

MLCU ACADEMIC DIGEST

Volume 4 2020

COMPILATION OF MULTIDISCIPLINARY RESEARCH AND ARTICLES

Martin Luther Christian University Shillong, Meghalaya, India

MLCU Academic Digest

Volume 4 • 2020



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MLCU ACADEMIC DIGEST

The MLCU Academic Digest is annual, online and print compilation of abstracts, book synopsis, articles and ongoing project details on multidisciplinary research written and carried out by the faculty, adjunct faculty, students and alumni of MLCU. The digest covers all the thrust broad research areas of MLCU including but are not limited to them. While pursuing multidisciplinary areas of research, the following are the emerging research thrusts in MLCU that cut across academic programs beginning from undergraduate level up to the doctoral studies.

Environmental Studies
Indigenous Knowledge Systems and Practices
Education
Gender Studies
Tribal Psychology
Mental Health
Traditional Livelihoods

OBJECTIVES OF THE COMPILATION

To provide a medium through which scholarly reports and materials are accessible to students, faculty and alumni.

To recognize the contributions of faculty and students in the overall academic development of the university.

To recognize the achievements of the students in the area of research.

To document and encourage research based writing by students and faculty of MLCU.

FEATURES

All materials will be an open accessible content

Only abstracts of published material are included. Complete content may be accessed from the respective source.

The soft copy can be downloaded from the university website mlcuniv.in

ABOUT THE UNIVERSITY

Creation of the University

Martin Luther Christian University was created by Act No. 11 of 2005 of the Legislative Assembly of Meghalaya and received the assent of the Governor on July 6, 2005. The Government of Meghalaya issued the gazette notification on February 22, 2006. The creation of the university is in accordance with the University Grants Commission Act, 1956 under Section 2(f) and the university is empowered to grant degrees under Section 22 of the UGC Act.

Several students and graduates of MLCU have been awarded JRF, NET and merit scholarships by the UGC. Many graduates of MLCU are pursuing their higher studies in universities and institutions in different parts of the country and abroad.

The First Christian University

Martin Luther Christian University is the first full-fledged Christian University in India, the capstone to more than two centuries of Christian education in this country. As a Christian university, MLCU has the mandate, mission and commitment to engage proactively with the Christian community, especially youth, Christian educational institutions and Christian organizations.

A Developmental University

The University recognizes its opportunity and responsibility to contribute to the sustainable development of Meghalaya and the Northeast region, participating not only in higher education, but also in vocational education, health care, information and communication networks, environmental conservation, gender studies, cultural documentation, peace building and interventional projects. The University collaborates with NGOs, community organizations, and industry in the development of the community.

The Name

The University is named after Martin Luther (1483-1546), a church reformer who is known as the Father of Protestantism. Though Martin Luther left law studies to become a monk, his enlightened views on education are quoted to this day. He was especially concerned about "parents who do not have the opportunity or means to educate their children". His sermon on "Keeping children in schools" later published as a treatise, focused on poor families who needed their children to work rather than go to school. He laid emphasis on the establishment and maintenance of Christian Schools in response to a decline in the church run schools in the 16th century.

The Emblem

The University Emblem comprises of the *Knup*, the Cross and the Hearth. The *Knup* is a traditional woven bamboo cane cape used as a protection against rain when working in the fields or out in the open. The *Knup* symbolises protection and nurture in the journey through hardship to gain knowledge. In the centre of the *Knup*, is the Cross which is the symbol of Christianity and denotes sacrifice and endurance. At the base of the *Knup* is the Hearth with burning fire which occupies an important place in tribal houses. It is a place where parents and elders gather to instruct, narrate stories and sing songs while imparting the cultural and traditional knowledge of the forefathers to the younger generation.

The Motto

Noted poet, historian and archeologist George Fabricius (1516- 1571) eulogised the Protestant Reformist, Martin Luther as "The Light of Truth." Martin Luther Christian University's motto has emerged from this praise of the Father of Protestantism. According to Fabricius, truth is a light that illuminates, educates and edifies.

MARTIN LUTHER CHRISTIAN UNIVERSITY

The Mission Statement

To contribute to the sustainable development of Meghalaya and Northeast India, by providing knowledge, skills and values that will enable our students to become global citizens, while upholding gender, ethnic and religious equity for all, conserving its bio-cultural heritage and by recognising its Christian legacy and commitment.

Vision

Christian education and values for the betterment of society, especially its youth and Christian community.

The Vision of the University has encapsulated the mandate and commitment of the Founders of the University which have been recorded verbatim in the Minutes of the first meeting of the Board of Governors and is extracted as below:

"The role and responsibility of the church is to transform society in a manner that is relevant in today's context. The process of transformation must come about in such a way that it solves the problems of unemployment among young people, poverty, health, education and development. The university has come at the right time and should help our people to help themselves. Our state has a rich potential in nature and the university should help to tap these resources in a proper way. The university should be rooted in the local culture."

"The university should help to define the role of the church in this society. It should serve the people of Meghalaya. Historically, the church has provided school and higher education in Meghalaya but the university will be the crown of our educational efforts in Meghalaya. The praxis of faith, grace and scripture is education."

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SECTION VII

PUBLICATIONS (BOOKS AND MONOGRAPHS)

Webinar on Economic Revival for Indian Mountain States post COVID-19 Organised by the IMI, New Delhi. June 12, 2020

Summary of Webinar

Key resource person was Shri Sanjeev Sanyal, Principal Economic Adviser, Govt of India. At the backdrop of COVID-19 pandemic, how Himalayan states might explore innovative opportunities, the key issues deliberated were:

- Focus on building human capitals and utilising them to convert into assets.
- Bring back the best brains of the states working outside to their respective states; provide them opportunities and incentives to contribute to the state's economy.
- Migrants returning to their mountain states could be the 'best human capital' of their states; explore ways of retaining them in the states through productive engagements.
- Mountain states should focus on:
- (a) Disaster preparedness and management such as earthquake, which might be more serious than COVID-19 pandemic as mountain states are all in fragile seismic zones. Housing and human settlements should be to address safety of live and property against the earthquake.
- (b) Climate change responses, which may mean many things such as global warming, excessive or untimely rain or no rain, and so on. Use the principles of "Vocal for Local", meaning promoting local traditional diversified crops for food and nutritional security; traditional medicinal plants for health. Traditional crops can withstand climate change shock and fluctuations. Build on the traditional ecological knowledge inherited you're your forefathers. The ecological footprints of the people inherited from elders must be preserved and protected.
- (c) Demography of the mountain communities should be in tune with the carrying capacity of the area.
- (d) Diversification of economy and income sources should be the pillar of sustainable living for the mountain states (not to depend only on single large activity such as tourism, no matter how promising it might be on a short-term situation).

Webinar on World Environment Day Theme: Agrobiodiverrsity of Indian Himalayan Region (with special emphasis on traditional food) Organised by GB Pant National Institute of Himalayan Environment & Sustainable Development (GBPNIHESD), Almora, Uttarakhand, June 5, 2020

Panel Discussion on "Nutritional Aspects & Health Benefits of Agrobiodiversity" (Session 2) Key points of panel presentation by Dr Vincent Darlong, MLCU, Shillong

- Folktales of the mountain communities particularly the tribal people in Eastern Himalayas, more so, in North East India mentioned of close link between historical migration of the communities and their settlement in particular area in relation to availability of foods (and land for growing or cultivating foods).
- The mountain communities often refer their traditional foods as "original foods".
- In their perceptions, "Original Foods" are those they source from their surrounding landscapes including forests, fallow forests, rivers/streams and wetlands, and traditional crop varieties that they grow in their jhum, terrace fields and home gardens.
- Again, in the perception of the mountain communities of the Eastern Himalayas, all "traditional or original foods" are nutritious and healthy as the combinations these foods --- plants and animals--- have provided sustenance, helping to create vibrant, healthy native communities for countless of generations. In fact, the civilization journey of the people through their traditional food culture have close link with the religious, cultural, economic, nutritional and medicinal knowledge of the people.
- The relationship between the mountain communities and their foods is reciprocal. While their traditional foods provided them cultural and physical health, and the mountain communities reciprocate by maintaining the health of their foods by way of traditional cultivation, conservation of seeds, processing such as fermentation, smoking, steaming, roasting, etc.
- Many mountain and upland communities continue to depend on their traditional foods for subsistence including nutrition and health as these foods are so associated with native culture, spirituality, medicine and overall wellbeing.
- In 2005, a rapid survey during the programme implementation of externally-aided project in North East India, showed amazing food varieties across the tribes and cultural systems. The people consumed nearly 100 varieties of foods such as rice, pulses, legumes, roots and tuber crops, leafy vegetables, oil seeds, fibre seeds, millets, job tears, etc. from jhum, terrace and home gardens; over 200 varieties of foods came from forests that included insects, mushrooms, ferns, fruits, roots and tubers, small animals, jungle fowls, etc.; and about 70 varieties of food from rivers, streams and wetlands including varieties of fishes, prawns, crabs, snails and insects.
- Most traditional foods were taken as boiled or steamed, fermented, smoked, dried or roasted. Some foods are taken raw. Fried foods are also increasingly being adopted by the communities.
- Fermented foods of meat, cheese, fish, soybean, rice, leaves, millets, etc are well known. Smoked meat and fish are also well-known. These are traditional delicacies involving delicate processing.

• Key issues:

- ✓ Availability of traditional foods dwindling, so also number of farmers producing foods in the mountain areas are reducing; and many of them are fast ageing with young people staying away from farming or food production activities.
- ✓ Past practices of balanced diet sourced from jhum fields, fallow forests and streams with combination of cereals/ pulses and fish-meat are under serious challenge.
- ✓ Area of jhum decreasing, so also diversity of crops being cultivated (rice landraces reduced to 50-80 varieties as compared to 5000 plus varieties about 50 years ago).
- ✓ Climate change, introduction of high yielding hybrid seeds, promotion of market-led commercial crops is all impacting on the native crop varieties and hence traditional food-nutrition sources.
- ✓ Weakening of traditional community institutions over land governance coupled with introduction or promotion of commercial cash crops through government programmes, and changing land use systems
- ✓ Changing food habits due to larger movement of upland communities are another area of challenge.

FROM VICE CHANCELLOR'S DESK

- ✓ Knowledge on traditional food processing and preparation (cuisines or recipes) or different methods of traditional foods steaming, fermentation, smoking, etc. are all weakening/reducing.
- ✓ Knowledge on foods for health such as combinations of foods according to seasons, ailments, age, etc are also eroding significantly as the traditional knowledge holders are reducing.
- ✓ With many young people from mountain areas regularly out migrating and living away from their native homeland or occupied with modern white/blue coloured jobs elsewhere, practically have no time to learn from their parents or grand-parents on their traditional foods including processing and cuisine.

• Ways forward/Recommendations:

- ✓ Indigenous knowledge and framework for restoring culturally and nutritionally important foods needs to be revisited and introduced.
- ✓ Revival of traditional food systems through research, community engagements and extension services need to be promoted; academic institutions should be supported to incorporate local food systems and promotion of recipes in their courses.
- ✓ Promotion of home gardens, school gardens, biodiversity gardens, community conserved areas, could also be ways of re-introduction of traditional food crops in the region.
- ✓ Food festivals of native foods and promotion as power foods, healthy foods, organic foods, could go a long way, which is being organised by many communities during tourist seasons in Eastern Himalayas.
- ✓ Externally aided multilateral projects funded by IFAD and World Bank; bilateral projects funded by Kfw, JICA, IDRC, etc. demonstrated promising strategies for conservation and revival of local and traditional nutrition-rich food crops in many states in North East India. Best practices from these projects should be replicated / scaled-up.
- ✓ Many traditional mountain foods require promotion for popularising as nutritious and healthy food. Some of the food types may require special advocacy or promotional strategies. For example, fermented soybean, smoked meat, etc are "signature foods" of the North Eastern communities. However, cultural acceptability of such foods beyond the region require more innovative communication and advocacy.
- ✓ An emerging traditional food among many communities in the region is the 'insect foods'. Building on the traditional insect-based food culture, many enterprising young community members are exploring ways of promoting insect foods.
- ✓ At least 80 species of insects are edible edible (bees, crickets, grasshoppers, locusts, wasps, silk worms, bamboo & wood worms/larvae, aquatic insects, etc.) in North East India. With more protein, richer polyunsaturated fatty acids and minerals (as compared to conventional meat sources), the insects could form 'future foods' (as was in the past). In fact, Entomophagy (the science of insects as foods) strongly advocates possible promotion of insects for food & nutrition security due to its abundance, availability throughout the year in diverse habitats, high nutrient composition, high feed conversion efficiency, ease of digestibility, ease of breeding and many species being able survive in severe adverse conditions. Culturally if eating of insects in their natural forms are unwelcoming to many, they could be converted to protein pellets or any other socially-acceptable forms.

Webinar on "Fostering Social Responsibility by Higher Education: Covid 19 and Beyond" *Organized by* Association of Indian University in collaboration with Society for Participatory Research in Asia (PRIA), New Delhi. April 8,2020

Summary of Webinar

The panellists deliberated on the following key questions.

- What kinds of impacts informal urban settlements and rural communities would be experiencing and how they can be supported by colleges and universities around them?
- In addition to responding to immediate public health and livelihood needs, what kinds of support local bodies like panchayats and nagar palikas/nigams would need over the long term?
- In addition to the few villages and surrounding communities where universities and colleges are already engaging, what further actions they can plan in partnership with other stakeholders?

India Land and Development Conference 2020 (ILDC 2020) organised by NRMC, Bhubaneswar in collaboration with Govt of India and Others March 3, 2020 Panel 26: North East Land Tenure

Summary of Presentation on NE Land Conference by Dr Vincent Darlong, MLCU, Shillong

1. Context / Rationale

ILDC2020 provided a space for deliberating and exchanging on issues around land in Northeast India, which are complex and unique in many ways. The Session (Panel No 26), chaired by Dr V.T. Darlong, VC, MLCU, Shillong had five presentations on different issues of land tenure. These were Dr Mangcha Touthang on Kuki land tenure system; Mr Dimgong Rongmei on Land Tenure Mapping; Mr Jiten Yumnam on Dam displacement; Ms Akeina Gonmei on women land rights; and Mr Prasant Mohanty on criteria and indicators for forest land governance under customary control. Each panellist provided insights into their respective subject matter of discourse, but all had a common conclusion that land issues are are 'multidimensional work in progress' and would require long-term engagements among various land stakeholders and land actors in Northeast India.



FROM VICE CHANCELLOR'S DESK

2. Issues / Challenges

- Diversity of customary land tenure system --- as many land tenure systems as the tribal groups in NE India—require tribe-specific studies of land tenure system to find solution to each unique situation.
- Traditionally, the Chiefs among the tribal communities, such as the Kuki chiefs in Manipur, have the social, economic
 and moral responsibilities over the people under their care; many of today's modern chiefs are those connected with
 power and therefore do not exercise or understand their customary roles and responsibilities of the institutions of
 chiefship, thereby de-meaning the institution including on allocation of land for developing permanent farming
 systems for sustainable livelihoods.
- In the past, no one own land, rather everyone in the community (a village) own the land together; today land has an owner, such as, individuals, clans, chiefs, or the village community.
- Women's land rights remain key issues as land inheritance only by men in most tribal communities, except among
 the Khasi and Garo of Meghalaya where land is inherited by the women; even in such cases, women's voice on land
 matters are increasingly becoming weak.
- Fragmentation and privatisation of community land among tribes are leading to unequal ownership of land; even landlessness is becoming trends in some communities.
- Land loss and displacement due to hydropower projects in the region (over 200 mega hydropower projects proposed
 in NE Region); very poor record of implementation of rehabilitation and resettlement programme of people
 displaced by hydropower projects.
- Insufficient development of criteria and indicators for forest land governance under community control vis-à-vis the
 need for strengthening the roles and responsibilities of community institutions and gram sabhas in land governance
 with equity across the tribes.

3. Good Practices / Innovations

- Customary land tenure mapping in Manipur facilitated by RNBA is seen as good practice that will enable better understanding of existing land tenure and provide equitable access and rights to land.
- There are emerging voluntary allocation of land to women by households and clan members; such practices should be documented and used for advocacy for women's land rights.

4. Key Take Away / Recommendations

- Land tenure mapping should be introduced across the tribes to understand the ground realities of existing land tenure and also allocated land to every member of the communities including the women.
- Post-graduate scholars in subjects like Sociology, Social Work, Environment, Tourism and other allied subjects have ample opportunities in furthering the study and advancing in various ways on land tenure issues in Northeast India.
- The Government of India declared solar energy policy and the price of per unit power from solar power is lower than per unit cost of power from Hydropower projects; hence solar power should be promoted to discourage hydropower that has many adverse social and environmental impacts including displacement and loss of land by the tribal people.
- Government should review its policy of promoting over 200 mega dam projects in Northeast India that will adversely
 affect the lands of the tribal people that could also cause displacement of tribal people.
- The higher education institutions in Northeast India should actively engage on research to provide factual issues
 and workable recommendations around land tenure with customary practices that could benefit the tribal people
 including land rights to women as well as contribute to policy development.
- Land productivity and the need for improving land quality under community ownership / control require serious
 attention by the government and research institutions.
- Registration and pattadar systems, such as among the Kuki and other communities, should be introduced in villages
 for security of land access and ownerships for the village inhabitants; mere customary traditions may no longer be
 good enough, given increasing contestation of ownership of land when such lands are acquired by the Government
 for public or development purposes.
- Need for developing indicators for forest land governance under community control including those in Northeast India.

North East Land Conference (NELC): Land, Laws, Locals & Livelihoods Jointly organised by MLCU Shillong & NRMC, Bhubaneswar. January 30-31, 2020

How secure is the Customary Land Tenure System from Sustainable Livelihood Perspectives? A Preliminary Study from Two Different Customary Land Systems through the lens of land-based development programme in NE India

Abstract by Dr Vincent Darlong, MLCU, Shillong

- 1. In rural NE India, particularly in the tribal areas, land is owned by the "community", although land ownership system differs across ethnic tribal groups and villages in the region. Majority of the ethnic groups follow community, clan or kinship and private or individual land ownership systems. Private land ownerships by individuals are mainly for housing, permanent cultivation and farming, etc., while community lands are controlled and managed by the villagers as a whole through the village headman or village authority.
- 2. The present paper is a preliminary analysis to understand if there is any relationship between the development of sustainable livelihoods and the customary land tenure systems among two different tribal communities, practicing two different customary land tenure systems, namely, the Nagas and Thadou-Kukis in Manipur and Assam. Among the Naga across the ethnic groups, the customary land ownership is generally by the individual or private, clan and community. Whereas the Thadou-Kukis have a traditional land ownership by the Village Chief and the villagers have the use rights over a 'parcel of land' mainly for jhum cultivation, beside the homestead.
- 3. The primary and secondary data emerging from implementation of externally-aided community-based *North Eastern Region Community Resource Management Project for Upland Areas* (NERCORMP)¹ over three phases indicate possible strong linkages between sustainable development of livelihoods and traditional customary land tenure system. Majority of the Thadou-Kuki households were seen to be accessing project resources for promotion of annual crops and livestock, while the Nagas preferred perennial crops besides the livestock.
- 4. It may be concluded that cultivation of annual crops by the Thadou-Kukis based on traditional land systems is indirect indication of insufficient land tenure security (as the land is owned by the Chief and not by the individuals), whereas cultivation of perennial crops among the Nagas indicate more secured and lasting land tenure or land ownership systems. Further data showed that per capita income among the Nagas with matured perennial crops tended to be higher and sustainable than those of the income of the Thadou-Kukis from their annual crops only. Also, it was seen that the average landholding (or area under cultivation per household per annum) among the Thadou-Kukis appear to be much smaller than those of the Nagas. All of these could be inferred as evidences indicating that chieftain-ship owned traditional land tenure system as seen among the Thadou-Kukis may have disadvantages in the development of land-based sustainable livelihoods as compared to more 'democratic' traditional customary land ownership as seen among the Nagas. The present paper is to share these observations.

A joint project of International Fund for Agricultural Development (IFAD) and Govt of India (GoI) from 1999-2017 in the states of Assam, Manipur and Meghalaya as NERCORMP-I during (1999-2008) and as NERCORMP-II (during 2010-2017). The same model as NERCORMP-III has been replicated by GoI funding only in Arunachal Pradesh (Tirap, Changlang & Longding districts) and Manipur (Chandel and Churachandpur districts).

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East Zone Vice Chancellors' Meet on "Towards Global Best Teaching Learning Process in Indian Higher Education". Hosted by Central University of Jharkhand On behalf of Association of Indian Universities Ranchi: December 19-20, 2019

Summary of presentations made by the participants

The key deliberations of the East Zone Vice Chancellors' Meet were to contribute to the Association of Indian Universities' (AIUs) policy paper on **Reimagining Indian Universities.** The policy paper laid focus on five thematic areas **with e**lements from the NEP.

A presentation made by Prof. K. Srinivas from Hyderabad stressed on the need for continuous professional and competency development of faculty to enable quality impartment of knowledge in the 21st century. The following points were highlighted:

- a) Redefining the roles of teaching to transform learning from PUSH to PULL
- b) To imbibe positive attitudes:
- i. FAIL to be understood as "First Attempt in Learning".
- ii. END to be understood as "Efforts Never Die".
- iii. NO to be taken as "Next Opportunity".
- c) Critical competencies to be developed continuously are:
- i Identification and adoption of the right pedagogy
- ii Identification of the right content for the class room
- iii Ability to create innovative and application-based assessments
- iv Acquirement of necessary ICT competencies /skills
- v Planning for implementing the ideas for personal development and class room interaction
- vi Foster the following skills among students
 - Innovation
 - Creativity
 - Critical thinking
 - Team building
 - Applied learning
 - Problem solving ability
 - Collaborative learning
 - Higher Order Thinking
 - Skill development

[&]quot;The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn". - Alvin Toffler

Promoting Effective Pedagogies & Assessment Practices -Global trends

Summary presentation by Prof Sajet Kushwaha, Vice Chancellor, Rajiv Gandhi University, Arunachal Pradesh

In Prof. Kushwaha's presentation, it was stated that many contemporary undergraduate students enter their programmes of study with a primary objective of improving their employability. Hence educators, through effective pedagogy and assessment practices, should work alongside and towards these objectives.

It was noted that universities have been able to meet the need of students in gaining experience in a range of additional and subsidiary programmes that focus on the 'value added benefits' and their ability to think critically. This prepares them to tackle a multitude of challenges that they are likely to face in their future.

The higher educational sector should ensure that it enables students to become effective citizens. By doing this, the students are groomed into becoming lifelong learners, thus fulfilling one of the long term goals of the educational enterprise.

Summary presentation by Dr Shashikala Wanjari, Vice Chancellor, SNDTW's University, Mumbai

In this presentation quality education was defined as one that is open to change, constantly tries to find out the effects of instruction on learning and modifies the instruction according to the evidence collected.

The initiatives that were highlighted were students as observers of learning, student mentoring and students as agents of change.

The TESSA model of improving student learning through teacher learning activities, pedagogical themes, effective subject teacher was also analysed. Another model that was examined was the SPEEL Project for Developing Effective Pedagogies. A few of the pedagogical themes proposed were probing of students' understanding, making practical and relevant content, develop problem solving and creative skills. There should also be a shift from assessment of learning to assessment for learning.

Summary presentation of Educational Technology at IIT, Bombay by Dr. Yogendra Pal,

Project Research Scientist, Department of Computer Science and Engineering, IIT, Bombay

The presentation aimed to highlight the various educational technology projects in IIT, Bombay such as TELoTS (Technology Enhanced Learning of Thinking Skills), TUET (Teacher Use of Educational Technology), EDA (Educational Data Analytics), MOOCs (Massive Open Learning Courses) as well as projects on various tools such as iQuE, iSAT, CuVIS besides various other educational technology tools and projects.

Summary presentation of Creating Technology Enabled Learning by Prof. ORS Rao,

Vice-Chancellor, ICFAI University, Jharkhand

The presentation highlighted the paradigm shift of learning from the early days of the gurukul system to the modern 21st century teaching learning practices that are developed according to the requirements of the learners. With 21st century tech savvy there is a need to understand learners in order to improve learning effectiveness.

The Bloom's Revised Taxonomy was also examined with emphasis on the shift from teaching to learning in a student-centric fashion where students are involved in the learning process and the focus is on their needs, abilities, interests and learning styles. Various technological tools can also be used. Although there are various challenges in the implementation of technology in teaching learning, it can be accomplished with strong leadership commitment.

Dr. Ruchi Tripathi, Assistant Adviser, NAAC, Bengaluru also gave an in-depth presentation on the Revised Accreditation Framework in the Assessment and Accreditation Process of NAAC. The presentation summarised the various factors that led to the revised accreditation framework. These include the need for a transparent and robust system of accreditation that will emphasise more on objectivity and rule out subjective judgement. Another was the need for scores to be established quantitatively. In this way, the performance of the institution will be integrated in seven broad criteria including a survey on student satisfaction. The perception of the peer group would make up for only 30% of the said criteria. The performance of the institution can be analysed as metric level, key indicator level, or criteria level. The method would be ICT-enabled in order that assessment results can be obtained quickly.

It was further mentioned that the preparation of the Revised Accreditation Framework began in June 2016. The design

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and metrics started then with the formation of different core work groups. At the same time, the formalities of the portal based application processing were designed. The application process through the newly designed portal was inaugurated in July 2017. The new process introduced key indicators of Alumni engagement and student satisfaction. The data is then validated by external professional agencies.

Legacy of Catholic Church in Tripura: Pathways Ahead. Silver Jubilee Commemorative Conference of the Diocese of Agartala, Tripura November 8-9, 2019

The Coming of God's Kingdom: The People of God, the Church and Beyond: Brief Reflections on the 25 years Journey of Agartala Diocese, Tripura

Abstract by Dr Vincent Darlong, MLCU Shillong

- 1. Notwithstanding the theological and canonical understanding on the 'Coming of God's Kingdom', the scope of the present discourse around this theme would be essentially on the coming of God's 'rule in the human heart and life' as understood from Luke's gospel "the kingdom of God is within you" (Luke 17:20-21, Christian Community Bible). God's rule is about our commitment to do God's will which includes living righteous ways based on gospel values and helping proclaim God's message of hope to the world (Mathew 19:17-19; Mathew 24:14; Mathew 28:19-20, Christian Community Bible).
- 2. Ever since the light of gospel came in the life of the people in Tripura, especially among the tribal people, they have experienced transformative changes in all aspects of secular and spiritual development. These journey of advancement as experienced by the people of God (the Christians and more specifically by the Catholics) may be considered as the mirror-image of 'the coming of God's kingdom'. The discourse on the 'Coming of Kingdom of God' is, therefore, an invitation to reflect through the lens of people's changing life as manifested in their experiences of "wellbeing" (social, cultural, physical, economic, environmental, knowledge, emotional and spiritual wellbeing) since the coming of the gospel in their life. Such ideas of wellbeing from the perspectives of Christian communities in Tripura would also mean the influences and impacts of Christianity in the fields of education and human resources development, livelihoods, health care, gender and women empowerment, socio-cultural enhancement, moral values and tolerance, social services and voluntarism, inter-community harmony and peace building processes, environment and natural resource management, youth-focused initiatives and so on.
- 3. The contour of mapping of the transformative parameters of changes and challenges had been done using evidence-based research and survey questions through focused group discussion, appreciative enquiry, key informants' interviews of community elders, local 'mondali' leaders, women and youth leaders as they experienced and continue to experience as followers of Christ in Tripura, more so since the creation of the Diocese of Agartala. The informants were also divided into three categories: (a) those who were Catholics before 1969 (until the time when Tripura was a single Parish); (b) those born or became Catholics between 1970 and 1996 (until the time when Agartala Diocese was created); and (c) those born or became Catholics a Ther 1996 (post-creation of Agartala Diocese). To the extent possible, the people interviewed also attempted to cover in terms of various tribal groups, gender, age groups, level of education, profession, and people who are local Church elders or leaders in their respective communities. The research methodology has been built around a number of key research questions.
- 4. The paper assumes the 'Coming of Kingdom of God' as the happenings and situations at the present time, the present realities as experienced and enjoyed now by the people of God (the 'coming of kingdom of God' may also mean the future reality to be hoped for as Christians, as also the 'spiritual kingdom' and not 'earthly or political kingdom'). This understanding is reflected from Luke's gospel "Jesus went on through cities and villages, proclaiming and bringing the good news of the kingdom of God" (Luke 8:1, Christian Community Bible). In essence, this is about the rewarding positive changes of being Christians (Catholics) as much as the value of the righteous practices of God's will and rules as taught by the Church, transforming individuals and the societies in Tripura. Building on the achievements of Agartala Diocese on its 25 years of journey, the paper concludes with brief summary outlines of suggested actions and also reflecting the silver jubilee celebration as an opportunity for a "new beginning" for the Agartala Diocese.

Future of Shifting Cultivation in Northeast India: An Academic Inquiry into the Traditional Livelihood System vis-àvis Emerging Conservation Ethos of the Indigenous Upland People of Northeast India

Abstract by Dr. Vincent Darlong, MLCU Shillong, India presented at the International Conference on Research organised by Panpacific University, Philippines, October 24-26, 2019

(Email: vtdarlong@gmail.com)

Abstract

Traditional community practices of nature conservation among the Indigenous or tribal people of Northeast India stemmed from various features of traditional socio-cultural and livelihoods systems of the communities. They managed their forests primarily to sustain their traditional livelihoods in the form of slash and burn shifting cultivation, locally known as *jhum*. Notwithstanding the various regulatory regimes recognizing their rights to jhum in a controlled manner, the practice of *jhum* in most situations today are in conflicts with formal policies. Building on the traditional indigenous practices of nature conservation, a recent externally-aided project demonstrated encouraging initiatives in promoting community conserved areas (CCA) for biodiversity conservation as well as diverse models of improved jhum agroforestry systems. In the process, CCAs with community-based conservation rules and regulations emerged including faith-link 'green gospel' as a conservation model. Alongside also developed modified jhum and diverse integrated semi-sedentary jhum sub-systems having potentials for addressing food-nutrition-income security of the people as well as survival of indigenous knowledge around jhum practices. The present paper is an academic inquiry on these experiences and opportunities, having potentials for promoting both biodiversity conservation and upland livelihood systems in the form of transitional shifting cultivation or jhum.

Key words: biodiversity conservation, community conserved area, shifting cultivation, jhum, indigenous knowledge, green gospel



Figure 1 MLCU team at the International Conference on Research organised by Panpacific University, Philippines & MLCU, Shillong

6th Popular Lecture of GBPNIHESD-NERC on the occasion of the Annual Day of GBPNIHESD, Itanagar, Arunachal Pradesh, September 10, 2019

People, Policies and Practices in Conservation: Grassroots Priorities and Potentials in Environmental Conservation and Development in Northeast India

Summary by Dr. Vincent Darlong, MLCU, Shillong

- 1. Introduction and overview. Each year on 10th September, the G.B. Pant National Institute of Himalayan Environment & Sustainable Development (GBPNIHESD), established in 1988-1989, celebrates its Annual Day by organizing a scientific event. The Institute was established during the birth centenary year of Bharat Ratna Pt. Govind Ballabh Pant. Since its establishment the Institute has been serving as a focal agency to advance scientific knowledge, to evolve integrated management strategies, demonstrate their efficacy for conservation of natural resources, and to ensure environmentally sound development in the entire Indian Himalayan Region (IHR). With its Hq at Kosi-Katarmal, Almora (Uttarakhand), the Institute has five Regional Centres (RCs), namely, Himachal RC at Kullu (H.P.), Garhwal RC at Srinagar (UK), North East RC at Itanagar (A.P.), Sikkim RC at Pangthang (Sikkim) and Mountain Division at MoEF&CC, New Delhi. As part of its Annual Day Celebration on the 10th September 2019, the North East Regional Centre of GBPNIHESD at Itanagar organized a Popular Lecture on the theme of environment and development. I had the privilege of delivering this year's popular lecture titled as "People, Policies & Practices in Conservation: Grassroots Priorities and Potentials in Environmental Conservation and Development in Northeast India". The write-up is the presentation made, largely drawn from years of field experiences from Northeast India, more specifically with that of an externally-aided project called NERCORMP, jointly funded by International Fund for Agricultural Development (IFAD) and Government of India.
- 2. Contour of presentation. The presentation has been organized into six sections for ease of follow-up and reference. It may be kept in mind that in the present deliberations, the meaning and scope of environmental conservation and development is seen through the lens of Community Conserved Areas (CCA) for biodiversity conservation and management, as well as benefits derived from such conservation initiatives. The six sections are:
- (a) Section 1: Introduction & Traditional Conservation Ethos of NE India.
- (b) Section 2: Emerging Environmental Conservation & Development with special reference to CCAs of forest and rivers (based on an externally-aided project).
- (c) Section 3: Triggering Effects of CCAs: Agrobiodiversity in Jhum and *Jhumscapes*.
- (d) Section 4: Challenges, Opportunities and Emerging Lessons from CCAs.
- (e) Section 5: Drivers for Sustaining and Scaling CCAs: Livelihoods Investments & Policy Education.
- (f) Section 6: Importance of Research and Concluding Remarks.
- 3. Emerging lessons. The presentation outlines and concludes with a number of lessons learnt. Some of these lessons are:
- Small efforts and small investment, but big gains. The project made comparatively small investment in awareness and capacity building on environment education and biodiversity conservation. With increased knowledge on values of biodiversity conservation by the NaRMGs and TVIs, the ground achievements on CCAs had cascading effects, even non-project villages adopting the good practice.
- Community mentoring a continuous process. Effective CCAs however require a continuous mentoring of the communities for various facets of CCA regimes including equity in access to resources and their utilisation.
- Practical experiences of adverse impacts of deforestation such as drying up of natural springs leading to conservation initiatives. Community experiences of drying up of their local natural water springs and disappearance of local birds and animals became triggering factors in promoting CCAs in their villages as well as strengthening environmental conservation in general.
- Practical experiences of positive impacts of "upstream forest conservation" leading to improved "downstream
 agriculture" and water availability together with increased pollinator insects such as local bees. Some of these lessons
 were more prominent in some villages such as Somdal village in Ukhrul district of Manipur. The experience further
 strengthened in resolving improved biodiversity and forest conservation initiatives among the Tangkhul communities
 in the district.

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- NTFPs, women and livelihood benefits. CCAs initiatives provided spaces for greater involvement of women in the local conservation and utilisation of biodiversity for human and environmental benefits. In many cases, the NTFPs became the centre of conservation activities as the communities could get direct tangible benefits through appropriate conservation and management of NTFPs.
- Development of local eco-tourism and ancillary economic activities. Many CCAs became linked to eco-tourism thereby enabling opening up of other avenues for income and sustainable development for the communities. Rohbah fish sanctuary in Meghalaya is an interesting example towards this end.
- Re-awakening and deepening of traditional tribal conservation ethos and practices. CCA initiatives provided an opportunity for many communities to revive their traditional conservation ethos, also thanks to increasing awareness on values of environment and biodiversity conservation.
- Communities becoming messengers and advocators of nature conservation. One of the interesting lessons have been that many of the NaRMG members who had been trained on biodiversity issues have become messengers and advocates of the need for biodiversity conservation as means of sustainable development. Such individuals have also been supporting their neighbouring non-project villages to initiate CCAs in their respective villages.
- Emergence of community-based inclusive rules and regulations for CCAs. As the rules and regulations for CCAs have been development by the communities, there exist immense pride in the implementation and follow-up of the rules and regulations with respect.
- Improved inter-village inter-community networking on biodiversity and forest conservation. With biodiversity and forest conservation issues becoming increasing agenda of the local communities, there had been significant improvement in the cooperation and collaboration between neighbouring villages on issues of environmental conservation and development. In particular, women took more active roles in these initiatives.
- Emergence of new idea of conservation based on 'faith' "Green Gospel". This was prominent in Somdal village in Ukhrul District, Manipur where the Church too play active roles in conservation initiatives. The combined initiatives of the Church and NaRMGs along with village authorities have initiated the message of 'green gospel' to think of forest and biodiversity as God's creation and therefore use them wisely and not thoughtlessly.
- Increasing "Social Convergence". Effective CCAs conservation and management require more intense collaborative efforts of the elders, women and youth of the village. In many villages this has been happening, thereby, enhancing 'social convergence' facilitating harvesting of youth energy, women's knowledge and wisdom of the elders in biodiversity conservation.
- Emerging 'Women Leaderships in Conservation'. Many villages have been witnessing the increasing emergence of women leaderships in biodiversity conservation initiatives as women are not only custodian of the knowledge on biodiversity but also the users and therefore their involvement as active protectors of biodiversity would be natural desirability for sustainable CCAs.
- Increasing community discourses on issues around environment and development. As seen among many communities, CCA initiatives also resulted in increasing discourses around the local issues of environment and development such as soil health, water conservation, prevention of soil erosion, increasing soil fertility, prevention of forest fire, climate change issues, seeds systems, promotion of agroforestry, conservation of bees as pollinators and so on.

Lesser known indigenous plants: Therapeutic measures among the Khasi tribes, Meghalaya

Laribha Dohtdong*, Bonnie Nicole and Dr G.C. Kharkongor *Email: laridora@gmail.com

(Presented at two day International Webinar on *Probiotics, functional food and nutraceuticals:Today's need to maintain healthy life* organized by Department of Home Science, Arya Mahila PG College, Varanasi, June 15-16,2020)

Abstract

Background: Health culture and health practices of the tribal vary according to their communities and geographical location. Since time immemorial, the tribal people are living in harmony with the natural ecosystem. The Khasi are one of the 15 largest tribal communities inhabiting Meghalaya with Shillong as its capital, one of the smallest state in North east India. It is known that the tribes have a deep connection with the natural ecosystem and are highly dependent on forest for their sustainability. They have gathered a vast knowledge about the usage of these lesser known plants which has not only form part of their food commodities but also used them as an alternative for medication to improve their health condition. Thus, the study provides an insight on the rich biodiversity of ecosystem and the traditional knowledge the adolescents have on the remedial purpose of the lesser known indigenous plants. Objective: The study aimed to document the usage of lesser known indigenous plants by the Khasi adolescents for different health conditions. Materials and method: A cross sectional study was carried out in Mylliem Block, East Khasi Hills District, Meghalaya among the Khasi youth to elicit information on the knowledge and usage of lesser known indigenous plants for different health disease through self administered scheduled. Results and Discussion: The knowledge on the medicinal value of 15 lesser known indigenous plants were documented with their local names. The lesser known indigenous plants were used as an alternative for medication to improve the immune system, to relief from pain and diseases, to treat gastrointestinal diseases, anaemia, communicable diseases like fever, cough and sore throat, and to treat non communicable disease like diabetes, elevated blood pressure and kidney stones. Majority (81 %) have reported to used Khleinsyair (Centella asiatica) for de-worming while indigenous plants like Jarain (Fagopyrum esculentum), Japong (Fiscus Auriculata), Jajew (Begonia Josephii), and Jabuit (Polygonum muricatum), were used by 69 % Khasi adolescents for treatment of diarrhoea and dysentery. There is a need for preservation of these informations which is usually obtained through oral communication from parents, family and/or traditional healers. The documentation of the indigenous plants and their medicinal value will help in the conservation and preservation of these plants and also contribute to the recognition of traditional medicine. Keywords: Lesser known indigenous plants, Traditional knowledge, Therapeutic purpose.

Effectiveness of Value-Added Traditional Rice-Based-Snacks on Undernourished Children: A Comparative Study of Shillong and Coimbatore Gracedalyne Rose Shylla-Passah* and Saradha Ramadas V Correspondence: Gracedalyne Rose Shylla Passah Email: graceshylla@gmail.com

(Paper presented in 4th Panpacific International Research Conference. Theme: Cresting 4.0: Multidisciplinary Research on the Wave of the 4th Industrial Revolution, Quest Plus Hotel and Conference Center, Clark Freeport Zone, Pampanga Philippines, 24-26 October, 2019)

Abstract

India is among those countries in the world with the highest recorded numbers of undernourished children. Although, the government has intervened in combating malnutrition, the results noted is still far behind and has failed to meet the Millennium Development Goal .With the concept of regional food system approach, an attempt was made to value add the traditional ricebased-snacks (RBS) to mitigate undernutrition. The study was carried in selected orphanages from a list of government registered Children's homes of Shillong and Coimbatore. One fifty four inmates aged 5 to 15 years of both gender was screened for undernutrition. Based on the screening and grading among the children, 64 children were found to be undernourished out of which 42 children belong to Shillong. Value added pukhlien in Shillong and value added kozhukattai in Coimbatore was supplemented for a period of 90 days. There was a remarkable change in the nutritional status in children from baseline to 90 days irrespective of gender and city. At baseline, all the children were undernourished whereas at 90 days of supplementation, two thirds (66.2 per cent) improved and were found to be in the normal category while one-third (33.8 per cent) of the children remained the same.

Keywords: Coimbatore, rice-based snacks, undernourished, Shillong, value added.

Determination of Shelf life of the Value-added Rice-basedsnacks of the Khasi tribe

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(Paper presented in One- Day National Seminar on *Food and Culture of North Easy-Solutions to Sustainable Development*, Vivekananda College, University of Delhi, August 22, 2019)

Abstract

The aim of the study was to determine the shelf life of the valueadded as well as the existing rice-based snacks (RBS) of the khasi tribe at Shillong, Meghalaya. The experiment was conducted on the four most commonly consumed RBS namely - Putharo, pumaloi, pukhlien and pusla using Total plate count (TPC). The sample size totaled eight which included four value added and existing snacks respectively. The TPC was observed at zero, second and third day as the products were highly perishable. Three varied temperature viz., normal room temperature, lower and elevated temperature ware taken into consideration to study the shelf life. The snacks were usually packed in a leaf [Pyrniumpubinerve Bl. (Marantaceae)], in addition, another package trial was performed using a zip lock (polyethylene with 5 microns) for the study. It can be inferred that the keeping quality of the RBS are short live irrespective of the temperature or the type of packaging. For putharo it can be kept for two days, for pumaloi and pukhlien it is for three day while for pusla, it can be stored for more than three days except for the one stored at elevated temperature and packed in the zip lock cover. Future recommendation is to improve the shelf life of these snacks.

Keywords: Shelf life, putharo, pumaloi, pukhlien, pusla, khasi, Shillong

Axone Stinks (And I like it)

Lalnunsanga Ralte*

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(Film review published in http://www.raiot.in/axone-stinks-and-i-like-it/ June 23, 2020)

Synopsis

Axone, an extreme comfort food, rarely has an in-between. You either love it or hate it. It seems the film Axone by Nicholas Kharkongor, has gone the same direction as well. Much criticism has been poured on it in terms of accuracy and how it has dealt with many important issues, especially to North-easterners, on racism and discrimination. We are a region starved of representation in all forms, even much less in this medium. Axone puts out a predominantly northeastern cast in the main roles and though there are a few snags, we are still far from achieving acceptable authenticity in films. Every representation is a point of view. We must be open to the idea that "mis-representation" is a term that must be dealt with in degrees and not in broad sweeping generalisations, since there is no one true, correct representation of anything. There are no easy answers or fixes or even how to articulate the racisms we face. Some are obvious and physical like slapping and beating and name calling. Others are more sneaky and subtle. It is a difficult task to tackle something this complex and nuanced. Obviously this one film will not be able to get it right.

January An Earthquake in Shillong Pristine

July

Lalnunsanga Ralte*

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(New Poems published in The *Indian Quarterly-A Literary* and Cultural Magazine, Volume 8, Issue 2, January-March 2020, page 150)

January

January comes clothed
In such heavy layers
Inners, outers, overs
Promises for the year.
I peel an orange and fall in love
Such soft resistance
And then a taste of the sun
Seeped in its sweetness.
I haven't heard from you
In so long. I wonder
When did that layer
Get peeled off?
Where was the resistance
And where the sweetness?

An Earthquake in Shillong

Today,

I learned that concrete

Is not so concrete,

That we run out, not in

That I no longer envy

My neighbour's mansion.

He stands next to me panting

Barefoot, in the dirt of the street

Glancing nervously at the tall lamppost.

Pristine

I hate these modern-day photographs

The ones you now see everywhere

Sometimes they say they're of places that I know

Like Police Bazaar or Iewduh

Places that I see everyday

But I do not recognise them

Though the shapes seem familiar

And the arrangements fit as I remember

They feel like someplace else

With such shine and lustre

Pristine in every weather

Dust glimmering like carefully cut diamonds.

Surely, even Laitlum, with its gorges and mists,

Surely, has some blemish.

Pristine always makes me uncomfortable.

Pristine reminds me of a hospital room,

The gestapo, ethnic cleansing,

School uniforms, a ruler.

Anyplace not home.

A friend showed me plans for a smart city.

That too is pristine.

The designs show graphically

Perfect lines, figures, angles

Nothing growing unless planned

And passed by Committee.

I felt sorry for the trees.

I cannot a recall a happy time

Without a crooked tie, unruffled hair,

Muddy shoes and a button loose,

The stench of sweat and pheromones

Mingling with the pine-soaked air.

Blemished was Pupu's face

With wrinkles and scars

Making it whole.

Pristine was his coffin.

An Earthquake in Shillong
Today,
I learned that concrete
Is not so concrete,
That we run out, not in
That I no longer envy
My neighbour's mansion.
He stands next to me panting
Barefoot, in the dirt of the street

Glancing nervously at the tall lamppost.

July

Shillong summers are precious Just a few odd days for the peacock To look in regretful longing Then soon, the monsoon and autumn And trees shedding their leaves Each a memory of warmer times Strange that you never hear the snap Of something so precious falling away There will be the stubborn few That brace to face the winter Pain will be their prize Mother opens the cupboard To iron an old suit Now unworn for many seasons It sags on its hanger, a spectre Habit, she says. Pain will be her prize.

On North East and North East Literature

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(Resource person paper presentation in the *National workshop* on Research Methodology, Government College Rhenock, Sikkim February 7-21,2020)

Abstract

The problematic nature of the term – northeast. There are certainly some shared commonalities in terms of geography, anthropological ancestry and of course, politically in being from the margins. It is also useful in uniting those with common struggles and for rallying point in voicing out these struggles for all the different states. But, beyond this, it is extremely limiting. It denies the richness of culture and language and histories of the many communities and ethnicities that exist in the region, all distinct and unique to their own. It gives the wrong and o'Then misguided idea that the whole region is one homogeneous ethnic entity. A closer study of literature coming out from the different states can shed light on the multiplicity of voices that have, too o'Then, been denied individuality and placement in a larger literary context.

The Phonological Study of Mowkaiaw

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(Paper presented in the 40th Annual Conference of Linguistic Society of Nepal, CEDA Hall, Tribhuvan University, Kirtipur, Nepal, November 26-27, 2019)

Abstract

Mowkaiaw is a variety of Pnar dialect which is spoken in East Jaintia Hills District, Meghalaya. It belongs to Mon-Khmer branch of Austro-Asiatic languagefamily. The first part of the paper discusses the phonological aspect of Mowkaiaw variety which includes the phonemic inventory, its distribution and classification. Furthermore, the paper also covers the phonological processes of vowels and consonants. The second part of the paper compares the lexical items among Mowkaiaw speakers by examining the change, modification and alternation in the lexical items.

Though there are many linguistic works that have been done in Pnar dialect but when delve into other varieties, apart from Pnar, a meager work has been done. Therefore, this study aims to provide the current linguistic situation in Mowkaiaw variety by describing its phonological aspects at length and also highlights its lexical situation

Classroom Interaction: A Strategy to Develop the Oral Competency of ESL Learners

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(Artice published in *New Academia: An International Journal of English Language and Literary Theory*, **8** (3), 131-137 https://interactionsforum.com/2019/vol-viii-issue-iii-july-2019)

This paper will focus on the role of classroom interaction in developing the oral competency of ESL learners. The need for the study comes from the observation that learners lack in the oral skills when it comes to any form of public speaking. Learners want to express themselves but are unable to do so since they do not feel confident, hence, affecting their performance. Classroom interaction will serve as a platform and an opportunity for these learners to overcome the challenges that they face in speaking. Therefore, this paper will attempt to look at the different levels of learners and will attempt to provide suggestions for improving the oral competency of learners through classroom interaction.

The Vanity of Hope

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(Article published in *The Calcutta Journal of Global Affairs, Volume 4, Issue 2 May 2020*. A University Grants Commission Approved Journal (under UGC-CARE, Arts & Humanities Citation Index ISSN 2582-2241)

Abstract

The commentary observes that there has been a continuously flawed peace process in India's North East Region (NER) which has, over time, encouraged recurring cycles of violence and divisions. It critically tries to examine whether the process is more of a disruption than a solution in the region while discussing in brief various peace accords as well as ongoing peace negotiations with the government of India. Notwithstanding the general 'agreement' that the Mizoram peace accord of June 1986 is a successful case of conflict resolution, it argues that Mizoram endures unresolved issues of the Bru (Reang) and the Hmar tribes. The rest of the talks too in the other NER states, or what was once thought of as conflict resolution, only turned out to be cases of failed conflict management. The Bodo accord of 2003 is a case in point as are the peace agreements with the Naga groups in the past, a prominent one being the Shillong Accord of 1975. Despite signing of peace deals with various armed outfits in the past and in recent times, major challenges remain. The newest development is the National Democratic Front of Bodoland-Saoraigwra signing of a peace agreement with the central government and the state (Assam) government on January 27, 2020. The Naga peace talks led by the National Socialist Council of Nagalim-Isak-Muivahhas been the longest ongoing negotiation since 1997 with the last round of formal talks held on October 31, 2019 with no final settlement. Peace processes in India's North East remain an unfinished business, and Covid-19 will delay matters.

Impact of Colonization on the Land of the Indigenous People in North East India

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(Presented at the 6th Bi-Annual Seminar on the "Land and Indigenous People" at John Roberts Theological Seminary, Mawklot, Shillong, November 20-21, 2019)

Abstract

Colonialism leads to suppression of the native people and their natural resources. Until the advent of the British colonialists, the indigenous people in the North East India lived independent lives in their own territories. The British rule, however, brought about tremendous changes in the region. This essay argues that the British colonialism has

left both positive and negative impacts on the land of the indigenous people in the region. For instance, while the introduction of inner line permit has its positive impact, the commercialization of land is an example of negative impact. While the indigenous people may adopt the good examples of the positive impacts, they need to check the negative impacts of colonialism in order to safeguard their land from further destruction.

Keywords: Colonialism, Land, Indigenous People

Relevance of Gandhian Philosophies of Satyagraha and Nonviolence for Peace in North East India

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(Presented at a two-day National Conference on "Relevance of Gandhi Philosophy of Universal Uplipft (Sarvodaya) in Contemporary World" at William Carey University, Shillong,October 17-18 2019)

Abstract:

Gandhi is known, besides others, for his philosophies of satyagraha and nonviolence around the world. He introduced the concepts of satyagraha and nonviolence and employed them in the political struggle for Indian independence. His concepts influenced, and continue to influence, several leaders around the globe in their struggles for justice and peace in different context. The North East India, inhabited by over 200 ethnic groups with diverse cultures, has been wrestling with multiple conflicts such as inter-village, interethnic, local and non-local, inter-state, and international conflicts. This paper argues that Gandhi's philosophies of satyagraha and nonviolence will help in bringing about peace in the conflict torn region of North East India.

Keywords: Satyagraha, nonviolence, North East India, conflict, conflict resolution, and peace

DEPARTMENT OF ENVIRONMENT &TRADITIONAL ECOSYSTEM

Interrelationship between land tenure system and floral diversity and livelihood in the eco-sensitive zone of Nongkhyllem Wildlife Sanctuary in Meghalaya

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The Nongkhyllem Wildlife Sanctuary (NWLS) located in

Abstract

Ri-Bhoi district of Meghalaya is classified as a global biodiversity hot spot under the Eastern Himalayan Endemic Bird Area rich in floral and faunal diversity. The eco-sensitive zone (ESZ) of NWLS covering an area of 202.87 sq km comprises 125.91 sq km recorded forest area out of which 29 sq km falls within NWLS, 96.91 sq km within Nongkhyllem Reserve Forest (NRF) and the remaining 76.96 sq km area is either under the control of the District Council or managed by the Communities, private individuals or clans. The recorded forest areas are directly under the control of the State Forest Department, whereas, in District Councils areas, District Council has the power to make laws with respect to among others, the management of any forest not being a reserved forest as prescribed under Para 3 of Sixth Schedule of the Constitution. ESZ notification of NWS allows regulated and promotional activities in some areas while prohibiting the same in other areas. The random seasonal sampling of floral diversity vis-a-vis the different land regulation system was undertaken in the NRF, NWLS and District Council area of the ESZ and the population number and girth of trees, shrubs, climbers besides the ground vegetation were measured. The number and girth of trees species were more in NWS/NRF than those found in the forested district council area indicating better tree growth in the protected area. Some of the tree species are Trewia nudiflora, Hydrangea vestita, Carallia brachiata, Mesua ferrea, Tertameles nudiflora, Stereospermum sp., Brodillia retusa, Dillenia indica, Largerstroemia speciosa, Dillenia pentagyna, Castanopsis sp etc . Some of the tree species with conspicuously larger girth and number were recorded though few in number in the ESZ area under district council area. The climbers, lianas and ground flora were abundant in NWLS/NRF compared to the district council forest area. The species richness and diversity in the recorded forest area was higher compared to the district council area due to the dependency for livelihood. The floral diversity and richness of the forest under the district council can be increased, if stringent rules as applicable to NWLS/NRF are enforced in the district council forested area notwithstanding creating alternate livelihood opportunities for the villagers by the State Govt. A detailed qualitative survey was also conducted in three villages namely, Umladoh, Lailad and Umtasor situated inside the notified ESZ under the District council to elicit their opinion on the efficacy of protected area regulations in forests and the dependence of the community on the NWLS/RF/ESZ for livelihood purposes. It was found that the cultivation of betel nut, betel leaf, broom, banana etc. were the main livelihood options pursued by the villagers for sustenance, while chicken farming, fish farming, domestication of cow, goat etc were negligible in the study area. Such levels of human interference in the forested area within the ESZ have resulted in the conversion of land with natural trees species into secondary plantation of bamboo, banana, broom, betel nut etc. by the villagers. Furthermore, the low level of literacy and lack of employment opportunities coupled with inadequate development measures have hastened the process of forest fragmentation and species loss. This is in contrast to the high level of species richness and diversity in the protected area.

Key words: eco-sensitive zone, floral diversity, land tenure, district council, protected area, forest area

The aged effect of rubber plantation on the nutrient status of soil in Saibual village, Tripura

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(Published in the *International Journal of Multidisciplinary Educational Research* ISSN:2277-7881;Volume 8,Issue 9(2),September 2019)

Abstract

Background: Saibual village which is under Unakoti district of Tripura has been influence on cultivation of rubber in the area. Through various literature studies on the effect of soil quality due to rubber plantation, this study was also carried on soil fertility under different aged of rubber growing plantation and a control soils in Saibual village. Materials and methods: The soil samples were collected from three land use sites and they brought to the laboratory where they were air dried and sieve through a 2mm mesh for analysis of soil pH, conductivity, soil organic carbon, available phosphorus and nitrogen and potassium. Results: Indicated that soil under rubber plantation were predominantly acidic with pH as compared to control site. With increasing of the aged of the plantation there is also a reduced in the concentration of organic carbon and potassium and electrical conductivity (EC) of the soil and it was vice versa in the case of nitrogen and phosphorus where there was an increase in their concentration in the soil with the aged of the plantation. Conclusion: The study revealed that, with advancement of age in rubber plantation there was an improvement in the soil fertility in plantation and soils under rubber plantation does not have any deleterious effect on its chemical properties.

Keywords: Saibual village, rubber plantation, organic carbon, phosphorus, nitrogen,potassium.

Characterization of Market Solid Waste for the purpose of Waste Management inNongpoh, Ri-Bhoi District, Meghalaya, India.

Drowelshon Khriam, Daniel Lambor Kharbangar, Evan Donkupar Diengdoh* and Donboklang Marbaniang Email*:evandiengdoh@gmail.com (Published in *Sanskruti International Multidisciplinary Research Journal*, 2455-1511 VOL. V Issue-I Jul-Aug-Sep 2019, http://www.simrj.org.in Journal UOI: 1.01/simrj)

Abstract

The study was carried out on the quantification, characterization and determination of solid waste management in Nongpoh market. Structured questionnaire were applied to collect primaryinformation from the shopkeepers on the waste generated from their shops and onsite segregation ofthe waste were conducted for characterization of the waste. The results obtained revealed that thetotal solid waste generated in Nongpoh market is 0.174kg/per shop per day and furthermore on the analysis of the sample showed that 91.95% of biodegradable waste is generated, 5.71% ofrecyclable waste and 2.28% of non-recyclable waste are generated. The study also showed thatthere is a need for seperation of waste into different categories of wastes at the shop and also in thelandfill ground before being disposed off. The reccommendations from the study, that there is aneed for proper dusbin or proper storage facilities at every area of the market and also anawareness campaign is also the need of the hour so as to awake the civic senseof the people toconcern about their surrounding environment.

Keywords: Nongpoh market, solid waste, characterization of solid waste, biodegradable,

recyclable, non-recyclable

Effect of cement dust on soil physico-chemical properties around cement plants in Jaintia Hills, Meghalaya

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(Published in *Environmental Engineering Research 2020;*25(3): 409-417.Published online: June 12, 2019
DOI: https://doi.org/10.4491/eer.2019.099)

Abstract

Investigation was carried out to assess the effect of cement dust deposition on the physico-chemical properties of soil near some cement plants in Jaintia Hills, Meghalaya. Soil samples were collected and analysed and compared with the control site. Comparison of various soil physico-chemical parameters revealed that cement dust emanating from cement plants has changed the soil quality in the surrounding areas of cement plants. The normal soil pH in the area is generally acidic. However, due to the continuous deposition of cement dust soil pH was found slightly alkaline near the cement plants. The higher values of soil parameters such as electrical conductivity and bulk density were also noticed near the

cement plants. However, lower values of water holding capacity, soil moisture content, soil organic carbon and total nitrogen content were found compared to the control sites. The effect of cement dust deposition on soil is more in areas nearer to the cement plants. At present the changes may not be so serious but if this trend continues, soil properties of a vast area around the cement plants are likely to change leading to multiple effects on flora, fauna and socio-economy of the area.

DEPARTMENT OF ECONOMICS, COMMERCE & MANAGEMENT

Promoting traditional occupations in indigenpus populations in Meghalaya, India

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(Article published *in Indian Journal of Traditional Knowledge, Volume 19(2),April 2020,pp 370-377.IPC Code: Int. Cl.20: A61K 35/74, A61K 36/00)*

Abstract

Indigenous people have the right to own, use, develop and control the lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation. A study was conducted in Meghalaya state on 2 traditional occupations, blacksmithy and manufacturing of bows and arrows. A representative sample of 15 families in blacksmithy and 10 families involved in the manufacture of bows and arrows were chosen. Observational and interview surveys were done by the first author through personal visits. The analysis of data shows many positive factors for promoting traditionalm occupations that are worth preserving such as creativity, traditional knowledge, uniqueness, identity, selfworth and contribution to the economic and social factors of the community. The agricultural implements are still traditional and perhaps can be improved to provide better mechanical advantage and higher incomes. Traditional occupations continue to play a major role in the social and economic lives of the people and must be encouraged to develop further to enhance rural economy and also capture the unique identity of the people. Educational institutions, NGOs, concerned government ministries and private organisations through social responsibilities schemes can help preserving and promoting this unique but rich and wonderful knowledge of the indigenous people.

Keywords: India, Indigenous populations, Meghalaya, Occupations, Traditional

Assessing Impact of Governing Boards on Educational Institutions through Focus Group Discussions

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http://dx.doi.org/10.18843/ijms/v6si3/11)

Abstract

Good governance of educational institutions is essential to achieve optimal institutional performances. Several weaknesses exist in some Governing Boards (GBs) of educational institutions that need rectification through a careful analysis of the structure and functioning of GBs to identify changes that could make them more effective. Based on review of existing literature and background of the educational institutions in Meghalaya state, an in-depth, cross-sectional study was done during 2009-10 on a representative random sample of 36 church-operated educational institutions using mixed method approach. The quantitative aspect of the study involved in-depth interviews with members of the GBs, and Institutional Administrators on the composition, functioning and institutional outcomes and performances. Significant correlation was observed between the Characteristics of the GB and the Institutional performances, despite certain lacunae and cogent recommendations made. The details of this quantitative survey were published earlier and the qualitative part is now presented in this paper. Focus Group Discussions (FGDs) with three main stakeholders, the GB members, administrators of the institutions and senior teachers were conducted on the objectives of the research. The FGDs confirmed the findings of the quantitative survey but also added newer and more significant observations thereby leading to substantial recommendations. FGDs of other stakeholders such as parents and public may shed more light in improving the functioning of GBs. Qualitative approaches such as the FGDs can be usefully integrated into management research especially on sensitive issues that are faster, convenient and cost-effective.

Keywords: Governing Boards, Educational Institutions, Qualitative Research, Focus Group Discussions.

In situ nutrient variability in rice landraces from Garo Hills, Meghalaya in North East India

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(Article published in the 'Journal of Food Composition and Analysis' https://doi.org/10.1016/j.jfca.2020.103543 Available online 26 May 2020, 103543)

Abstract

Traditional rice genotypes are valuable sources of diverse phenotypic traits. The Garos inhabiting Garo Hill Districts in Meghalaya conserve and grow numerous rice landraces. Yet the nutritive value which are pivotal trait of traditional rice genotypes remains grossly under investigated. Nutrient profiling of 32 rice landraces including 8 glutinous varieties as brown rice and their milled counterparts (5 and 10% DoM) was carried out. Both non-glutinous and glutinous rice landraces showed mean protein content of 7.54 g/100 g (13 % c.v.), total fat 2.79 g/100 g (15 % c.v.), total dietary fiber 5.78 g/100 g (5% c.v.), ash 1.08 g/100 g (16% c.v.) niacin 2.74 mg/100 g (23% c.v.), pantothenic acid 2.08 mg/100 g (44% c.v.), iron 1.28 mg/100 g (34% c.v.), zinc 2.31 mg/100 g (16% c.v.) and phytate 256 mg/100 g (1% c.v.). Rice landraces had significantly higher dietary fiber and lower phytate content as compared to contemporary varieties. There were no significant differences in the nutrient content between glutinous and non-glutinous genotypes. Milling resulted in substantial reduction of all nutrients even at 5% DoM and the loss was most profound for micronutrients. The substantial variability of nutrients that exist within these 32 Garo rice landraces can be used for nutrient improvement in rice.

Keywords: Rice landraces, Garo Hills, Meghalaya, Glutinous rice, Nutrient variability, Milling losses

Land Tenure among the Kukis: Dynamics, Changing Trends and Implications

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(Paper presented in 4th India Land & Development Conference, 2020 organised by NRMC, Azim Premji University, FES, HLRA, Landesa, LRI, NCAER, WRI India at India International Center, New Delhi March 2-4, 2020)

Abstract

The traditional institution of chieftainship was held in high regards and attached utmost reverence due to the fact that the chiefs were solely responsible for the welfare of the villagers. Acts of benevolence and charity were synonymous with the institution of chieftainship. A widow/widower had a metamorphic husband/wife in the chief; an elderly had a metamorphic son to take care of him in his/her dying age, an orphan had a father, a destitute had no one but the chief to turn to. All affairs, no matter the triviality used to be handled by the chiefs who were viewed as a resort and refuge by the villagers.

With the changing time, the roles of the chiefs have also been perceived to change. The traditional systems of chieftainship; heritage or inheritance, clan eldership, sanctity of the institution have all been ignored and a new form of chieftainship has emerged. The concept of traditional chieftainship has lost relevance; the very institution being either disrespected or misinterpreted leading to the mad rush for any haves to aspire to be a chief. This frenzied zeal to become a chief, irrespective of and with total disregard towards the traditional system is leading to multiple chieftainships or claims to be a chief (irrespective of the size of chiefdom), bringing in a form of confounding concept of the institution. Such confusion is the result of supposed 'noveau rich'; militant leaders, contractors, land usurpers, people connected to MLAs and ministers, etc. who do not have basic idea of the sanctity of the institution, roles of being a chief or the corresponding responsibility of being one. This has led to the decay of the institution of chieftainship resulting in multiplication of chiefs but a relative reduction in the ascribed roles and responsibilities of the chiefs.

Discourses in various platforms have advocated the urgency of transforming the institution to make it more democratic and participatory. The suggestion for a move in abolishing the system of chieftainship towards village administrative councils where any individual has a right of governance adopted by the Mizos and Nagas has been rejected by majority section of the Kuki society. In this respect, it is not only veracious for the Kuki chiefs to acknowledge the changing trend and perception but also to make space for relevant adjustments or changes in their system of administering their respective villages for the sole purpose of sustaining this unique institution. The only way forward for a positive consequence

would be for the chiefs to accommodate and pay attention to the villagers living in his land to have a more concrete sense of belonging to the land and have something to hold on to in times of predicaments.

Rethinking human relationships in the fourth Industrial Revolution from Social Work Perspective

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(Paper presented in 4th Panpacific International Research Conference. Theme: Cresting 4.0: Multidisciplinary Research on the Wave of the 4th Industrial Revolution, Quest Plus Hotel and Conference Center, Clark Freeport Zone, Pampanga Philippines, 24-26 October, 2019)

Abstract

The paper highlights the importance of re-emphasising human relationship, humanity and morality in the context of advanced technological world. No doubt, technology has helped in many ways however, on the contrary human relationship is deteriorating. This paper brings forth the ethos of social work profession which recognises and places human relationship at its forefront especially while working at the community level. Therefore, the objective of this paper is to identify the problems faced by the people in the community and to determine the role of social work profession while working with people. The research design used is ethnographic among the Khasi Tribals in Meghalaya, India where six communities were chosen for the study and community organization, a method of Social work was applied. It was found that critical thinking, complex problem solving, creativity, management and coordinating community people, emotional intelligence, decision-making, service orientation, negotiating and flexibility were the strategies used, emphasising on building human relationships and interactions. To conclude, the fourth industrial revolution is important for any development of the country or any community, but it all depends on how humans utilise such an advancement to shape the future of the world whereby placing humanity at its centre-stage and morality as our essence.

Keywords: Fourth industrial revolution, Community Organization, Importance of human relationship, Social work profession

DEPARTMENT OF CULTURAL AND COMMUNITY INITIATIVES

Emergence of Landlessness among the Khasis of Meghalaya

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(Paper presented in the 'Northeast Land conference, Shillong, organised by MLCU in collaboration with NERCORMP, NEN Shillong, RNBA, and NRMC Centre for Land Governance, 30-31 January, 2020)

Abstract

The Khasi political organization first evolved when a group of clans called the kurs constituted themselves into a territorially-defined political community called the raid in their area of settlement, with the council of the chief maternal uncles of the founding clans called basans as the first political authority in these unique and independent mini states. Later, a group of adjacent raids federated to form a bigger state called the hima, and appointed a nominal head called the syiem, usually belonging a family brought usually from outside the hima. The federation was for the purpose of judicial administration and collective defense, but there was no merging of lands or dissolution of the autonomous territories of the federating raids. The syiem of the hima was not a territorial ruler because land belonged to the people, and territorial authority remained respectively with the councils of the federating raids. But during the British Rule, the syiem had been converted into a landlord and territorial ruler, and the basans and people of the autonomous federating raids were converted into mere freehold serfs. Thus with the authority of the syiem to issue land documents, and the British Government's ruling in 1918, recognizing the youngest daughter as an individual legal heir to ancestral property, the political and landownership structures in the hima were drastically altered, and privatization of land on individual basis had began.

Individual private ownership of land enforced by the modern law has led to landlessness of the majority of the Khasis as the narrative of traditions itself has already been hijacked by the rich and the powerful within the Khasi community. So, to solve this problem of landlessness, it requires a land ceiling law to be enacted by the authority of the modern state.

DEPARTMENT OF DOCTORAL STUDIES AND RESEARCH

Facebook and WhatsApp in higher education: an experimental study for Computer Science students

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Vol. 28, No. 7, (2019), pp. 347-369

In this paper, we examine the usefulness of Facebook and WhatsApp as a tool for teaching- learning undergraduate students of Martin Luther Christian University. The study incorporated the using of Facebook and WhatsApp for learning the course that was carried out over a period of total 36hrs teaching weeks from July 2018 up to December 2018. The results from the study showed a positive impact on the using of Facebook and WhatsApp on teachinglearning undergraduate students. The study also revealed that the experimental group made effective learning progress compared to the control group.

Exploring Social Networking Sites usage in University: A Study in North East India

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(Article published in the International Journal on Emerging Technologies 10(4): 257-265(2019)ISSN No. (Print): 0975-8364 ISSN No. (Online): 2249-3255 Published by Research Trend, Website: www.researchtrend.net)

Abstract

In this paper, we examine the level of usage of social networking sites by undergraduate and postgraduate students of Martin Luther Christian University. A survey questionnaire was conducted comprised of twenty (20) questions with 484 students from August 2018 to December 2018. The questionnaire were target to gather student's demographic variables (age, gender-based, course and discipline of study) preferred choice of social networking sites by students, mode of access, reasons and frequency of visit per day; impact on lifestyle; use of social networking sites for education and challenges faced on social networking sites. The results from the survey study showed that the learners were already using social networking sites in the university frequently at an average of 1-4 hrs per day. The popular social networking sites ranked by students were WhatsApp, Facebook and Instagram.

The stress of the parents of the intellectually disabled children

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(Article published in the 'International Journal of Indian Psychology' Volume 08, Issue 1, January-March, 2020 ISSN 2348-5396, DIP: 18.01.109/20200801 DOI:

10.25215/0801.109)

Abstract

This paper is an assessment of the stress borne by the parents who have intellectually disabled children. We have used cross-sectional descriptive method for the study. Through Stratified Random Sampling method six special schools are selected. The sample size of the parents is 116. To assess the stress, we use Dr Satish Girimaji's schedule, namely "Family Interview for Stress and Coping in Mental Retardation" (FISC – MR). With the help of the guide and other experts in the field, a stress questionnaire is prepared based on FISC - MR and tested for validity and reliability. The study shows the following results. Of the 116 parents, 12 have mild stress, 53 moderate, 47 severe and 4 have profound stress. The stress scores have the mean value of 53.57, median 54, mode 39, and the standard deviation 17.95. Parents stress scores are derived from 4 different subsections. They are Daily care stress, emotional stress, family stress and social stress. Among these Daily Care stress has the highest mean (16.90). The 't' test and ANOVA are the statistical tools used. ANOVA results based on parents' age, religion, income, birth order of the child and number of children - have the p value greater than the alpha level 0.05. This indicates that there is no statistically significant difference in the stress level of the parents with respect to these variables. For the education level of the parents, the p value 0.09, though not very significant, yet close to 0.05, shows that education does play a role. Among the variables, Occupation of the parents and the age of the child have the p value lesser than the alpha level (0.05), indicating that they do make significant difference in the stress level of the parents. The t test results indicate that there is no significant difference in the marital status, location and the type of family. Regarding the gender of the child, the p value (0.049) is lesser than .05. It indicates that there is a significant difference in the stress level of the parents who have an intellectually disabled female child as compared to the parents of the male child. Thus, it is evident that these parents go through enormous stress in caring for their special

Keywords: Stress, Parents, Intellectual Disability, Children,

Breast Cancer Recurrence Prediction Model Using Voting Technique

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Abstract

In recent times, prediction modelling using machine learning is finding widespread recognition, due to its ability to facilitate the detection of critical features from large datasets. The areas of application are fairly diverse. Conventional approach involves using several data mining classifiers individually to build knowledge discovery systems. The emphasis has shiThed now to deploying an ensemble of these classifiers in order to further enhance the prediction capabilities and accuracy of Knowledge Discovery Process in Databases (KDD). This current study proposes a model for prediction of recurrence of breast cancer within three years, based on one of the types of ensemble data mining classification techniques called Voting. This approach uses different combinations of four data mining base classifiers, viz., Decision Tree, Multilayer Perceptron, Naïve Bayes and SMO. An attempt is being made to compare the effectiveness of voting classifiers, vis-a-vis, the base classifiers in order to determine the performance enhancing capabilities of the ensemble approach. Our work clearly demonstrates that the performance accuracy of the Voting classifiers analyzed with seven combinations is consistently high with values ranging between 81.0526% and 83.8596%. In contrast, the performance accuracy of base classifiers vary widely ranging between 75.7895 and 84.2105%. We have clearly established that the performance of voting classifier is very consistent. Voting also enhances the performance of weak classifiers like MLP and SMO. The dataset used in our experiment consists of 23 attributes containing 575 samples obtained from the Mizoram Cancer Institute of Aizawl, Mizoram, India.

Keywords: data mining, decision tree, multilayer perceptron, naive bayes, support vector machine, voting.

Comparison of Decision Tree-based Learning Algorithms using Breast Cancer Data

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https://link.springer.com/book/10.1007/978-3-030-43192-1. Page 885-896

Abstract

Recent times are witness to tremendous developments occurring in the field of Machine Learning. Data Mining applications are finding widespread acceptance, as they extend to encompass several sectors, including health care, education, weather forecasting, finance, etc. Data mining algorithms like classification algorithms are being integrated into the Knowledge Discovery in Databases (KDD) process to build optimized predictive models useful to healthcare and other professionals. Decision tree is considered to be one of the simplest and most widely used classifier algorithms.

In the current study, we have compared six decision tree-based learning algorithms on breast cancer dataset. The algorithms used include, J48 decision tree, decision stump, random forest tree, REP tree, hoeffding tree and Logistic Model Tree (LMT). The dataset is obtained from Mizoram Cancer Institute, Aizawl, Mizoram, India and it contain 575 records and 24 attributes. Infogain attribute evaluator has been computed to determine the rank of an attribute. The analysis is performed in two steps. First step involves the building of the model by training data, while during the second step, the dataset is evaluated using 10- fold cross validation technique. Our computations indicate that of all the algorithms evaluated, J48 decision tree performs with the highest accuracy (84.2105%), while random tree demonstrates the lowest accuracy (76.4912%).

Keywords: Data mining, Decision stump, Decision tree, Hoeffding tree, J48 decision tree, LMT, Random forest tree, REP tree.

Prediction of Breast Cancer Recurrence Using Ensemble Machine Learning Classifiers Dawngliani M.S*; Chandrasekaran N; Samuel Lalmuanawma³, and H. Thangkhanhau⁴

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https://link.springer.com/-chapter/10.1007% 2F978-3-030-46828-6_20

Abstract

Breast Cancer is the most common type of cancer prevalent among female cancer patients, while it is also the second most dreaded disease, causing cancer deaths among women. This study proposes new criteria for the prediction of survival of breast cancer patients, based on the analysis performed using four ensemble machine learning techniques, which include, AdaBoost M1, Bagging, Voting, and Stacking. For this study, we have used a breast cancer dataset consisting of 23 attributes and containing 575 samples obtained from Mizoram State Cancer Institute of Aizawl, Mizoram, India. We have employed ensemble machine learning classifiers to predict the recurrence of breast cancer within a period of three years evaluated based on the comparison of their performance. We have used 10 fold cross-validation technique and ROC curve to arrive at the results. From the dataset, attributes are ranked according to their contribution towards the prediction.

Keywords: Adaboost M1 , Bagging, Data mining, Ensemble method, Stacking, Voting.

Development of a Model to Predict Breast Cancer Recurrence Using Decision Tree based Learning Algorithms

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Abstract

Cancer has been recognized as one of the leading causes of death all over the world. Until recently, while Physicians have been trained to successfully diagnose and treat cancer patients, only the most advanced research medical centers have been able to develop support system tools and platforms that can facilitate the specialists to perform prognosis. To achieve this objective, these research institutions have been able to put to better use the medical data that has been

stored and maintained in the hospital records by linking them with machine learning algorithms. The main objective of this paper is to build a suitable model that will employ a decision tree (which is a data mining algorithm used for classification) to predict a three-year recurrence of breast cancer including chances of survival from the dreaded disease. For training purposes and to augment the learning process of the algorithm, a vast amount of medical data of breast cancer patients obtained from the records of Mizoram Cancer Institute, Aizawl has been utilized.

Keywords: breast cancer, data mining, decision tree, J48, recurrence.

A Comparative Study between Data Mining Classification and Ensemble Techniques for predicting Survivability of Breast Cancer Patients

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(Article published in 'International Journal of Computer Science and Mobile Computing', September 2019, Volume 8, Issue 9, pg.01 – 10, ISSN number 2320-088X 2) https://www.academia.edu/40276242/A_Comparative_Study_between_Data_Mining_Classification_and_Ensemble_Techniques_for_Predicting_Survivability_of_Breast_Cancer_Patients_

ResearchBiB: "http://paper.researchbib.com/view/paper/223422"

Abstract

Breast Cancer is the most common type of cancer prevalent among female cancer patients, while it also is the second most dreaded disease causing cancer death among women. A variety of data mining techniques, including Artificial Neural Networks (ANNs), Bayesian Networks (BNs), Support Vector Machines (SVMs) and Decision Trees (DTs) have widely been used in cancer research to facilitate the development of predictive models to create an effective decision making environment. This study proposes a criteria for prediction of survivability of breast cancer patients, based on the analysis performed using four data mining classification techniques, which include, Decision Tree, Multilayer Perceptron, Naïve Bayes and Random Tree and comparing the results with those of four ensemble techniques such as Adaboost M1, Bagging, Voting and Stacking. The dataset used in our experiment consists of 23 attributes containing 492 samples obtained from the Mizoram Cancer Institute of Aizawl, Mizoram, India. We are using data mining classifiers to predict the recurrence of breast cancer over a period of three years evaluated based on the comparison of their performance. Feature and attribute selections have been carried out to enhance the prediction accuracy of the computations.

Keywords: data mining, decision tree, neural network, support vector machine, naive bayes, support vector machine, ensemble method

Foundation Studies: Report of Preliminary Findings and Follow-up of a Pedagogical Approach for the Freshmen Students in a Tribal University in Meghalaya, India

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(Paper presented in 4th Panpacific International Research Conference. Theme: Cresting 4.0: Multidisciplinary Research on the Wave of the 4th Industrial Revolution, Quest Plus Hotel and Conference Center, Clark Freeport Zone, Pampanga Philippines, 24-26 October, 2019)

Abstract

On the sweeping transformation brought about by globalization and fast technological advancement, adolescents and young adults transitioning from Higher Secondary to Undergraduate academic environment find themselves in between the unprecedented overflow of information at the their fingertips, and their search for identity, career goals and aspirations, and their social and cultural adjustments. Higher educational institutions are now challenged with the paradigm shift of pedagogical approaches in meeting these realities in order to maximize the holistic development of the students. An on-going programme of the Martin Luther Christian Universitystarting from 2018, is the Foundation Studies (FS) for the Freshmen Students where all First Year UG students are exposed to eight workshops. These workshops are executed through an integration of departments and centres in the university with the following components: Career counselling, Knowing Myself, Cultural studies, Human values, Environment, Life Skills Human Sexuality, Music, and Art appreciation. The outcome of the programme is being evaluated through a longitudinal approach using pre and post tests, interview, and focus group discussions. In addition, all participating students are able to participate in an online feedback portal developed for this specific purpose. This presentation reports the relative effectiveness of the components as well as the impressions of the students, predominantly tribal students, who have undergone the FS programme and are now in their Second Year. The discussion of the findings refer to Multiple Intelligence theory, Emotional Intelligence Theory, Social Learning Theory among many others.

Keywords: Foundation Studies, Pedagogy, Freshmen, Tribal.

Stress among Secondary School Students of Saipung Block, East Jaintia Hills Meghalaya

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*Email: bamonlang2010@yahoo.com (Paper presented in the **National Seminar on** *Recent Trends in Educational Psychology* organized by Department of Education, Sikkim University; Gangtok, November 11-12,2019)

Abstract

Stress is a part of everyone's life. According to Evans and Kelly (2004) stress is a 20th century sickness. Students at the secondary school level face number of problems related to school environment, aspiration level, examination, peer pressure and academic performance. The present study is an attempt to study stress level among secondary school students. The objectives of the study was to find out the stress level among the secondary school students and to find out the differences in pressure, physical stress, anxiety, frustration and overall stress among the students. Descriptive survey method was used. The data was collected from 150 secondary school students located at Saipung Block using random sampling technique. Stress scale developed by Dr. Vijaya Lakshmi and Dr. Shruti Narain (2014) was used to collect the data. The results of the study reported that no significant difference was found in pressure, physical stress, anxiety, frustration and overall stress among male and female secondary school students.

Keywords: Stress, Pressure, Physical Stress, Anxiety, Frustration

CENTRE FOR CAREER DEVELOPMENT AND PLACEMENT

Career Counselling as an important component that may be offered as a Specialization for the Postgraduate students pursuing Professional Courses in Shillong, East Khasi Hills District, Meghalaya, India

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National Seminar on *Quality Enhancement of Teacher Education in India: Recent Trends and Challenges* at Nikhil Banga Sikshan Mahavidyala, Bishnupur, Bankura, West Bengal, India. July13-14, 2019)

Abstract

Objective: To find out the need to offer career counselling as a specialization among the postgraduate students pursuing professional courses. Methodology: A descriptive, cross sectional study design, collecting relevant quantitative and qualitative data from the respondents was conducted. Data on retrospective histories and experiences in career counselling was captured to link how career counselling is becoming an important aspect for career development and career decision making. In this study, a total of 100 students were studied. Setting: Postgraduate students from MSc Counselling Psychology and Master of Social Work from Martin Luther Christian University, Shillong. Results: Career counselling has led a student to be familiar with his/her interest and aptitudes, hence paving a way for them to make the right career choice. Career guidance has facilitated students to be focus with their career planning and in choosing relevant programmes during their course of study to help built their expertise. Career Counselling as an area should be enhanced, to create more professionals in the field. Conclusion: There was a strong recommendation that proper career guidance and monitoring is the need of the hour, as students are either over exposed to career information or are not exposed to them at all.

Key words: Career Counselling, Specilization, Postgraduate Students

CENTRE FOR GENDER EQUITY AND DIVERSITY EDUCATION AND RESEARCH (GENDER)

Land and gender relations in the context of matrilineal Meghalaya, India

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(Paper presented in the 'Northeast Land conference, Shillong, organised by MLCU in collaboration with NERCORMP, NEN Shillong, RNBA, and NRMC Centre for Land Governance, 30-31 January, 2020)

Abstract

Limits on land resources and the increasing push for development in developing countries has led to the gradual transformation of property regimes. Land is embedded in social structures, making it imperative to understand the context in which such changes occur. My study presents the case of the matrilineal context in Meghalaya, India which has been experiencing increasing privatization of community land due to the growing pressure on land resources for development. The main aim of the study is to assess the underlying driving forces and mechanism for the transformation of property regimes and evaluate the impact of such change on gender relations. The framework for analysis includes the economic paradigm which sheds light on how changes in economic conditions influence actors' behaviour and the political paradigm that elaborates how actors direct property rights change in their favour. Secondly, the impact tof the transformation on women's land rights is evaluated through the bundle of rights framework. With this framework, I employ a qualitative case study analysis of Ri Bhoi District in Meghalaya as it represents a region which has undergone extensive transformation of community land to private land in the last four decades. The evaluation of the changing role and authority of actors in the transformation of property regimes in Meghalaya indicates that the transformation was a result of the interplay of economic determinism and political bargaining processes . Secondly, the evaluation of women's bundle of rights indicates the critical relevance of women's participation in Land governance.

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In the Shadows: Children of Urban Poor Households in Meghalaya

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(Authored In the Shadows: Children of Urban Poor
Households in Shillong ,ISBN 978-8194073949, MLCU
Press, March 2020)

Synopsis

Sustainable Development has been a key phrase that is promoted at all levels of development work since 1992, when in the UN Conference on Environment and Development, world leaders discussed the means to operationalize sustainabledevelopment. Children have been important stakeholders in the process of development. There is growing body of knowledge revealing that early childhood development is one of the most cost-effective investments a country can make to build human capital and promote sustainable development. It is noteworthy to consider that economic analysis from both the developed and developing countries point to the same conclusion that investing in the early years of life yields some of the highest rates of return to families, societies and countries (UNICEF, 2015a). For governments or organizations to intervene on the problems faced by children, it is essential to understand the enormity and multifaceted nature of the problems at hand. At the state and more local levels, reports on specific issuesare not easily available. The lack of data on issues affecting children at a local level hinders local governments and organizations from completely understanding the issues to enable them to take action. Thus there is a need to examine local issues that would provide data so as to be able to act and intervene appropriately. This book is therefore an attemptto examine the status of children and especially poor children in urban areas of Shillong, Meghalaya and the issues emerging therefrom.

The data that is presented in the book is both from primary sources and secondary sources. The primary data was collected from 261 households from three localities, Nongmensong, Punjabi Lane and Wahrting of the Shillong Urban Agglomerate (SUA) area in 2018. The sampling unit was the households who fall within the Below Poverty Line (BPL) category who had children below 14 years. But this could not be strictly followed as many 'poor' households in these localities did not have a BPL card, thus data was collected from poor households as verified by a local NGO working in the areas, the Reach Shillong Ministries. The data was collected at two levels from each household; from the mother or father and from the children above 11 years of age through personal interviews. There were altogether 484 interviews conducted among women and children 11 to 18 years. Informed consent was sought before collecting data from the parent and the children. For the child, apart from parental consent, assent of the child was also sought. Besides, this study received ethics clearance from the University Research Ethics Committee of Martin Luther Christian University. Besides the chapters, the book also contains some

exercises that would enable students to use this work as a reference book or work book. The questions are largely intended to help students analyse situations and improve their critical thinking.

The urban landscape of Meghalaya is crowded as the concentration of houses and facilities around Shillong is increasing and this is evident with the growing number of localities being included to the Shillong Urban Agglomeration after every census survey. This has put a lot of pressure on resources such as land and housing, and thereby people who have migrated almost 10 to 15 years ago from rural areas have not had a chance to enhance their quality of life in terms of material well being. Thus, they continue to live in shanty houses and there is an increase in the number of households living below poverty line.

Children living in such conditions have had to face numerous problems and many have not been able to come out of the cycle of poverty. The wellbeing of the children from such households can be said to be poor with very little material comfort and social security. The social environment is quite poor; with young children being exposed to tobacco and alcohol abuse, foul language, fights and quarrels on a regular basis. What is more alarming and is a cause of concern isthe behaviour of such children? It has been found that at a very young age, they are exposed to alcohol, and start smoking which could lead to using other drugs also and as they grow are vulnerable to other anti socialbehaviour. These are serious indications of what could be major social problems that we as a society will face.

The issues associated with these households such single parenting and poor relationship with the father leads to a lack of guidance and support to growing children. These children grow up often with no positive role models in their lives. On a daily basis, there is not much supervision and hence the children are left to the care of an elder sibling who is not much older either. The Open Day Shelters of the Reach Shillong Ministries have become a refuge to many children who would otherwise be left on their own during the day. The unsafe environment that these children live in is a cause of concern as some have already reported to having been sexually abused.

The need therefore is not only to identify issues and react when problems happen but to be proactive and identify areas where one can work with in order to prevent the problems. Thus there is a need for a paradigm shift from a reactive approach — to a protective factors approach. If we want to see a change in the lives of children from urban poor households, working with children alone will not bring about a sustainable change but it is imperative to work with their families and communities. There is nothing as important as the foundation of a family. The breakdown of families leads to broken lives and these broken children grow and live as scarred individuals to only continue to do what they have seen in their lives.

After a discourse on urban poverty and children within this context, it is apparent that tackling urban poverty should not be limited to providing housing facilities and infrastructure development though these are also important but, what is missing from most urban poverty programs is the 'social aspects' that the government needs to recognise. The Government of Meghalaya should create a policy for urban development and also programs to enhance the wellbeing of children, adolescents and youth, the family and the community (taking the protective factors). Curriculum in universities needs to include this important subject of concern 'urban poverty'. The subject on this issue should not only be limited to discussions only but these discussions should enable departments and institutions to come up with field action projects which can be initiated at an institutional level and later on become sustainable programs.

Protective factors should not be limited to an academic discussion but rather practical steps suggested in this book can be implemented by various groups and institutions. It has been identified that protective factors at the individual, family and community are important for the growth and welfare of children.

The church being a dominant institution in the society needs to take up the challenge of addressing issues facing families today and also those of children. Programs can be initiated for children and parents in ways that will transform families not just to adhere to religious norms per se but rather to live productive lives while achieving their God given potential. The church also has the additional capacity of handholding families including children and continues till their adolescence and youth. This is a unique characteristic of the church which may not be found in many other institutions. This characteristic when used effectively can create an enabling environment for the family including children.

The focus up to now has been to reduce rural poverty but it is high time to also look into matters of urban poverty and address it before too many children live without the chance of getting to live a 'life to its fullest'.

Intergenerational transfer of knowledge and mindset change through school gardens among indigenous children in Meghalaya, North East India

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(Chapter Case Study 9 in an EBook Agrobiodiversity,
School Gardens and Healthy Diets-Promoting Biodiversity,
Food and Sustainable Nutrition, Edited By Danny Hunter,
Emilita Monville-Oro, Bessie Burgos, Carmen Nyhria Roel,
Blesilda M. Calub, Julian Gonsalves, Nina Lauridsen 1st
Edition, March 2020, London, Routledge eBook ISBN
9780429053788 https://doi.org/10.4324/9780429053788)

Synopsis (book chapter)

Nestled in the hills and biodiversity of Meghalaya are three main matriarchal indigenous communities, Khasi, Jaintia, and Garo communities which inhabit the state. The larger proportion of the indigenous peoples resides in the rural areas and agriculture is their main livelihood activity, although today people have various sources of income but mostly related to agrobiodiversity. Among indigenous peoples, traditional knowledge relating to flora and fauna, soil, water resources and nature at large forms the basis for their identity, culture and heritage and food and medicine systems. North East Slow Food and Agrobiodiversity Society (NESFAS) has facilitated the development of the Indigenous Food System Curriculum which is aimed at enhancing the knowledge of students about their own environment and food system. As a result of the school garden, it has been seen that the schools have started to harvest their produce. In connection to the impact of school gardens, NESFAS wanted to assess the knowledge of students regarding the indigenous foods.

Transformation of Autochthonous Land and Property Rights among the Khasis in Meghalaya

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(Chapter in an EBook 'Land, Words and Resilient Cultures: The Ontological Basis of Tribal Identity' Edited by bodhi s.r & raile r.ziipao, Published in India by Tribal Intellectual Collective India. E-book Edition 2019 ISBN: 978-81-942059-0-6)

Synopsis (book chapter)

The edited book 'Land, Words and Resilient Cultures: The Ontological Basis of Tribal Identity' examines tribal identity around three inter-dependent categories, that of, land, words and resilient cultures. Central to the book is land, understood as a dynamic living entity that defines, produce and reproduces an identity, a tribe, a language and a culture.

The chapter on "Transformation of Autochthonous Land and Property Rights among the Khasis in Meghalaya" discusses the land traditions of the Khasis in Meghalaya and the transformation that has come about over the years. The study provides a historical account of transformation of land property regimes of the Khasis in Meghalaya, highlighted against the backdrop of the traditional land tenure system. Furthermore, the study elaborates on the classification of land, the main actors responsible for land governance, the administrative hierarchy and the terms of use of community land and private land as emanating from empirical data in Ri Bhoi District of Meghalaya, India.

Analyzing the effectiveness of using Facebook as a teaching-learning tool for undergraduate students

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(Chapter in a Conference Proceeding of International Conference on *New Frontiers in Engineering, Science, Law, Management, Humanities and Social Science* (INFES 2019) 23-24 February, 2019. Edited by Rhituraj Saikia, Eudoxia Research Centre, India. Spectrum, 1(1): 352-363. ISBN:9798647282972)

Synopsis (book chapter)

In this paper we explore the use of Facebook as a teaching-learning tool for undergraduate students of Martin Luther Christian University. This paper incorporated the use of Facebook group activity tool during the course that was carried out over a period of 18 teaching weeks. The findings from the study showed the positive impact on the use of Facebook as a teaching learning tool on the university students. The study also revealed that the experimental group made effective learning progress compared to the control group.

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Virtual Teaching: A great challenge for both the Teachers and Students

Chelmelyne Dhar

The Dialogue June 27, 2020 http://thedialoguemedia.com/analysis/education/virtual-teaching-a-great-challenge-for-both-the-teachers-and-students/

Education has become an activity simulated in a computer currently under an unprecedented scenario. Teachers and students have experienced such a gap which has never been felt before. Our communications are mostly done online, assignments are given and submitted online and this has taken a toll on both the parties. Definitely, it is quite uncanny and baffling with the presence of a myriad of barriers which cause hindrance to our smooth and direct communication. According to my speculation of the data collected from our students across the north-eastern region, I established that many of them were unable to submit their assignments on time due to problems like no internet connection, fluctuation in network reception and sharing of one laptop among two to three siblings. These are very limited issues I am mentioning here, there are still many more which are questionable. Unfortunately, matters such as these are not under our radar during normal times. Ever since the lockdown, it has suddenly dawned upon us that our academic lives are suffering in an unanticipated way.

Considering the above-mentioned points, however, there is no way out to tackle this otherwise. As teachers, we have to overlook some of the excuses given by our students which somehow may be true that not all students are being honest. Intricately, with the help of our University's lockdown guidelines, advisory and monitoring we perform our tasks diligently. We all know that most of the teachers out there are not IT geniuses; therefore, we do face challenges that come along with online teaching and learning. I do believe that some teachers are not even familiar with the advanced technology that we are supposed to be equipped in modern times. Being acquainted with modern technology is not everyone's cup of tea. Some of us are comfortable in our old ways of functioning; this is conducive to mental ease and helps us to be stress-free. On the other hand, in times like these, we have to step up a little bit more and explore our own abilities. We usually did not try, that is why we don't know the capacity that God has bestowed upon us but if we try I am sure, we will surprise ourselves to see that we can break the benchmark that was set by us in our comfort zone. However, it does take hard work and persistence to acquire and discover new knowledge. Also, proper guidance from an expert is required to use an app which will cater to online learning for conducting classes and presentation online.

On the contrary, teachers should never be judged and criticised for their absence of techknowledge. People ought to learn to appreciate the hard work that they put in. Teaching is a profession with low pay compared to other sectors. Still, teachers are expected so highly that it is never enough of whatever they toil on a daily basis. Definitely, not

all are perfect; a few are not committed and dedicated with the work that was entrusted to them. However, there should not be generalisation based on some who failed to execute. A person is defined by his work ethics and this so true in some individuals. In many, it is an uphill task to cope up with the changing trend because of lockdowns. Anyhow, we have to move on, we had better never allowed our incapability to let our work comes to a standstill. Making an effort is crucial to try other means possible because our dedication is significant and critical for our student's future is fixed in our hands.

By any standard, there's nothing like classroom teaching. As a responsible teacher, I miss all the responsibility that comes along with fun learning in the classroom. I miss all the jokes, the surprise, the greetings, the exhaustion, the feeling of accomplishment at the end of each day. Being a teacher is a tedious process; however, teachers are tenacious, as we are not willing to give up on a student's life. We are the ones who mould and shape their directions in life. We feel outraged and discouraged on certain occasions since there are numerous pressures that besiege us.

Nevertheless, despite the pressures that besiege us at all times, at the drop of a hat we are always ready to comprehend and act with sensitivity because we care. There is no other way to express a feeling of rewarding than this prestigious work that I have been practising over the years. Emphatically, together we can come out of this deep water successfully. All of us share the hopes and dreams that we can make this work. We will get back to our classrooms a Ther this pandemic and enjoy whatever we enjoy best (even though some things will never be the same anymore). We will practise the same values like honesty and integrity in our teaching career purposefully and wholeheartedly.

Where will Covid take us?

Glenn C Kharkongor

The Shillong Times, June23,2020

Predicting the future is hazardous at best. Crystal ball gazers and clairvoyants have kept away from the Covid scene. Some church goers quote Bible verses to claim this is a curse from God, to which Bah HH Mohrmen has posed the right question, and to paraphrase him, "If this pestilence is from God, why are we taking measures to curb it, instead of humbly accepting our just punishment?" For the rest of us, Covid lies in the realm of science and it is here that we must look for answers. Science is not always precise and predictable. Indeed, debate and doubt are important tools in the scientific method, and the constant peeling away of the unproven and disproven enables a clearer core of factual information to emerge. Covid is here to stay Do viruses that cause contagious pandemics go away? Probably not. Once the wave passes, the virus lurks quietly somewhere, dormant till favorable conditions arise again. Only a few viruses have been truly eradicated, like smallpox and rinderpest, polio is on the cusp of elimination. Several of the recent pandemics or local outbreaks of SARS, MERS, and Zika have been contained, and the numbers have diminished, but spikes occur now and then. So like with HIV, an uneasy equilibrium is reached with most viruses. There have been cascading predictions for the peak of the epidemic, first April, then mid-May, now we are hearing August. These are futile prophecies, and Niti Aayog made a big hash by declaring that aTher May 16, there would be no more cases. That offending power-point from Dr VK Paul, a retired professor from AIIMS, has since been removed from the website. Pre-symptomatic spreaders are identified once they get symptoms, so the biggest unknown is the number of asymptomatic cases. These innocent individuals may be quiet spreaders, having never been tested. Thus with every stage of unlock, there will be a spike of cases. These are not preventable and must be immediately subjected to isolation and tracing of contacts. Migrations of labour and other home returnees like students caused a spike. Another predictable spike will occur with the opening of schools. Fortunately children are very low risk. A wave is somewhat different from a spike. It means a resurgence of virus spread, maybe from new mutations, or environmental factors such as seasonal temperature and climatic variations. But definitions are subject to shades of meaning.

What about testing?

Unreasoned demands for more testing are a simplistic approach. Even if it was logistically and financially possible to test everyone in India, the yield would not be very useful. Millions would be found to be negative. An unknown but probably large number would be asymptomatic positives. This may be a feel-good thing, because it would tell us that most people with the virus don't get sick and it would also provide a denominator that would indicate a very low fatality rate, i.e., not that much to worry about, compared to TB, malnutrition, suicides etc. It would be impossible to trace the source of infection of every asymptomatic positive case and would confirm by default, that there is community spread. A better strategy would be to test more in hotspot areas, and definitely all contacts. Up to this point we are talking about RT-PCR, finding out if a person has the virus and can be a spreader. Antibody testing has a different purpose. Antibodies to Covid appear 6-12 days aTher infection and merely show that a person was exposed. It has little role in treatment. Antibody testing is a public health surveillance tool that tells us about prevalence in the community and will influence later policies and decisions about control programs, such as vaccination, drug requirements, treatment protocols and public awareness.

Vaccines

Hope and hype do not help the cause. It takes at least a decade to develop a vaccine. Even though Nipah vaccine efforts got an early start, the vaccine is still years away. Compressing the time frame is fraught with complications. The fastest vaccine was developed in 4 years, for mumps in 1967. MERS appeared in 2012, but intense work on a vaccine is

still in progress. Whether a vaccine will come at all is not a given. In spite of 30 years work, there is no effective vaccine for HIV. Best efforts have yielded no vac cine for dengue or chikungunya. Even if a good vaccine is developed, antivaxxers will pose a considerable threat. In 2019, the World Health Organization named vaccine hesitancy as one of the top 10 threats to global health. Deaths among unvaccinated persons are steadily rising, worrisome especially for innocent children. Their parents subscribe to fringe theories such as links with 5G, and claims that Bill Gates is using vaccine microchips to track humans. The anti-vaccination movement uses social media to amplify its message. Facebook told the British Medical Journal that it has removed hundreds of thousands of posts containing harmful misinformation relating to Covid-19 and a potential vaccine. Meghalaya may fall victim. The vaccination rate among rural children in the state is 58.5%, lower than the all-India average. A published survey on vaccinehesitation, by the Indian Institute of Public Health, Shillong in 2018, reported a multi-factorial situation. While many parents were worried about efficacy and side effects, there were cultural and religious reasons also. Like with Aadhar, there is some distrust of government schemes. Biometrics is considered by some to be anti-Christ. Medical officers have reported refusals based on religious grounds, and one government doctor said that he had invited religious leaders for a discussion, but nobody showed up. In the course of a nutrition project conducted by MLCU, it was found that in one village, not a single child had been immunized because of warnings from a pastor.

Drugs

Hydroxychloroquine has been virtually abandoned, studies on ivermectin have been discredited. Plasma transfusions from infected patients do help but will never be available on a large scale. Plasma is the golden yellow sticky fluid that oozes from healing wounds, the liquid residue when the red blood cells are removed. It contains antibodies. Steroids have been given a magical glow, but they are natural hormones occurring in the body and have general immune benefits that cover a wide range of illnesses in a non-specific manner. Steroid drugs can have harmful side effects, both in the short and long term. The first anti-viral drug manufactured in India for Covid is favipiravir, announced on June 20. It will help those with mild and moderate disease, but not those with severe disease. Each tablet is Rs 103. For the prescribed 14 day course, the expense will be Rs 11,866. Not many will be able to afford this, and no scheme for poor patients has been announced.

What should Meghalaya do?

A phased unlock is the right strategy, but not to be unduly dragged out. Border checking should be continued for registration and home isolation. Testing at state border areas won't tell us much, because people from containment zones cannot move, and those who are allowed to travel are expected to be asymptomatic anyway. Testing at the entry points can be restricted to those from high case cities and persons with symptoms. Institutional quarantine should be only for those

with positive tests and symptoms.

Educational institutions must open, albeit in a phased manner. For schools, first the higher classes, for colleges and universities, only the final year batches. Other batches can join a month later, when precautionary systems are in place. Assembly, convocations and other large campus gatherings must wait. Teaching in shifts is logistically difficult, and will entail double faculty time. Students from the other Northeast states will come to Shillong, but are unlikely to cause a spike in cases.

Tourism can re-open for the post-monsoon season. Because of a general fear, the numbers will be small to begin with, and so crowding at popular spots is unlikely. One USP that can be marketed is the low Covid prevalence. Maybe this is the idea of 'resilient tourism'.

The unlock will be covered by the Rapid Response System. Chief Minister Conrad's idea sparkled briefly, but seems to have been shelved. A vigilant and agile system of testing and contact tracing for every positive case can now be put in place.

We will have to live with Covid like we live with TB, malaria and the flu.

Mid Crisis Report Card

Glenn C Kharkongor

The Shillong Times, June 20, 2020

Who knows if this is the mid-point of the Covid crisis? But we're at the junction between lockdown and unlock, so a good time to do some stock-taking. Are there any lessons to be learned, that will help us on the onward journey? Almost every agency, institution and citizen is a stakeholder, and one way of working in tandem is to keep watch over each other. There is no escape from a systems approach, and any organization or person that strikes out on its own will rock the boat.

Government

The central and state governments have managed the health crisis quite well, given India's high population and disparate regions. Declaring a disaster situation early and the follow-up lockdown were decisive actions.

Where the government failed was in the anticipation and management of the social and economic fallout. Declaring a lockdown with only four hours notice was a dangerously precipitous move. Once the volcano erupted, it could not be contained. The government looked, helpless, confused, inept, even heartless, as millions of migrant labourers took to the roads. The financial schemes and full-page ads were unconvincing. The vast exodus led to a spike in Covid cases over the entire country. Worst of all, the collateral deaths are incalculable. This illustrates very vividly how rules and

guidelines can unravel when they collide with real life.

The main spokesperson for the government is the Indian Council of Medical Research, an astute move. Even the Ministry of Health stayed in the background and Niti Aayog made a few missteps. The ICMR has been on top of the situation, most of the time. But the management of administrative communication has been poor. India's bureaucrats issued well over 4,000 different rules during the first two months of lockdown, a morass of orders that added to the confusion. One journalist has described it as management by red tape.

There was no option but to release the lockdown. India is one of the few countries in which restrictions have been unlocked, even in the face of Covid cases rising daily. In most parts of the country, workplaces and commercial establishments are open. On June 15, the local trains in Mumbai, one of the worst hit cities by Covid, started moving, even as India recorded a daily high of 11,929 cases. The graph will spike again and again, but these are correct decisions in the balance of options.

Judiciary

The courts, especially the Supreme Court have been exemplary. Numerous statements and judgements exemplify their grasp of reality. They have supported the government's strategy, by and large, in dealing with the pandemic. The Madhya Pradesh High Court upheld the government's order prohibiting disclosure of identity of Covid-19 positive patients. The Delhi High Court slapped a fine of Rs 20,000 on a on a petitioner who had challenged the Centre's decision to relax the nationwide lockdown.

The Supreme Courts genuine concern for migrant labourers and other victims shone through in several orders. It ordered a time-bound schedule to help workers reach home. It ordered the government to take up the full refund of cancelled tickets with the airlines. It refused to take action against private companies who could not pay full salary to employees, and asked the finance ministry to take up the waiver on loans with the Reserve Bank of India.

Media and social media

The TV channels are a mixed bag. It is pointless to comment on shrieking anchors who thrive on sensation, zooming into controversial waters. Bland and balanced analysis is a rarity. But TV succeeded in highlighting the plight of migrant labourers, bringing their distress into living rooms, drawing the attention of the world and prodding a sluggish government.

The print media, has by and large, walked a straight line, balancing their critique with recognition of the difficulties that governments face. Coverage of the plight of victims has been fused with empathy. The headlines have been supported by infographics, which bring focus and immediacy. Rarely have there been lapses into hyperbole.

Many in the social media have taken off, running on tangential forays into conspiracy theories. The one that seems to have gained the most traction is the 5G radiofrequency (RF) waves, which is a non-ionizing radiation and harmless compared to ionizing radiation, such as x-rays. In some right wing circles, there is denial that there is Covid at all, or that it was created by Anthony Fauci.

A proponent of the 5G conspiracy is Dr Rashid Ali Buttar, a Pakistani born osteopath and anti-vaccine crusader in the US. He has twice been reprimanded by the medical licensing board for improper treatment of patients, and use of adulterated drugs. Buttar claims several qualifications which are listed as "questionable" by Quackwatch, a professional monitoring organization. There are enough delirious followers to post his frequent and dangerous rants.

Citizen response

Citizen responsibility has been a mixed bag. There have been regions where citizen compliance and cooperation have been exemplary like Kerala. In cities like Mumbai and Bangalore, the residential areas have seen self-imposed restrictions by apartment complexes and citizen groups. But crowding invariably happens in slums, market areas and bus and railway stations. And everywhere, there are the unheeding devil-may-care types who make good citizens despair. The behaviour of the poor, however, deserves empathy, not condemnation.

In this age of internet, open access journals and public discussion, everyone has become an expert. While we must be well-informed citizens, an assumption of expertise is hazardous. The authors of some letters and articles in the media even put their degrees and brief biodata, indicating that they are well-educated and highly intelligent. It's not the same thing as being an expert. It's harmless if everyone has an opinion about the cricket team, but matters of health are different. Because Covid knowledge is incomplete and evolving, anyone can latch on to something that supports his/her pet opinion, and trumpet it as scientific.

There are two kinds of specialists whose expertise is paramount in viral outbreaks: epidemiologists who know about patterns of disease and virologists who track virus behaviour. While not perfectly predictive, their generic knowledge comes in handy when dealing with a new viral disease. Even medical specialists discuss differential diagnosis and seek second opinions. But if I wanted to invest my money I would go to a broker, rather than to an architect, never mind how smart he is.

By and large, India has depended on the advice of ICMR and other epidemiologists and they have got it mostly right. It's the political and administrative decisions that have sometimes faltered.

Church

As usual, whenever there is a crisis, the church is conspicuously absent from the scene. A few donations come

in and a few individual churches or Good Samaritans proffer some community aid, but a systemic response has never been forthcoming, whether from a single denomination or from the collective church community. Some years ago, in Kenya, the church used its reach in every village to distribute mosquito nets, logistics that even the government could not muster. There are many silent epidemics such as single mothers, stunted children, and teenager dropouts, in which the church could contribute immensely.

Meghalaya

Our state government has done a good job, given the inherent difficulties of dealing with a disaster situation. But the decision-making has not been free of political expediency. Certain businesses like coal and liquor appear to have been favored. In the face of pressure groups, non-tribals have not been adequately protected.

Communication with the citizenry gets low marks. Public pronouncements have been monopolized by the chief minister and his deputy, and there have been mis-statements, back-tracking, and amateurish explanations. Hardly have we heard from a health expert. Even Trump, with his muddled press conferences has a health expert standing by. The recent interview, featured on the front page of the Shillong Times, with the health secretary, Sampath Kumar, was refreshing. His detailed answers gave us a clear update of the Covid situation in the state.

Has Community Transmission Happened?

Glenn C Kharkongor

The Shillong Times June 16, 2020

There have been denials, assertions and side-stepping about community transmission from various spokespersons and experts. The Indian Council of Medical Research (ICMR) has been consistently claiming that community transmission has not occurred. A few days ago, Chief Minister Conrad Sangma assured us that the state was taking steps to forestall community transmission. On June 13, Andhra had 222 new cases of which 186 were reported to be from "community transmission", the media carefully using quotation marks.

ICMR Director General Balram Bhargava was asked at a media briefing on June 10, if India is in the community transmission phase, Bhargava skirted the question and said, "There is a heightened debate around this term community transmission. Having said that I think even WHO has not given a definition for it." This was on the day that India registered its highest number, 9996 cases.

But Delhi Health Minister Satyendar Jain said last week that in half of the Covid cases, the source of infection was not known. The assessment of the Delhi administration points towards the "third stage of spread. If the transmission has reached a stage where the source can't be identified, it is community spread, according to epidemiology," Jain said. The health minister carefully added, however, that it was up to the Centre to declare whether the community transmission stage had been reached.

What is community transmission?

In leading up to an epidemic, WHO describes the stepwise scenarios of: no cases, sporadic cases, clusters of cases, community transmission, and country-wide transmission. According to the ICMR, community transmission has occurred when the source of the infection cannot be located because multiple areas now have been affected. A person tests positive despite no known exposure to an infected person, nor any history of travelling to an infected area. The WHO says that community transmission "is evidenced by the inability to relate confirmed cases through chains of transmission for a large number of cases, or by increase in positive tests through sentinel sampling".

A state of community spread implies that the virus is now circulating in the community, and can infect anyone. At this stage, it is theoretically possible for everyone to catch the infection.

What are the experts saying?

The denials of the Indian government mean that the country is still at Stage 2, which is local transmission. This occurs when family members, friends, neighbours or other close contacts, contract the virus from an infected person. The source of the transmission is known, contacts can be located, and appropriate measures such as testing, treatment and isolation, are taken.

Some leading physicians have disagreed with this assertion for months. Jayaprakash Muliyil, former professor of epidemiology at CMC Vellore and Member, Research Committee, National Taskforce for Covid, declared that spread by community transmission started in March itself. In the first week of April, India Today quoted the Director of AIIMS, Dr Randeep Guleria as saying that Stage 3 had begun in some parts of the country.

In the last week of May, a joint statement by the Indian Public Health Association, Indian Association of Preventive and Social Medicine, and the Indian Association of Epidemiologists included this sentence: "It is unrealistic to expect that COVID-19 pandemic can be eliminated at this stage given that community transmission is already well-established across large sections or sub-populations in the country."

A paper published in the Indian Journal of Medical Research (IJMR) on more than 40,000 positive cases recorded between January and April, conceded that the exposure (travel or contact) history of a large number of confirmed cases was missing. The IJMR is the official journal of the ICMR.

Why doesn't the government say so?

In March itself, community transmission had been established in at least 12 countries in Africa, said the World Health Organization (WHO). These include Algeria, Senegal, South Africa, Burkina Faso, Cameroon, Ivory Coast, Democratic Republic of the Congo, Ethiopia, Gabon, Liberia, Nigeria and Rwanda.

Since then we haven't heard much about community transmission. The National Health Service (NHS) of the UK has been unable to trace contacts of 33% of people with coronavirus in spite of a vigorous 'Test and Trace' strategy, but they don't use the term 'community transmission'. Other than India, few countries seem to stress the concept of community transmission.

It's difficult to overhear what goes on behind the closed doors of the central Secretariat, so we can only speculate. Perhaps the government feels that to concede the fact of community transmission would be tantamount to saying the lockdown didn't work. Or they may be criticised for not doing enough testing. Already there has been a misstep by Dr VK Paul, NITI Aayog member, who predicted in the last week of April that cases would decline to zero by May 16.

Once community transmission has occurred the public health strategy changes. Only minimal mitigation measures would be required, mostly dependent on responsible citizen behaviour. Like for the flu, those who get moderately or severely sick will be treated. The doctors will do Covid testing just to confirm the diagnosis. Public health strategies will be confined to surveillance, outbreak monitoring, and vaccination programs when the vaccine is ready. In the long term, tracking of seasonal surges and regional variations and their concomitant factors will round out the knowledge of the behaviour of the virus.

Is community transmission an important concept

While acknowledging the threat of community transmission, the president of the Public Health Foundation of India (PHFI), Dr K Srinath Reddy maintained we must first be clear about the definition. He advises applying it to local situations rather than to the country as a whole. Two categories of localised outbreaks are of concern.

The first are cases concentrated around entry points of foreign travellers, usually large cities. The second are clusters in overcrowded areas, especially slums. The priorities now are to contain the disease in these areas and to protect rural regions, because two-thirds of the population resides in the rural hinterlands. Reddy's nuanced view takes a disaggregated view, rather than viewing the country as a whole.

What about Meghalaya?

The small number of cases indicate that community transmission has not occurred in the state. All the positive cases are seemingly traceable to their antecedents. Most of these in any case are asymptomatic or have mild disease and

are containable at home.

Registering and monitoring incoming travellers needs to be continued. But testing at entry point needs to be done only for those with symptoms or those coming from the 13 cities with high case load as Himachal Pradesh has done. These cities as per the ICMR list are: Delhi, Mumbai, Chennai, Ahmedabad, Thane, Pune, Hyderabad, Gurugram, Chengalpattu, Jaipur, Jodhpur, Kolkata, and Indore. Others do not need entry point testing and should go straight to home quarantine.

As only asymptomatic travellers are allowed to travel, it is unlikely that many newly infected persons will test positive, because the virus load is small in the early stages. Already we have seen such instances in Meghalaya. Institutional quarantine should be reserved only for those with moderate symptoms and for individuals whose home situations are not optimal. In other countries individuals with mild-moderate symptoms are being managed at home. Meghalaya could adopt this approach.

The decisions of headmen in Meghalaya are inconsistent, with some localities mandating that returnees must go to institutional quarantine, even though home conditions are adequate. This is against the current guidelines. Forced institutional quarantine of negative and asymptomatic cases has its own problems of logistics, proper care and supervision, and possible spread of other diseases.

In Karnataka, persons who are in home quarantine are required to provide the names of two neighbours who will assist the tracking system to ensure compliance. In this way, citizen responsibility is combined with systemic monitoring. Public identification of positive cases is not required. This violates the principle of patient confidentiality and may encourage vigilante actions.

Individual responsibility to battle corona #Unlock 1.0

Gracedalyne Rose Shylla Passah

Published in Meghalaya Times on June 14, 2020

As the government has liThed the Lockdown and mankind has not find the cure for corona, it is an individual's obligation to battle this deadly virus. With the rise in active cases, one must ensure not to contract it and the best bet is to boost our immunity.

Immune system

In its simplest term, immune system is the body's defense against infections with the main function of fighting disease-causing germs and to remove them from the body. It is complex as it is not a single entity. To function well, it requires balance and harmony. Because of this complexity

and no clear evidences on how to boost immunity, one can only think of supporting to strengthen it.

Ways to strengthen our immune system Accepting the new normal is the way forward. With many aspects not in our control, choosing a healthy lifestyle is. One must opt for it and this is the natural way to strengthen our immunity. What includes in this are: practicing basic hygienic habits, getting ample amount of quality sleep, performing exercise regularly and maintaining emotional and mental health, consuming a balanced diet and more. In this, consuming a balanced diet is perhaps the most important but others are interrelated.

Consuming a balance diet

The thumb rule is to aim for a balanced meal with minimally processed foods. It is necessary to have a diverse range of foods that can provide all the essential nutrients. "MY-PLATE-FOR-THE-DAY" (available online at: http://nin.res.in/downloads/My_plate_for_the_day.pdf) is one of the simplest visual aid that provide guidance for a balanced diet. It depicts eight different kinds of foods to be consumed in a day by an individual and it is to focus on the variety and amount. The division of the plate signifies the amount. These food groups provide us the nutrients namely: Carbohydrate, protein, fats (macronutrients), vitamins and minerals (micronutrients). These nutrients have their respective functions to build the body.

If one were to place all the foods that are to be consumed in a day in a plate, half the plate should be occupied with vegetables and fruits. They provide vitamins and minerals. These nutrients have a protective, regulatory and body maintaining function. Savor the flavor of seasonal fruits and vegetables and choose the ones rich in color. Vary the vegetables by consuming them raw (wash well) or cooked; fresh, frozen, canned, or dried. One can choose from darkgreen vegetables, roots and tubers and other vegetables. Focus on seasonal fruits as well, especially whole fruits and limit juicing them. Fruits may be fresh, canned, frozen, or dried instead of juice. Three fourth of the plate must be filled with cereals and millets. They provide carbohydrate and it provides energy. Common examples are rice, wheat, millets, corn and oats. It is ideal to opt for whole grains rather than refine counterparts. The remaining one fourth is shared among pulses, eggs and non-vegetarian items (provide protein which aids in body building and repairing) in a bigger share while nuts and oilseeds and fats and oils is further subdivided into smaller slots. The protein sources include meat, poultry, seafood, pulses, beans and peas, eggs, milk products (paneer), nuts and seeds. One can vary the protein routine throughout the week. For the non-vegetarian sources, look/opt for lean meat. Trim or drain fat from meat and remove poultry skin. The vegetarians must include different kinds of pulses and can vary their method of cooking. The nuts and oilseeds are rich in the micro-nutrients while fats and oils are needed for the energy. The importance of milk and milk product is also seen in the visual aid.

Besides the main nutrient, one has to drink ample amount of liquid – water and other cold and hot beverages. Make better beverage choices as many beverages contain added sugars and offer little or no nutrients, while others may provide nutrients but too many calories.

SPECIFIC NUTRIENTS

Under certain conditions, when the immune system is compromised, one is more inclined to infections; hence, the immune booster nutrients which are mainly vitamins and minerals and specifically are Vitamins A, E and D – the three fat soluble vitamins; C & B vitamins, and minerals such as zinc, selenium, iron, copper etc. These are to be consumed in additional to the other macronutrients.

The next concept in nutrition with special reference to immune boosting is 'Functional Food' which is defined as "foods or dietary components that may provide a health benefit beyond basic traditional nutrition." Food containing phytonutrients (common examples are curcumin, pepperine, allicin, gingerol, lycopene), probiotic, prebiotic, antioxidant rich foods and food pigments which gives colour to the food item. They are also referred to Super foods.

Micronutrients (vitamins and minerals) and phytonutrients that are primarily available in fruits, vegetables, greens, nuts, and whole grains play crucial role in several metabolic pathways that aid in optimal immune function.

SEASONAL TRADITIONAL FOOD

It is highly recommendation is to opt from a range of seasonal traditional food. Our state is blessed with a plethora of wild edibles herbs, fruits and vegetables and seeds. Their nutrient composition is better or at par with the other conventional food items. Some plants are used for their unique healing properties by the traditional healers and have scientific evidences.

SOME USEFUL DIETARY AND LIFESTYLE GUIDELINES TO FOLLOW

- Ensure substantial servings of fresh fruits and vegetables (as much as 450 to 500gm per day per person) and prefer whole grains. These can be easily drawn from what is locally produced, seasonal, available and accessible.
- Limit consumption of highly processed foods, avoid fruit juices & carbonated drinks these are high in fat, salt and sugar, and poor in nutrients (vitamins, minerals, phytonutrients)
- Consuming meat, poultry and eggs is not risky, but hand wash hygiene must be followed a Ther handling raw meat, eggs or even vegetables. Thoroughly cooked meat/ poultry may be included in moderation.
- Avoid too much fat (no more than 30 gm/person/day-preferably more than 2 varieties of oils), salt (no more than 5gm/person/day), and sugar is just calories with no nutrients, hence, keep it to bare minimum
- Maintain ideal body weight .Being underweight or overweight/obese impairs immunity and increases

inflammation

- Moderate physical activity/yoga will reduce stress and build immunity
- Keep your body hydrated with adequate water intake for good immune response to any infection
- Smoking & alcohol adversely affect immunity and increase the risk and severity of infections, hence must be minimal or avoided

SOME LOCALLY AVAILABLE FOODS THAT ARE RICH SOURCES OF ABOVE-MENTIONED NUTRIENTS

- Papaya, guava, apple, grapes, mango and many other fruits are rich in beta carotene (precursor of Vitamin A), Vitamin C, Potassium, B vitamins and folate which help in overall maintenance of health and immunity
- Citrus fruits like oranges, tangerines, lemons, sweet lime, goose berries, and red bell pepper are good source of Vitamin C
- Green leafy vegetables are rich sources of beta carotene (precursor of Vitamin A), vitamins C and E, anti-oxidants and fibre
- All seasonal vegetables and spices are rich sources of multiple micronutrients and antioxidants that aid in immune function, regulate gut microbiota and reduce inflammation
- Curd is a source of many nutrients, improves gut health by regulating gut bacteria; aids immune function and reduces inflammation
- Legumes (chickpea, green gram, black gram, lentils, and beans) provide many nutrients including iron and Zinc
- Millets are good sources of multiple micronutrients and fibre
- Flesh foods provide many nutrients including iron, zinc and essential amino acids
- Fish are rich sources of protein, vitamin A, vitamin E and essential fatty acids

It is prudent to obtain these nutrients through a good balanced diet. But two important points are to be noted – firstly, though deficiency of one or more of these nutrients can increase the frequency and severity of infections, supplementation of nutrients among healthy (not deficient) population does not confer any additional benefit; secondly, some of these nutrients in excess can increase susceptibility to infections. Therefore, a balanced diet is the key! In conclusion, there is no single mantra or magic bullet or vitamin or specific herb or supplements or nutraceuticals that gives one a full-proof immune boost. Adapting a healthy lifestyle is one way to support and boost the immune system.

Strengthening your immunity during Covid pandemic

*Gracedalyne Rose Shylla Passah, Ms.Kacheu Kanuo and Ms.Narsen Yanthan

Eastern Mirror, Dimapur June 9, 2020

In the wake of the COVID-19 pandemic and coupled with the return of the fellow citizen from different parts of the country, it is now an individual responsibility to ensure one does not contract it. Until the vaccine for the corona virus is created, the best bet is to boost our immunity which is a complex system

Immune system

In its simplest term, immune system is the body's defense against infections with the main function of fighting disease-causing germs (pathogens) like bacteria, viruses, parasites or fungi and to remove them from the body. Clinically speaking, the immune system is the amalgamation of a multitude of different systems, organs, cells, proteins and so on and has several factors affecting the efficacy of its performance. It is complex as it is not a single entity. To function well, it requires balance and harmony. Because of this complexity and no clear evidences on how to boost immunity, one can only think of supporting to strengthen it.

Ways to strengthen our immune system

Choosing a healthy lifestyle is of prime importance to strengthen it in a natural way. In this, consuming a balanced diet is perhaps the most important but also practicing basic hygienic habits, getting ample amount of quality sleep, performing exercise regularly and maintaining emotional and mental health and more..

Consuming a balance diet

The thumb rule is to aim for a balanced meal with minimally processed foods. It is necessary to have a diverse range of foods that can provide all the essential nutrients. "MY-PLATE-FOR-THE-DAY" (available online at: http://nin.res.in/downloads/My_plate_for_the_day.pdf) is one of the simplest visual aid that provide guidance for a balanced diet. It depicts eight different kinds of foods to be consumed in a day by an individual and it is to focus on the variety and amount. The division of the plate signifies the amount. These food groups provide us the nutrients namely: Carbohydrate, protein, fats (macronutrients), vitamins and minerals (micronutrients). These nutrients have their respective functions to build the body.

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on seasonal fruits as well, especially whole fruits and limit juicing them. Fruits may be fresh, canned, frozen, or dried instead of juice. Three fourth of the plate must be filled with cereals and millets. They provide carbohydrate and it provides energy. Common examples are rice, wheat, millets, corn and oats. It is ideal to opt for whole grains rather than refine counterparts. The remaining one fourth is shared among pulses, eggs and non-vegetarian items (provide protein which aids in body building and repairing) in a bigger share while nuts and oilseeds and fats and oils is further subdivided into smaller slots. The protein sources include meat, poultry, seafood, pulses, beans and peas, eggs, milk products (paneer), nuts and seeds. One can vary the protein routine throughout the week. For the non-vegetarian sources, look/opt for lean meat. Trim or drain fat from meat and remove poultry skin. The vegetarians must include different kinds of pulses and can vary their method of cooking. The nuts and oilseeds are rich in the micro-nutrients while fats and oils are needed for the energy. The importance of milk and milk product is also seen in the visual aid.

Ka Jingpher Haka Rukom Bam Bad Ka Thiah Ka Dem Jong Ki Samla Pule Kolej Bad Skulbah Ka Sor Bah Shillong Ha Ka Por Khang Dam Naka Daw Ka Khlam Covid 19

*Gracedalyne R S Passah ,Joplin M G Kharjana and Ms. Phinbet Arti Kharbyngar. Khasi translation by- Ms Occyliana Syiemiong U Nongsaiń Hima June 6, 2020

Ban pdiang ia ki jinglong jingman barabor sha ki jingkylla na ka jingwan ka khlam Covid kala wanrah ia shibun ki jingkylla ha ka met jong u briew khamtam ha ka koit ka khiah. Ka rukom bam, rukom thiah, rukom dem jong ki samla pule la pynshong dor ha ka por khangdam 2.0 lyngba ka jingwad bniah.Kumta, la jied ia ka sor bah Shillong kum ka jaka ban wad bniah namar ba ka dei ka jaka kaba bun ki jaka pule bad kolej. Ia kane ka jingwad bniah la pynpoi sha ki samla pule kolej bad skulbah lyngba ka watsapp da kaba ai ia katno katne ki jingkylli ba la shna kyrpang kaba iadei bad kane ka phang. Ki nong iashimbynta ha kane ki long tang ki samla ba pule ha ki kolej bad skulbah bapher bapher ka sor Shillong. Ka phang ba la jied tang ia ki samla kolej bad skulbah ka long namar ba ka dei ka por ba ki samla pule ki iaid bad ki shem bun ki jingeh bad jingkhuslai. Ha kajuh ka por kadei ruh ka rta ba ki don ki jingkylla ha ka met ka phad bad ha ka bor pyrkhat pyrdain jong ki. Wat lada don katto katne kiba la tip shaphang ka jingdonkam ia ki jingbam ki ba bsa ban tei ia ka met hynrei, ka jingtip bad jingpyrkhat jong ki ka khang lad ia ki na ka jingkylla ha ka rukom im. Shuh shuh ka jingsngewthuh shaphang ki jingbam bunsien kam ju ialam sha ki rukom ban jied ia ki jingbam kiba bha bad ba teimet. Ka jingthmu jong kane ka jingwad bniah ka long ban pynshongdor iaka rukom bam bad ka thiah ka dem jong ki samla pule ha kane ka por khangdam naka daw u COVID 19.

Tang hapoh lai sngi kynthih ngi lah ioh pdiang kumba 959 ngut ki samla pule jong ka sor Shillong ki ba la iashim bynta shitrhem ha kane ka jing wadbniah. Na ka 959 ngut, 80 percent ki dei kiba pule ha ki kolej bad 20 Percent ki dei kiba pule ha ki skulbah. Katkum kane ka jingwad bniah la shem kiba bun na ki ki don hapdeng ka rta kaba 21 snem, ka jingkheiñ ryntih kat kum ka jingthew na ki nongiashim bynta kynthei bad shynrang ka long 10:4. Kat haduh ban da shem ia ki dawai ban pyniap ia u khniang jingpang COVID 19, kaba donkam mynta ka long ban pynkhlain ia ka bor met ban ialeh pyrshah ia ki jingpang. Kumta, kawei na ki lad ban pynkhlaiñ ia ka bor met, ka long ban bam ia ki jingbam ba tei bad ban thiah biang kynta katkum ba la mang. Ka met u briew kadon ia ka kynja baje ba pyrkhing ia ka por ban trei kam :kum ka por ban thiah mynmiet, ban khie mynstep bad ka por ban thngan haba donkam ia ka bor ka sor na ki jingbam. Ia kane ka kynja baje lah pyniaid da ka jabieng. Ki nongwad bniah jong ka pyrthei ki iai ban ba ki rukom bam ba u briew u bam man la ka sngi bad ka rukom thiah ka iarap ban pyniaid beit iaid ryntih ia ka rukom treikam ka met ka phad jong u briew. Ki don bun ki jingsakhi lyngba ki jingwad bniah bapher bapher kaba kdew ba ka thiah ka dem ka ktah ia ka rukom bam rukom dih bad ha kajuh ka por, ka rukom bam rukom dih ka ktah ia ka thiah ka dem jong u briew. Ka rukom thiah biang por ka ai lad ia ka met ba kan treikam kham bha. Lyngba kane ka jingwadbniah ka pynpaw shai ba haduh 80 percent naki samla kolej bad 75 percentki samla pule skulbah ki mad ia ka jingkylla ha ka rukom bam ha kane ka por khangdam. Ki samla pule ki bam khyndiat sien ha ka shisngi ban ianujor bad ka por showa ban wan ka khlam. La lap ruh ba 85 percent ki samla pule kolej bad 80 percent ki samla pule skulbah ki bam duna ia ka saw sien haka shisngi. Katkum, ka jingwad bniah jong ki riew shemphang bapher bapher jong ka pyrthei, u briew uba ju bam hynriew sien ha ka shisngi, la lap ba ka khleiñ (cholesterol) bad ka shini (insulin) hapoh ka met ka biang bha ban ia u briew u ba bam tang laisien shisngi. Ki jingtrei kam jong ki dkhot met ha ka ban pyniaid ryntih iaka jingthngan, ka jingtylliat bam,ka jingpyndonkam jong ka met ia ka khlein bad ka shini ka iaid man ka arphewsaw kynta. Namarkata, ka bam bad ka thiah khlem por ka lah ban pynthut ia ka baje kaba pyniaid ryntih ia ka jingtrei kam jong ka met. Kaba bam bun sien palat haka shisngi ka ktah ia ka jinglong shapoh jong ka met kaba lah ban pynlong ruh ia u briew ban sngaid palat (obesity) kaba ai lad pat ia shibun ki jait jingshitom, kane ka buh ia ka jingkoit jingkhiah haka jingma. Kumba 72 percent kiba pule kolej bad 67 percent kiba pule skulbah ki pynpaw da lade hi ba haduh katno ka rukom bam kaba koit kaba khiah ka la kylla bad ktah jur ha kane ka jingshah khangdam.Ka daw bah na ki jing kylla ha ki rukom bam ka long ba 30.2% kiba pule kolej ki dei na ki jingkhuslai bad ka jingkulmar ha ka bam ka dih. Katba 37.3% ki samla skulbah ka dei naka daw jong ka jingkulmar ha ka bam ka dih bad 30.1% ki kdew ba dei naka jingkhuslai bad jingpisa lynga. Ka rukom bam ka ktah ia ka thiah ka dem ha kajuh ka por ka thiah ka ktah ia ka jingkoit jingkhiah. Kano kano ka jinglong kaba wanrah iaka jingpher ha ka rukom bam ka ktah ia ka thiah ka dem, ka pynpher ia ka jingtreikam jong ka met bad ka ktah jur ia ka bynta ha ka

jabieng kaba pyniaid ia ka por thiah por dem. Ka jingkheiñ jingdiah ha kane ka jingwad bniah ka pyni shai bad pyn shisha ba haduh 88 percent kiba pule kolej bad haduh 90% kiba pule skulbah ki mad ia ka jingpher ha ka rukom thiah jong ki ha kane ka por khangdam. Ka jing duna ha ka por thiah ne ka jingbym biang ka thiah ka dem ym tang ba ka pyntlot pynswai ia ka met ka phad bad ia ka jabieng hynrei ka ialam ruh sha ka jingbym iaid beit shuh ha ka trei ka ktah, ka lah ban buh ia ka jingkoit jingkhiah ha ka jingma. Katkum ka National Sleep Foundation 2020, ka jingiohthiah bha ha ka por mynmiet ka pynkhlaiń ia ki thied jabieng, ka iarap ruh ia u briew ha ka bor pyrkhat pyrdaiñka. Lada duna ka rukom thiah lane ym iohthiah bha, ka pynlong ia u briew ban klet bieit bad ka kah dum ia ka jabieng. Kane ka pynsuki ruh ia ka jingtreikam jong ka met da kaba wanrah ki jingkylla ha ki hormones (hormones- leptin bad ghrelin) kiba kitkhlieh ha ka ban pynthngan lane pynkdang ia u briew. Ka jing iohthiah bun kynta ka kyntiew ia ka jingkoit jingkhiah. Ka jingduh ia ka thiah ka dem, ka pynlong ia ka met u briew ban pymnih duna ia ka protein cytokines kane ka pyntlot bor ha ka ban ia leh pyrshah ia ki jingpang. Ka jingpynlut bun por ha kaba pynbor ialade ban peit sport ha ki telebishon (TV), ki jinglehkai ha ki mobile phone ne ki social media, ne ha ka ban pyndep ia ka jingthoh (assignments) kaba pynlong ia ki ban peit miet baroh shimiet haduh ban da saw ka tyngab, kane ka ktah jur ia ka bor treikam jong ka met bad ka jabieng kaba pynlong ia ki ban shem jingeh ban pynleit jingmut ha ki kam jong ki. Don bun ki samla pule kiba khuslai jingmut shaphang ialade bad ia ka iing ka sem, ka jingiadei paralok ne ha kaba iadei bad ka pule puthi jong ki. Kane ka pynduh thiah bad ka pynlong ia ki ban khuslai jingmut baroh shimiet. Katkum kane kane ka jingwad bniah ka daw jong ka jingbym ioh thiah lane duna thiah ka longba 80 percentna ki samla pule kolej ka dei ka jinglynga, ka jingkhuslai mynsiem bad ka jingpyndonkam palat ia ka mobile phone lane ki laptop. Na ka 767 ngut ki samla pule kolej, 600 ngut ki pyndonkam palat ia ki mobile phone jong ki kaba kdew ba ki pynlut por ha ka ki jinglehkai games, social media, peit phlim lane ki pyndep ia kam thoh kam tar jong ki. Ka jingpyndon kam palat ia ki mobile phone bad laptop lane kompiwtor, khamtam ha ka por mynmiet ka ktah jur ia ka rukom thiah. Ym dei tang ba ka ktah ia ka jabieng hynrei ka blue lait ha ki mobile bad kompiwtor ka lah ban pynduna ia u hormone melatonin uba iarap ban pyniohthiah. Ki samla pule kiba pynlut bun por ha ka kor internet ki pynduna da lade ia ka por thiah bad ka pynlong ia ki ban shohthait baroh shisngi. Haba ia nujor bad ki samla pule skulbah, ka daw ba wanrah ia ka jingiapher ka rukom thiah jong ki ka long ka jingpyndep ia ki jingthoh assignment bad pule kot. 60 percent ki kdew ba ki don jingkhuslai haka liang ka jingpule. Namarkata, ka rukom thiah bad ka jingjrong lane jinglyngkot jong ka por thiah ka ktah ia ka jingthngan bad rukom bam haka por mynstep (breakfast). Ka por bam mynstep ka dei kaba kongsan tam ban bam jingbam (breakfast) namar kane ka ai jingkhlain ia ka met la phad ban treikam haka por mynsngi. Katkum ka Indian Council of Medical Research(ICMR), kaba bam bha bad bam kdang ha ka por mynstep ka tei ia ka jabieng bad ka iarap ia u briew ban pynleit jingmut kham bha. Ka jingjlan palat jong ka por bam (10-12 kynta) naduh mynmiet haduh mynstep, ka pynduna ia ka shini ha ka met bad ka jing bym bam ia ka bamstep(breakfast) ka ktah ia ka bor sngewthuh. Kane ka jingwad bniah ka pynpaw shai kdar ruh ba haduh 48 percent ki samla pule skulbah bad haduh 45 percent ki samla pule kolej kim ju bam ia ka jingbamstep (breakfast). Kane ka pyni ba ka jingthiahmiet ryngkat ka khie slem ka pynlong ia ki ban ym lap shuh ia ka por ban bam mynstep. Katkum ka jingwad bniah kaba na Japan, ka long ba lada u briew u bam ja miet slem palat bad pynjlan iaka por thiah, kane ka pynlong ia u ban khie slem bad duh noh syndon ia ka jingbam step(breakfast). Ka jingmlien ban pynduh jingbam step (breakfast) ka wanrah bun bah ki jingpang jingshitom kum ka jingsngaid palat (obesity), ka jingpang shini ym tang ha ki rangbah, ki tymmen hynrei wat ha ki khynnah khunlung bad ha ki samla ruh. 78.6 percent ki samla pule kolej bad 68.4 percent ki samla pule skulbah kila pynpaw ba ki kwah ban bam ia ki jingbam kai (junk foods) kum ha kane ka por khangdam. 45.5% ki samla pule kolej bad 53.6% ki samla pule ki skulbah ki shem baka daw kaba la pynlong ia ki ban kwah ia ki jingbam kai ki long na ka daw ka jinglynga, jingsngewbtai bad ka jingkhuslai. Ka jingwad bniah ia ka jingiadei hapdeng ka rukom bam rukom dih ryngkat ka rukom thiah rukom dem ka long ka donkam, kine artylli ki long kiba kongsan namar ka rukom bam ka ktah ia ka thiah ka dem. Ka jing bym biang ka por thiah por dem ka don ka jingiadei bad ka jingsngaid palat bad kiwei de ki jingpang kum jingpang shini. Bun na ki samla pule ki bud ia kane ka rukom im ha kane ka jingjia ryngkhat jong ka khangdam bad kane ka ktah ia ka rukom bam bad rukom thiah. Ka khangdam na kane ka khlam ka ngoh COVID19 ka lah wanrah bun bah ki jingkylla bad jingpher haka rukom treikam ka met ka phad naduh ka thiah ka dem haduh ka bam ka dih. Ha kane jingpynjari jong ka khangdam, ki samla pule ki nang mad khambun shuh shuhia ka jinglynga, ka jingpisa, ka jingkhuslai mynsiem bad ruh ha ka jingban jong ki kam iing kam sem ryngkat ruh ka pule puthi kaba ktah jur ia ka rukom thiah jong ki. Kine harum ki longki katto katne ki lad ba ki samla pule ki lah ban bud khnang ban pynmlien biang ia ki ban bam kum ha shwa ban wan ka khlam COVID19. "Bam kham bun ki jingbam ba tei met bad thiah ruh hapoh ki kynta ba la mang ki long ki lad ba kongsan. "Pynbiang ia ka rukom thiah bad rukom bam khnang baka bor met kan khlaiñ bad kan lait na ki jingkhuslai bad kan lah ruh ban ia leh pyrshah ia ki khñiang jingpang. "Iaineh ha kajuh ka por bam namar ka rukom bam ka ktah ia ki hormone bad ka rukom thiah. "Lada don ki por ba phim lah ban ioh shibun ki jait jingbam, kawei ka jingai jingmut ka long ban thied kham bun ki jingbam kiba tei met ban ia ki jingbam kai. "Ka Bitamin C ka long kaba donkam ha kane ka por ban iarap ban pynkhlain bad ban tei ia ka bor met, - lah ban shem ha kum ki soh balensha, sohjew, soh mylleng bad ki jait soh ba bun um(citrus fruits). "Pynduna ka jingpyndonkam ia ki mobile phone bad laptop lane kompiwtor. Ka blue lait kaba mih na kine ka ktah ia ka rukom thiah. Ialeh katba lah ban kiar na ka jingpyndonkam ia kine shikynta shuwa ban thiah. "Long ki basmat basting bakhih baksar. Ka long kaba suk ban pynlait

khlem pynshitom na ka kilan met da kiei kiei kiba jia ha ki

sawdong sawkun, hynrei ka jingkilan met ka ba man la ka sngi ka wanrah bun ki jingmyntoi kynthup ruh ia ka jingiohthiah bha.

What about Waste? - The Meghalaya picture

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Meghalaya forms a part of the Indian Himalayan region (IHR) along with Jammu and Kashmir, Ladakh, Himachal Pradesh, Uttarakhand, Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura and the Hill Districts of Assam (Dima Hasao, East and West Karbi Anglong) and West Bengal (Darjeeling and Kalimpong). A substantial part of the region is host to a "Biodiversity Hotspot" making it imperative to understand and acknowledge the essential ecological services it provide to its people. When one thinks of the IHR, one's imagination would be immediately transported to beautiful mountains, rolling hills, pristine rivers and lakes. With the spurt in developmental activities and accessibility, there is also a "mountainous" increase in waste accumulation magnified by rapidly growing tourism, pilgrimage, mountaineering and changing consumption patterns. In this region, 22372 metric tons (MT) of municipal solid waste is generated every day. Meghalaya is no exception to this phenomenon.

The Himalayan Cleanup

A group of dedicated people, under the aegis of Integrated Mountain Initiative (IMI), a civil society movement across the IHR, recognised this ever-growing problem and decided to do something about it. ATher a 2-day workshop on "Envisioning Sustainable Waste Management Pathways" at Gangtok on 11-12 May, 2018 with participants from all the IHR states, the "Himalayan Cleanup" initiative was born. Unlike most conventional cleaning drives involving only collection and segregation of waste, this cleanup intends to understand and highlight what constitutes the trash and how much (Waste Audit) and who are the polluting brands (Brand Auditing). These audits are based on the concept called the Extended Producer Responsibility (EPR) of the Polluter Pays principle, a key element in all the new waste management rules notified in 2016 by the Union Ministry of Environment, Forests and Climate Change (MoEF&CC), Government of India.

Expressing solidarity to the cause, all the IHR states, including Meghalaya, came together for the first ever "Himalayan Clean-up" on 26th May, 2018 spearheaded by the Zero Waste Himalayas (ZWH), Sikkim and the Sikkim chapter of IMI. In Meghalaya, the cleanup was undertaken by the faculty and students of Martin Luther Christian University, Shillong and members of IMI's Shillong Chapter, Meghalaya Integrated Mountain Development Initiative (MIMDI) at Khyndailad (Police Bazar), Shillong with the State Mission

Director, Swachh Bharat Mission (G) sponsoring the oneday event. The cleanup started with waste collection and segregation followed by the waste and brand audit. An astounding 193 kg of waste was collected with non-branded plastics dominating the waste fraction. The Brand auditing revealed that Bailey mineral water bottle (PET bottles), Shikhar gutkha (multilayered plastics) and Frooti (Tetrapaks) constituted the major plastic pollutants. The figures from the other 89 Cleanup sites from the 12 IHR states combined also painted a grim picture where 97% of the waste collected was plastic. Staggering numbers filled up the datasheets. 2,50,697 numbers of multi-layered plastics, 68,780 single use plastics, 36,389 pet bottles and 12,869 tetrapaks with beloved brands like Pepsico India Limited and Hindustan Coca Cola topping the branded item list. For a one-hour cleanup from just 89 sites, the figures presented before us was startling and definitely an eye opener. The findings were later presented before the Minister in charge of MoEFCC, Government of India on 1st June, 2018.

Meghalaya had its second cleanup on 26th May, 2019 at two popular tourist and picnic destinations, Dainthlen and Weisawdong in Sohra. The volunteers collected 399 kg of waste in which, unsurprisingly, glass beer bottles (164.4 Kg) and multilayered snack packets (47.98Kg) were the dominant fractions. The major polluting brands included Beads packaged water bottles, Lays manufactured by Pepsico India Ltd, Frooti and Coca-Cola. Similar trend was observed across the 12 states which undertook the cleanup. Both the operations threw up similarities in terms of the waste composition and the brands preferred by the public. The findings brought to the fore the urgent need for adoption of policies to ban single-use plastic with a focus on EPR concept and strict enforcement and compliance of the different Waste Management Rules, 2016. More importantly, what resulted from the exercise was not just the data and figures but a deeper understanding of how small lifestyle changes, from using our own water bottles instead of buying packaged water to buying a fruit instead of a Frooti, can make a huge difference.

Waste in the COVID-19 era

Fast forward to 2020 and we are now grappling with a health and humanitarian crisis unleashed by the novel coronavirus. In such an unprecedented and challenging time, waste management has emerged as an urgent and essential public service to minimize possible secondary impacts upon health and the environment. Waste collection and disposal has been hit hard by the ongoing pandemic but more so, the grave impact it has on the safety and livelihood of sanitation workers, waste pickers and garbage collectors, the backbone of the waste management system. A new study published in the New England Journal of Medicine reported that the virus can survive on cardboard for about 24 hours and on plastics and stainless steel for about 72 hours. This poses a higher risk of exposure to the virus for the waste handlers from handling unmarked medical and contaminated waste. Underlining various challenges like gaps in compliance of bio-medical waste rules and solid waste handling, a set of guidelines on the handling, treatment and disposal of waste generated during treatment, diagnosis and quarantine of COVID-19 patients was released by the Central Pollution Control Board on March 18, 2020 in addition to the existing BMW Rules, 2016.

In Meghalaya, the same guidelines are being followed and a public notice was issued by the Meghalaya State Pollution Control Board (MSPCB) on 13th May, 2020 for sound management of used masks and gloves generated from home quarantine. But are these guidelines enough when in our country you still read reports about dumping of face masks by users under home-quarantine in household garbage that were being collected by rag pickers and people reselling used face masks. Similarly, in Meghalaya, a news report doing the rounds where used personal protective equipments (PPEs) and empty food packets were seen to have been disposed off recklessly around the vicinity of IIM, Shillong. To add to the problem, plastics has emerged as an unlikely hero as demand for masks, gloves, PPEs and disposable plastics skyrockets. As we are grasping to understand this unfamiliar reality, it is understandable for individuals and families to make difficult and oThen necessary lifestyle changes for their safety and well-being. Plastic has become a double-edged sword but it is a real and present crisis that poses a grave threat to the environment and sustainability.

So, what is the way forward?

For an effective waste management ecosystem, a multiactor approach should be followed where corporate social responsibility initiatives, non-governmental organisations and waste management players must come together. Few things can also be done. For example, the data and information can be sent to the concerned authorities so that it can trigger policy change. However, upon waiting for policies to change, the fear is that we waited too long. At an individual level, we can surely make a difference. We can equip ourselves with the knowledge of different waste management rules and identify the areas we can contribute. Availing the take back system or collection centres as part of EPRs for the producers as imposed by the E-waste (Management) Rules, 2016 is one instance. We can also practice the zero waste concept individually first, and then eventually rope in the family, our neighbours and the community. Especially as we navigate this new reality together, let the COVID-19 crisis be a reminder about the need to reshape how we all think and act about waste. The solution lies within each one of us if we only care enough.

Altered eating and sleeping pattern of college going students studying in Shillong

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Accepting the new normal that is anticipated from the pandemic may bring about changes to bodily rhythms to which may have an adverse effect on one's health. The eating and sleeping pattern of college going students was evaluated during the lockdown 2.0. The study area is Shillong for it being an educational hub whereby many educational institutions and universities are present. The study was carried out in an online mode using Google Forms which was circulated in the student's WhatsApp groups. College/ university going students were targeted as this phase is oThen considered as a period of storm and stress. It is a crucial stage of hormonal adjustment and their life making decisions is influence by many factors. While some maybe aware of the importance of food and meeting their daily nutritional needs, however, their knowledge and attitude might hinder them from changing their behaviors. Moreover, having knowledge on food and nutrition does not always lead to healthy food choices. The purpose of this research was to assess sleep and the dietary pattern followed by the said group during Covid-19 pandemic. An overwhelming response was received with as many as 959 students responded in a span of three days. Out of 959 students, 80 percent students belong to the under-graduate (UG) category, while 20 per cent were postgraduate (PG) students. The average age was 21 years which are justifiable as it is the range of the said education level and the ratio of female and male was 10:4. Till the antidote for the coronavirus is created, the best bet is to boost our immunity which is a complex system. Among the many ways to boost our immunity is to consume a well-balanced diet and getting ample amount of quality sleep. Researchers have given a lot of emphasis that diet and food choices help regulate our circadian rhythm. There is enormous evidence indicating that sleep can affect the eating habits and vice versa. The circadian rhythms keep our body clock running on time, which in turn keeps all of the bodily functions running on schedule — such as falling asleep at night, waking up in the morning, feeling hungry when we need energy and metabolising the food we eat. The study revealed - 80 per cent of undergraduates and 75 per cent of the postgraduate students had a changed eating habit during home confinement. The number of meals per day has reduced than the usual daily schedule before the pandemic. Consuming 'less than four' meals per day was followed by 85 per cent of undergraduates and 80 per cent of the postgraduate students. According to many experts, individuals who constantly consumed six meals a day were found to have better cholesterol and insulin levels than those who consumed less than three meals. Many metabolic processes in the body such as appetite, digestion and the metabolism of fat, cholesterol and glucose follow patterns that repeat every 24 hours. Eating inconsistently may affect the internal body clock and that interruption might lead to weight gain and other health risks. The students themselves had rated 'average' on the how healthy their eating practices are. Seventy two percent of UG and 67 per cent of PG students opted for this rating respectively. The reasons stated was stress and eating disorders (30. 2 per cent) by the UG and eating disorders (37.3 per cent), stress (30.1 per cent) PG students. Diet affects sleep and in turn sleeps affect long term health. Any behaviours that alter the regular eating habits can interfere with the circadian rhythms and modify the set clocks the body runs on and change the master circadian clock of the brain which controls sleep. The statistics revealed an alarming and noteworthy data where as much as 88 per cent UG and 90 per cent PG student are experiencing irregular sleep pattern during lockdown. The risks of inadequate sleep extend way beyond tiredness. Sleeplessness can lead to poor performance at any given tasks, increased risk of injury and many health problems. According to the National Sleep Foundation 2020, a goodnight's sleep reactivates memories and strengthens brain cells connectivity. With insufficient sleep, one may be susceptible to forgetfulness and brain fogging. Lack of sleep also slows down the body metabolism by causing changes in the hormones (leptin and ghrelin) that are responsible for regulating satiety and appetite. Quality sleep hour's enhances immunity. When one is sleep deprived, the body releases fewer cytokines which greatly affects the immune system making the body prone to infections. When things get in the way, like jet lag, daylight savings time or a compelling sporting event on television, games, social media, assignments that keeps one up into the wee hours of the morning brings about the disruption of the circadian rhythm thereby making one feel out of sorts and can make it harder to pay attention. The circadian rhythm works best when you have regular sleep habits. Some adolescents stress themselves too much on family issues, social life and academic burdens which leads them to be unable to get quality sleep tossing and turning all night long. Poor quality sleep in itself can become an added source of stress and lying awake for many hours in bed at night may cause anxiety and negatively effects their daily activities and performance. The reported reason of the irregular sleep patterns by majority of the UG students (80 per cent) includes boredom, anxiety and excess screen time. Out of total number of 767 respondents, 600 of UG students said they indulge in excess screen time. This signifies the extensive use of their gadgets which may include addition to games, indulge in surfing the social sites, watching series and movies or doing their assignment. Excess screen time, especially later in the evening, can have a detrimental impact on sleep. Not only can it stimulate the brain in ways that make it hard to wind down, but the blue light from screens can suppress the natural production of melatonin, a hormone that the body makes to help us sleep. Students who spend more time using the internet have less sleeping time and feel higher levels of tiredness. When comparing to university (PG) students the factors that obstruct their irregular sleep patterns are predominantly academic activities in additional to what the UG students had mentioned. Sixty per cent of PG students reported academic stress. Therefore, the quality

and quantity of sleep, which usually manifest as short or long duration of sleep, may affect conditions in the early morning such as appetite for the breakfast meal. The most important meal of the day, unquestionably, is breakfast which acts as a fuel to jump-start the body. According to ICMR, eating breakfast provides energy for the brain and improves learning. The effect of glucose deprivation is noticeable by a fall in blood glucose level of sufficient degree, which is rapidly followed by disturbance in cerebral function. The gap of about 10 to 12 hours between dinner and breakfast causes low blood glucose levels and habitually missing breakfast can adversely affect cognitive performance. The study also revealed that 48 per cent university students and 45 per cent under-graduate (UG) students missed their breakfast than any other meals. One can clearly see the association of this-'sleep late and wake up late' thus, missing this meal, proceed to have a brunch instead. According to the study conducted in Japan, if individuals with late night dinner eating, delay their bedtime to allow for a certain time period before sleep or prolong the duration of sleep, the opportunity of taking breakfast may be missed owing to wakeup delayed. Habitually, breakfast skipping has been considered to contribute to numerous cardio metabolic conditions including obesity and Type 2 diabetes not only in children and adolescents but also in adults including the elderly. Furthermore the students are experiencing lockdown has the craving for junk foods and fast food with 78.6 per cent under-graduates and 68.4 per cent post-graduates. The cue that is attributed to these cravings are anxiety, boredom and stress with over 45.5 per cent UG students and a total of 53.6 per cent PG students. Evaluating the relationship between dietary habit and sleep quality is vital, because the food pattern play a significant role in sleep quality. An irregular sleep duration which is associated with both obesity and metabolic disorder, obesity and an irregular sleep pattern are related to unhealthy diet. Students are following a haphazard schedule during lockdown and this effect their sleep and eating and diet cycle. The lockdown has changed the bodily rhythm; write down the dietary patterns to quality sleep of the students. During this extended lockdown, the students are experiencing additional anxiety, stress and added pressure at home and from an education institution which has an impact on sleep. Here are a few tips which can get the students back to pre-corona lifestyles Eating even healthier than the normal habit and enjoying a healthy sleep pattern is important. One got to keep up a consistent sleep and meal pattern, otherwise the body just loses its habitual hormone fluctuation thereby adding to its stress and decreasing its capacity to fight off infections Stick to the eating routine because hormones and sleep quality is affected by how the body is used to the feeling such as whether the stomach is usually more full or not before one fall asleep. Just in case one do not have access to a lot of food, the suggestion is to purchase nutritionally dense food rather than nutritionally empty foods. Vitamin C is important to help boost immune system - it's found in kiwi and citrus fruits. Be mindful of screen time. The blue light produced by electronic devices, such as mobile phones, tablets and computers has been found to interfere with the body's natural

sleep-promoting processes. As much as possible, avoid using these devices one hour before bed. Utilize gadget settings or special apps that reduce or filter blue light. Stay Active, It's easy to overlook exercise with everything happening in the world, but regular daily activity has various important benefits, including for sleep.

(We the undersigned solemnly declare that the project report "Altered Eating and Sleeping Pattern of College Going Students Studying in Shillong" is based on our own work carried out during the lockdown 2.0 of Covid19) Joplin M G Kharjana, faculty of Saint Mary's College, Shillong, Dr. Gracedalyne R S Passah, faculty of Martin Luther Christian University, Shillong Phinbet Arti Kharbyngar, faculty of St. Mary's College, Shillong

Crisis of Conscience and Compassion

Glenn C Kharkongor

The Shillong Times May 27, 2020

The unfolding tragedy of poor migrant workers is a blot on the conscience of the nation. The tableau of human misery is still unfurling. The government is reduced to a few mumbles of sympathy and doles of questionable certainty. TV and newspapers carry vivid stories of daily accidents, deaths from exhaustion, and penniless hunger. As the toll mounts, no one talks of flattening the curve of collateral deaths.

ATher Partition, this is the largest exodus of people of Independent India. But this is modern India, with national highways, railway networks, and private carriers of every kind of conveyance. The long lines of migrants, walking hundreds of kilometres with their meagre bundles and small children gives us an unspeakable numbness.

The measures of our government seem perfunctory, insincere and woefully inadequate. They have washed their hands. The Supreme Court refused to intervene, aTher the Centre claimed that arrangements had been made. Solicitor General Tushar Mehta callously told the bench, "but some don't want to wait and start walking on foot.Migrants must have patience to wait for their turn".

Wait their turn for what?

Money? According to SEWA (Self Employed Women's Association), over 70% had not received the promised cash payments into their Jan Dhan accounts. Having not received wages for two months, migrant travellers had to pay for truck rides, fourfold for bus tickets, premium for train fares. According to Stranded Workers Action Network, 64% of migrant labourers had less than Rs 100 with them.

Transport? Trains were cancelled, leaving thousands stranded in Karnataka, buses turned back at state borders. The waiting centre in Ramlila Maidan in Delhi was littered with garbage and cow dung, where anxious would-be travellers stayed for days. Thousands chose to sleep on pavements. At various checkpoints they were forciblyherded into quarantine centres, disinfected by chemical sprays. Most decided to walk through forests and byways to avoid detection and harassment.

Food? Only 18% have received the promised rations. In Mangaluru, bags of rotten, mouldy rice were distributed. There were scuffles for food at railway stations. Anganwadi centres, the source of one good meal a day for poor preschool children have been closed since March 6.

To reach home? it's impossible to hold back the tide of the homecoming impulse. The yearning for home, never mind how humble, is a theme for poets, filmmakers and songwriters. Every psychologist or sociologist learns Maslow's Theory: food, shelter, safety, love and belonging are the most basic of human instincts. Home is the ultimate social safety net.

Many were bewildered, unable to comprehend this jolt to their already precarious lives. In a survey by Local Circles, more than 75% of respondents polled across 277 districts did not understand what the circulars meant – a fact borne out by frequent clarifications from the Ministry of Home Affairs. In the first lockdown, they were given just four hours to shut down their lives.

Driven deeper into poverty

In April alone, 60 million jobs were lost in the organised sector. Add 40 million labourers and the number swells. These workers lived in the worst conditions, sleeping and eating in hovels, labouring inthe sweat factories of Make in India. To heap further torment, Gujarat increased work hours to 12, Karnataka to 10, undermining existing laws and specifying that overtime wages will not be paid. UP and MP have suspended al labour laws for 3 years. No one speaks of higher wages, better living conditions for workers.

The almost daily pronouncements of largesse for the poor is mostly repackaging of existing budgetary allocations and schemes. Disdaining euphemisms like, 'old wine in new bottles', the Deccan Herald described these doles as 'frankenstein'.

Middle class mindset

There are diseases that mainly afflict the poor: malnutrition, TB, malaria. The middle class is mostly insulated from these diseases, so we don't give them much attention. Social distancing is already in place. But when a disease strikes the well-off, we move into high gear. Health precautions become ritualized and sacrosanct. Infringements become punishable by force of law, backed by social sanction. The middle classvoice is always heard. We have become hoarse with condemnation of rule breakers, demanding fines, incarceration, and heaping of more indignities.

When our well-being is under threat, the welfare of others is secondary, expendable. We find a moral high ground, assuage our guilt by quoting the kind acts of a few tender hearts.

We are pleased with our own little sphere of importance and content in our cocoon of comfort. The class divide pits an affluent professional class able to stay cosily at home indefinitely, against a working class who must risk limb and life to survive.

Physical distancing is a fantasy

Social distancing, based on caste, has been practiced in the villages of India for millennia. But in urban slums, we now demand physical distancing. It's impossible. According to a survey by Down to Earth, in the slums there are 1.5 persons per room, in West Bengal 2.5 persons. Half of them share a common drinking water source, 40% do not have bathrooms.

Pictures of crowding from all over the country show the futility of distancing. In the rush for food, travel, and passes, people swarm together. India does not have the wherewithal to keep its huge population separate from each other.

Distancing measures on the London Underground has caused lines up to three kilometres long and waiting periods of several hours. Then imagine the chaos in India. There are 140 million daily commuters and 23 million daily train passengers. Is physical distancing possible when passengers sit on the floor, ride on the roof?

"Who gives a shit?"

Is the blunt retort from P. Sainath, author of "Everybody Loves a Good Drought", and the spokesperson of rural poverty in India. He was talking about the "16 workers from Madhya Pradesh, eight of them Gond Adivasis", crushed by a goods train. Nobel Laureate Abhijit Banerjee said of the vulnerable street children, "Their existence is not even acknowledged". Two small children were found on a road, their migrant parents run over by a passing vehicle.

There are very few spokespersons for tribals. Brinda Karat began an article in The Hindu by narrating the story of JamloMakdam, 12, a migrant Adivasi girl who died of hunger and dehydration just a few kilometres from her home in Chhattisgarh, while walking home from Telangana. Denied their traditional habitats and landless, the proportion of migrant households among STs are higher than all other communities. STs are the single largest group among female migrant workers.

Mothers and children are dying

According to a UNICEF report, 20.1 million babies will be born in India in the period Mar 11-Dec 16, 2020. How will they all get to hospital? Several have given birth on trains. A migrant worker delivered on the road on May 16 a Ther walking 250 km. She left the baby at the gate of a rural hospital that would not admit her because she did not have a Covid negative certificate. The full story is in Down To Earth magazine.

Johns Hopkins School of Public Health has predicted that child mortality rates could rise by 45%, most of them soon

aTher birth, and maternal deaths by 39%mostly in labour and childbirth, Worldwide, there will be 1.2 million deaths in the next six months among children under five years of age. The largest number will be in India, 1400 child deaths a day in the high estimate, and by the low estimate350 deaths a day. So far Covid has caused 50 deaths a day. India never fails to find new causes to die from.

The dimensions of the silent toll of mental illnessis incalculable. A youth from Odisha, unable to get home, hanged himself in Haryana. So many more will die such deaths, the reasons not known or denied. Untold numbers will suffer from anxiety and depression. Other groups in silent distress are commercial sex workers, the handicapped and the LGBT community. Unconscionable scenes and stories paint bleak scenes of despair. A picture in the Shillong Times showed Khasi women breaking stones in Sohra for Rs 187 per day. In another picture street children were sweeping up grains of dal on the road in Shillong, fallen from a truck. MGNREGA jobs are down to 1% of normal.

Shakespeare lived his entire life in the shadow of the bubonic plague. One-fifth of the population of Stratford-upon-Avon died of the plague. References to the pestilence appear o'Then in his plays. From Macbeth are these lines, written in despair, "Alas, poor country, almost afraid to know itself. It cannot be called our mother, but our grave".

Are Traditional Institutions Equipped for Disasters? A Case Study of the COVID-19 Pandemic

Marbabiang Syiemlieh, Mangcha Touthang and NaoremArunibala

The Shillong Times, May 20,2020

The endearing echo of PA systems broadcasting do's and don'ts on battling the Covid-19 pandemic has become a daily fare. We all realise that we are staring at an ominous and uncertain future. One could hear adults hushing their children, with televisions on minimal volumes reminding one of impending danger. This time, announcements were also made by traditional institutions to ensure that information reaches the community members. Through these, one is assured that the Government and the traditional institutions are fighting the pandemic in unison. The Northeast region has not experienced overwhelming positive cases of Covid-19 as compared to other parts of the country. Perhaps, one of the factors responsible for this are the initiatives taken by leaders in following the World Health Organization (WHO) guidelines before the virus lunged at the region. The State Governments, by collaborating with Traditional Institutions has done a commendable job in supervising and administering the fight against the virus. The region has states like Sikkim with no positive cases till date; Mizoram, Nagaland, Arunachal Pradesh and Meghalaya had cases but they have mostly recovered. In Assam and Tripura the Covid numbers seem to be on the upswing. The following is a cursory glimpse

on the roles, responsibilities and functions that the traditional institutions have assumed in several Northeast states. In most Northeastern states, village councils and churches have taken the responsibility to disseminate information and sensitize people on the pandemic. In most communities of the region, the Traditional Institutions have functioned uniquely and there has been no dearth of community initiatives and participation in matters related to disasters and other unprecedented occurrences. In the case of Mizoram, the state government coordinated with civil society organisations for formation of Village Task Forces in all the villages of the state. These task forces were on constant vigilance to ensure that no one ventured outside their homes unnecessarily. They are also tasked with reporting instances of any shop owner who might or had actually charged customers exorbitantly. The task forces were able to actually ease the pressure on the state police forces and they remained quite effective in the fight against the pandemic. Similar instances were also observed in the state of Meghalaya. In some communities of Meghalaya, the village councils took initiatives in ensuring that financial assistance is provided to the daily wage labourers as per government provisions. Such institutions have also been able to form Relief Cells headed by the Headman and its representatives, with the objective of ensuring that different forms of relief assistances were made available at the village level. The Headmen also facilitated the PHCs and CHCs and community health workers in conducting awareness programs on COVID-19. In Assam, the traditional institutions, in collaboration with various student bodies have been providing groceries, medicines and other essential commodities. Furthermore, some communities installed water taps at various points to encourage hand washing among the communities. Sikkim is one state which successfully maintains a status quo in the fight against COVID-19 as it continues to effectively keep its statistics of infected persons at an amazing zero. No one in the entire state has been tested positive. This is attributed to the fact that the state has a rare and unique approach where civil society organisations are roped in by the state government as major stakeholders. This distinct feature is one of the main reasons as to why Sikkim is the only state which has the record of producing and selling solely organic products. It is noteworthy that while other states are still mulling with the idea of bringing back students and migrant workers stranded in other states, Sikkim has already conducted a mock drill on how such situation would be handled. Such basic coordination and accountability will ensure the safety of citizens anywhere in the country. One exemplary community worth highlighting is Mawlangwir in West Khasi Hills District of Meghalaya where the Dorbar Shnong has been playing a proactive role. The institution conducts meetings, consultations and deliberations on the nature of the urgency and unexpected situation keeping in mind the guidelines provided by the government. The Dorbar Shnong ensured that provisions are accessible to all identified sections, limited issuance of passes only in case of emergency in healthcare, granted permission to shops selling livestock from the village only. The village coordinates with the Health Department on emergencies. A 'Village Quarantine Centre' with water supply, rooms, beds, electricity, and toilet is arranged for any eventuality. Volunteers including men, women and youth are on a daily roster to monitor the centre to avoid undue stress. Remarkably, the village had formed a Disaster Management Committee some years back, actually making it possible to form a restructured committee called 'Community Covid-19 Management Committee'. The teachers who work in schools in the villages were roped in for spreading awareness at the household level, to sensitise the community on prevention against Covid-19 by using pamphlets provided by the Deputy Commissioner's office. Moreover, the elite in the community with political positions and connections extended assistance in cash and kind to needy villagers. Inspite of these good practices, there are some communities which witnessed unfortunate experiences. One example is the tragic incident in Meghalaya when a person who was infected with the virus passed away and things turned ugly when his last rites could not be held as a matter of course. The uncalled for protest against the cremation/ burial by some communities, while the state was under lockdown and curfew is a slur that Meghalaya has to live with. But this also was due to sheer panic that the virus from the dead body could spread and infect others. Further, there were also reports from across the country where frontline workers were attacked, harassed, discriminated against and stigmatized on suspicion of spreading the virus. Without blaming concerned communities and aTher a rational analysis on how and why this happened, the modest answer could be that the genesis of such problems was lack of adequate information dissemination and awareness to communities at large on the virus. Considering that traditional institutions have always risen to the occasion when called to action, the question that arises is whether they have been efficiently equipped to cope with similar or worse disasters in the future? Are the initiatives taken by the traditional institutions sufficient to meet the needs of the people? Based on experiences gathered from the present pandemic, the answer can be yes, provided the traditional institutions which include the village council, the women's groups, youth groups and religious institutions converge to ensure better results. However, there are few strategies that need to be inculcated. There is need to invest in capacity building on different skill sets to tackle any kind of disaster. We need to map resources within communities to create disaster response forces that can be quickly activated at short notice. Disaster management requires community partici-pation devoid of selfishness, greed and callousness from privileged elite sections that have the tendency to undermine the prudence of community-based institutions. The vicious games played at the highest levels of world politics will intrude into our lives and mess up our existence. Hence one viable solution is to revive the roles and functions of our traditional institutions, with utmost transparency and accountability. We need to remind ourselves that we are all mortals and the best thing we can do is prepare for a similar pandemic, a disaster or the next virus with such threatening magnitude which could return to our lives. Let us ask ourselves some pertinent questions. Is it worth going back to our roots and learning some enduring lessons from the past? Are our traditional institutions repositories of indigenous knowledge systems by means of which we can reach out to the infected, the afflicted, the sufferers instead of being rendered mere helpless, panicking onlookers? Let this pandemic be an eyeopener and show us a way forward on how we should work together within

our communities to restore the public faith in our traditional institutions which of course, must keep up with the times and be held accountable stakeholders. As community-owned institutions they must be encouraged to participate in all progressive strategies to face the present challenges. This is the only way forward and together we can fight any disaster or pandemic henceforth.

Educational Institutions Need to Open Soon -With some graded steps

Glenn C Kharkongor

The Shillong Times, May 13,2020

According to UNESCO, 73.5% of all students are out of school. Education has been completely closed down in 182 countries. Totally 1.29 billion learners are missing school. Of these 321 million are in India, one-fourth of the world total. Across India, according to a research study conducted by Brainwiz, there have been major disruptions to education in the last two years. For instance, since the abrogation of Article 370 in August 2019, schools across Jammu and Kashmir lost over 60 working days. Extreme weather conditions and pollution levels forced a loss of 120 days across states such as Delhi, Puducherry, Punjab and West Bengal. Political rallies and bandhs added over 30 lost days. Additional school days have been lost to curfews in the Northeast. These cumulative losses to education are termed as "aggregate shock" by UNESCO. The report details the damage to child learners, not only in terms of cognitive deprivation, but also in mental health, social wellbeing, and sexual threat. It especially focuses on the future economic damage that will be caused by disruptions to education. Children become unwitting victims in a world dominated by the priority for adult benefits. In Australia, the federal education minister Dan Tehan has described the closure of education as a "sledgehammer". And that is in a developed country. The effect among the vast poor student population in India will be even more devastating. Limitations of eeducation Much is being made of the efforts to provide elearning across school, secondary and higher education. Predatory "edtech" companies are already seeking ways to cash in and their marketing campaigns are gaining strength. But irrespective of the quality of online learning, it can only offer a temporary respite. It cannot take the place of conventional education. The classroom provides irreplaceable face-to-face interaction with a teacher, and social contact with fellow students. Apart from the syllabus there are life lessons like 'sharing', 'taking your turn', tolerance for other ethnic and religious groups. The extra-curricular activities provide well-roundedness and children deprived of these benefits will be stunted in several respects. A large proportion of students do not have smart phones or internet connections. Live sessions, graphics, and large text downloads require high bandwidth. Zoom classes need a laptop or desktop. Even then, there may be three children in one home who each needs their own device as online classes are concurrent since they follow regular school hours. But these are problems of middle class homes. Poor and rural students, who are a majority of learners are further marginalised. According to a survey by the Economist, only 20% of poor children have online access in any form, and only 60% among the lower middle class. Actually middleclass homes that have good internet bandwidth and laptops will not suffer that much. The younger ones receive enough stimulation at home and the older children have e-learning resources at their disposal. Mental health The mental health implications of the COVID19 outbreak are far reaching. In Thailand, a recent survey of 6,771 students conducted by the United Nations, found that more than 70% of children and young people said the pandemic is causing stress, worry and anxiety. More than half of the respondents also said they are worried about studies, exams, and their future education and employment. Seven per cent were concerned about domestic violence. The UN Report also found that not all consequences of the pandemic are as visible. Strict isolation measures, the closure of schools and workplaces, and loss of income to many families will continue to have long-term negative impacts upon education, health, and wellbeing. The same report also concluded that home learning may itself be a source of stress for families and learners, with pressure on parents to take on hometeaching. In many homes, the parents are poorly educated, or have low ability in English or the language of textbooks and instruction, and so unable to help with home schooling. Studying on one's own needs high motivation and small children cannot be expected to be so committed. From earlier data we know that there are heightened sexual and reproductive health vulnerabilities and risks when schools close for more than a few weeks, particularly among the most disadvantaged, and among girls. Rates of child abuse and unintended pregnancy increase. Further marginalization of the poor The costs of closure are even more staggering for the poor, whose families are rendered even poorer by loss of work. Younger children lose out on the cognitive stimulation of the classroom. The damage done to children by lost learningfalls most heavily on the youngest, who also miss out on picking up social and emotional skills. Children from poor families now have even less to eat at home and are missing the school mid-day meal. Older children will have to care for younger children in the home, and help parents with other responsibilities, curbing selfstudy time. In this scenario an extra burden falls on the older girl child. The health risks for girls who can no longer attend school are not limited to the virus. Without school, home confinement means there is a heightened risk of domestic violence and sexual abuse. Following the Ebola crisis, Sierra Leone saw a huge rise in adolescent pregnancy, which, according to the children themselves, was directly linked to school closures. In some communities, pregnancy will be a permanent barrier to a girl returning to education even once the COVID-19 crisis ends. Moreover, during the crisis, maternity and reproductive resources and facilities are likely to be redirected to counter the pandemic, posing additional threats to the health and safety of adolescent girls and young

women. Covid threat to school children Evidence is growing that school-age children are a low risk population. In the state of New South Wales in Australia, school aged children are around 16% of the population, but only 1.7% of Covid-19 cases had been recorded in this age group. A new report, cited by the chief medical officer of the state, as the federal government advocates the reopening of schools, says children are unlikely to transmit Covid-19 between each other or to adults. The European Centre for Disease Prevention and Control, the European Union's public-health agency, said last week that child-to-adult transmission "appears to be uncommon". The chance of a child developing a severe illness is 2000 times less than a person over 60. So opening of schools in green zones, with no active positive cases, should not present a significant danger. Graded opening of schools In most of India, the summer holidays have provided a buffer against a heavy loss of school days, because of Covid. Karnataka has announced that it will prune the syllabus for schools to reduce the curriculum burden in a truncated school year. Assam is considering a change in the school year schedule to reduce loss of school days. Meghalaya schools which have their long break in the winter, cannot afford to have much more closure in the mid-year. Schools in the Shillong Agglomeration Area Step 1: From June 1: open all secondary and higher secondary schools with only 9-12th standards to prevent crowding on campus. Universities and colleges could open with only the final year UG and PG classes. There would be no assembly or contact sports. Step 2: From July 1:open all schools for all classes and all UG and PG batches in colleges and universities. Students from outside the state could also join, provided inter-state travel has been permitted. Such students could be guarantined, if the then rules so specify. Schools outside the Shillong area Open all schools and colleges in green districts from June 1 or earlier. It is unlikely that these schools will have teachers or students (boarders) from red zones or outside the state. For the few that may be from outside, they could join later.

Conrad's Brilliant Rapid Response System Idea: Key to Securing the Post-Lockdown Phase

Glenn C Kharkongor

The Shillong Times, May 4,2020

The national media has covered our Chief Minister's suggestion of a Rapid Response System (RRS). This RRS from the grass roots level caught the Prime Minister's interest at the recent meeting with the chief ministers. Conrad has specified a turnaround time of 60 minutes for the health and civil administration to swing into action for detection of cases. The brilliance of this plan is that it is doable. The benefits of such a system are immediately discernible. Firstly, it provides an action plan that will enable the closure of the lockdown period. Secondly, it will pick up data from the last mile. Thirdly, it is a call to responsibly involve all citizens. Finally, it can operate as a two-way system for upward data gathering

and downward dissemination of awareness building. Experts will say that we already have such a system, but it will be a bits and pieces claim. The term Rapid Response Systems has an immediate appeal because it packages all activities into a cohesive engine geared to a single campaign. Any number of expert committees, taskforces and management information systems don't add up to an RRS. While an RRS should be a knee-jerk strategy in this national pandemic, Conrad has been the first to call for it. Rapid response systems originated in hospitals to enable quick treatment of medical emergencies such as a cardiac arrest in the ICU. I was introduced to Code Blue during residency training in the US in the 1980s. Those who were on Code Blue duty in the hospital would immediately respond to an intercom announcement such as "Code Blue, Room 436" stated repeatedly and accompanied by a buzzer or siren. All team members would rush there and look for the blue light blinking above the doorway above of the patient's room. Medical rapid response systems are used in the field such as EMRI 108, which has radically improved the handling of medical emergencies in Meghalaya. Perhaps the EMRI control room could be the nerve centre of the Rapid Response System. Their geo-spatial system would provide immediate mapping of location, access and route. The NESAC (North East Space Applications Centre) station in Umiam could provide additional expertise. Citizens must report directly Presumably the RRS will be mobilebased so that every citizen can be roped in. They would be asked to report on two events: if he/ she or someone in the immediate family develops the classic cluster of symptoms. If such a person is outside the family, it should be reported to the headman. The second event would be the reporting of a violation of the rules in force such as a prohibited large gathering. A simple list of dos and don'ts would guide the final decision to report or not. Citizens must be encouraged to report directly to the call centre. Such empowerment will energise them. There will be false alarms and crank calls, but the system must be robust enough to deal with it. ATher all, even a small percentage of authentic calls is worth its weight in gold. Health personnel have their own chain of reporting. The ASHA worker will report to the PHC doctor, who reports to the district medical officer and so on several rungs up the hierarchy. But this chain of events takes much time and anyone who tries to circumvent it may be hauled up by their superiors who have their own spin on the situation. This reporting will never happen within 60 minutes. The call centre would have protocols to log, categorise and forward information to the relevant government agency as calls are received. It would now be incumbent on the health department, police station, DC's office etc. to act immediately. The high cost of indecision It is easy to see from the news reporting that there is indecisiveness about the post May 3 scenario. Having kicked the can from March 24 to April 14 to May 3, how much more can the inevitable restoration of normalcy can be delayed? Comparisons between countries and even between different regions of India break down aTher a point. Consultations with chief ministers are not yielding a consensus. In the end, overcaution carries the day, because it is the safe political refuge. It is easy to understand the dilemma.

When the health experts and the health agencies do not agree among themselves, wishy-washy briefings, with a lot of ifs and buts, are handed to politicians. An important feature of the scientific method is valuing doubt over certainty. Varying interpretations are common. What's more an individual scientist is permitted his/her own cognitive dissonance. They go by time honoured aphorisms like, "Absence of evidence is not evidence of absence". Meanwhile collateral damage is mounting every day. Examples are seen in every newspaper now, almost every page. Students cannot return from Kota or from their colleges. Even school students on excursions are stranded in remote places. Migrant labourers who were the only wage earners in their family are jobless. Many have walked, cycled or taken a boat in the middle of night in choppy waters. Some have been waylaid and shunted into quarantine centres from where some have tried to escape. In times of crisis, the homing instinct is uppermost. There are heart breaking stories of mothers unable to cuddle their newborn babies. Pregnant mothers and those in labour are not able to access timely healthcare. Suicides are beginning to mount. Families are separated. Suspicion and stigma are growing. The rise in poverty and hunger is incalculable in a country like India. As previous cataclysms such as the Spanish Flu Pandemic or the Great Depression inform us, there is a longterm cost that is visited upon future generations. Decreases in income affect affordability for healthcare and education. These deprivations compromise the economic future of the younger generation. Millions of Indians already have low immunity from malnutrition, making them also more susceptible to adult diseases like diabetes. Their vulnerability to disease will rise. Epigenetics tell us that malnutrition in one generation contributes to ill health and cognitive development in succeeding generations. National and state leaders must get out of this trap of indecision. The costs of indecision are spiralling upwards continuously. Ultimately, it is the politician's call. As Al Khalili said, "Doubt is essential for science, but for politicians it's a sign of weakness". Conrad's plan is the way out.

Time to suspend the cycle of lockdowns and curfews: Declare EKH as Green Zone Soon

Glenn C Kharkongor

April28, 2020

The repetitious cycle of lockdowns and curfews is yielding diminishing returns. Meghalaya is a case in point. The government waged a good campaign to test and trace contacts from the Bethany epicentre, and found all primary contacts to have tested negative. So far so good. Now is the time to act on the data gathered in Meghalaya and the fund of knowledge that has come from the labs of science and fieldwork of epidemiologists. We don't have all the answers yet, but we know much more than when the pandemic started. Overall in India, the doubling time has gone from 3 to 6 and is now 10 days. There are spikes here and there, but those places are

tackled by the correct policy of containment zones. The first lockdown was based on the incubation period of the virus. That has been doubled and more, so the calculations for extensions of the lockdown are less surefooted now. Prolonged lockdown will soon be tantamount to lockup, which is not a nice word. It will lead to collateral economic, social and mental damage, about which much is being written up now. Here and there we are seeing protests against lockdowns. Fortunately these have not become widespread. Presymptomatic and asymptomatic carriers There is much evidence for such carriers and the prevalence rate for these mostly innocent individuals is mounting by the day. Nothing much we can do about these individuals, who will take us towards herd immunity, because we can't identify or quarantine all of them. Unless we do wide testing with antibody tests, and use resource-saving ploys as pool testing, meaning that blood samples from multiple individuals are tested together. This saves kits if the result is negative. If the test is positive, the technician will go back and test each of the samples individually. This is a good strategy in resourcepoor countries, in communities where prevalence is expected to be low. The ICMR has issued guidelines for pool testing of 5 individuals at a time. This is too conservative, especially for a country with a large population. Germany is testing 50 at a time. But this mass surveillance is a tool only for later use, when policy makers need to know prevalence rates so that budgets can be allotted and schemes created for control or eradication. This will come into play when a vaccine is available. Though India is in the downslope of the curve, we need to wait for a certain equilibrium to be established, in which the numbers are countable and future trends are predictable. To get to that steady state point, a return to normalcy is required. Decision-making not so easy now In the early part of this crisis, administration was easy. Decisionmaking by state leaders merely followed the national directives, with some local tweaking. Every state called for shutdowns and police clampdowns, and those that were stricter were praised. On the technical side, compliance with the ICMR guidelines was the order of the day. Perhaps only Kerala forged their own strategies, honed by earlier experiences such as with the Nipah virus. Local leaders now have to peruse new data, manage variations in the local situation, and deal with logistics and economic exigencies. They have to balance public demands, try to grasp the evolving science, and engage with their medical advisors, not all of whom are on the same page. Cues from the national or other state governments are of diminishing importance and each state has to detail out its stepdown measures, minor calibrations of which may have unforeseen fallouts. Curfews in Shillong have had mixed success. The crowding evidenced by pictures in the Shillong Times on 'open' days quickly nullified the benefits of strict curfews. Perhaps no state had seen the need to have such stringent curfews. Many states, including Meghalaya have faltered on public communication. We have heard mainly from the Chief Minister with the Deputy Chief Minister seen more now as spokesperson, and occasional statements from the Health Minister. This is not enough. There needs to be an articulate scientist who explains

the rationale behind decisions and takes the technical questions. Even a stumbler like Donald Trump has a seasoned epidemiologist doctor standing one step to his side at all press conferences. Politicians have varying levels of knowledge. When they falter inglib attempts at science, it is easily noticed by the public. The state should have had a technical spokesperson also. This is advisable in all disasters. In a major earthquake scenario, a geologist or a scientist from NESAC would have great credibility. The editor of the Shillong Times wrote about "fear management". Fear of the unknown is human nature. One may be less fearful of a fiery inferno because one can see it. But the virus is invisible and takes on ghostly proportions. Advising the public repeatedly not to panic carries little weight, when they see the unsure stances of the leaders. Overlaps of power as seen in the Jhalupara and Nongpoh episodes could have been avoided by invoking the Shillong City Disaster Management Plan 2018, which clearly places the DC at the helm and provides against multiplicity of authorities. Incidentally, epidemics are included in Category 5 of the classification of disasters in the 2018 Plan. A reading of the 239 page plan indicates that there are many levels of preparedness which could have been put in place. Instead there was recourse to the outdated Epidemic Diseases Act of 1897, once the crisis was upon us. New cases will be zero a Ther May 16 The Niti Aayog key empowered committee for Covid has released their study on the future course of the epidemic in India which shows that the peak in new cases will be reached on May 3 and this will drop to zero on May 16. Imprecisions aside, this provides a tentative timetable for decision making. It is important to unbolt the lockdown lockjam soon. In getting back to normalcy, many sectors need to be properly reviewed. Karnataka has opened all neighbourhood shops, only large markets and malls are closed. Hardware, mobile, barber shops, bakeries are open in all cities, towns and villages. Farmers can take their produce to the cities. In this way family and small enterprises are back in business. It has been reported in the Shillong Times, Apr 26, that 10288 Meghalaya citizens are stranded elsewhere in the country. Many are in dire straits. Bangalore police are issuing travel permits for people from other states to return home. There are not many takers because with no public transport, hiring a private vehicle to go by road is prohibitive. Even if someone reaches Byrnihat, will he/she be permitted to enter the home state? If not now, when? ATher reaching home, will quarantine be enforced? This should not be necessary. Educational institutions need to be reopened, or the school year and examination schedules will be compromised. Furthermore unaided private schools must collect fees, otherwise they cannot pay the teachers and other staff. This is not a big worry for mainland India because of the buffer of summer holidays, but Meghalaya has a different academic calendar. Declare EKH as Green Zone soon Only Kashmir and NE states have this habit of enforcing curfews. Curfew is an ugly word, seemingly enforced because the public is at fault, and has colonial overtones. Civil restrictions could have been invoked through the Disaster Management Act 2005 or the Shillong City Disaster Management Plan 2018, which was given to us with great fanfare but forgotten

thereaTher. West Bengal has coined and imposed a "super lockdown" but not a curfew. The Supreme Court has repeatedly upheld that the right to live implies the right to live with dignity. This is transgressed repeatedly by police in this country, making citizens hold their ears, do push-ups or frog marches, or beating them with lathis. The government managed the Bethany cluster in a timely manner. With the good news that all primary contacts have tested negative, it can soon be announced that there are no active cases in the state. Meanwhile a containment zone can be declared temporarily, either of the Bethany Hospital locality or the Greater Shillong Area, and the rest of EKH can revert to green status.

Lifestyle and Immunity

Gracedalyne Rose Shylla Passah

The Meghalaya Times April 27,2020

One can do so by adapting a healthy lifestyle which includes consuming a balance diet, performing exercise regularly, getting ample amount of quality sleep, practicing basic hygienic habits and maintaining emotional and mental health. Immune system.

In its simplest term, immune system is the body's defense against infections with the main function of fighting disease-causing germs (pathogens) like bacteria, viruses, parasites or fungi and to remove them from the body. Clinically speaking, the immune system is the amalgamation of a multitude of different systems, organs, cells, proteins and so on and has several factors affecting the efficacy of its performance. It is complex as it is not a single entity. To function well, it requires balance and harmony. Because of this complexity and no clear evidences on how to boost immunity, one can only think of supporting to strengthen it.

Ways to strengthen our immune system

Choosingahealthylifestyleisofprimeimportancetostrengthen it in a natural way. Following are collated factors that one must keep in mind, although there may be other factors too. Practicing basic hygienic habits: The Center for Disease Control and Prevention (CDC) has persistently stated the importance on keeping the hands clean and avoid touching our face. A clear demonstration on the steps to wash hands appropriately has been circulated too. The same has been reiterated by the World Health Organization and Department of Health and Family Welfare.

Getting ample amount of quality sleep: Focus on the quality as well as the quantity of sleep. The Sleep Foundation recommends seven to eight hours of sleep a night. A good sleep quality can impact the frame of mind and the mood thereby one can function to an optimum level. The antibody regeneration takes place during sleep thus keeping the body

and immune system regulated.

Performing exercise regularly- Regular exercise keeps the blood circulation pumping which aids the immune system cells to move across the body effectively. Many individuals have realized the ill-benefits of being sedentary and are working out in the gymnasium. Physical activity of any form ranging from walking around the house, dancercise, calisthenics training, zumba and yoga are encouraged. Ideally speaking, 30 minutes on a daily basis or 3-4 times a week can be engaged. Moderation is key.

Maintaining emotional and mental health: Be emotionally healthy as it has an effect on physical health. Keep the stress and negative emotions at bay. The immune system's ability to fight off antigens is reduced during stress hence making one more susceptible to infections. People who are emotionally and mentally resilient have the tools for coping with difficult situation and maintaining a positive outlook. Learning how to cope with stress, managing psychological issues and relaxation are keys to boosting immune systems. Some research has proven that listening to one's favorite music, fondling a pet, meditation have helped in reducing stress.

Consuming a balance diet: The thumb rule is to aim for a balanced meal with minimally processed foods. It is necessary to have a diverse range of foods that can provide all the essential nutrients. 'MyPlate' is one of the simplest visual aid that guidance to help one create a healthier eating style that meets the individual needs and improves one's health. The message in MyPlate is to focus on the variety and amount. The division of the plate signifies the amount.

Make half of your plate filled with grains. Common examples are rice, wheat, millets, corn and oats. It is ideal to opt for whole grains rather than refine counterparts.

Protein too occupy half of the plate and the sources include meat, poultry, seafood, pulses, beans and peas, eggs, milk products (paneer), nuts and seeds. One can vary the protein routine throughout the week. For the non-vegetarian sources, look for lean meat. Trim or drain fat from meat and remove poultry skin. The vegetarians must include different kinds of pulses and can vary their method of cooking.

Vegetables occupy more than half the plate. Savor the flavor of seasonal vegetables and choose the ones rich in color. Vary them by consuming them raw (wash well) or cooked; fresh, frozen, canned, or dried. One can choose from the five vegetable subgroups namely dark-green vegetables, starchy vegetables, red and orange vegetables, beans and peas, and other vegetables.

Focus on fruits, especially whole fruits. Fruits may be fresh, canned, frozen, or dried instead of juice. By the side, the dairy group includes milk and milk products. They provide calcium, vitamin D, potassium, protein and other nutrients needed for good health throughout life.

The right mix of different foods can help one be healthier thereby preventing any infections. Under certain conditions, when the immune system is compromised, one is more inclined to infections; hence, the immune booster nutrients are vitamin C, vitamin D and B-complex Vitamins. These are to be consumed in additional to the other macronutrients. There is sufficient evidence that deficiency of certain vitamins and minerals directly suppresses the immunity. Vitamin C rich foods are citrus fruits, gooseberry, guava, tomato and green leafy vegetables. Vitamin D can be obtained primarily from the sun by getting exposed about 15-20 minutes preferably in the morning. Food sources include fatty fish and fish liver oil, egg yolk, liver, some mushrooms. The vitamin B-complex refers to thiamine (Vitamin B1), riboflavin (Vitamin B2), niacin (Vitamin B3), pantothenic acid (Vitamin B5), pyridoxine (Vitamin B6), folic acid (Vitamin B9) and cobalamins (Vitamin B12). Few selected vitamin B-complex food sources are: Thiamine (Vitamin B1) Rice, noodles, macaroni, bread, corn, beans, lentils, pork, fish, milk, curd, cheese. Riboflavin (Vitamin B2)Rice, oats, pasta, bread, beef, egg, fish, chicken, milk, curd, cheese, fruits, tomatoes, sunflower seeds, green leafy vegetables, nutsNiacin (Vitamin B3)Rice, whole wheat, bread, spaghetti, lentil, beef, chicken, fish, pork, egg, milk, fruits like banana, broccoli, seeds (sunflower and pumpkin seeds), nuts, potato, tomatoes. Pyridoxine (Vitamin B6)Rice, Beef liver, fish, chickpea, potatoes, onion, watermelon banana, nuts & raisins. Folic acid (Vitamin B9)Whole grains, Dark green leafy vegetables, liver, eggs, sea foods, beans, peanuts, sunflower seeds, fresh fruits and juices. Cobalamins (Vitamin B12)Beef, liver, chicken, egg, and milk products. Vegetarians may take vitamin supplements for B12 to compensate.

The next concept in nutrition with special reference to immune boosting is 'Functional Food' which is defined as "foods or dietary components that may provide a health benefit beyond basic traditional nutrition." Food containing bioactive compounds (common examples are curcumin, pepperine, allicin, gingerol, lycopene), probiotic, prebiotic, antioxidant rich foods and food pigments which gives colour to the food item.

Probiotic

There is growing evidence that a regular intake of probiotics may positively influence health specifically the gut-flora. Probiotics are defined as live microorganisms — mostly bacteria — which when taken in adequate amounts confer a health benefit. The best example is Yakult (fermented milk drink containing Lactobacillus casei) which is a yogurt.

Prebiotic

Prebiotics promote the growth of particular bacteria in the gut that are beneficial to intestinal health. Foods naturally containing substances with prebiotic properties include wheat, onion, banana, garlic and leeks. Foods rich in antioxidant is Zinc Fish/seafood, meat, whole grains, nuts, legumes, pumpkin seeds Selenium Meat, egg, fish/seafood, whole grains, nuts. Vitamin A Butter, ghee, egg, milk, liver,

fish, fish oil, cheese, green leafy vegetables, orange-yellow fruits and vegetables. VitaminE Vegetable oil (corn, soybean, sunflower) whole grains, nuts and seeds.

Besides the main nutrient, one has to drink ample amount of liquid – water and other cold and hot beverages. Make better beverage choices as many beverages contain added sugars and offer little or no nutrients, while others may provide nutrients but too many calories.

MyPlate is adapted from USDA, there is no one-size-fits-all dietary guidelines. India is a land of diversity that includes food too. My personal recommendation is to opt from a range of seasonal traditional food. Our state is blessed with a plethora of wild edibles herbs, fruits and vegetables and seeds. Their nutrient composition is better or at par with the other conventional food items. Some plants are used for their unique healing properties by the traditional healers and have scientific evidences.

Local organization and entrepreneurs that support local produce includes North East Slow Food & Agrobiodiversity Society (NESFAS) in Laitumkhrah which has publicized many infographics in their recently launched #EatTraditional #EatGreens campaign where they depict the comparison of the nutritive composition between traditional foods versus common foods and has also emphasized on consuming diverse traditional foods. Zizira explorers situated at Golflink has a vision to pioneer the development of natural products, proving the underutilized potential of the region and are doing very well with product development too. They have included a handful of recipes too in their social media.

The name Le organica (Keating road) carries with it an obligation to the society in which they have taken root in; as an obligation to give back. They support beekeeping and all natural and healthy products.

Centre Of Learning, Knowledge and Services (COLKS) a nestling entrepreneurship with its headquarter at Mawblei has won 'Golden SIAL India Food Innovation Award', for its honey branded as "Bee Natural" has unique identity of its food products. It is noted that all of the mentioned above vouched for local produce and sustainability and adheres to products that are tested and validated by credited laboratory. It is highly recommended to browse their website and social media pages too.

In conclusion, there is no single mantra or magic bullet or vitamin or specific herb or supplements or nutraceuticals that gives one a full-proof immune boost. It is complex and more study may be conducted. Adapting a healthy lifestyle is one way to support and boost the immune system.

Communication, Composure and Containment in the COVID Red Zone

Glenn C Kharkongor

The Shillong Times April 22,2020

Red Zone and Containment Zone East Khasi Hills District has been declared as a Red Zone. A Red Zone has been defined and described in a variety of complicated and confusing ways, as Arijit Sen of IIM Kolkata has pointed out. Initially it meant to include the districts that together contribute 80% of the country's cases, or has 80% of the cases in a state, but along the way also is defined as districts with a doubling rate of less than 4 days. Lists of such states have been drawn up in an inconsistent way, says Dr Sen who is a professor of economics. So far there are 170 Red Zone districts, though these numbers move up and down. A Red Zone district may apparently also be a 'hotspot' (defined by the Health Ministry as districts where cases double in 4 days or less, so this means the same thing as Red Zone) or cluster (fewer than 15 local cases). A large cluster i.e. more than 15 local cases becomes an 'outbreak'. Anyway, suffice it to say that a Red Zone is a worrisome area and it is correct that EKH has been declared as one. So, now what? The main strategy is 'containment'. Within a Red Zone a Containment Zone may be declared. This zone may be a building, a city, or even the whole district. A district which is not a Red Zone may still declare a Containment Zone. The Containment Zone is the battle front. It is to be in full lock down. Easing up of restrictions allowed in other areas will not apply. There are detailed action plans to be followed. For example, no outbound travel and no private or public transport will be halted, except for essential services. A 'buffer zone' around the Containment Zone is also to be declared. The same restrictions will apply in the buffer zone. Not Critical to Find the First Case While the Meghalaya government has been reasonably upfront and efficient in information dissemination, there have been a few missteps. This is not a criticism but an opportunity for better communication management.

While the Shillong Times has kept us updated on the Covid numbers from day to day, one kernel of information doesn't seem to be forthcoming from the government. Withholding the results of the test on the Air India pilot is not in the public health interest. It is not enough to say that results are being awaited, when test results of other individuals have been announced. The doctor would have come in contact with hundreds of people during the course of his work and daily routine, and perhaps in his travel to Guwahati. Most noteworthy among these are patients, who could have spread the infection to him, even though they were not symptomatic or were being treated for another ailment. Besides patients, many others may have been in casual contact with him. Finding that person is helpful but not critical. There need not be an obsessive search to find this needle in the haystack. The first case in China, supposedly from Wuhan, has not been identified and may never will. It is now only of academic interest to ascertain whether the virus came from a

seafood market, or from a secret lab, as some are beginning to speculate. Whatever the case, the public health measures remain the same. So the Meghalaya government can go ahead and clear some confusion by announcing the result of the tests done on the pilot, irrespective of whether it is an RT-PCR (for detecting the virus) or an antibody test (to detect an old infection). The cloud of suspicion over the pilot can be liThed. Administrative composure Even though the situation changes from day to day and there continue to be gaps in our knowledge of the pandemic, government response should appear sure-footed. This will inspire confidence and reduce the uncertainty that may lead to panic. In almost every state, multiple notifications, press releases and statements by political leaders carry contradictions, confusing reasons, and sometimes withdrawals of earlier decisions. The momentary lapses of administrative grip happen without adequate explanation, leaving the public confused and suspicious, and creates space for rumour-mongering. Such vacillations, though sometimes understandable, need to be minimised. A daily communique should be issued from one authority. A leading newspaper, The Hindu highlighted on its front page on April 20, the discrepancy between ICMR and Ministry of Health figures. Last Sunday ICMR reported that 17,615 persons had tested positive in the country, while the Health Ministry said the number was 14,792. Step-down apart from the Red Zone An editorial in the Shillong Times, April 20, rightly called for a calibrated easing of the restrictions. This can begin immediately, since as of that date the States have been empowered to take steps in accordance with the local situation. It is unlikely that any state in India has imposed the regime of curfews, and the restrictions of movement of people and shopping as in Meghalaya. Stern police enforcement, communityled barricades and vigilante actions have contributed to almost a siege situation. In a stringent lockdown, fear and suspicion is heightened and no amount of 'education or awareness' will work. The State Government should consider whether the entire district needs to be declared as the Containment Zone, or just Shillong, or part of Shillong. Shops for food provisions must be open every day, in every locality of every town outside the Red Zone, with sufficient hours to prevent long lines and crowds. Congestion near shops, in the frenzy for buying food, negates the objectives of distancing. Even if vehicular transport is limited, people should be able to take walks in their localities. Being locked up in one's house creates claustrophobia and is psychologically debilitating. Only a privileged few have comfortable homes. The rural hinterland must be opened up to their usual activities of farming, harvesting, and markets. They should be able to bring their produce to the towns that depend on rural vegetables, fruit and meat for daily consumption. Transportation for them needs to be restored. All offices should be permitted to re-open with minimal or rotating staff. The wheels of normal life need to start slowly turning again. "Hong Kong has demonstrated that Covid-19 transmission can be effectively contained without resorting to the highly disruptive complete lockdown adopted by mainland China, the United States, and Western European countries," said Benjamin Cowling, a professor of epidemiology and biostatistics at HKU's school of public health. Continuing precautions It is becoming increasing clear that in many areas of the country, the pandemic is waning. The time for doubling of cases has doubled to 6 days. In 19 states a downwards trend has been observed, and Goa has been declared Covidfree. So the threat to Meghalaya from other parts of the country is diminishing. In Meghalaya we are fortunate that there is only one cluster of cases and that is being managed well. The period of quarantine and self isolation for the early incomers have been completed. Meghalaya can rollback some restrictions while maintaining the mitigation measures of physical distancing. Focused case and contact testing will continue. The ICMR guidelines will remain in force. Citizen compliance and cooperation will be ensured by self-discipline. The fear of the pandemic has been embedded in all of us and will remain the main motivation to be responsible. But one must not worry about getting food for the family and be assured of a timetable back to normalcy.

You Look Different so you are "Corona-Virus"

Phibawan Syiemlieh

The Meghalaya Times April 20, 2020

A few weeks ago, I was on the phone with one of my good friends from Aizawl. We spoke about covid-19 taking over the country and the world and while we were on the conversation, she recited an incident that happened to one of our northeastern friends. Our friend lives outside the state in Southern India and she had gone to the supermarket alone to get basic necessities. While she was doing so, she noticed some people staring at her while covering their nose and mouths with a look of disgust, maintained distance from her and running away while doing so. The fact that covid-19 originated from China was enough to understand why people were reacting that way. But why? Why did it make sense? Because she looks "different" and this was not the first time, but it was the worst situation she had been in so far. She hurriedly got what she needed to buy and went to stand at a queue for payment to which some people did the same, i.e, maintained distance and covering themselves from her. She was hurt and scared to the point where she wanted to sneeze but she had to hold it in because she was worried about the consequences. Hurt. Fear. Pain.

This is just one of the many incidents that north-eastern people are facing right now. This is what we have been seeing on the news lately and it is not the first time either. Racism. Prejudice. Discrimination. Why? Again, because we look "different" to them. We look "different" hence, we do not belong here. We do not look "Indian" enough to be considered citizens of the country.

Imagine living in a world where you have to hold in your sneeze, where you are not allowed to buy groceries and basic necessities, where you are denied food and shelter just because

you look "different" to them, a world where your identity is posed as a threat and people threaten to kill you because of it. It sounds absurd but this is what is happening right now in our very own country, where "diversity and equality" is what is supposed to make our country great. India is a land of "colors with its rich ethnicity and diversity", it is a land of "unity in diversity", they say. Is it though?

Article 15, a fundamental right of the Constitution of India states that the law prohibits "discrimination of any citizen on ground of any religion, race, caste, sex, place of birth or any of them". But it is sad that very few can comprehend what this actually means. You see, the consequences of racism are not just about the pain and hurt. It is more than that. "I am being discriminated because I look different", "You do not look like us, hence, you have coronavirus and you will kill all of us. We are doomed because of you so I will do whatever I want to you". Does that sound right? We are constantly posed as criminals, being spat on, beat up, harassed, discriminated and killed because we look different. Is it a crime to look the way we look? Is it inhumane to be who we are? Do we need a make-over to be accepted as part of the same nation? Even if we are different, it still does not justify the horrific acts of cruelty and harshness towards another human being.

All this chaos going on in the world today is not one man's fault or one country's fault because we all have a role to play here. How? The word is hatred. Hatred, which has existed since the beginning of mankind and being manipulated and carried on from one generation to another. People say "love is blind" but what makes a human blind is hatred because it has led to this. Historically, people were not afraid to show the hatred they have against another person but now, the scary part is that it has become a subtle act that takes different forms and it gets justified.

To all the parents, educators, our leaders and adults, let us once again be mindful of the fact that our children look up to us. We are their role models. The love we give them is reflected towards another person they connect with through them just as how the hatred within us can also be inflicted unto others through them as well. Children acquire certain behaviors and attitudes from adults which psychologists call social learning. Just as how values and beliefs are passed on from one generation to another, it is also important to be sensitive and mindful of what we say and how we behave with them because the pain that countless others are going through right now does not end here and it shall continue. There is no such thing as hoping the next generation would correct our wrongs because from what is going on right now, there might be no new generation for redemption. We are the ones who can make a change by the thoughts we think, the words we say and the acts we commit. We do not need wealth to help another human being because although, kindness seems to be underrated, it can help save a life even though we might not always be aware of it. This is not a matter of being illiterate or literate because being kind, compassionate, empathetic, mindful and considerate does not require a degree or wealth. Being human does not require a degree. If we strip off skin, race, gender, skin and ethnicity, we are just like anybody else. We are not "different". We live under the same sky and breathe the same air. We are also those who deserve the same amount of respect just like anybody else.

Let us, for once, cast aside our differences and stand together to fight this common enemy. We are against each other but our enemy knows no bounds. It does not choose a specific race, caste or gender to inflict pain, it simply attacks a human being and the last time I checked, the meaning of "humanbeing" according to the dictionary, is "a person especially as distinguished from other animals or as representing the human species". The verdict of this definition is that, if we strip off all the basic eligibilities made by man of who should be considered human, we will come to realize that we are not different anymore. I repeat, we are not different. We are the same.

I am just one individual voicing out my thoughts that countless others might not be able to at this point, with the hope that you hear me and the pain that we suffer just because we look "different" to you.

Don't ignore, inform them: Informing your children about the COVID pandemic and convincing them to stay home can be a difficult task but you can always fall back on the age-old method of storytelling

Glenn C Kharkongor

The Shillong Times April 19, 2020

Children, especially younger ones, will be con - fused and frightened by listening to adult talk, TV and even by conversations among themselves. They can be disturbed by body language, tone of voice and the general confusion. As children see upsetting images on TV or hear alarmist talk, they may believe that they are in imminent danger. Children need a feeling of security and this is ensured by reassurance, consistency and routine in the home environment. Home, sweet home, may be a utopian flashback for most adults, but for children, it needs to be a constant protective cocoon. Parents, family members and other trusted adults can help children make sense of what they hear in a way that is honest, accurate and helps to minimise anxiety or fear in a balanced way. Such conversations can be useful for teaching them hygiene and personal safety and enrol them as allies in the fight against the spread of the disease, and environmental protection. Keep the explanation simple, using words, concepts and examples which are easily understandable. The information should be appropriate to the age of the child. Tell them about how some stories on the internet and social media may be based on rumours and wrong information. Explain who the experts and leaders are and use examples from whom we can get reliable information. Ask them what they have heard on television, from adults or friends. Discuss those random bits of

hearsay and provide corrections, explanations and assurances as needed. Keep a calm tone and composed body language, because children pick up signals from those as well as your words. Children will even listen in when you talk to other adults, so be consistent. Make time to talk, listen attentively and be available so children know they can come to you w h e n they have questions or fears. Avoid blaming others, or making assumptions about who might be vulnerable to Covid, especially groups that may be stigmatised. Be a role model. Children will follow your reactions and learn from your examples. Teach children everyday actions to reduce the spread of germs. Remind children to stay away from people who have fever or coughing or other infectious symptoms. Remind them to cough or sneeze into a tissue or their elbow, then throw the tissue into the trash. Get children into a hand-washing habit. Teach them to wash their hands with soap and water, especially aTher blowing their nose, coughing or sneezing; going to the b a t h r o o m and before e a t i n g . Singing a well-known song during handwashing will help time the 20 seconds. If soap and water are not available, teach them to use hand sanitiser. Hand sanitiser should contain at least 60 per cent alcohol. Supervise young children when they use hand sanitiser to p r e v e n t swallowing alcohol. In most families, adults work during the day, so it is a new experience for children to have parents around the whole time. Create a routine for the family that makes the most of this situation and enhances family bonding and reduces time for children to worry. A family meeting to discuss and decide about the day's activities will make them feel included. Assigning age-appropriate tasks will make them feel important and involved. Family decisions could cover food and diets, TV and screen time, personal and home cleanliness, protection of the elderly, and many other issues. Family play time is especially delightfull for younger children. Children like to hear stories of compassion and helping and there are many inspiring examples in Meghalaya. Primary school or younger children needn't worry much about missing schoolwork but set aside an hour a day to look at their books and do some artwork and reading. Get them involved in a house project, rearranging furniture, creating an art corner, playing board games or making up stories. Older children can make 'flatten the curve' charts or make a scrapbook on Covid. Share these on family and friends WhatsApp groups. M o s t children will do w e l l with the assurance of p a r e n t s and other family members, and will be happy to have parents around the whole day. They may show occasional concern or anxiety. A few children, however, may be at risk for more intense reactions, including severe anxiety or depression. Worrisome situations may bring to the surface or exacerbate a pre-existing mental health problem, which may be related to a prior traumatic experience or abuse, family instability, or recent loss of a family member. Children may also witness domestic abuse during the lockdown. The National Commission of Women has expressed its concern at the apparent rise in domestic violence. The hotlines run by NGOs that are the usual channels for women to report such attacks are eerily silent.

Activists and experts believe that this rise in domestic

violence probably reflects the continuous presence of the abuser at home during the lockdown. Contact a professional if you observe the following persistent behaviours lasting more than a week. In preschool children, the symptoms can be thumb sucking, bedwetting, clinging to parents, sleep disturbances, loss of appetite, fear of the dark, regression in behaviour and withdrawal. In primary school children, the symptoms are irritability, aggressiveness, agitation, clinginess, nightmares, poor concentration and withdrawal from activities and friends. There are many resources on the internet. UNICEF, the World Health Organisation and the National Association of School Psychologists have dedicated web pages with resources for engaging with children during the COVID pandemic. The University of Philippines College of Education has compiled an online children's dictionary of COVID-19 terms. The following are the probable questions and answers to them: What is COVID-19? A contagious disease made up of alphabets that stand for COCorona, a large family of viruses (germs) that can be passed between animals and people, VI-Virus, D-Disease, and the number 19, because it was discovered in 2019. It is a new virus. Doctors and scientists are still learning about it. Is it very dangerous? Yes, it can be. Because it has spread all over the world in a short time and made a lot of people sick, some of whom have died. But most people will be fine, especially children. Doctors and nurses are working hard to help people stay healthy, and scientists are working on new medicines and a vaccination. What happens if someone gets sick? P e o p l e can get a fever, cough, or have a hard time taking deep breaths. We take them to a hospital where they will get a test and treatment. A few people may get very sick and need to be on a breathing machine. Why do people have to stay far apart? Explain the spread of germs and assure them that they can hug and play with family members. To inform your child about the ongoing crisis, you can take the help of the ageold method: storytelling. The following is a short and simple story about the bad guy corona and how to defeat it. Once Upon a Time There Was a Germ Named Covid A germ is a tiny animal, so small that you cannot see it. There are good germs and bad germs, but Covid is a bad g e r m . F r o m o n e Covid, m a n y m o r e o f t h e m g r e w . N o w there are so many of them, and all of them have the same name Covid. They came to the world only a few days ago, and they have gone all over. There are so many Covids in the world, that we cannot count them. If a Covid gets into your body it can make you sick. It makes your body become hot with fever. If it gets into your chest, you may have trouble breathing, like if someone puts a pillow over your face. Fortunately, C o v i d does not m a k e everyone sick, but we all need to be careful. The Covid germs can spread to anyone, adults, children and all kinds of people all over the world. No one is to blame for this, only the germs. Most people will be okay, the germ hardly makes children sick, and those who get sick may be taken to a hospital. You've seen people wearing masks. They do that for two reasons. One reason is to prevent the germs from getting inside our body through the mouth or nose. And also, if someone has the germs, the mask will block them from getting out to spread to other people. There

are other ways of being careful. We should wash our hands because hands can pick up Covids and put them inside our body, especially if you put your fingers in your mouth or nose. So keep your hands clean and out of your mouth, nose, and eyes. This will help keep the germs out of your body. Till Covid goes away, we need to be careful. Strangers and travellers from other places can bring the Covid germs to us, so we should stay far away from them. That's why schools are closed and people don't visit each other much and stay mostly at home. We may even stay away from friends or relatives who come to visit our house. Most big people are staying at home because the germs can spread at the work places. At home we can hug and play touching games but only with our family. Animals are safe, so you can play with yourdog and cat or any o t h e r pets. Only a few people are working. The doctors and nurses need to take care of the sick people in the hospitals, the police and firemen are taking care of the town, working hard to keep us all safe. Some shops are open so that we can get food. So you don't need to worry about anything. We are all at home together. Even if someone gets sick, the hospitals are open. Have you seen on TV how the nurses and doctors dressed up in gowns, caps and masks? They know how to help the sick people get well and stop the germs from spreading to other people. One day soon, the Covidgerms will be gone. How will this happen? If we are careful, the germs cannot spread and they will die. Sick people who go to the hospital will get medicines to kill the germs. And when the germs are all gone, the children will go back to school and the big people will go back to work. And everyone will be fine.

Dorbar Shnong, a dominant force in fighting COVID-19 and beyond

Melari Shisha Nongrum

The Shillong Times April 6,2020

Watching the television when the Prime Minister, Narendra Modi on March 24, 2020 ordered a 21 day lock down and exhorted 1.3 billion people in the country to stay inside our homes for three weeks, what went through our minds? Everyone was concerned about survival, about food. Would my rice sack last for 21 days? Many were panicking as to whether our stocks would be enough for such a long time. The state government immediately swung to action by assuring the public that there was no need to panic and that food would be available. But how this was going to play out, was something we had to fathom. The Dorbar Shnong stepped in and played its pro-active role. I stay in Lawjynriew, Nongthymmai and I salute the Rangbah Shnong and other leaders of our locality Lawjynriew. A day after the lockdown the Dorbar Shnong has taken the lead in providing basic ration of essential commodities to each and every household while maintaining the safety norms of social distancing. Announcements for such facilities were repeated and clear to everyone and we didn't need to stand in long queues. When the vehicle passes through a certain location, the announcement would be made and all the people staying in that locality would wait at their own gates and give the list of goods needed to the volunteers and then we would pick up our goods once they were ready. This has continued and every three to four days, all basic commodities from cereals, pulses, eggs, meat, vegetables and even bakery items from the locality were made available at our door step. The Dorbar Shnong regulated the number of shops to be opened during the days where shops were allowed to be opened. Moreover, the Dorbar Shnong urges its people to stay home and stay safe and to not come out unnecessarily and that if they needed to buy essential commodities, to strictly maintain social distancing. With this system in place, the worry of the availability of food is gone and the residents need not hoard food items since they know there will be sale of basic essentials in the next 3 to 4 days. Apart from providing essential commodities, the Dorbar Shnong networked with the local church and provided emergency health services also especially to poor and needy households. They also created three counters in the locality to assist the daily wage earners to apply for the wage compensation from the Department of Labour, Government of Meghalaya. Spraying disinfectants was regularly conducted and announcements were made before it was done. This is a case in point. I have friends who have told me that several other Dorbar Shnong have also taken similar initiatives. In rural areas, I have reports of the Rangbah shnong going to commercial areas to access food grains not only for himself but for the community at large. All along we might not have realised the utility of the Dorbar Shnong.

Sometimes we questioned the relevance of the Dorbar Shnong and traditional governance in modern society? We have seen the Dorbar Shnong play a role in community life and local administration. Matters relating to sanitation, supply of potable water, disposal of garbage, construction of drains and footpaths are mostly handled by the Rangbah Shnong and Dorbar shnong. It has also been assisting the government on issuing epic cards, ration cards and aadhar cards. Of course, there has been criticism of the Dorbar Shnong in matters relating to the issuing of the "No Objection Certificate" and ostracizing people in some communities. Nevertheless, aTher seeing how the Dorbar Shnongs have played a proactive role in ensuring basic facilities in this time of crisis, I see a future for the Dorbar Shnong to go beyond its role of issuing certificates and to play a more positive role in building communities. Recently, I had conducted a study on the wellbeing of children of urban poor households in three localities of Shillong. One important finding that has emerged from this study is the impact of the social environment on the children's well-being. The social environment in these communities was found to be negatively impacting the lives of children. Children were regularly exposed to alcohol abuse in their homes and neighbourhood, smoking, fights and quarrels along with foul language from a very young age. One of the impacts is that 72% of the children (average age 13 years) smoked on a daily basis and have started smoking when

they were as young as 7 and 8 years old. We may say these are personal/family matters. But I beg to differ. This is a grave social issue. The Dorbar Shnong can play a protective role in curtailing such activities. For instance, the implementation of the Juvenile Justice (Care and Protection) Act, 2015 which has laid down stringent punishment for those selling tobacco products and cigarettes to minors could be made more stringent. Also, a proactive initiative for children's welfare by creating a committee on child welfare with the objective of seeing that no child is in distress. For instance, there were 18.3 % of children (n=213) below 14 years of age who dropped out of school. Can this matter be taken up by the committee and be reported to the child welfare committee and other relevant authorities in the government? Sport and recreation activities for children during holidays or weekends which is handled by professionals can be initiated by this Committee. Research has shown that positive community norms/ initiatives bring out positive outcomes. In essence, the Dorbar Shnong need not only implement government programmes, but take positive initiatives for enhancing the wellbeing of its residents. I believe that it is not only in these trying times that the Dorbar Shnong will be relevant but there is so much more that these traditional institutions can do to positively impact the communities in the shnong.

The Lost Legacy of Thomas Jones: A Grandson's Quest Glenn C Kharokongor

The Shillong Times November 27, 2019

Research and Reflection

Thomas Jones has been placed on a pedestal in our Khasi Hills. The man has been canonised by a holiday, held up as the father of the Khasi alphabet in schools, and the legacy has been embellished by a new tombstone laid in 2018 by the Khasi Jaintia Presbyterian Synod. It further elevated him as the Father of Khasi Literature. All controversies and contestations about this pivotal figure in our colonial history have seemingly been laid to rest in peace.

Andrew May, professor of history at the University of Melbourne recently delivered the First Thomas Jones Oration at Martin Luther Christian University. This great-great grandson of Thomas Jones has scoured the archives in an obsessive quest for revealing the real Thomas Jones. No more the detached academician, May's pursuit is an emotional journey in which he is a participant observer, albeit of historical facts rather than of contemporary gleanings. This entanglement provides us with a sentimental study that evokes the empathy of the listener.

This is so very tribal: embedding concepts and facts into a narrative that centralises the story teller. Positionality, meaning the stated stance of the researcher is growing in importance as a tool in ethnographic studies. In his oration May demonstrated this self-disclosure. He went further by first paying his respects to the Indigenous peoples of the land where he works, the Wurundjeri people of the Kulin

Nation in what is now called Australia. In doing so he paid his respects to his tribal audience in Shillong.

Indeed, Bah Andrew is rightfully and legally one among us. This claim is staked on a written bequest by "Oo Boomon, the Priest of Mowleem, and the … representatives of five families (who) have agreed and consented of our own good will to allow the Revd Thomas Jones to build & make gardens on the Shillong land". This document goes on to extend the bequest to the descendants of Thomas Jones.

Resolution and Redemption

Reading 'against the grain', May's study of his ancestor seems to have a four-point agenda: firstly, the wish to ameliorate the harsh judgement of the Church in punishing him for his marriage to the 15 year-old Emma Catell. While such a liaison would hardly have raised an eyebrow among the Khasis, it was scandalous for the strait-laced Welsh Calvinist Methodists and Jones was summarily dismissed from the service of the church.

Secondly, to draw attention to the nepotism, corruption and exploitation of the Khasis by the British government, blatantly supported by the local colonial courts, Jones became a champion of poor Khasi farmers who were grossly underpaid for their oranges by British businessmen. Those that protested at this cruel extortion were "caught and tied up by the heels or neck or arms & hung to trees &c. until they are (at) the point of death and they or their friends promise to give any sum it may the pleasure of the parties to demand – their pigs & fowls are shot & and their women violated and their money extorted at the point of the Company's Bayonet".

In protest, Jones wrote petitions and long letters to the government pleading the cause of the ill-treated Khasis. These petitions, preserved in the volumes of the Bengal Criminal Judicial Consultations contain lines such as "... if I kept silent, I would be a partaker of the sins of their oppressors" and "I therefore crave the considerations of Govt not only on my own behalf but on behalf of thousands of oppressed Kassias whose welfare is inseparable from mine". His petitions fell on deaf ears.

Thirdly, there has been charge of linguistic imperialism in the paternalist and racist manipulation of the Khasi language in makings translations into English. Language is an instrument of power in the hands of the dominant. The Reverend Hugh Roberts described the Khasis as 'absolutely unreliable' translators and wished the language to be rid of its 'barbarisms' and 'ugly brutal sounds'. In the effort to make a script for the Khasi language and create published materials, a panoply of actors were involved: William Carey, Alexander Lish and others. May says, "At best, the missionaries messed and meddled with language; at worst they destroyed something of it".

May absolves his forbear of deliberate complicity in this linguistic conspiracy, pointing out that Jones came with

the mandate for attainment of the language spoken by the natives as his first objective. Jones acknowledges the help he received from two young Khasi lads who knew a little English and taught him Khasi pronunciation and grammar. Credit needs to be given to these joint efforts, just as Tenzing Norgay helped Hillary to the summit of Mt Everest.

Fourthly, May concedes the "intergenerational damage to culture, identity and self-respect" and regrets the participation of his family "in the long march of imperialism". He phrases this as an "uncomfortable legacy to sit with…in the smoke haze of settler-colonialism".

But the Jones family, impoverished to begin with, gained no material advantage unlike many of their rapacious co-colonialists. Their gains were mixed, a legacy of respect in the Khasi Hills, but stains of scandal and vilification in the church and government records. Jones himself became a victim of the corrupt colonial government and courts. In the end he was a man on the run, hounded by these authorities, his servants beaten, his wife and relatives terrorised and his house vandalised.

His compassion for the Khasis are seen in several examples. At the request of the people of Nartiang, Jones wrote a petition to the Political Agent requesting him to release their priest from prison and to allow them to conduct their puja. He added that "there is no other European that knows so much about the case as I do". He taught the locals carpentry, how to improve their iron works and make rice beer.

May clings to "the good in this man" who stood amidst the ideological hypocrisies and ruins of empire as an example of humanism. "Thomas Jones was neither saint nor sinner, coward nor prophet – he was just a man, like you and I."

This historian-grandson craves exoneration for his ancestor and his impassioned research and its conclusions have indeed achieved a posthumous absolution for Thomas Jones. It is also a monumental addition to the historical record.

Reconciliation

For those who study the predations of colonialism, the book Orientalism by Edward Said was a release of captive minds. It enables us to correctly place supposed classics like Eric Hobsbawm's Age of Empire and Samuel Huntington's Clash of Civilizations as apologia for racial domination.

May on the other hand, admirably calls for reconciliation. He quotes Aristotle's categories of orations, focusing on the 'deliberative' speech which exhorts the audience to action. The imprinted and integrated effects and damage of the imperial and missionary enterprise is impossible to erase. But we can move on, beyond the idolization of Thomas Jones, by subliming it into something better.

The Khasi community and its academicians could re-appraise the historical records and come to a rapprochement. Take the best of this double-edged legacy and intertwine it with the richness of Khasi tradition, knowledge and worldview, using it to inform our educational system and our evolving social norms so as to create a destiny of purpose.

Letter to Editor

Christianity and Covid

Glenn C Kharkongor

Published in The Shillong Times June 4, 2020

Editor,

Two recent pieces in The Shillong Times, "Of God and Caesar" by HH Mohrmen (June 2, 2020) and "A Prayer that Agitates" by UD Tmar (June 4, 2020) should be read side by side. The latter is heavy with Biblical verses and doctrinal injunctions. The conflation of these quotes, with simplistic explanations of the over lap of religion and politics hardly relate to the matter at hand. First of all, it is pointless to speculate on the MLA's motives. His views and practice of religion is his personal space, to which he is fully entitled. As a representative of the people we are only concerned with his secular service consistent with his assigned political role. Secondly, this issue has got nothing to do with the existence or absence of God, and certainly cannot be covered in two paragraphs. A complete library will not give us an answer. On the other hand, the article by HH Mohrmen presents an articulate analysis of the incident in the Assembly. He begins by probing the political propensities which lead to such events. ATher quoting the statement on the floor of the legislature he proceeds to dismantle its argument, on both societal and religious grounds. He brings in a cultural context to conclude that while Christianity is a religion of compassion, it has hurt the sentiments of many in the state of Meghalaya. Each function of society has its own location of orderly practice, be it education, health or the stock exchange. Imagine the disturbance to parliament if Muslims start praying, Hindus perform pujas and Sikhs and Parsis read loudly from their holy books. Parliament and legislatures must proceed in their own proper protocols. There are some Christians in our community who have espoused a misplaced connection between Christianity and Covid. One sees these comments in social media posts. Particularly damaging are the statements that discriminate already marginalised sections. In the deaths of poor labourers, destitute women and innocent children are we really seeing the curse of God? How can that be part of a gospel of compassion? The history of pandemics shows us that separation of religion from rational practice is a good policy. England, in the Middle Ages, experienced several outbreaks of the plague. When deaths surpassed thirty in any town, they banned assemblies, feasts, archery contests, and other mass gatherings. Since it was believed that it was impossible to become infected during the act of worship, church services were not included in the ban, leading to fresh cases. In a secular, democratic country and in any enlightened society, especially a multi-faith community, religion should not become spectacle. There are Biblical injunctions against that. There are also 93 verses in the Bible that advocate praying in private.

Yours etc., Glenn C. Kharkongor, Via email

Another blow to secularism

Glenn C Kharkongor

Published in the Shillong Times January 23, 2020

Editor,

I agree with the conclusion in the letter written by NK Kehar (ST January 22, 2020) that we should "be tolerant and welcoming to all communities." My own letter said that, "India belongs equally to all its citizens, irrespective of origin, ethnicity or religion." The main intent of my letter was to object to the RSS claim that, "this country belongs to the Hindus". Mr Kehar has conveniently side-stepped this point, choosing to go instead into tangential points of little relevance that camouflage the main topic.

Furthermore he has gone on a personal attack accusing me of 'blatant misreads'. I had not made any claim to expertise on this subject and merely quoted from authoritative scholars on this subject and had provided the sources. The term Ancestral North Indian, Indo-European and Aryan come from the academic literature and this study has been led by Prof David Reich of Harvard University which has collaborated with the Centre for Cellular and Molecular Biology in Hyderabad.

His (sorry if my presumption of the gender is wrong) claim that the Khasis came from Southeast Asia is based on outdated assumptions which have been updated by recent genetic and linguistic evidence. It is well-established that Munda and Khasi are related genetically, linguistically and culturally such as the similar patterns of monolith erection. I will be happy to provide a complete bibliography of scientific references to anyone.

Another issue is worth raising here. In the 1951 census form there was an option of choosing "tribal religion". This was removed thereaTher and "other religion" was added. But from the 2011 Census, even "other" was removed and tribals who followed their own religion could not indicate their religion. Many tribal organisations have raised this issue but to no avail. Now we are being told we are all Hindus. Hinduism has great philosophies and precepts but so do other religions.

Yours etc., Glenn C. Kharkongor Via email

RSS Misreads history

Glenn C Kharkongor

Published in The Shillong Times January 21, 2020

Editor,

The Shillong Times (Jan 19, 2020) has quoted the RSS chief, Mr Mohan Bhagwat as saying that "this country belongs to Hindus". This is a false reading of history. The Indo-Europeans (previously referred to as Aryans) came to India about four to five thousand years ago. They are referred to as Ancestral North Indians (ANI) in genetic parlance. When they came to the subcontinent it was already populated by Ancestral South Indians (ASI), who had come several thousand years earlier. The earliest inhabitants in India are the Ancient Ancestral South Indians (AASI) which are represented by the genetically purest tribals in India, who have been historically isolated in the Andamans and thus did not intermarry with other ethnic groups.

The first inhabitants of India are the tribals, notably the Austro-Asiatic tribes such as the Munda and Khasi who came out of Africa about 65-70 thousand years ago. The antiquity of these groups and the timing of their ancient migrations are traced through gene mutations. The Austro-Asiatic languages are considered by linguists to be the oldest language group in the country thus providing linguistic confirmation of the genetic vintage of tribals. It is now being increasingly considered that the Indus Valley Civilization was made up of ASI and AASI individuals who freely intermarried.

Hinduism as a religion was formed only about four thousand years ago and the caste system became rigid about two thousand years ago. This is based on genetic evidence showing that earlier inter-marriage patterns ceased with the hardening of caste divisions, especially among the higher castes.

The tribal religions based on social elements, nature and spirits, dates back to pre-historic times, evidenced by sacred forests, monoliths and ancient rituals. But while the tribals are the first peoples of the subcontinent and their religion is the most primeval, we have never laid claims to the country. India belongs equally to all its citizens, irrespective of origin, ethnicity or religion.

Those who would like a scientific reading of the history of the peopling of India should read "Which of Us are Aryans?" by Romila Thapar, India's foremost historian and "Early Indians" by Tony Joseph, a prominent journalist.

Yours etc., Glenn C. Kharkongor, Via email

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Status and Factors influencing breastfeeding among tribal mothers in Mawbri Village

Barihun Madur*

(*Granted the Dr. Domes Roy Shullai Memorial Scholarship) Under the supervision of Dr Iwamon W J Laloo and Ms.Eldanolyne Shadap.

Department of Allied Health Sciences

Abstract

Exclusive Breastfeeding (EBF) have both benefit for mothers and baby for optimal growth and development.

This study aims at identifying the status and factors affecting EBF at Mawbri village in Meghalaya. A cross-sectional study was conducted using a self designed questionnaire that was administered among 129 tribal mothers. Outcome of the study indicates that among 46.5% who claimed to practice EBF, 75% of them also gave sugar water to the baby during first six months. Besides the study also reveal that 80.6% of the mothers initiate breastfeeding within one hour after birth and 50% continue breastfeeding up to 2 years. Study reveals that family, friends and healthcare provider encourage and support EBF. Very few indicate that breast problem such as breast engorgement, breast abscess and sore breast affects FBF

Keywords: Exclusive Breastfeeding, tribal mothers

An interventional study to assess the knowledge regarding Disaster Preparedness among youth in Nongmynsong, Meghalaya

Deity Kordor Lyngba*

(*Granted the Dr. Domes Roy Shullai Memorial Scholarship) Department of Social Work

Abstract

The research on an "Interventional Study to Assess the Knowledge regarding disaster preparedness among youth in Nongmensong", Meghalaya is a study that tell us about disaster preparedness, how preparedness is required in our daily activities. This study also tells us about the importance of being prepared and how a community could be the first respondent when any calamity occurs. Based on this research an interventional programme was conducted where pre and post-tests was carried out to examine the knowledge of the youth about disaster preparedness.

The researcher continues to look at the preparedness of the grass root level and it was conducted keeping in mind the benefits of the community youths that they could get from this research. The pre-test and the interventional programme was done on the 31st May 2019 and the post-test was done on the 7th June 2019. First the pre-test was conducted then followed with an interventional programme and lastly, a post-test was done.

The major findings show that every individual is aware

about disaster and the preparedness required but they do not practice this preparedness. After the tests it was clear that the youths are aware about the steps to be taken before, during and after a disaster strike. The prime objectives of this study are to conduct a programme and to assess the knowledge of the youths with regards to disaster preparedness.

Assessment on the availability and Utilisation of wild edibles in Bataw village, East Jaintia Hills District, Meghalaya

Gifty Merry Phawa

Department of Environment and Traditional Ecosystems

Abstract

Wild edibles provide subsistence and livelihood to people, especially to those who largely depend on forests in particular. The objective of the study was to assess the availability and utilisation of wild edibles in Bataw village, East Jaintia Hills District, Meghalaya. The data was documented through primary and secondary sources. Analysis of data was obtained through a sample size of 39 respondents from the village. Interviews, household surveys and field surveys were conducted to fulfil the objective of the study. During the survey, a total of 35 wild edibles were documented, out of which there were 15 tree species, 6 shrub species, 6 herb species, 5 climber species, 1 fern species, 1 banana plant and 1 fungal species. The mode of utilisation in the village varies from species to species. The availability of wild edibles in the area of study is of diverse variety and is still abundant for the people in the village as per recorded information.

Impacts of rubber plantation on the soil properties and the economic status in Saibual village, North Tripura

Nunengpuia Darlong

Department of Environment and Traditional Ecosystems

Abstract

Saibual village which is under Unakoti district of Tripura has been influence on cultivation of rubber in the area. Through various literature studies on the effect of soil quality due to rubber plantation, this study was also carried on soil fertility under different aged of rubber growing plantation anda control soils in Saibual village.Materials and methods: The soil samples were collected from three land use sites and they brought to the laboratory where they were air dried and sieve through a 2mm mesh for analysis of soil pH, conductivity, soil organic carbon, available phosphorus and nitrogen and potassium. Results: Indicated that soil under rubber plantation were predominantly acidic with pH as compared to control site. With increasing of the aged of the plantation there is also a reduced in the concentration of organic carbon and potassium and electrical conductivity (EC) of the soil and it was vice versa in the case of nitrogen and phosphorus where there was an increase in their concentration in the soil with

the aged of the plantation. Conclusion: The study revealed that, with advancement of age in rubber plantation there was an improvement in the soil fertility in plantation and soils under rubber plantation does not have any deleterious effect on its chemical properties.

Keywords: Saibual village, rubber plantation, organic carbon, phosphorus, nitrogen, potassium

A study on the quantification of solid waste in Nongpoh Market, Ribhoi District Meghalaya

Drowelshon Khriam and Daniel Lambor Kharnangar Department of Environment and Traditional Ecosystems

Abstract

The study aims at documenting waste management practices among people residing along the Umkaliar River and suggests possible solutions of issues faced in the current situation. Umkaliar river is one of the tributaruy of the Umkrah river. Umkaliar being the most important river on the area where people are likely to use it for domestic and agricultural activity, so it should have effective and proper waste management strategies in order to maintain its cleanliness. The method of study is done through questionnaire, interview, and discussion to document people's behaviour towards waste disposal and to make them aware of its importance and the importance of the river. After analyzing the data we found that most of the people are not aware of proper solid waste management. Further, they have been neglecting the important role of the river and hence most of them release their waste water directly to the river. At present sewage treatment and waste management system has not been introduced in the area. Some of the household solid wastes are collected by the village committee for disposal to landfill, and some of them burn their waste generated at their own premises.

Traditional marriage ceremony: A study in Raliang, West Jaintia Hills District, Meghalaya

Chandelma Suchiang Department of Social Work

Abstract

Raliang village which is under Laskein C&RD Block is in west Jaintia Hills District Meghalaya. The Objective of the study is to identify the various process performed before and after marriage, the implication and changes of Traditional Marriage.

The Research was conducted using Qualitative research whereby the tools of data collection used are In-depth Interview and FGD.

The Target group in this study includes Married Men, Married women, mixed married men and women, younger generation unmarried, Traditional leaders and older generation. The

sample design used is based on non-probability sampling i.e Purposive sampling

From this study the researcher found that there are two process of ceremony perform before marriage whereas four process of ceremony after marriage.

In this study also found that there are the implication of Traditional marriage on family i.e it bring Prestige to the family and, blessing to the couple, on the other hand found that there are very less people who performed the Traditional marriage because the concept of virginity comes in the traditional marriage.

In this study also found out that the traditional way of dressing is changing in which people were influences by the western types of dressing.

In this study also found that the expenditure for marriage has been increased compare to the olden days in which they used only dry fish(*kthung*) and plantain stem (*Kachor*)

The role of maternal uncle in this study found that it has been detoriated, because there is no respect from his clans. Vice versa he himself ignored his clans and family.

The youth of the presentation generation lacking the knowledge of Traditional marriage because no one take the responsibility to educate them about traditional customs. On the other hand due to the influences of the Western culture and there is a changes in the way of dress and practices for marriage.

A comparative study on stress and coping mechanism adopted by the aspirants in preparing for competitive examination in Shillong, Meghalaya and Ukhrul District, Manipur

M K Chanchuila Department of Social Work

Abstract

The dissertation entitled "A Comparative study on stress and its coping mechanisms adopted by aspirants in preparing for competitive examination in Shillong, Meghalaya and Ukhrul District, Manipur" is an original work done by the researcher name Miss. M.K Chanchuila as a partial fulfillment of Master of Social Work. The study focus on academic stress with the objectives to assess the prevalence of the stress, to ascertain the factors responsible for stress, to examine the effects, and to identify the coping strategies adopted by the aspirants for stress management. The researcher adopted the Descriptive design and crosssectional Design. The researcher adopted purposive sampling and snowball sampling under nonProbability Method. The Primary data collection tools which the researcher used were Questionnaire and the Perceived Stress Scaled Measurement. The researcher collected the data from the aspirants preparing for competitive examinations from Shillong, Meghalaya and Ukhrul District, Manipur. To determine the respondents, the researcher handed the Perceived Stress Scale to the aspirants preparing competitive examination along with questionnaire in order to know the level of stress, its causes, effects and coping mechanism adopted by the aspirants in dealing with stress. The researcher found out that out of 80 respondents, the Ukhrul district, Manipur aspirants have 15% who were facing high level of stress as compared to the aspirants from Shillong, Meghalaya with 13%. Majority of the aspirants from Ukhrul district with 73% and Shillong with 83% have moderate level of stress and with 12% from Ukhrul district, Manipur and 4% from Shillong, Meghalaya have low level of stress respectively. The researcher also found out that poor time management (Shillong- v 70% and Ukhrul- 65%) and too much to study (Shillong-63% and Ukhrul-60%) were the main causes of stress among the aspirants in both the places. The academic stress has affected the aspirants in other parts of their life physically, mentally, emotionally and socially. The findings on means of adopting coping mechanisms by the aspirants were both positive and negative strategies to reduce their stress. The Positive strategies used were listening music (shillong-90% and Ukhrul-88%), rest or sleep (Ukhrul-70% and shillong-63%), watching comedy (Ukhrul-70% and Shilllong50%), and physical exercise (Ukhrul- 63% and Shillong- 55%) as one of the major findings. The negative mechanisms adopted by the aspirants were smoking (Shillong23% and Ukhrul - 13%), drinking alcohol (Shillong-23% and Ukhrul- 10%) and eating a lot of junk food or eatables (Ukhrul- 23% and shillong-28%) respectively. Thus, Stress has affected the aspirant's life in effective studies, poor performance, health status (physically or emotionally) and social functioning of daily life. Therefore, this study will provide the basis for enhancing the general adoption of a new, positive approach to aspirants life and younger generation by ensuring success in their examinations also suggestions on means of or ways of reducing the level of stress based on perception of the aspirants or researcher themselves will be determined which is envisioned to help the aspirants in coping with stress.

Mutual funds

Naphisabeth L Chyne Department of Economics, Commerce and Management

Abstract

Mutual fund investment has changed immensely in the recent past, and investors' psychological understanding and their expectation are changing in the present scenario. Investors' preference towards return and risk varies often. The investor should compare the risks and returns before investing in a particular fund. For this, he should attain the advice from experts and consultants and distributors of mutual fund schemes. The investors can invest in the mutual fund and acquire more benefits. Periodically checking up on how the mutual fund is doing is important, and there are lots of

measures that the investor can use to perform the checking. A funds track record may be the single most important factor that an investor checks before opting for a mutual fund product. Hence, it is important to evaluate funds before investing. But it is becoming increasingly important for investors to take note of other parameters as well, while deciding between mutual funds. Of course, investors need to weigh the savings on expenses against the performance record before choosing a fund. Over the past decades mutual funds have grown intensely in popularity and have experienced a considerable growth rate. Mutual funds are popular because they make it easy for small investors to invest their money in a diversified pool of securities. As mutual fund growth towards becoming an industry hasevolved over the years, there have arisen many questions about the nature of operations and characteristics of these funds. Thus the funds evaluation process helps the investors to know more about the funds and its performance.

SECTION I

ABSTRACT - JOURNAL, CONFERENCE (FACULTY AND PHD SCHOLARS)

SECTION II

SYNOPSIS (BOOK, BOOK CHAPTER)

SECTION III

ARTICLES (NEWSPAPER, NEWSLETTER AND MAGAZINE)

SECTION IV

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Ongoing Research
- Funded Externally
- Seed Grant

SECTION VI

CONFERENCES CONDUCTED

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PUBLICATIONS (BOOKS AND MONOGRAPHS)

SECTION V

SI.No	Name of the research project	Name of Principal Investigator /Co- Principal Investigator	Designation and Dept.	Amount sanctioned (in lakhs)	Name of funding agency	Year of sanction
	FUNDED EXTERNALLY					
1	Mental Health and Social Stigma among Healthcare Personnel involved in the management of Covid 19 patients in India	Dr. Maribon Viray / Anniesha Lyngdoh, Jochanan Diengdoh, Phibawan Syiemlieh	Associate Professor, Department of Psychology	Rs 3,00,000 (Three Lakhs Only)	Indian Council for Medical Research, New Delhi	2020
2	Project for Life skills community intervention for forestalling alcohol use	Dr. R Jennifer War Ms.Melissa Kyndiah	Dean Academics Assistant Professor, Department of Psychology		Indian Council for Medical Research, New Delhi	2019-
ϵ	Situational analysis on issues concerning children in Ri-Bhoi District, Meghalaya"	Mr Emideiwahun Rangad and Dr Naorem Arunibala	Assistant Professor, Department of Social Work	Rs 3,00,000 (Three Lakhs Only)	Indian Council for Medical Research, New Delhi	March 2020
4	Teenage pregnancy with a special focus on familial, legal and socio-cultural context in Meghalaya	Dr Marbabiang Syiemlieh, Ms Nadeen Pakyntein and Ms Ibasaralyne Thabah	Assistant Professor, Department of Social Work	Rs 4,00,000 (Four Lakhs only)	Directorate of Social Welfare, ICPS, Government of Meghalaya	November 2019

ONGOING RESEARCH - FUNDED EXTERNALLY

ONGOING RESEARCH - FUNDED EXTERNALLY

Year of sanction		2019	2019	2019	2019	2019	2019	2019	2018-
Name of funding agency		MLCU	MLCU	MLCU	MLCU	MLCU	MLCU	MLCU	MLCU
Amount sanctioned (in lakhs)		Rs. 25,000	Rs. 25,000	Rs. 25,000	Rs. 25,000	Rs. 25,000	Rs. 25,000	Rs. 25,000	
Designation and Dept.		Computer Sciences	Music	Allied Health Sciences	Allied Health Sciences	Allied Health Sciences	Social Work	English and Communication	Psychology
Name of Principal Investigator /Co- Principal Investigator		Dr.Amit Gurung and Mr Sangyal Lama Tamang	Dr. Mebanlamphrang Lyngdoh Mr Tyngshainlibor Lyngdoh and Ms Amabel Susngi	Dr. Rennie O Lakadong and Ms Ibadahun Dhar	Mr. Banlam Jyrwa	Dr Rennie O Lakadong and Ms eldanolyne Shadap	Dr Marbabiang Syiemlieh and Dr Samhita Baroah	Dr Chelemlyne Dhar, Dr Egira Shadap and Ms Lalrinmuani Kingbawl	Melissa D Kyndiah
Name of the research project	SEED GRANT	Falsification of Hybrid Systems	An Analysis of the Compositions of Late Teslet Pariat	A pilot study on knowledge, attitude and practices of parents on immunization of chilren in selected villages of East Khasi District,Meghaya	Frequency and Associated Risk Factors of Scrub typhus infection in Mawphlang Block , Meghalaya	A Study on nutritional status of children under 5 years in selected areas in East Khasi hills, Meghalya –Pilot study	Social class within the prism of tribe and gender in matrilineal Meghalaya	Language maintenance and language shift among Mizo Speakers in Happy Valley, Shillong	.Monitoring the implementation of the P.O.C.S.O Act 2012
SI.No	• • • • • • • • • • • • • • • • • • • •	1	7	3	4	~	9	7	∞

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SECTION VI

Conference Conducted

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Title of Conference / Seminar/ Workshop	Organized by	Level	Venue/ Date
University			Doblook to MICII
'Walk for Women's Health'	In collaboration with Rotary Club of Orchid City, Shillong.	University	Campus October 18, 2019
Research Office			
Research Skills Development Workshop	Research Office	University	MLCU Hall January 13-14, 2020
Statistical Package for Social Sciences Software Workshop	Research Office	University	MLCU Hall January 23-24, 2020
1st North-East Land Conference	Research Office in collaboration with NERCORMP, NEN Shillong, RNBA, and NRMC Centre for Land Governance	Regional	MLCU Hall January 30-31, 2020
Medical cum Mental Health Camps in Umsawmat village, Mawphlang Block and and in Mawbeh village, Pynursla Block	Research Office in collaboration with department of Psychology and Allied Health Sciences		Umsawmat village November 18, 2019 Mawbeh village November 20,2019
Academic Writing workshop	Research Office and facilitated by Dr Gideon Arulmani	University	MLCU Hall July 15-16, 2019
University Research Week	Research Office	University	MLCu August 16-17,2019
Academics			
Consultation on the Draft National Education Policy 2019	Academics		MLCU November 16 , 2019
Workshop on Self Directed learning	Academics	University	MLCU Hall July 3,2019

Computer Sciences			
Workshop on Data Mining and Big Data - Techniques and Tools	Dept. of Computer Science	University	MLCU Hall October 21, 2019
Allied Health Sciences			
Special Nutrition Camp at Laitmawroh village, Khatarshnong Block, East Khasi Hills District	Dept. of Allieh Helath Sciences in collaboration with NSS , MLCU	University	September 16-19, 2019
Health Camp for the Reach Ministries at Umkdait, Nongmensong	Dept. of Allieh Helath Sciences in collaboration with Bansara Eye Care, Shillong	University	August 17, 2019
Conflict Management and Peace Initiatives			
Climate Action for Peace	Dept. of Conflict Management and Peace Initiatives in collaboration with the Nichols-Roy Bible College (NBC), Sohryngkham .	University	NBC campus September 21, 2019
Music			
Workshop on Understanding African Music	Department of Music	University	MLCU March 3,2020
Psychology			
Academic Intergrity Development workshop	Department of Psychology	University	MLCU December 6, 2019
Cultural Competence and Evidence Based Practices in Mental Health	Department of Psychology	University	MLCU August 1-2 , 2019
World Suicide Prevention Day	Department of Psychology in collaboration with Bethany Society and Meghalaya Association of Professional Counsellors (MAPC).	University	University's campus and in Khyndailad, Police Bazaar September 10,2019

SECTION VI

Psychological care and disaster risk reduction	Department of Psychology in collaboration with US. Agency for International Development (USAID), United Nations Development Programme (UNDP) and National Institute of Mental Health and Neurosciences (NIMHANS), Government of India	University	MLCU July 30,2019
English and Communication			
Workshop on Creative Writing	Department of English and Communication,Facilitated by Dr Suranjana Chaudhury, NEHU	University	MLCU November 11, 2019
Celebration of World Indigenous Languages Day First Thomas Jones Oration	Department of English and Communication First oration deliverd by Prof.Andrew May	University	MLCU November 19- 20, 2019
Centre for Gender Equity and Diversity Education and Research (GENDER)	(GENDER)		
Workshop on Child Protection and Safety	Centre for Gender Equity and Diversity Education and Research (GENDER)	University	MLCU July 1-2,2019
Workshop for field staff and coordinators of Bethany Society on Gender	Centre for Gender Equity and Diversity Education and Research (GENDER)	Regional	Bethany Society August 7,2019
Workshop on Gender and masculinity	In collaboration with Centre for Health and Social Justice (CHSJ) , New Delhi and North East Network (NEN),Shillong	Regional	MLCU January 15-17,2020
Gender Sensitization workshop on <i>Understanding Human</i> Sexuality and Gender Identity: Towards an Inclusive and a Sensitive Church	In collaboration with the ESHA Project of the National Council of Churches in India, Nagpur	University	January 27-28,2020
Workshop on Gender studies, Reproductive Health and Life Skills Education	Centre for Gender Equity and Diversity Education and Research (GENDER)		November 12-15, 2019

Session on "Gender-based discrimination" for MSW students	Centre for Gender Equity and Diversity Education and Research (GENDER)	University	MLCU February 11, 2020.
Session on "Child Protection and POCSO" for MSW students	In collaboration with Faith Foundation,Shillong		February 12, 2020
Centre for Career and Placement			
Foundation Semester – 'Career Orientation and Planning for UG & PG Students' (Workshop Mode)	Centre for Career and Placement	University	MLCU September 25 - 27, 2019
Workshop on Basic Skills in Career Counselling for MLCU Faculty	Centre for Career and Placement	University	MLCU January 20-23 2020
Consultative Meet of Trained Career Counsellors at MLCU	Centre for Career and Placement	University	MLCU January 30, 2020
Centre for Education			
Workshop on Teaching Learning for new faculty of IIPH and BIOS	Centre for Education	University	MLCU January 20-24, 2020

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Publications (Books and Monographs)

PUBLICATIONS (BOOKS AND MONOGRAPHS) Centre for Publication and Communication

In the Shadows: Children of Urban poor households in Shillong, Meghalaya

Melari Shisha Nongrum March 2020 ISBN 978-81-940739-4-9

INR: 299

In the Shadows is a study on the children of urban poor households of Shillong and the effect that the adverse conditions that they are inevitably subjected to have on them. Besides bringing these issues to light, the author also proposes certain protective factors that can be practised locally in the family and even globally in the community thus ensuring that stakeholders formulate a positive, effective, and holistic solution.

Tales of Darkness and Light

Janet Hujon November 2019 ISBN: 978-8194073932

INR: 299

This book is about the work of Soso Tham, the acknowledged poet laureate of the Khasis of northeastern India. He was one of the first Khasi writers to give written poetic form to the rich oral tradition of his people. Poet of landscape, myth and memory, Soso Tham paid rich and poignant tribute to his tribe in his masterpiece The Old Days of the Khasis. Janet Hujon's vibrant new translation presents the English reader with Tham's long poem, which keeps a rich cultural tradition of the Khasi people alive through its retelling of old narratives and acts as a cultural signpost for their literary identity. This book is essential reading for anyone with an interest in Indian literature and culture and in the interplay between oral traditions and written literary forms.

Building a Community in Bissamcuttack: the work of Mercy and Johnny Oomen, among the Dongria Kodh tribals of Niyamgiri Hills, Odisha, India

Glenn C Kharkongor August 2019 INR: 100

The monograph narrates the various initiatives that Dr. Johnny and his wife introduced in the community of Bissamcuttack such as the the Mitra (Madsen's Institute for Tribal and Rural Advancement) approach and the sundry ways in which they have benefitted the community and improved healthcare. The work is a detailed chronicle of the couple's various projects and programs that have been successful in lowering the infant mortality rate, containing the spread of malaria, combating malnutrition amongst the tribal children, setting up of educational institutions for the tribal youth besides various others.

Waiting for an equal world: Gender in India's North East

Patricia Mukhim March 2019

ISBN: 978-8194073925

INR: 599

This volume is a compilation of the articles and editorials written in newspapers and magazines and papers presented at academic and professional meetings. It is the outpouring of thoughts, ideas and analysis from a woman activist and writer whose reportage and commentary has emerged from the heartbeat of tribal grassroots and the ground zero of political and social activity. The book is meant to reach out to social activists, political scientists, community-centered academicians and all those who have concern for gender equality.



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