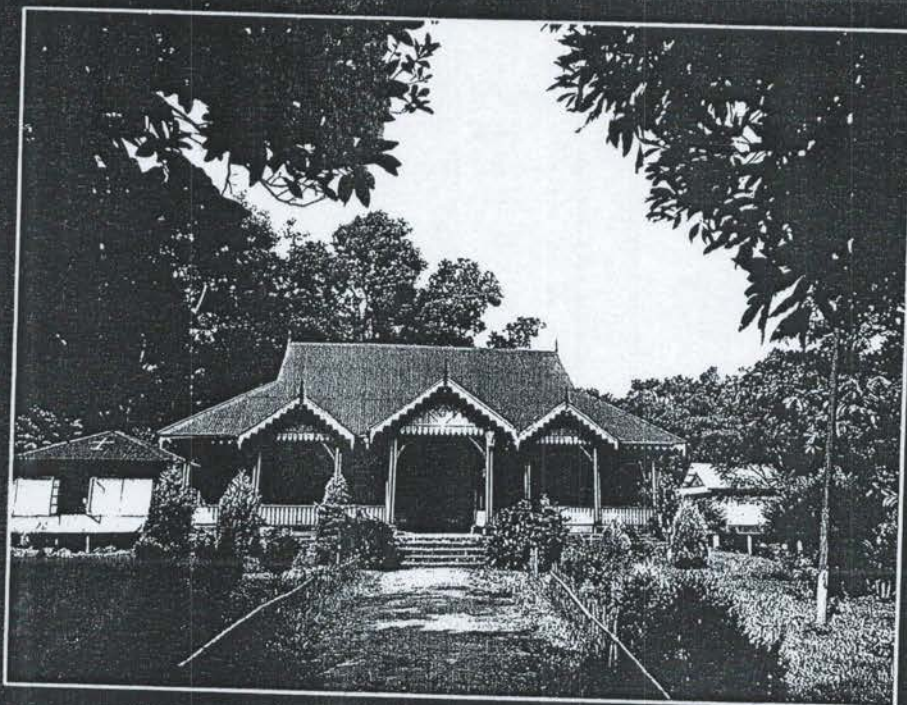
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MENTAL HEALTH, PERCEIVED STRESS AND SELF-ESTEEM: A STUDY OF YOUNG MIZO ADULTS IN LUNGLENG VILLAGE

Dr Rinpari Ralte
Associate Professor & Head,
Department of Psychology

ABSTRACT:

Self-esteem (the attitude one holds toward himself/herself as an object) is thought to be strongly related to mental health and perceived stress. The present study assesses the relationship between mental health, perceived stress and self-esteem among young Mizo adults in Lungleng village. Fifty-Nine participants (30 males and 29 females) with the age range between 20 to 40 years (Mean=27.75yrs) were contacted and assessed. Findings revealed significant gender differences ($t = 2.85, p < 0.01$) in self-esteem only. Males are found to have higher levels of self-esteem (Mean=28.63) than females (Mean=26.34). Significant negative correlation ($r = -0.34, p < 0.01$) was obtained between self-esteem and perceived stress; and self-esteem was also found to significantly predict perceived stress. This suggests that high levels of self-esteem result in lower levels of perceived stress and vice versa. Thus, findings suggest the need for the promotion of positive self-esteem in the target population to reduce levels of perceived stress and improving mental health simultaneously.

Key Words: Mental health, Perceived Stress, Self-esteem

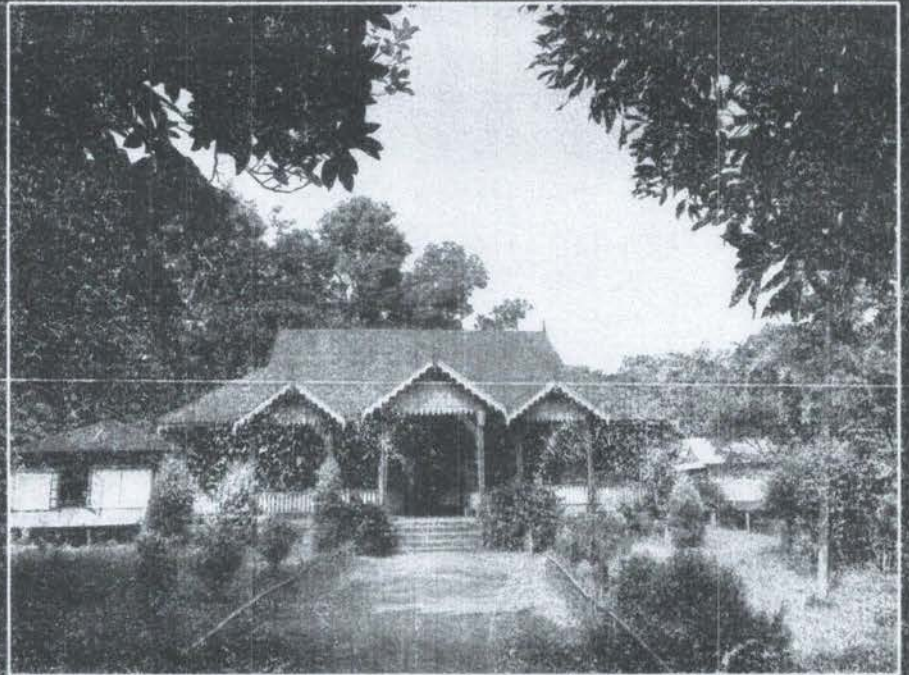

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EDUCATIONAL SYSTEM IN LUNGLENG VILLAGE

Lalthankungi, SusanLalthanpuui,
Lalrintluangi, Lalhruaitluangi,
Lalchhuanmawii, K.Lalawmpuia,
Gloria Lalchhanhimi

I

Introduction

Education is an act or process of imparting or acquiring knowledge or skills. It is the process by which society deliberately transmits its accumulated knowledge, skills and values from one generation to another. Educational system indicates the ways in which people learn skills and knowledge, information and understanding. It can be divided into various ways of learning namely-formal, informal and non-formal or quasi formal.

In studying the educational system in Lungleng, the research team focussed its study on the formal and informal education, studying the dissemination of learning from the household survey, and of formal education through the study of schools in the village.

Research Methodology: The success of a research depends primarily on the instruments or tools used and


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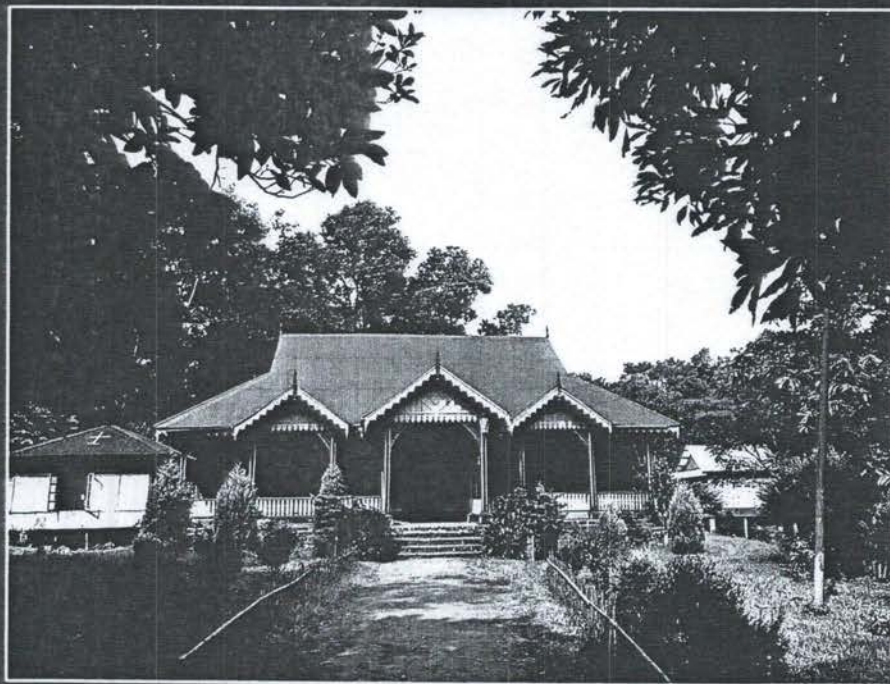

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ANALYZING SHIFTING AGRICULTURE AS A COMPONENT OF LOCAL LIVELIHOODS: A CASE STUDY IN LUNGLENG -I VILLAGE OF MIZORAM

P.C. Vanlalhluna*, R. Vanlalpeka, Zothanmawia,
Vanlalhruii Ralte, H. Lalruatsanga & HS. Thapa
Department of Botany

ABSTRACT

A study on shifting agriculture as a component of village landscape and local livelihood was made on Lungleng-I village which is a representative of typical jhum cultivation area where the cycle is reduced to 6-years. Shifting agriculture is the main occupation of people and an integral component of the village. The shifting cultivation provides numerous food crops to the people in a variety of manner even though risks are always a part of the system. The jhumias derive their sustenance largely from the natural resources surrounding them which include forest lands, degraded jhum fallows and home gardens besides from jhum which is the most dominant livelihood system for the village. The jhum fulfill the food and fod-

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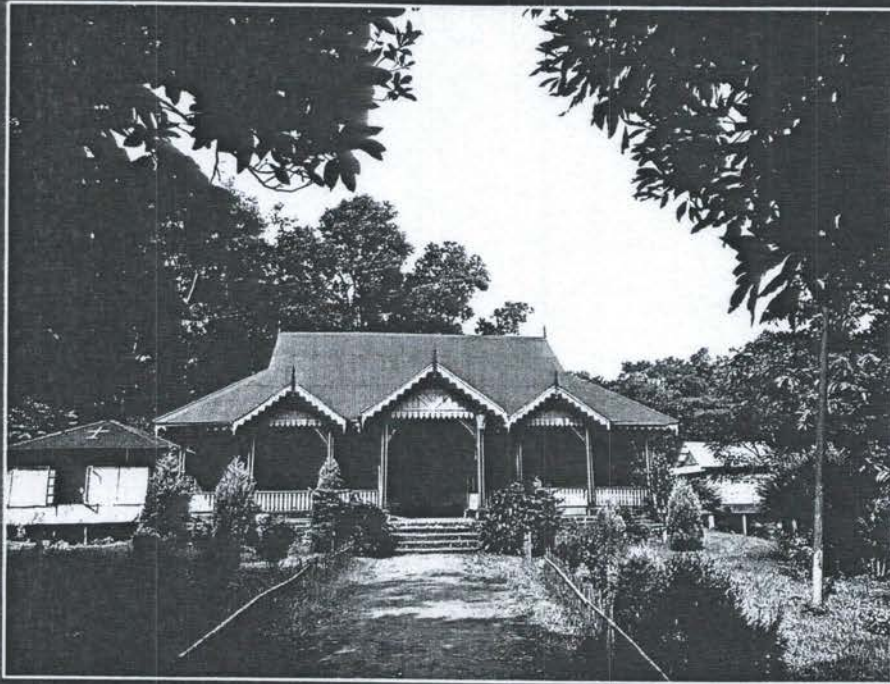

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LUNGLENG

(A Study of Pachhunga University College Adopted Village)



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SURVEY OF PTERIDOPHYTES DIVERSITY IN LUNGLENG –I VILLAGE, MIZORAM

R. Vanlalpeka*, PC. Vanlalhluna,
Zothanmawia, Vanlalhruaii Ralte, H. Lalruatsanga
Department of Botany

INTRODUCTION

Pteridophytes occur mostly in terrestrial habitats on earth and are also present in some aquatic communities. They are the important part of the ground vegetation in many forest communities and, also an important component of many epiphytic plant communities. Some species are very beneficial to humans and many species attracts many plant lovers for their graceful, fascinating and beautiful foliage.

The work on Indian pteridophytes were initiated by Beddome (1883, 1892) and after partition of the then British India in the second half of 20th century several scientists made their contributions to Indian pteridology Bir (1977, 1979), Kachroo (1975), Panigrahi (1960), Panigrahi and Choudhury (1962), Dixit (1984), Dixit and Vohra (1984), Handique and Konger (1986), Barua et al. (1989) and Borthakur et al. (2000) had provided. Recently, Mirza (2000) reported fern and fern al-

*Email: PekaV110@gmail.com


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REPORT OF NSS ACTIVITIES AT LUNGLENG ADOPTED VILLAGE

Dr. Zoramdinthara
Programme Officer

The NSS Unit of Pachhunga University College is the most premier NSS Unit in Mizoram and its came into existence in 1972. From the date of its inception, volunteers and Programme Officers of this unit have been already rendering their voluntary services for the expansion of NSS activities in taking up various programmes. The NSS Manual 2005 clearly mention that every NSS Unit must have their own adopted village and to take up task for development perspective as Lungleng Village was adopted village of our college and NSS Unit of this institution, the adoption committee has assigned us to undertake construction of public urinal, campaign on cleanliness, campaign on no tobacco and campaign on fire prevention at the village.

As such, the meeting of NSS Programme Officer cordially resolves that the newly adopted village may be visited to survey different activities which can be undertaken under special camping. As Lungleng Village Adoption Committee assigned this NSS Unit to do infrastructure works, after contacting local Village Council President and Local leaders of YMA, we decided to construct public urinal, to conduct anti-tobacco


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RE-READING OF MIZO LITERATURE

(with special reference to under graduate course)

A compilation of Seminar Paper



Department of Mizo
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POST-COLONIALISM LEH
'PASALTHA KHUANGCHERA'
BY LALTLUANGLIANA KHIANGTE

*Lalrotluanga
Research Scholar
Mizo Department
Mizoram University*

1. Introduction:

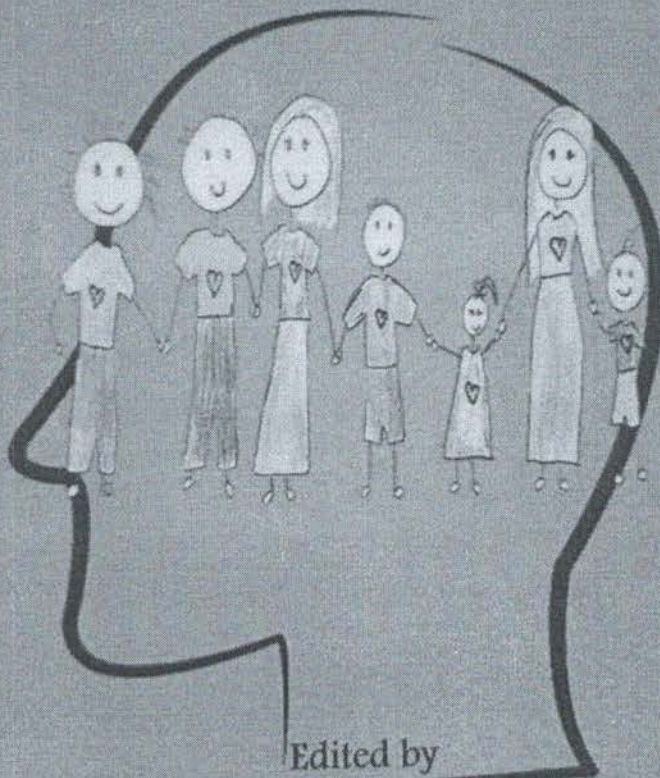
Lehkhabu tha ziaktu chuan a ziahsak, a chhiartu tan hmun leh hun awl zau tak, ngaihtuah chhunzawm tur thiam takin min chhawpchuahsak thin. Chu chuan amah leh chhiartute inkarah sawifiah mai theih loh inlaichinna thuk tak a siam a, lehkhabu dang an ziah chhiar tumin kan fan kan fan tawh mai a ni...Lehkhabu pakhat vang pawhin ziaktu tha a nih theih a, lehkhabu sawm zet pawh a tul mai thei. Lehkhabu pakhat ang ziaak thin te hi chuan an beih fe pawhin an beih rei a ngai khawp ang. Hei tak hi literature khawvel chu a ni (Tapchhak Theory, 78)

Tia C.Lalawmpuia Vanchiau sawi ang hian Mizo zinga thuziak lama kutchhuak ngah ber pawl leh a kut chhuakte tun thlenga zirilaibu lama kan hmuh thin Dr.Laltluangliana Khiangte hi a kut chhuak pakhat 'Pasaltha Khuangchera' vang chauh pawh hian ziaktu tha zinga chhiar tel tlak niin a lang. Ziaktu tha chuan a chhiartu leh ngaithlatu tan hmun awl a zuah thiam em em a, a ziah chhunzawm dan tur leh eng hawi zawngin nge a ziaktu hian min kalpui ang tiin ngaihnawm ti takin kan chhiar thei thin. Lemchan ziaktu tha ni tur hian thenkhat tan chuan lemchan thawnthu pakhat chauh pawh a tawh maithei, thenkhat erawh an kutchhuak pakhat vang chauh pawhin ziaktu tha-ah kan chhiar tel thei bawh ang. 'Pasaltha Khuangchera' hi Mizo Academy of Letters ten *Book of the Year* nihna hial an pek a nih avangin Mizo ten ziaka kan neih zingah chuan chhuanawm ber pawl a tling phak a ni.



PSYCHOLOGY

MITIN TAN



Edited by

Dr. C. Vanlalhruaia
Lalhmingmawia Ralte


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KUM UPATE TAN

- Lalthanthluangi Sa

Bible-in, "Lu tuak chu ropuina lallukhum a ni a" a
ang hian, dam rei leh miten 'tar' an tih theih khawpa awm
Pathian malsawmna a ni tak meuh mai. Amaherawhchu, m
tam takin kan hriatthiam loh fo thin chu, tar vâng ringawt hian
engmah zir tur emaw thawh tur nei lo an ni tawh bik lova, the
lai leh naupan zawk lai ang chiahin zir tur tam tak leh
hmachhawn tur tam tak an la nei ve reng a ni. Naute kan nih
atanga kan than chhoh zêl a, hun hrang hrang kan tawna kan
inzir thar a ngai ang hian, kum upa nih te, mi te ngaiha tar nih
te, kan hna atanga pension ngaih hun te hi, insiam rem leh
mahni inher rem ngai tak hun a ni. Midang min hriatthiamna
piah lamah mahni leh mahni kan inbih lêta kan inhriatthiam a
ngai êm êm a ni.

Mi thiamten, *life expectancy* an tih hi, mi hrisel tha pangngai
dam chen tura an rin tiin hrilhfiat ila kan sawi sual awm lo ve.
An dam chen tura beisei hi a kuma chhût a ni a. India ramah
hian tun kum sawmhni (20) kal ta chhûng khân *life expectancy*
hi kum sawm (10) vèlin a pun belh a ni. State hrang hrang te
life expectancy chhût vek a nih laiin keini hmarchhakho
finfiahna tur data an dawn loh avangin a hriat ve theih tlat loh
Kan hnaih ber Assam State kan en chuan, *life expectancy*
thingtlângah kum 63 a ni a (mipa kum 61.9, hmeichhia 64.6).
Khawpuiah chuan a sâng ve leh deuh a, kum 70.3 a ni. (mipa
69.1, hmeichhia 71.8). Ram dangah te pawh mipa ain


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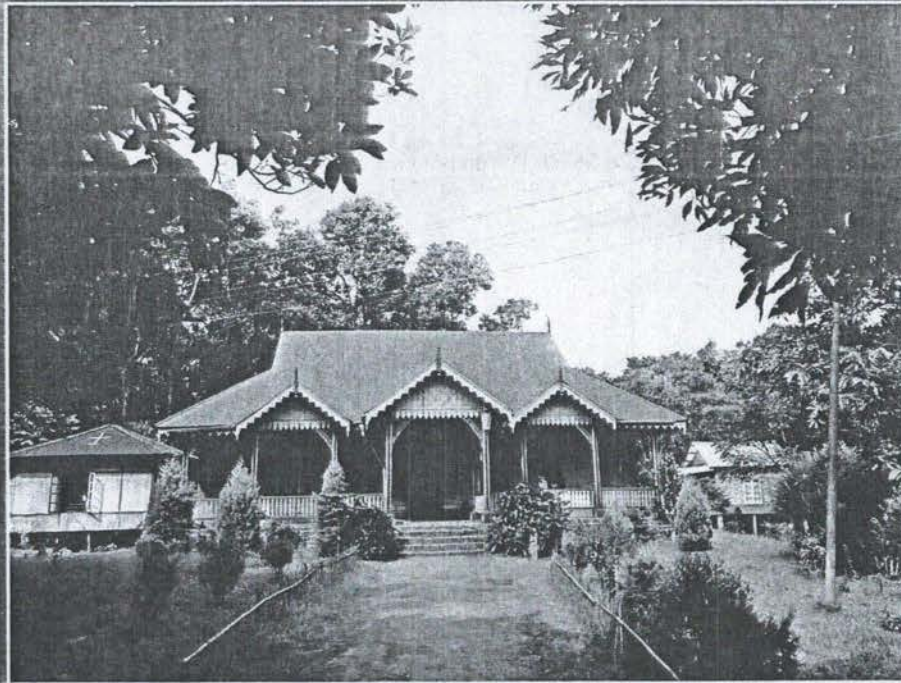
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AN IN DEPTH STUDY OF THE ENGLISH PROFICIENCY LEVEL OF LUNGLENG HIGH SCHOOL AND LUNGLENG CHIEF KHAMLIANA

Dr. Lalbiaksangi Chawngthu, Dr. Rualzakhumi,
Henry Lalmawizuala, V. Lalmalsawmi, Dr. Rebecca Angom,
Dr. Jamie Zodinsangi Hrahsel, Vanlalveni Pachuau, Alexander.
L. Sailo, Dr. Lalrinchhani, Jason Lalremruata,
R. Zothanmawia & P.C. Lalrinmuani
Department of English

The English Department of Pachhunga University College conducted and organized a project on Lungleng village on 14th October, 2016. The purpose of this project was to determine two things, first to conduct an in depth study of the English Proficiency level of the High School students and second, to obtain a deeper insight into the legends associated with Lungleng village and its chief Khamliana.

A. ENGLISH PROFICIENCY LEVEL

METHODOLOGY:

Inorder to identify the problems regarding the English proficiency level of the high school students of Lungleng village and to obtain a deeper insight into the existing legends connected with Khamliana, the following methods were implemented:


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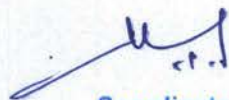
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LALRAMMUANA SAILO
Dinthar**—KA TLANGVAL LAI CHU SUNIN—**

Ka tlangval lai chu sunin
Hma hun Chiang lo ruaiah
Tiam lo mah i mi umtu chuan
Sulin mi zui kan thurukten
Hleiten an dang lo thinlaiah
Lengte chhingmit kaina karah
Len ka thiam lo a paw ber mai.

Ami leng Pawla sai loh tur mah
An ngaih lengi bawhla chhamten
Kawngkhar hawngin i run chhungah
Pungkhawmin Pasena hla lo rem chu
Ka theihtawk a tlem lua e Lalpa,
Hmingchhiat Biakbuk ka mualphona
Lengi tum ngai lo khan
Kawngka dai pial a paw em mai.

**—PAWNG THIR THER HIAN MI HIP
THIN A—**

Pawng thir ther hian mi hip thin a
Tleitir mawng no ka tuar thin a
Kham kar saisu suah sual awm lo
Sakruangin nul ka nuam thin a
Tawktarh chibi ka tuar thin a

Buaipui tham ka buaipui thin asin
Tleirawl tha za rual saw
Mitmeng a Davida thin
Ve tho^{thi} sin asin Johny Sins
I mawngbil phir te kha
Hrethiamten an sep thin a
Pawng thir ther hian mi hip thin a
Josefa ka ni lo, nang lah Delili.

Haw hawi tunah lengi sakruang khawhar thawiin
I ruamraiah lung rual ila
Phungbuh denin i awm bawr nen
Khumpui kaiin tunah chulin
Chh....

("E khai! E khai! Rammuan, Rammuan, a tawk, a
tawk, zahngai, zahngai")



MIZO FOLKLORE

(MIZO PI LEH PUTE THIL THLIR DAN)



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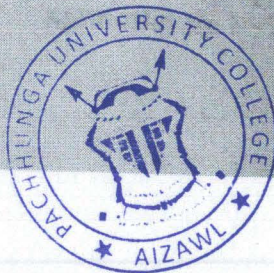
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Its Importance
- Dr. Zoramdinthara

Mizo Folklore

BUATSAIHTU THUHMA

Folklore (fawk-lawr) tih hi Mizo tawng thumal pakhata hrilhiah mai theih pawh a ni lo va, a awmzia berah chuan pi pute nunphung, an zia-rang leh an thawnthute zir chianna a ni a. An thil hriat leh thiam thil tawngkaa an lo inhlan chhawn dan te, an thilsiam dan leh an tih dante pawh a hranpaa zirna hmun hawng lova mi tih dan entawna an lo siam chhuah ve dan reng reng zir chianna chu Folklore a ni vek a. Kan Mizo pi leh pute hunah pawh thiamhnang thil chi hrang hrang tah dan zirna emaw, la dehna hmanrua - herâwt, hmuithlur, thembu siam dan zirna emaw, thlangra tah dan zirna emaw, nghawngkaw! suih dan zirna emaw buatsaih a awm kan hre ngai lo va. Pa themthiam deuh leh remhre deuh siam dan kha mün an entawn a, an siam chhuak ve zel mai nün a lang. Hetianga tawngka leh thiltiha an lo inzirtir leh inhrilh chhawn zel dan zir chianna hi English mi thiamten Folklore an lo vuah a, chu chu keini pawhin kan hman chhohpui ve zel a ni.

Folk-literature hi thil chhinchhiahna tur thuziak nei lo (unlettered people)-ten hmanlaia thil thlang chanchin tawngkaa an inhlan chhawn thin sawina a ni a. Chutiang zingah chuan, tunlai huna thil chhinchhiahna thuziak chi hrang hrang- thutluang te lemchan thawnthu te, thawnthu (narrative) te thufing te, sakhaw biakna lam thil te, thihna leh khawvel piahlam chanchin te leh, hla lam thil kan neil ziaka kan inhlan chhawng ang hian engmah hmail nei bik si lovin tawngkain an lo inhlan chhawng thi



PRESERVING MIZO FOLKTALES AND ITS IMPORTANCE

Dr. Zoramdinthara
Asst. Professor, Department of Mizo
Pachhunga University College

The Mizo folktale is a story or tale handed down by oral tradition from mouth to ear through the generations (Lalruanga. 4) Mizo folktales are based on magical, supernatural elements and talking animals or mythical creatures. They can be classified such as cumulative tales variety of plot less story where events follow a repetitious pattern. Tales of this type include *Chemtatrawta*. Beast fables or tales, such as *Keimi*, *Phungpuinu* etc, feature animals who speak like humans, and they usually teach lessons about the rewards of being brave, independent and clever. The humorous subcategory involves silly stories about characters who do ridiculous things and make funny mistakes. A good example is *Chhura leh Nahaia*, *Samdala* etc. There are also realistic folktales, such as *Tualvungi leh Zawlpala*, that contain magic. Other kinds include trickster tale like *Kungawrhi*, *Mauruangi* etc. What distinguish Mizo folktales are all the story starts with „once upon a time and ending with „and they all lived happily ever after. Generally, they are short and there is often a conflict between a hero and villain where everything ends happily.

Preserving Mizo folktales: One important aim of this paper is documentation or preservation of Mizo

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Mizo Thu leh Hla
ZIRCHIANNNA
Volume-1
-Lalrammuana Sailo



Lalrammuana Sailo hian kum 2013-ah Mizo Department, Mizoram University afaingin Master Degree a zo a. Tunah hian MZU, Mizo Department hmuaiiah Ph.D a li mek a. Zirlaite leh mamawhtute tan a. Hian afaingin literary website mizoramimages.com a enkawl mek a. Hian afaingin youtube lamah leh social media dang dangah thu leh a. Mizo thilte a chhawp chhuak thiu a. He lehkhaw hi mimal a. Hian afaingin thilchhuah hmasak ber a ni.

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Criticism

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literature zirna a ni a, grammar zirna a ni lo tih min hriatpui a ngai. Tin, tawng thlukna hi ka hmang lo lui bawk.

He lehkhhabua article thenkhat hi chu lehkhhabu hrang hrang leh journal-ah te ka chhuah tawh a. 2-na hi *Zacham parchhuang* (2018) bu-ah telh a ni tawh a. 3-na hi *Thu leh Hla*, November 2016-ah, 4-na hi *Mizo Studies* Vol.V January – March, 2016-ah, 14 hi Vol. VII No. 4-ah, 15-na hi Vol. IV No. 4-ah, 8-na hi *Lenchawm* (2017) ah, 6-na leh 13-na te pawh hi Radio a ka sawi tawh a ni bawk. Chungte chu ennawnin siam that ngai lai leh belh ngaite ka belh zel bawk.

Thu leh hla ka zir chian danah theory hmanna awm mah se kawng tam takah tute emaw ngaih dan awm sa leh pawm dan awm sa chu tehfung berah neih kher ka tum lo a, hnam dang literature sahal hmanga Mizo literature teh vek tum pawh a dik ka ti chuang lo. Mizo literature hian ziarang hran a nei ve a, chu chu a hlutna tak pawh a ni. Thu leh hla ka thlir dana ka ngaihpawimawh thin, ka tui zawng a ni ber ang chu, eng vangin nge he thu leh hla hi a ziah, eng nge a hunlai boruak, tute tana a ziah nge tihte, miten engtin nge an lo sawi ve tih hriat a, chung thilte chuktuah khawm vel chu he kan thu leh hla zir chianna kan kalpui dan tlangpui chu a ni.

Dt. 30/10/2019

Lalrammuana Sailo

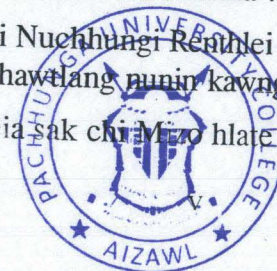

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RIMTAWNGNA (STRESS) HI ENG NGE A NIH?

- Dr. Rinpari Ralte

Hringnun chhiarkawp chhiar tura kan lo pian aṅa kan thih ni thleng hian kan nunah thil chi hrang hrang kan tawng ṭhin a. Hêng— harsatna, natna, pachhiatna, nun khawharna, hlawhchhamna, hrehawm tuarna chi tinreng te leh lusûna thleng hian kan tawh loh pakhat mah a awm lo va. Hêng zawng zawng tuar tura siam kan nih miao avangin kan nunah hian a bet tlat a ni. Kawng lehlamah chuan hlimna te, lâwmna te leh hahdamna te pawh kan tawng fo baw a. Hêng kan han sawi tak harsatna chi hrang hrang mihringina kan tawh ṭhin te hian kan taksa leh kan rilruah nghawng a nei ṭhin a. Kan rilru puthmang leh kan ngaihdân thlengin a nghawng ṭhin a; Tin, kan nungchang leh kan awmdân te pawh a tidanglam baw ṭhin. Hêng thil chi hrang hrang— mihring rilru, taksa leh awmdân tidanglamtute hi 'Stressors' tih an ni a. Hêngte hi mihringin hmachhawn thei lova a inhriat hnuah, a nghawng lo langchhuak ta hi 'Stress' chu a ni.

Stress hi khawi hmunah pawh hmuh tur a awm a, mahni mimal nunah, chhûngkuaah, hnathawhnaah, khawtlângah leh mihring leh mihring indawr tawnaah te hian englai pawh in stress siamtu ṭhahnem tak hmuh theih a ni.

Stress hi chi li-ah a ṭhen theih a, chûngte chu:

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1) **Distress (negative stress):** Harsatna a chhe zâwna nghawng nei thei zawng zawng hi *distress* tih a ni; entirnân, thihna leh lusûna.

2) **Eustress (positive stress):** Hêng— hnathar hmuh te, hnathawhnaa kaisân te, inneihna te leh tha leh zung ṭhahnem tak sên ngaihna ang chi infiamna te hian kan taksa leh rilruah a ṭha zawngin a nghawng thei a. Hêngte hi *good stress* emaw *eustress* emaw kan ti ṭhin. Mihring hmasawn zêlna kawng sialtu an ni baw.

3) **Hyperstress:** Mihringin a dawnsawn theih leh a lo insiamrem ve theih bâka nasa *stress* a tawn hian *hyperstress* emaw, *stress* nasa lutuk a tawng kan ti thei ang.

4) **Hypostress:** Mihringin phûrna rêng neilo khawpa thathona leh ngaihtuahna chawh harhtu tur engmah a tawn loh chuan *hypostress* emaw *stress* tlêm lutuk a paltlang mêk a ni kan titheih ang. Hetiang ang dinhmuna mi an din chuan mahni intihphûr nân thil ṭhalo tihah te an tlâk mai ṭhin. Entirnân, damdawi ruihtheih han tihchhin ve mai duhna te a awm thei.

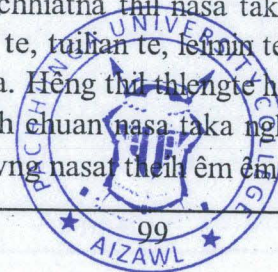
Rimtawngna thlentute (stressors):

Stressors te hi *stress* thlentute an ni a, hêngte hi hian lian pui puiah a ṭhen theih a ni:

1) Cataclysmic stressors:

A hmasa berah chuan *Cataclysmic stressors* an tih, kan chenna khawvêla chhiatna thil nasa tak lo thleng thut ṭhin; entirnân: lirngching te, tulian te, leimn te, indoria te, helna te leh a dangte an ni a. Hêng thil thlengte hi sawi lâwk theih loh leh a lo thlen meuh chuan nasa tak a nghawng nei thei leh a tihchhiatin a nghawng nasa theih êm êm te vek an ni.

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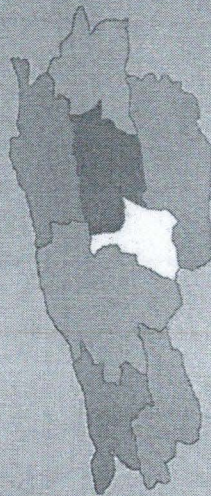

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GOVERNANCE AND DEVELOPMENT IN
NORTHEAST INDIA:
A MIZORAM READER



Editor
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14. Church and Changing Attitudes of Civil Society in Mizoram

Lal Lawmzuali

Asst. Professor, PUC, Aizawl

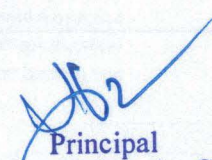
The Congress ministry in its second term in 2014 lifted the dry law the Mizoram Liquor Total Prohibition (MLTP) Act of 1995 by passing the Mizoram Liquor Prohibition and Control (MLPC) Act amidst vehement opposition from the Church. The legalization of liquor rekindled debate on the subject and the Church mobilised civil society to opposing the new law. The church standing on its prohibitionist stance played a vital role in shaping the electoral behaviour of the people which eventually resulted in the fall of the Congress ministry after ten years of ruling the political scene in Mizoram. Other political parties particularly the Mizo National Front (MNF) campaigned against the legalisation of liquor promising its prohibition if it was elected to power. The Mizoram Legislative Assembly General Elections 2018 witnessed the victory of the Mizo National Front (MNF) with a win of 26 seats of the 40 available at the Legislative Assembly. Many factors can be attributed to the fall of the Congress ministry but one factor certainly sticks out that being the legalisation of liquor and the crusade against it leads by the church. This study will focus on the role of the church in changing the electoral behaviour in the 2018 elections. The Church had an end that is ending the free flow of liquor in the state it vehemently campaigned against it which resulted in the handing of the baton of power to the major opposing political party that being the MNF.

Ministries have adopted different attitudes towards Liquor. Their attitudes reflected in the making of the policies. It has been adopted in various forms viz., the Mizoram Excise Bill, 1973. After ten (10) years of its enactment the Mizoram Excise Rules, 1983 came into existence. Both the Mizoram Excise Bill, 1973 and the Mizoram Excise Rules, 1983 came into force on the 10th October, 1984¹. 'To prohibit or to legalize?' has been the question of the day debated on various platforms. Prior to prohibition, (pre 1995 in Mizoram) the Church in Mizoram (inclusive of the two major denominations: Presbyterian Church and the Baptist Church of Mizoram) provided a powerful united front in lobbying against it to the policy makers. However, in the 1980's major work on the issue had been taken up by the Presbyterian Church². Therefore, when mention of 'the Church' is made in this paper, it is in reference to the Presbyterian Church alone. The efforts of the Church led civil society against illegal brewing, sale and consumption of liquor resulted in the enforcement of the prohibiting law viz., the Mizoram Liquor Prohibition (MLTP) Act, 1995. However, with the apparent failure of the dry law the Mizoram Liquor



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Studies on the Aquatic Macrophytic diversity in Khumanpat Lake, Manipur, Northeast India

K. S. Nishikandam¹, U. Khuram² and R. M. Sharma²

²Ecology Research Laboratory, Centre for Advanced Study in Life Sciences, Manipal University
Inphal - 795003, Mizoram.

1999

The present investigation was carried out in Khomomog Lake situated in Janghal East District, Myanmar located at a distance of 185 km from Yangon. The lake has been divided into five sampling sites, locally known as Ando Koo (Site I), Leikha (Site II), Lamahla (Site III) and Ngahayeha (Site IV), respectively. Collections of the aquatic macrophyte plant samples were taken on regular intervals from the four study sites during the entire study period. A total of 43 macrophyte species were found in the lake. Some of the dominant species like *Alismathura phillyroides*, *Utricle pinnatifida*, *Brachiaria mutica*, *Ceratophyllum demersum*, *Eichhornia stagnosus*, *Eichhornia crassipes*, *Eurychorda fucata*, *Heterocysta latiuscula*, *Salvinia aduncifera*, *Pistia stratiotes*, *Salvinia cucullata* and *Zizania latifolia* were found to occur in all the study sites. The percentage composition of the different aquatic macrophytes were found maximum in the emergent group (67.44%), which was followed by the free-floating group (13.95%) and rooted with floating leaves group (13.63%). The lowest percentage in 1994 was contributed by submerged species. The highest frequency, density and abundance value was exhibited by *Alismathura phillyroides*.

Key Words: Macroinvertebrates, Flotation, Degradability, Khambhat, Lake, Marine

Introduction

Wetlands: *ecotone* about 2.37% of the total geographical area of Manipur. One of the total 153 wetlands, 21 are inland lakes and 132 are in part 2. One Oh-long lake (both in Thoubali districts), two are reservoirs while 130 are waterlogged areas. The Loktak (a Ramsar site) is the largest lake in Manipur with an area of 24,672. Other major existing lakes of the state are Purnell, Khoudam, Lamjao lake, Iroput, Churapong, Loundup, Wathoung, Okongpat, Laisong, Awangpang, Patipat, Hidenkongpat, Yenapat, Sunpat, Iroput, Angphobkongpat, Khunmapat etc. (Singh 2010). All these lakes are much threatened to extinction which is attributed to encroachment and artificial eutrophication through disposal of domestic garbage; leaching of chemical fertilizers, paddy cultivation, lodging of pesticides, insecticides and misuse of toxic chemicals for catching fishes (Starna 2001).

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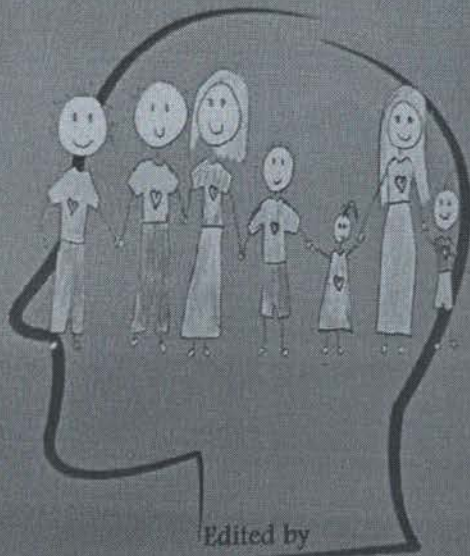
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FA ENKAWL DAN

- Dr. Lalropuii

Kum 1960 chho vèlah khân *developmental psychologist* lâr tak mai *Diana Baumrind* chuan naupang enkawl dân chungchâng zirchianna a nêi a. He a thil zir hian a tum ber chu khawthlang (Western) ho fa enkawl dân bîhchiana, fa enkawl dân bikah eng nge tha ber ang tih hmuhchhuah a ni. Chu a zirchianna atanga fa enkawl dân bik (parenting style) pathum a rawn târlan te chu a saptawngin: *authoritarian parenting style*, *permissive parenting style* leh *authoritative parenting style* tih an ni.

Authoritarian kan tih hian nu leh pa thupêk zawm ngama leh jul ti mi tih sawina a ni a, a Mizo jawnga sawi hian a thui deuh avangin leh kan sawi nawn sek a ngaih dâwn avangin *authoritarian* tîm kan sawi mai ang a; chutiangin, a dang puhnih te pawh khi a tawi zawgin kan sawi zel tawh mai ang.

Baumrind chuan *authoritative parenting style* hi a dâhin tha a ti deuh ber a. Hetiang hmanga fanan enkawl danah hi chuan nu leh paten thu an nêi a; amaherawhchu an fate zakuna chin tâwk neim an pe thîn. *Authoritarian parenting style* hi a fir (strict) mah mah a ti a, chumi bakah *permissive parenting style* (nu leh paten an fate an dah zalênin an chungah thumchhna an lekkawh lêm lohna) hi a nêmin a fir lo leh lutuk a ti bawh. *Baumrind* chauh lo pawh hian *parenting style* chu hmag an lo târlang ve tawh tho va, ani sawiho hi a tha ber leh kârchang ber a ni kher lo; amaherawhchu, tunah rih chuan amah bik chauh hi kan târlang hrih ang, kan sawi vek sen dâwn loh avangin.

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[Signature]

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