

Khasi Tribe and their Socio-Culture geography: A Study on Asia's Cleanest Village Mawlynnong

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Abstract:

Mawlynnong village is an eco-tourism spot visited by 1000s of visitors from various parts of the country in every year. There is a violent sense of self-determination among these people and certain rules they have followed traditionally. They do not want government to borrow ideas from outside and impose it on them. The villagers who have made the place so beautiful like the cleanest in the continent. There is something special about the place. I just came to see why it has become so famous. It really is clean and you have to give them 10 out of 10 for that. The rest of country should learn from Mawlynnong's experience. According to Mawlynnong village headman there is a fine imposed by the village council for anybody found to be throwing litter around or cutting trees. If Indians want to make their country a clean, healthy place, 100% literacy, then they should learn from the aesthetic environmental education model (both formal and informal) of Khasi tribesmen of Meghalaya's Mawlynnong village. Mawlynnong village was discovered by missionaries of the Anglican Church who came in contact with the village to spread the gospel way back in 1902. They later built a church there with the help of the highly-skilled local masons. Mawlynnong, a small village located in the East Khasi Hills in Meghalaya, was awarded the prestigious tag of 'Cleanest Village in Asia' in 2003 by Discover India Magazine. Located at about 90 kms from Shillong, the village offers a sky walk for you to take in the beauty as you explore it. According to visitors, you cannot find a single cigarette butt/plastic bag lying around there. As of 2014, there are about 95 households (around 450-500 people) in Mawlynnong. Mawlynnong Village of Meghalaya also referred as 'God's own garden'. The community has made collective effort to maintain the ambience of a clean village (Phukan, 2014). The village offers picturesque natural beauty, a trek to the living Root Bridge at a neighboring village Riwai. The village also offers a sight of natural balancing rock, a strange natural phenomenon of a boulder balancing on another rock. The

village is quite pretty, especially in the monsoons when there is lush greenery all around, with waterfalls paving the way to small streams and abundance of flowering orchids dangling from the trees and hedges add to the beauty of the village. Cleanliness is an age old tradition and a way of life for all villagers.

Key words: Mawlynnong Village, 'Cleanest Village in Asia'

I. Prolegomena

Mawlynnong Village has earned an exceptional distinction of being the cleanest village in Asia. The village is over hundred years old, keeping the surrounding environment clean is an age old tradition of this village; the inhabitants of this village – Khasi tribal are worshippers of nature. Local residents here grow different flowers around their houses to balance the beauty of their tiny cottages. The village council makes it a point to systematize and conduct workshops to create awareness of the dangers from global warming. Mawlynnong village is an eco-tourism spot visited by 1000s of visitors from various parts of the country in every year. There is a violent sense of self-determination among these people and certain rules they have followed traditionally. They do not want government to borrow ideas from outside and impose it on them. The villagers who have made the place so beautiful like the cleanest in the continent. There is something special about the place. I just came to see why it has become so famous. It really is clean and you have to give them 10 out of 10 for that. The rest of country should learn from Mawlynnong's experience (Borah, 2011). According to Mawlynnong village headman there is a fine imposed by the village council for anybody found to be throwing litter around or cutting trees. If Indians want to make their country a clean, healthy place, 100% literacy, then they should learn from the aesthetic environmental education model (both formal and informal) of Khasi tribesmen of Meghalaya's Mawlynnong village. Mawlynnong village was discovered by missionaries of the Anglican Church who came in contact with the village to spread the gospel way back in 1902. They later built a church there with the help of the highly-skilled local masons. Mawlynnong, a small village located in the East Khasi

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II. Objective:

To highlight the geo-locational, natural, socio-economic, cultural, traditional, and demographic view of Mawlynnong village at a glance.

III. Methodology

Pre-field (Survey of Research Literature): It is based on literature review related on Mawlynnong village and their life style, for ex., writings of Bikash Jyoti on 'Did you know: The Cleanest Village in Asia, is in India'; 'What Makes Mawlynnong Village Different From Others?' by Rumani Saikia'; 'Learning from Meghalaya village to keep India clean by Kharmujai' etc., review on education and demography scenario from journals, monographs, museum, literatures, archive centre, news (example: BBC News on "India's 'green and clean' village" by Jyotsna Singh), magazines, articles, internet sources, etc. To

know the cleanness researcher studied the writing 'Learning from Meghalaya village to keep India clean'; 'Asia's Cleanest Village- Rural Tourism Vs Tragedy of Commons' of Lyngdoh and Sridhar. To clear the concept on aesthetic review was make on 'Cultivating an aesthetic of unfolding: Jazz improvisation as a self-organizing system' F. J. Barrett (2000), 'The aesthetics of organization' of Linstead & H. Hopfl; about to know the racialconcept researcher studied the writing of 'Genetic diversity and relationships among the tribes of Meghalaya compared to other Indian and Continental populations' of B.T. Langstieh ; 'Toward an aesthetic of unfolding in/sights through curriculum' of R. L. Irwin (2003); 'Khasi - A Descriptive Analysis' of K.S. Nagaraja (1985); 'Khasi, a language of Assam' of Lili Rabel (1961). Apart from these to know the environment education contents I studied all the books those are studied in primary and upper primary school of this village, the books are Frank environmental education for class 5 to 8, the social general studied book of class 1 to 4 (books of Sarva Siksha Aviyon) etc.

During field: Researcher had visit at Mawlynnong village (especially in 2 primary schools, 1 Upper Primary school and 1 Anganwadi; ex. – L.P. School) and taken two special guide from NEHU (name: Bipull Ighni and Raju Chetri; they are well known about Khasi language, Assamese, English and Hindi) during his continue 7 days survey to search out the objectives related photography, writings, maps and documentary achieves. To get the opinion of the school children and age old persons of village researcher has used specific questionnaires. During survey researcher tried to visit at every corners of the village to get the minute information at every level. He talked with the Khasi local shopkeepers, Khasi gatekeepers of sky view gate, Khasi managers of home-stay hotel, members of Khasi community hall, Khasi school teachers, Khasi students, tourists, taxi drivers, Donboxco museum, and Meghalaya tourism Department in Shillong etc.

Post field: Accruing all information from field cum literature review researcher has followed the way of 'DEPI' (means Description, Evaluation, Prescription, and Implementation to fulfill the objectives) and generate tables, diagrams, models through cartographic, statistical and recent

Remote Sensing & Wikimedia techniques for representation of whole description.

IV. Result and discussion

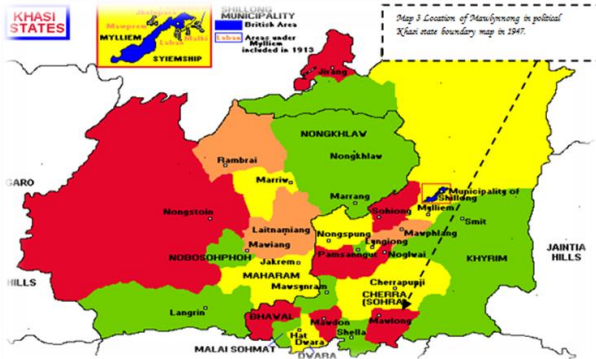
Physical geography

Geo-location:

About 90km (55 miles) from the state capital Shillong, 92 km from Cherrapunjee, and barely 4km (2.4 miles) from the Bangladeshi border and can be reached by road. The nearest airport is the Shillong Airport in Meghalaya. The best way to reach Mawlynnong is by road.

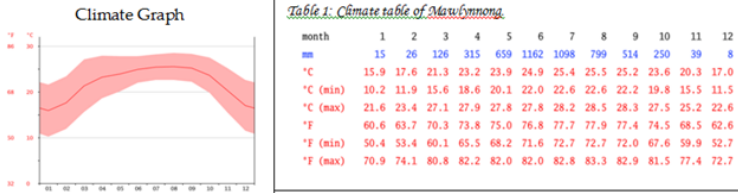


This village is sit atop a great plateau providing a comfortably cool climate. It is situated in the Block of Pynursla, district: East Khasi Hills. The village of Mawlynnong is situated at an altitude of around 4906 feet above sea level.



The jungle here was reminiscent more of Assam rather than Meghalaya with Pomelo (a citrus fruit of the size of a football) and Areca trees. The Latitude is 25.57 and Longitude is 91.87. Mawlynnong village is located in the UTC 5.30 time zone and it follows Indian standard time (IST). Mawlynnong sun rise time varies -38 minutes from IST. The origin of the Khasis has not been satisfactorily explained by the historians. The Khasi

language is classified as part of the Austroasiatic language family; Peter Wilhelm Schmidt believed that the Khasi people are related to the Mon-Khmer people.



The Khasi mythology traces the tribe's original abode to *Hynñiewtrep* ("seven families"). According to the Khasi mythology, "Blei" (God) had originally distributed the human beings to 16 heavenly families (*Khadhynriew Trep*). Seven out of these 16 families were stuck on earth while the other 9 are stuck in Heaven. According to the myth, a heavenly ladder resting on the Sohpetbneng peak (located in the present-day Ri-Bhoi district) was meant to allow those on earth to visit the heavens for worshipping God, but the Khasis used it too often and God was angered to the point where he destroyed the ladder. The Khasis first came in contact with the British in 1823, after the latter captured Assam. The area inhabited by the Khasis became a part of the Assam province, after the small Khasi Hill States entered into a subsidiary alliance with the British.

Climate:

Mawlynnong is one of the wettest parts of the country and while many parts of India are suffering under drought-like conditions this year, the south-western monsoon has not disappointed the north-east. Mawlynnong experiences a cool temperature throughout the year. The summers (March to June) here are pleasant with the temperature staying in the comfortable range of 15°C to 24°C. The monsoon months from June to September are accompanied by heavy rain and thunderstorms. The winter months from December to February are freezing cold. The minimum temperature during this period may even drop to 2°C ; the Min temperature is 27.98 °C ; Max temperature is 27.98 °C ; Sunrise time is 00:03:23 GMT; Sunset time : 12:00:13 GMT ; Humidity is 35 ; Wind speed is 1.66 m/s. The best time to visit the village of Mawlynnong is during the post monsoon season.

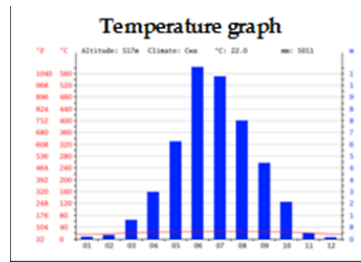


Plate 6.7, 8, 9, 10, 11, 12, e13: Some typical flora in Mawlynnong (source: Field survey, 2015)

This is because; there is plenty of greenery and small waterfall around the village. The roads during the monsoon are not in the best of shape with frequent landslides and foggy weather. If you can overlook the weather and the road condition then the post monsoon season is the best time to visit Mawlynnong. The dry months from October to April are the best time to visit Mawlynnong since the weather and road conditions are much better. It is the perfect place for an Indian summer. Men take a break from work, and from the sweltering heat. In Mawlynnong, the climate is warm and temperate. The summers are much rainier than the winters in Mawlynnong. According to Köppen and Geiger, this climate is classified as Cwa. The temperature here averages 22.0 °C. Precipitation here averages 5011 mm. The place comes alive in the monsoons. With a number of small streams and waterfall, Mawlynnong's greenery is a site to see. During the rains, the village greets everyone with beautiful flowering orchids, swinging from every tree. A few small tea shops in the village are always ready to replenish your energy with special tea and snacks.



Plate 2,3,4 & 5: Some typical faunal groups in Mawlynnong (source: Field survey, 2015).

Climate Graph

The driest month is December. There is 8 mm of precipitation in December. The greatest amount of precipitation occurs in June, with an average of 1162 mm.

Temperature graph:

With an average of 25.5 °C, August is the warmest month. The lowest average temperatures in the year occur in January, when it is around 15.9 °C.



Plate 13a, b, c, d, e, f, a, h: Some typical flora in Mawlynnong (source: Field survey, 2015)

Climate Table

The precipitation varies 1154 mm between the driest month and the wettest month. The variation in temperatures throughout the year is 9.6 °C ⁶.

Biodiversity:

Here forests grow in areas at an altitude of about 900 meters. These forests are thick forests because of heavy rain. Different types of trees grow and they are evergreen. The major trees found in these forests are teak, bamboo and fruit trees. Nature dances to the tune of purity and rawness here. In close proximity to the Bangladesh border, it still retains its own coolness with a distinct nip in the air, unlike the humidity in the neighboring country. The village is inundated with dark

green bamboo trees and picturesque plateau ranges. The descending clouds add to the milieu, rendering an easy walk in the clouds. Furry goats with pointed ears looking like dogs graced the landscape. Sparse grasslands gave way to thick bamboo jungles. Long snakes could be seen crossing the road. The locals on the other hand, seemed to be scaring the poor reptiles away (Ranjana, Jun, 2013). Melastom is all across the roadsides, in this village, the flash of pinkish mauve greets you. The melastoma is in full bloom and will do so till June. The shrub with hairy leaves (underneath) can grow up to 5 meters. The flowers grow in clusters. The villagers are spreading the message of conserving nature and they are trying on their own way to keep the virgin forest intact and in preserving nature. On a visit during monsoon one can find beautiful flowers and orchids in bloom in the trees in the forest. The hill of Khasi is covered with dense forests. Some of these forests are hundreds of years old. A great variety of plants grow here .Some of the plants that grow here are teak and sal trees, pine, bamboo and other canes, vines, rubber plants, many kinds of succulents, parasites, herbs, medicinal plants, and more than 300 varieties of orchids. Oranges, jackfruits, pineapples and edible mushrooms are commonly found in Khasi hill. Here is a plant most school children have read about – the carnivorous pitcher plant. It is also found in Mawlynnong. People there call it 'Tiew – Rakot' which means 'demon – flower' or 'Memang – Koksi' which means 'basket of the Devil' and 'Kset Phare' where 'kset' means 'net with a lid' and 'phare' means fly.

Socio-economic, cultural, traditional, demographic and tribal geography

Onomastics data:

Khasi names are known for their originality and elaborate nature. The given names may be invented by parents for their children, and these can be based on traditional native names, Christian names, or other English words. The family names, which they call "surnames," remain typically in the native Khasi language.

Nature has merged with society:

This village derives its name from the Khasi term "Mawlynnong" which means cavities on the rocks (caused by rainwater). A peaceful hamlet in the state of Meghalaya, Mawlynnong village is surrounded by emerald-green trees and a variety of flora, all adding to the beauty of this place. Now filled with greenery and attracting nature lovers, this place was earlier a village with many crater stones. The village also known as "Gods own Garden". Later, similar certificates were conferred by BBC, UNESCO and National Geographic. With colorful orchids flowering amidst the green leaves of trees, you will be acknowledging with the most beautiful enchanting sight of nature. The dedication of the villagers towards keeping their village clean and tidy will inspire you to do the same. Every villager contributes a small amount of money to hire a gardener for the entire village. The way to small streams and abundance of flowers that adds to the beauty of this small village. Immaculately maintained lanes were lined with well-manicured gardens full of blooming cosmos, hibiscus and marigold that were attracting colourful butterflies and insects. People could identify *Papilio Helenus*, a large species of butterfly as big as a small bird. Some tall watchtowers (plate 14) attracted our attention. There were beautiful gardens in all the houses with different varieties of flowers. Take a stroll round the village and you will be surprised to find varieties of plants that you have read only in textbooks like the pitcher plant. The forest-covered Khasi mountain range is not only a scenery satisfaction for the tourists world-wide but a paradise for those living in a congested and contaminated urban environment without a natural carbon sink system. Mountain and plains are covered with moist deciduous forests with rich biodiversity. Women and men could be seen carrying bricks in bamboo baskets, tightly fastened to their backs. Nature has attached their life in this way that the boundary of their houses is made by nature's rock (plate 15 & 16).

Inhabitants and race:

There have been many writers who have written that the Khasis belong to the Austric race of the East. This race is a descendant of the Muos from Burma and the Khmers from

Cambodia. Their dialect is also similar to that of the Monhmers. The Khasis (of Mon-Khmer ancestry) are believed to be remnants of the first Mongolian overflowing into India. Although no written records are available, it appears that the Khasis arrived on the hills much earlier than the Garos.

Social system:

The Khasis have a history of their own when it comes to politics. A meeting is held and an elder is chosen to be the Lyngdoh or the Priest. He is given the authority to rule. When a clan becomes larger, the people make ties with other classes. When the two clans join together it is called a 'Raid'. The 'Basan' is the head of the clan. Earlier there were no kings and the Bansan is the ruling authority. As time passed, the vRaids came together to form a kingdom. The system of governance of the Khasis is deep rooted.



A meeting is held and a headman is chosen. He takes care of everything in the village. But the ruling authority in the kingdom is the king. However, there are kingdoms which are ruled by the Wahadar known as the Wahadar kingdom. There are also the Sirdars who rule the sirdar kingdom. Before the British arrived, all of Pnar was ruled by a king. The Khasis follow a democratic system of governance because the will of the people is placed at the top. The king cannot do something which the 'darbar' does not agree or if his ministers are against it. The land belongs to the person that is why there are no taxes. According to Khasi history, the first Kings were King Madur Maskut, the king of Sutnga and the king of shillong. According to a legend these kings were God like. The Madur Maskut

Kings were said to have originated from a pig. They were believed to have super powers and no one can defeat them. The king of Sutnga were said to have originated from a fish called the 'Lidohkha'. The kings of Shillong were said to have originated from a strange woman called 'pah – syntiew'. These kings were God-like because it was believed that they were sent by the Gods. They were called 'God-Kings'. Other kings who were not God-Kings were called 'man-kings'. There is a very close relationship between the people and the kings. The king treated his people like children and the people treated him like a father. When India gained Independence in 1947, the Khasi kingdoms joined the Indian union. The Khasi kingdom was made into the Khasi-jaintia Hills District and it fell under Assam. The Kings, the Priests, the Wahadars, the Sirdars and the Dolois are still there but they have no more power. They have to obey the orders of the District council. Keeping it clean comes naturally to most people here. Before the arrival of Missionaries to this part of the world, Khasi were divided and sub-divided tribes-jumping from tree to tree, killing animals for meat and killing each other for dominancy. But the introduction of Christianity into their lives changed everything-from bringing peace to making them aware of cleanliness. It has a very effective local governance system. The society is matrilineal - meaning that land is passed down through the female side of families - making women economically more powerful. The Khasi are a matrilineal society, meaning that a family's lineage is traced through the surname of the wife, with the youngest daughter inheriting all the family's property. Mawlynnong people are following the dd/mm/yyyy date format in day-to-day life. The economic prosperity of the village is, at most, gender-driven. Women are the core economic driver in this matriarchal society. This tribal matriarchal society has established a new socio-economic paradigm and its success can be attributed to female entrepreneurship at all levels of economy building. Couples marry and the entire village helps them set up their house and farm. I was touched by the close-knit social responsibility. The most important thing is the villagers, the people of Mawlynnong are friendly and unlike in the many villages where children will run away from strangers, the children in Mawlynnong will talk to you if you want to start a conversation but if you wish to be on your own too, they will

walk their way. The Khasi society is divided into different clans. These clans are further divided into families. The family is the smallest part of the society. Every clan bases its origin from the 'Iawbei' who is the oldest mother of the clan. The 'Thawlang' is the oldest father of the clan. The 'suidnia' is the oldest uncle of the clan. These three are highly respected by people the Khasi-pnar family includes the father, the mother, the children and also the grandparents. A special feature of the Khasi-phar society is that it is a matrilineal society. This means that the children bear the title of the mother and not of the father. This is because the females are responsible for running the household affairs and keeping the house clean. The father is responsible for providing food for the family and he takes care of important matters. Marriage is regarded as something sacred. Children are regarded as blessings from god. There is nothing more valuable than the joy that children bring to a family.

Holiday:

As Khasis are devout Christians, they do not prefer to work much on Sundays.

House and village beauty:

All walkways in Mawlynnong are decorated with flower vines. Beautiful orchid are everywhere on trees adding colors. You literally have to re-think if it's a village or a botanical garden when you are in here. I walk past spotless yards and neat hedges with bright bougainvilleas and orchids as well as birds-of-paradise spilling over the sides, and village homes made from bamboo and timbers. Fresh laundry clipped neatly on the clotheslines, conical cane baskets provided all over the village to collect litter, this sure looks like something out of a storybook. The morning was beautiful and drizzly. The birds were singing, the air was fresh, there were colorful butterflies around, and the first view of Mawlynnong was a sight of serene. The village is damn pretty and certainly very clean and organized with small bricked footpaths crisscrossing the village and networking the entire community. All the houses are simple, cozy and small here and immensely delightful is the community's passion towards gardening, as all the houses have a courtier where the villagers grow varieties of exotic flora.



Plate 17: Bamboo made waiting place.



Plate 18: Type of house in Mawlynnong.



Plate 19: Type of house made by cutting rocks.



Plate 20: Wooden frame of Khasi house.

This, in a way, adds colors to the village and to the surrounding rich-in-green landscape. Khasi Tribe is charming, culturally rich and they certainly know how to appreciate beauty. Creepers are an ingredient of the village architecture and are used for decorated houses. Bamboo steps leading to the *tree house* which is perfect size for a solo-traveler. Flowers were everywhere. The lush green of the monsoon fills the landscape everywhere around the village. The splendid living root bridge is near the village. The *uvuzelic* sound of crickets (plate 3) and other insects which are continued throughout the entire time. In front of every house and shop, there were beautiful bamboo baskets as dust-bins. You have never seen such number of butterflies together.

No wonder with such high degree of cleanliness and environment friendliness, the people of the village are also all healthy and sprightly. It's a dream of many environmental activists and a desired destiny for those who want to enjoy the purest and unspoiled bliss of nature. Mawlynnong's fame is now drawing an endless stream of guests from across the country and abroad. Although residential facilities here are still scarce

and are in the process of being developed, the existing facilities constructed from bamboo and thatch is hospitable and restful.

Plate 22: Logs are stored for sale at side of road.



Plate 23: A Khasi woman is ready to carry stone-pieces for house building in village.



Plate 24: A roadside tea shop of Khasi lady in village.



Plate 25: Cassia leaves in jute bags are stored at side of road for business.



Plate 26: The hotel of Rice and Tea in village.



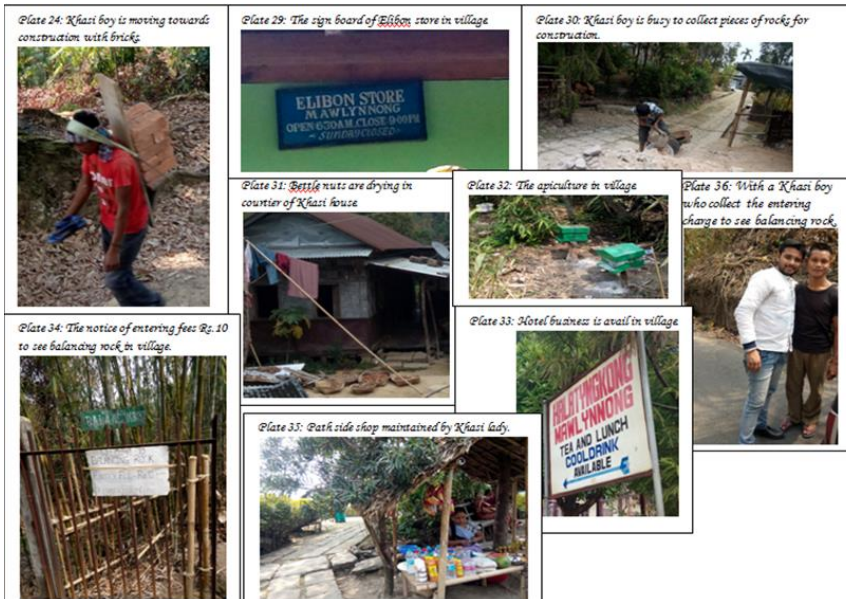
Plate 27: Khasi people are busy to store cassia leaves in jute bag.



Unlike other cities and towns in the country, where several government sponsored cleanliness drives are taken up but fail, Mawlynnong has set an example of a self-disciplined drive of responsible citizens working to save the environment in a praiseworthy manner. There was no welcome as such but a horde of children playing all over a metallic parking space fenced by ornamental crotons greet you. Mawlynnong is best described as an absolute tropical paradise and a nature lover's dream destination. Houses, each with a garden of flowers of exotic variety—orchids, birds-of-paradise, lilies, etc. all blooming profusely in every imaginable nook and cranny. Little stone paths thread between the houses and the entire village is impeccably clean. Spires of two churches grace the skies, and the people are a friendly and cheerful lot who endear themselves to the visitor immediately. The cacophonous symphony of the river rushing past, crickets, birds, and other sounds of the jungle here are a sheer delight for the senses. The village is the perfect setting for a picture painting, with its well defined trim roads, symmetrically arranged bamboo huts in the outline of trees, and bamboo dustbins dotting the area. Different types of houses are found here like: wooden frame based (plate 20), rock based (plate 19), bamboo based (plate 18 & 21) etc. All the houses reflect the connection of their life with their surrounding nature.

Occupation:

Agriculture is the principal occupation of the local population, with betel nut being the main crop. Villages whose inhabitants all chip in a few rupees every month to pay for a village gardener who keeps the place spotlessly clean and planted up with fantastic flowers and exotic plants from the surrounding forest. Below this plateau, in the plains of Bangladesh exists an environment that is much more appropriate for growing oranges. Consequently, many Khasi farmers have cultivated the land below them which is only accessible by traversing huge cliff faces. A few days trekking around these hills will bring you in contact with some lovely people and beautiful places. Be sure to take a guide from a village. It is another way of occupation. Khasi women are engaged in weaving textiles with a loom. Villagers are born cultivators – they have learnt to care for the land and forests from childhood and derive their income from broom grass, bay leaves, pepper, honey and betel nut as well as fruits like oranges and pineapples. I follow a stone path (King's Way) from Riwai village where a young Khasi youngster sells us a ticket for just ten rupees to see the living root bridge. Bamboo is an important part of local economy in any part of the North East. Villagers are mostly seen selling pomelo, boiled eggs, betel nuts, tea, bottled water and packaged snacks to the tourists.



In Mawlynnong village out of total population, 180 were engaged in work activities. 98.33 % of workers describe their work as Main Work (employment or earning more than 6 Months) while 1.67 % were involved in Marginal activity providing livelihood for less than 6 months. Of 180 workers engaged in Main Work, 3 were cultivators (owner or co-owner) while 34 were agricultural laborers. The locals make wooden artifacts from bamboo trees, and sell them as decoration pieces. Khasi people in Mawlynnong are engaged in different traditional as well as modern professions. They collect cassia leaves from jungle and store these in jute bag and finally sale to buyers (plate 25 & 27). In recent due to development of tourism vis-à-vis construction in village lot of Khasi people have been engaged in building construction work like they are carrying bricks or boulders (plate 28), maintaining tea-rice stall (plate 26), home stay, lunch-dinner hotel, glossary store (plate 29), bettlenut & bettleleaf stall (plate 31), pebble transportation (plate 30), apiculture at fringe of village (plate 32), tea-lunch-cooldrink shop (plate 33). They have the special technique to carry atleast 10 bricks in each trip (plate 28). During movement they carry their sleeper in hand due to exact comfort movement (plate 28). They are using modernized sign board (plate 26) to identify their hotel or tea stall. But their tea stalls or hotels are partially traditional. Due to invasion of modernization some stalls or shops have been modernized and lot of modern items are found their like electric fan, modern dish, plate, cup, chair, table etc. About their business they are very systematic. Like other market they also follow specific closing day about their store and time of opening or closing (plate 31). All shops or stores or stalls are situated in front of home. The shopkeeper or manager maintain their traditional dresses. Male Khasi works parallel with female. They collect sand and rocks in their wooden basket and transport these to construction area (plate 30). When I surveyed I saw in every house that Khasi people dries their bettle nut in traditional *kula* (plate 29); which is the another important trade item of their life. The Khasi land is very rich in minerals. The casting and molding of irons is one of the oldest occupations. Sword, axes, spears, hammers, knives, sickles, locks, keys, spades and many others daily used items prepared by them; which is also the source of income. Coal, limestone and other minerals are

found here; during the excavation of this area Khasi people are engaged for their occupation. The Khasis and the pners are very good in carving. They have betel nut fruit hanging their own style of making gold, silver, necklaces, gold chains, from the tree, earrings, and so on. They also weave clothes in the Bhoi, War and pnar areas. In the village, people make baskets and carpets out of bamboo; they make clay pots, wooden pot and many other pots which can be used for cooking and storing water. They also make musical instruments like the ksing, Nakra, the Mieng, the Maryngoid, the Tanglod, the Tangmuri and the Duitara. They also make weapons such as bows and arrows. In their business life they use english (when they are interacting with tourist people). On the basis of their eco-tourism place like *balancing rock visit* they make a source of income. For example you have to pay Rs. 10 to enter within the balance rock visit (plate 34). Always all business place is governed by Khasi people. They are not interested to give the authority of these tourist place of village under government undertaking. Most of the shops/glossories are conducting by Khasi women. Their shops are situated at path-side bamboo made stalls; where you can get frooti, haldiram bhujia, pan, bislery water bottle, fruits etc. (plate 35).The Khasi boys are very friendly. About to enter within balancing rock zone you may enter here before paying. On my experience I feel they have good belief on tourist and did not hesitate to take any photo with tourist. Their tribal perception is open minded (plate 36).

Agriculture:

Agriculture is the main occupation of the people and betel nut is the principal crop. Mawlynnong had something different to offer. Narrow flights of concrete staircases descend into the organic farms that are just a few crops growing along both its sides. One Khasi boy showed me their plantations of pineapple, pepper, betel nuts and of course, coriander. The war region of Khasi and jaintia hills is popular for orange and areca plantations. The warm climate here is favorable for the cultivation of other various fruits and crops. The warm moisture laden air from the Bay of Bengal through Bangladesh help maintain a perennial green cover over these parts while maintaining an optimum temperature for the crops to thrive.

Areca nut from here is in high demand because of its texture and taste and is exported across the border as well as to other parts of the country other crops grown here are papaya, bananas and various citrus fruits. Most are locally consumed although there is a continuing demand for the region's unique variety outside.

Hunting, fishing, Animal husbandry and food:

People of this village catch and hunt tree squirrels; they prepare it for food and resulting barbecue. They take to eat tea, kwai - the local betel leaf with lime and areca nut. People caught fishes and got a fire prepared for smoking the fishes. The village has a few eating stalls which serve rice, dal, roti and also local kashi style homemade chicken. The food served is not at all spicy and is bland with just a few herbs.

Plate 38: Types of Khasi-rice food - Pukhlang and putyndong.



Plate 39: Traditional blackberry in village.



Plate 40a, b, and c: Killing the wild rat by Khasi people and preparing for meal (from upper).

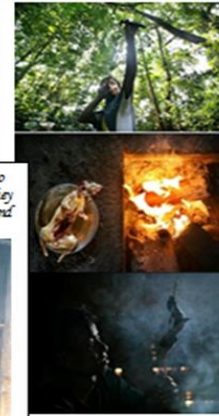


Plate 41: Wild mushroom in village is sold in roadside shop.



Plate 44: The look of the Khasi kitchen, where Khasi male is busy to prepare food dish both for tourist and his family. In their kitchen they use bamboo made shelf, use separate high space to store vegetables and utensils to save the food items from ground level dirty.



Plate 492 Traditional Khasi woven.



Plate 43: Khasi weapons and utensils.



For tourist they serve local chicken, fish curry, rice and fresh vegetables that were seasoned with Khasi herbs. People feasted on a meal of chicken, fish, daal (pulses) and vegetables cooked

in home-grown spices. To top it all was the fine texture of the local rice wine, and *Kyiad*. Each pakora is the size of your palm made from one potato and an onion, and is enough to fill your stomach. Locals sit on hillocks on the route to the peak, selling fresh vegetables and plums. Pineapples can also be had between July to September. Apart from these they have traditional Khasi-rice made food like *pukhlang* and *putyndong* (plate 38) and jungle blackberry (plate 39). Rice is the main food of the Khasis but they also eat corn, potato, sweet potato, tomato, beans and many other vegetables. Pork, beef, chicken, duck are also eaten. They also eat fish and dry fish. Betel-nut and betel-leaf are favorites among the people. Farming and cultivation is the main occupation of the people. There are also blacksmiths and merchants. They cultivate on hills, plains and cultivate in the same place and they also practice shifting cultivation. But now they have partially stopped the practice of shifting cultivation. Apart from rice, they also cultivate potato, sweet potato, corn and many other vegetables. They also export potato. Other crops that are grown are betel-nut, betel-leaf, pepper, ginger and bay leaves. Fruits like oranges, pears, plums, guavas, bananas, pine apples and many other different fruits. The Khasis also rear animals like cows, pigs (plate 37), goats and hens. Some of them work as merchants and other as day laborers. About food they are mainly dependent on jungle. From jungle they trap the jungle rats, then eradicate the skin from body and after that burn it to make up food (plate 40a, b, and c). It is very popular among Khasi. Jungle mashroom is another item of food in their life and they also sell it (plate 48). Though it is not very available but it has deep demand among Khasi.

Kitchen:

They have the traditional woven (plate 42) and jungle logs are used for fuel. But recently they are not using their traditional woven in their kitchen. Kitchen room is made by bamboo. The traditional woven is placed in their hotel to present their traditional culture in front of tourist. It is their way of community management to attract tourist. They use the earthen oven also (which is found in plain area) (plate 44) and cocking method is mainly followed by modern spices for tourist. In their kitchen they used some traditional dishes, pan those

are found in plate 43. They use different types of knives (plate 43) in their daily life. In recent they use modern dish, *deski*, and pan in their kitchen. Lot of raw green bamboo cups is used for water and tea.

Population:

	Total	Male	Female
Population	414	204	210
Child (0-6)	80	47	33
Schedule Caste	0	0	0
Schedule Tribe	401	197	204
Literacy	93.71%	92.99%	94.35%
Total Workers	180	99	81
Main Worker	177	0	0
Marginal Worker	3	0	0

Source:<http://www.census2011.co.in/data/village/279032-mawlynnong-meghalaya.html>

As of 2011, there are about 82 households of 414 of which 204 are males while 210 are female in Mawlynnong, currently home to almost 95 houses and a population of around 500. In Mawlynnong village population of children with age 0-6 is 80 which make up 19.32 % of total population of village. Average Sex Ratio of Mawlynnong village is 1029 which is higher than Meghalaya state average of 989. Child Sex Ratio for the Mawlynnong as per census is 702, lower than Meghalaya average of 970.

Religion, belief and Sacred grave:

Traditionally Khasis believe that their religion is God given and is based on the belief on one supreme God, the creator *U Blei Nongtha*. A Khasi is a deeply religious person, who has an intense love of life. He believes that life is God's greatest gift and he has to account for it again in the hereafter. However, many members of the Khasi communities have converted to Christianity. They are known to be hospitable, cheerful and friendly. They celebrate several festivals which are directly and indirectly connected with religion. They are full of joy and happiness which is expressed outwardly in form of dance, feast and worship. The *Shad Suk Mynsiem* (Walking Dance) signifies love, friendship and peace to the Khasi people. The three-day festival is usually celebrated after harvest and before the

sowing season in March or April and takes place all over Khasi hills at different times and different locations. Khasis are mostly Christians – the result of the work of Welsh Christian missionaries who came here in the British era. Narrow stone paths meander through the village, church spires loom above. Today, the villagers are mostly Christians. There is a lovely church in the village that accentuates the quaint beauty of the village. All Khasi villages are connected by a network of stone pathways known as the King's way which traditionally kept the local betel nut trade alive with Shillong. Throughout this network, hundreds of living root bridges form the bridledways over the myriad of water channels that criss-cross the area. The Khasis believe that their origin is connected with God Himself. According to their beliefs God first created the people of the sixteen huts. These come down to earth and go back to heaven with the help of a golden bridge. This bridge connects heaven to earth and is believed to be at the top of *U lum sohpetbneng*. Finally the people of nine huts stayed in heaven and the people of seven huts came to live on Earth. The people of seven huts then became their ancestors.

Worshipping and conservation of forest:

Mawlynnong's status for being clean and green has been well documented, and its Khasi tribal inhabitants are known to be worshippers of nature. Their respect for nature is seen by some as an efficient way of preserving the forest cover. Many Khasi people are "nature worshippers" the drive for cleanliness and education is not about faith only. Even today they are very strict about how the forest can be used. There was a huge amount of community spirit in all the villages. Locals plant trees to ensure that the virgin forest is kept unbroken and also replenished.

Language and dialect:

The native language of Mawlynnong is English and most of the village people speak English and use it for communication. The Khasis are an indigenous or tribal people, the majority of whom live in the State of Meghalaya in north-east India, with small populations in neighboring Assam and in parts of Bangladesh. They call themselves *Ki Hynñiew trep*, which means "the seven huts" in the Khasi language. Their language

Khasi is the northernmost Austro-Asiatic language. This language was essentially oral until the arrival of European missionaries. Particularly significant in this regard was a Welsh missionary Thomas Jones, who transcribed the Khasi language into Roman script.



Khasi has significant dialectal variation. Several dialects have only partial mutual intelligibility, and Bhoi and Nonglung are distinct enough to be sometimes considered separate languages. Other dialects are Cherrapunji (Sohra), Khyntiam, and War (not the same as the related War language); Cherrapunji and War are 75% similar lexically. Cherrapunji is standard. In the past, the Khasi language had no script of its own. William Carey attempted to write the language with the Assamese script between 1813 and 1838. A large number of Khasi books were written in the Assamese script, including the famous book *Ka Niyiom Jong Ka Khasi* or *The Rule of the Khasis*, which is an important manuscript of the Khasi religion.

The Welsh missionary, Thomas Jones, in 1841 wrote the language in the Latin script. As a result, the Latin alphabet of the language has a few similarities with the Welsh alphabet. The first journal in Khasi was *UNongkit Khubor* (The Messenger) published at Mawphlang in 1889 by William Williams. Actually, when we say Khasi, we include the Khyntiams or Nonglungs, the jaintias or syntengs or Pnars, the Bhois and the Wars. Even though the words may be different, the dialect is still the Khasi dialect.

Dress:

In their colourful dresses and caps (plate 47) they looked like the Pied Piper of Hamelin. The traditional Khasi male dress is a *Jymphong* (plate 48), a longish sleeveless coat without collar, fastened by thongs in front. Nowadays, most male Khasis have adopted western attire. On ceremonial occasions they appear in a *Jymphong* and sarong with an ornamental waist-band and they may also wear a turban (plate 48). The traditional Khasi female dress is called the *Jainsem* or *Dhara* /Hand Loom shawl (plate 49), both of which are rather elaborate with several pieces of cloth, giving the body a cylindrical shape. On ceremonial occasions they may wear a crown of silver or gold (plate 49). A spike or peak is fixed to the back of the crown, corresponding to the feathers worn by the menfolk. The *Jainsem* consists of two pieces of material fastened at each shoulder. The "Dhara" consists of a single piece of material also fastened at each shoulder. The traditional Khasi male dress is "Jymphong" or a longish sleeveless coat without collar, fastened by thongs in front. Now, the Khasis have adopted the western dresses. On ceremonial occasions, they appear in "Jymphong" and dhoti with an ornamental waist-band.

Marriage:

The Khasis of this village are, for the most part, monogamous. Their social organization does not favor other forms of marriage; therefore, deviation from this norm is quite rare. Young men and women are permitted considerable freedom in the choice of mates. Potential marriage partners are likely to have been acquainted before betrothal. Once a man has selected his desired spouse, he reports his choice to his parents. They then secure the services of a mediator to make the arrangements with the woman's family (provided that the man's clan agrees with his choice). The parents of the woman ascertain her wishes and if she agrees to the arrangement her parents check to make certain that the man to be wed is not a member of their clan (since Khasi clans are exogamous, marital partners may not be from the same clan). If this is satisfactory then a wedding date is set. Divorce is frequent (with causes ranging from incompatibility to lack of offspring) and easily obtainable. This ceremony traditionally consists of the husband handing the wife 5 cowries or paisa which the wife then hands

back to her husband along with 5 of her own. The husband then throws these away or gives them to a village elder who throws them away. Present-day Khasis divorce through the Indian legal system. The type of marriage is the determining factor in marital residence. In short, post marital residence when a heiress *Khaduh* is involved must be matrilocal, while post marital residence when a non-heiress is involved is neolocal. Generally, Khasi men prefer to marry a non-heiress because it will allow them to form independent family units somewhat immune to pressures from the wife's kin. A Khasi man returns to his *iing* (home) upon the death of his spouse (if she is an heiress). These practices are the result of rules governing inheritance and property ownership. These rules are themselves related to the structure of the Khasi *iing* (clan).

Music, Crafts, Costumes and Festival:

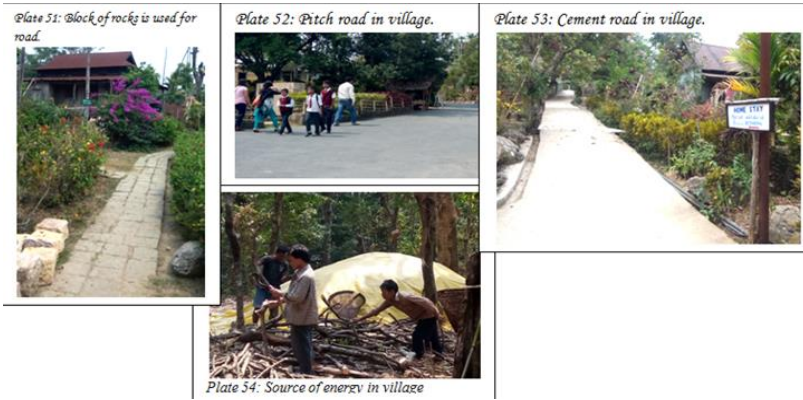
The Khasis particularly loves of songs praising the nature like lakes, waterfalls, hills etc. and also expressing love for their land. They use different types of musical instruments like drums, *duitaras* and instruments similar to guitars, flutes, pipes and cymbals. Weaving is an ancient craft of the tribal of Meghalaya - be it weaving of cane or cloth. The Khasis are famous for weaving cane mat, stools and baskets. They make a special kind of cane mat called 'Tlieng', which guarantees a good utility of around 20-30 years. Khasis weave their own cloth. The Khasis have also been involved in extracting iron ore and then manufacture domestic knives, utensils and even guns and other warfare weapons using it. They have distinct costumes and jewellery. However, with the change of time as in the rest of the country, the males have adopted the western code of dress leaving the ladies to continue the tradition of ethnic sartorial elegance. The Khasi lady wears a dress called 'Jainsem' which flows loose to the ankles. The upper part of her body is clad in a blouse. Over these, she ties both ends of a checkered cotton cloth on one shoulder, thus improvising on apron. On formal occasions, worn over the 'Jympien' is a long piece of Assam muga silk called 'Ka Jainsem Dhara' which hangs loose below the knees after being knotted or pinned at the shoulders. The 'Tapmohkhlieh' or head-shawl is either worn by knotting both ends behind the neck or is arranged in a stylish manner as done with a shawl. The jeweler of the Khasis

is also alike and the pendant is called 'Kynjri Ksiar', being made of 24 carat gold. The Khasis wears a string of thick red coral beads round their neck called 'Paila during festive occasions. Nongkrem Dance is a religious festival in thanksgiving to God Almighty for good harvest, peace and prosperity of the community. It is held annually during October/ November, at Smit, the capital of the Khyrim Syiemship near Shillong. The dance is performed in the open by young virgins and men, both bachelors and married. The women dressed in expensive silk costumes with heavy gold, silver and coral ornaments dance in the inner circle of the arena. The men form an outer circle and dance to the accompaniment of music of flutes and drums. An important feature of the festival is the 'Pomblang' or goat sacrifice offered by the subjects to the Syiem of Khyrim, the administrative head of the Hima (Khasi State). Ka Syiem Sad, the eldest sister of the king is the chief priest and caretaker of all ceremonies. The festival is conducted along with the Myntries (Ministers), priests and high priest where offerings are made to ancestors of the ruling clan and the deity of village. One of the most important festivals of the Khasis is Ka Shad Suk Mynsiem or Dance of the joyful heart. Men and women, dressed in traditional fineries dance to the accompaniment of drums and the flute. The festival lasts for three days. Khasi people maintain the ceremony around the time of the queen's birthday.

Communication mode:

The village containing the somewhat more famous 'double decker' root bridge has remained relatively unaffected by this boom in indigenous travelling, mainly because there is still no road there and 4 wheels are most certainly the preferred mode of travel for your average Indian vacationer. Four types of roads are found in this village like pitch road (plate 52), rock road (plate 51), natural earthen-rock road and cemented road (plate 53). Within the core of village a pitch road was come from Shillong road. When you move towards the fringe of village only earthen-rock road is found. Transport is skeletal, markets far flung and locals measure distances by the time. Sensationally, even here the versatile banyan tree can merge its brilliance by way of the ladders and suspended walkways that the Khasi have built in order to be able to scale these sheer faces. How did

they build these bridges? In the monsoon the river becomes a furious torrent and crossing it became impossible for the villagers. So the wise men of those days grew two rubber trees on either bank of the streams and extended their secondary roots through the hollow trunk of the Kwai or betel nut tree to reach the other side. Once the roots were entrenched, they wove the handrails and support vines till it became as strong as a concrete structure over many years. Some root bridges are as old as five hundred years. The ideal bridges to bear the offensive of the heavy monsoons, these look like a set out of Avatar or the Lord Of The Rings with their lattice of twisted roots and filled with rocks and stones on top to actually look like a constructed bridge! The road to Mawlynnong was narrow and green on both sides. The smaller roads within the village were made of concrete. The roads were very clean and every bit of the road was all-weather.



Energy source:

For electric energy, every house has separate solar plate installed to harvest clean energy. The alternative energy resource generation has made this village self-reliant for their gross energy consumption. This clean energy development reduces the load over the conventional electricity supply. The Solar Energy generation Programme is being run in association with Donton Solar House East Khasi Hills. The programme is sponsored by Power System Operation Corporation Ltd in collaboration with The Energy Research Institute, TERI. Like most well-lit and maintained cities, there are solar street lamps alongside the roads. In respect of fuel energy to prepare food they collect fuel-logs from jungle (plate 54).

Medical facility:

That is still a problem. They have to travel at least two hours to the nearest medical facility.

Folktale:

A story of a couple who decided to have their marriage ceremony in the jungles of this region, somewhere. In their reception they were sort of attacked by a large herd of butterflies whose wing spans were larger than a handfan. The guests in their reception had a feast of eyes to see the vibrant colors all over the place.

Caste:

In Mawlynnong village, most of the village population is from Schedule Tribe (ST) and constitutes 96.86 % of total population in Mawlynnong village. There is no population of Schedule Caste (SC) in Mawlynnong village of East Khasi Hills.

Property:

The inheritance of property is from the mother to the daughters. Often, it is the youngest daughter who inherits the house. This is because she is the one who has to take care of the parents. It is also up to her to keep up with the tradition of the family for its own well-being. The other daughters also inherit a part of the property. But they have to leave the house when they get married. Even though the youngest daughter may become the owner of the house, she cannot do what she pleases. She cannot sell the family land without the permission of uncles, brothers, sister and other relatives.

Game:

Hear the unmistakable sound of a football match (which is well worth watching, the standard of play is very good). I saw group of enthusiastic boys play on a self-made roller and an enormous board are bearing the name of the village. Three different games I observed during my survey like football in house arena (plate 56), cricket on road (plate 57) and marvel game in front of school (plate 55).

Plate 35: Khan children are busy in marble game.



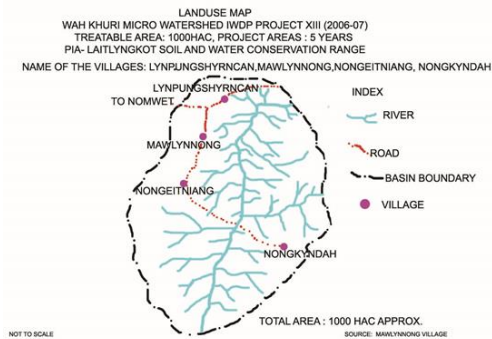
Plate 36: Khan children are busy in football game.



Plate 37: Khan children are busy in cricket game.



Fresh water availability (land- water management):



Map 4

While the supply of clean water and sanitation is a huge problem in India's teeming cities, it is an even bigger challenge for the authorities in the country's villages where these facilities are almost non-existent. The village is not only clean and green but also a model of sustainable environmental sanitation and drinking water. Just before reaching the village, along the slope of the hill, PHED, Meghalaya, has installed a water treatment plant for ensuring safe drinking water, with a 24x7 zero energy water supply system. In order to ensure the supply of safe and potable water supply to the habitations of Mawlynnong, a gravity-enabled water supply scheme was conceived by tapping water from the Wahniriang. Stream, which is about 5.50 km from the village. The raw water is collected by constructing an RCC weir across the stream and then conveyed through a gravity main of 65 mm diameter GI pipe for a distance of 5,570 m up to the treatment plant, installed in close proximity of the village. Water flows from the source through a pipe to a sedimentation tank of 2.5 m length, 1.2 m breadth and 1.5 m height. From the sedimentation tank, after an initial settling of impurities, water flows to a slow sand filter tank of 4 m length and 2.5 m breadth. Through layers of sand and pebbles, water gets treated and flows to the reservoir of 2 m length, 2 m breadth and 1.7 m height to store 4,000

liters. From the reservoir water is supplied 24x7 to the village along a natural hilly slope by gravitational force, without consuming electricity, through 22 standposts, totally free of cost. At the entry point of the village, a tank of 1.5 x 1.5 x 1.5 m of 2,000 liters is erected for the storage and supply of an equitable amount of drinking water to all corners of the village. An amount of `43 lakh was sanctioned for the single village scheme with a design of 40 lpcd. However, 70 lpcd is being provided, as informed by the SDO. Though household (HH) supply has not been provided, households draw a line from standposts and pipes. PHED has provided taps in the standposts, but the villagers do not have taps, thereby wasting water. This requires an awareness generation campaign. The village has 80 households, out of which 29 HHs are below poverty line (BPL) and the rest are above poverty line (APL). Out of the total BPL HHs, 20 were provided an incentive of `1,500 and the rest had their own toilets. In 2007, an amount of `30,000 was allocated for 20 HHs. For Mawlynnongm CNI UP schools, two units were provided in 2009 at the cost of `40,000.



Plate 59: Researcher indicating the bamboo basket which is used here to store wastes.



Plate 60: solid waste manure production in village

Formal Education:

The travel magazine Discover India declared the village as the cleanest in Asia in 2003, and the cleanest in India in 2005. The villagers here say that lessons in hygiene start in school so that children can be taught from an early age how to keep their surroundings clean and green. The village presently has two Lower Primary school (Nursery to Class IV), one Upper Primary school (Class V to Class VIII) and one Anganwadi Center and all have durable, clean toilets and drinking water with tanks. The literacy rate is 100%. The village with cent

percent literacy is conscious and they are spreading the message of conservation and protection of the environment.



Plate 58: Upper primary school in Mawlylong village.

The primary school, which is English and Khasi medium, has no dropouts. Mawlynnong village has higher literacy rate compared to Meghalaya. In 2011, literacy rate of Mawlynnong village was 93.71 % compared to 74.43 % of Meghalaya. In Mawlynnong Male literacy stands at 92.99 % while female literacy rate was 94.35 %. Their education stressed upon on organic farming, civic sense and protecting the environment. School maintain their systematic holidays like: Winter holiday (45 days), presbytery meeting (1 day), synod meeting (1 day), Good Friday(1 day), eastern Monday (1 day), independence day (1 day), puja holiday (7 days), diwali (1 day) Wangala festival (1 day), Song Kutsnem (1 day), Winter holiday (60 days), Unitarian day, Shad Wongkrem, Shadsuk Mynsiem Local residents pleasure themselves in growing different flowers around their houses to harmonize the beauty of their tiny cottages. That means an aesthetic sense is doing here. The aesthetic curriculum must include an awareness and sensitivity toward many environments - physical, psychological, spiritual, and social. The present curriculum emphasizes the primacy of experience, the merging of form and content, the recursion and convergence of time, the celebration of the self-conscious individual, and the understanding of the phenomenological experience. Aesthetic media is used to enhance the curriculum and encourage self-expression and reflection; in addition, it encourages critical thinking and brings to light many social injustices. Village cleaning, poetry, visual images, music, dance, drama, work education and literature are vehicles for engendering the shake to the unconscious that leads to the

autobiographical narrative. It is important to address the issue that schools want to prepare students to be successful citizens; they do not forget that it is just as important to help students become human beings who are able to enjoy the existence of beauty around the world. The present education of village demands awareness of the environment and openness to the deep ecology of learning. Students are able to learn how to perceive the world in a different way and that language and communication goes beyond being able to speak. They know that the art of aesthetic expression, learning of environment education, implication of environment education in practical way has infinite resources, and by using the aesthetic curriculum, Khasi educators are providing students with the opportunity to enter a world full of aesthetic learning. Their concern with education goes beyond schooling; environment education is a lifelong process of which schooling is only a small part. Schooling opens the doors to the world of formal environment education learning both in curricular and co-curricular way. The environment education system in Mawlynnong village is called as aesthetic by researcher because it has deep ecological sense to conserve their nature, environment, beauty of village, economy, eco-tourism, development, and parallel to conserve their historical indigenous identities. Though they are modernized in different angles but they proved they are careful about their indigenous knowledge, culture, community management, cleanness identity, bio-engineering, ecology etc. Through the formal environment education system they are nourishing their cleanness education in curriculum way, on the other hand maintaining cleanness education in practical and co-curricular activities way through the cleaning of village-site in every Friday. So from the formal education system people are getting cleanness education both theoretical and practical way. Moreover village community is giving their deep intension on cleaning of village and provided lot of instructional hording both for Khasi and tourist. It is an example of informal cleanness education or environment education for us. So in this way both formal and informal education has same target i.e. to maintain their village cleanness. The informal education which is delivered from houses, community hall or from age-old persons of village is the source of social education for villagers

and which is related with the same aim of formal education. The sign of informal education is followed in this village every site. An aesthetic sense is attached here. For example; Khasi people in this village attached lots of instructions board with trees, use bamboo basket at every corner of path to collect wastes (plate 59), arrange specific space in house arena to conserve the waste items to produce manure, the places of ecotourism in village, the cleanness- all these are the reflection of aesthetic sense of village dwellers. Nature is attached with their civilization. The hand bell to start the classes is hanging from trees. It is another example of their aesthetic sense. In this way formal and informal education has been assimilated in one village.

Table 3: Schools in Mawlynnong village

Class level	Estd.	Total Teachers		Total Students
		Male	Female	
Ribnians Chillason Memorial S.S.A. Lower Primary School		2; name: Rishot Khongthourem, Head Master :Kephrim Kharlatang		55
Primary Olingsingh Memorial L.P. School (Nursery to Class IV)	1996	2 (1 permanent, 1 contract)	1 (name : Habmen Khoyselay)	40
C.N.I. Upper Primary School (Class V to Class VIII)	2005	3	1	41
Mawlynnong Anganwadi centre				
Source: Field Survey, 2015.				

V. Conclusion

The flash you enter Mawlynnong, a huge billboard welcomes you with the caption 'Welcome to Mawlynnong – God's Own Garden' and at the same time you also get to read a list of do's and don'ts on how to keep the village clean. These do's and don'ts are for everyone: the locals as well as the visitors. Each and every individual residing here, including the old and the children, all are responsible to keep the village clean. It is a joint endeavor by everyone and maybe that is the reason it has become a heritage site today.



Plate 61: Khasi women are engaged to collect the waste items from the corner of village-road.

Inhabited by people belonging to the Khasi tribe, I was fascinated by Mawlynnong's cleanliness and aesthetic beauty. A walk around the village will help us understand how a small initiative from a small community can help in keeping our environment clean and green. The roads and pathways are whiny clean. There are bins (*Thapa* -local name) everywhere to make sure you don't litter this abode. Mawlynnong is over hundred years old. Keeping the surrounding environment clean is an age old tradition. Local residents here grow different flowers around their houses to complement the beauty of their tiny cottages. A dustbin made out of bamboo is found all along the village. Everyone makes it a point that dust and waste are not thrown everywhere. All the waste from the dustbin is collected and kept in a pit, which the villagers use as manure. Mawlynnong is an environmentally conscious khasi community of about all families who take turns in maintaining the roads, weeding, sweeping and cleaning. Khasi women have this mania with cleanliness (plate 61). They are hanging out clothes to dry or sweeping their yards with the soft brooms. A question is raised among people like: How does this village have such a Utopian look? The village council imposes a fine on anyone littering or destroying trees. Children are taught to keep their surroundings clean at an early age. Sustainability, environmentally-friendly, recycling are now modern buzzwords, the Khasi people have lived their lives for centuries in perfect harmony with nature. It is a bridge that is used to cross tormenting rivers during the monsoon, but the incredibleness lies in it being alive – as it is made by joining and networking the roots of a living fig tree over a span of many decades and is used mainly by the future generations. And to think about it –

an ideal society would be where the citizens have a sense of responsibility towards ensuring the future generation of people not only have a safe life, but also a better life. Keeping the village clean has been an age-old practice where in each and every person from Mawlynnong takes responsibility for their village sanitation. It is a common sight to see villagers sweeping the roads, picking up dried leaves and throwing garbage in the cute hand-made bamboo dustbins. These bins can be found, placed at every nook and corner of the village.

Children are taught to collect litter at an early age and regular inspections are carried out by village council on sanitation facilities in each house. True to his words, cleanliness seemed like a way of life for villagers here. A worthy feature of Mawlynnong is that it maintains a perfect balance between age-old identities and modern amenities. The villagers have not scarified tradition to suit the demands of tourism. In fact, it can be seen as the perfect example of eco-tourism. Enjoy a slice of Khasi life and stay in the bamboo guest houses made in traditional Khasi style. You can also stay with one of the village families and enjoy Khasi hospitality. Relish a hearty Khasi meal in one of the food stalls in the village. Planting of tress is a regular scenario in the village. The folks enjoy plentiful of fruits and vegetables grown in the forests of the village. The aesthetic relationship between human and environment is present here; a paradigm shift from a rural habitat to an eco-tourism heaven of the continent, evolving a dynamic rural entrepreneurship mindset, extracting natural resources as livelihood, and the preserving ecosystem and its biodiversity as prosperity engine. The village has a zero litter policy. All the rubbish is dumped in to compost pits and polythene is completely banned. The living Root Bridge symbolized a living example of sustainable development.

Mawlynnong is not a very rich village, nor are the people of the village highly educated. But they have very high social education and their basics regarding social civilized values are very strong. They are socially united and there upbringing is clean. Village people of this wonder village do not do extraordinary things, but they do ordinary things in an extraordinary way. This is the specialty of the people of Mawlynnong. The villagers take efforts to plant trees to ensure that the virgin forest is kept intact and also replenished. A

valuable dissection of the issues concerning the interface of "public" and "community" work. It is an enlightening analysis of approaches and attitudes in such geographically distant locations, with such a wide range of educational experiences and aesthetic results. No other book so richly brings together detailed descriptions and captivating images of community-based projects that demonstrate the relationship between making environmental art, creating aesthetic environment education experiences and embodying the essence of place.

Community management is very much important for Mawlynnong's life. The informal education for environment has come from community instructions, which is the production of community hall. After getting the cleanness village prestige, village community has given their more importance on community management. One community hall was constructed by B.D.O Pynursla C & RD block under the scheme (M.L.A.) of 1996-97-98-99-2000 and C.M. scheme of 2001-02, which was inaugurated by Shri K.K. Dkhar on 8th March, 2006 in presence of Shri K.K. Tangsong, Chairman of Pynursla C & RD Block. During my survey I observed that the community hall was being progressed with two storied. Under the management instruction of village community Khasi dwellers prepared a specific zone in their houses where they deposit the waste leaves of trees or plants to prepare manure (plate 60). The manure producing space is bounded by bamboo boundary. Actually cleanness is the part of their life. And in every side their works bear the essence of aesthetic concept. When you will visit in this village you can see lots of community instruction here and there. They attached the instruction with tree and their writing is based on mainly Khasi and English both. To conserve some places from tourist they give some caution like 'Wat leit Sha ah' (a Khasi language is indicating to restrict the movement of people in this way because of conservation of drinking water is conserving in this way). These types of instructions boards look like very beautiful for village and help to protect their village beauty. In balancing rock zone the aesthetic cleanness informal education is found. An age-old Khasi person is always engaged his time to collect the fallen leaves and store these in tin box. I knew that on the basis of his age he is engaged in this light but most important work of his village. He knows the resource of his village so he is giving his

time to conserve the resource. Sanitation and drainage cleanness both are the root of the aesthetic environment of this village. In every houses both drainage and sanitation system are very good. Still now they are preparing good sanitation with the help of scientific way. The drainage system highlights their cleanness view, for example, the cleanness education is everywhere in their life, even the drain is very clean here. It is amazing for any researcher that in most cases drain is dirty because it is used to channelize the dirty waste items from household but the drain of Mawlynnong is differ from other. In this way everybody can seem that ho they are conscious about their waste items and cleanness.

Another example of aesthetic management is found here. I observed a specific wood structure is used by male Khasi to carry 12 bricks in one trip for construction work. When it is not used to carry bricks they use it to be a seating place. For example in plate number 92 you can see a wooden structure, once which was used for bricks transportation but no is placed at tree trunk as for seating place. So it is the way of community management or reuse of product.

They have some traditional knowledge to manage environment. They burn the forest land, sometimes to make an agricultural land or sometime to clean the ground level of forest. Due to the eco-tourism development recently lot of tourists have come here and village people are known that the side of path have to clean for good accessibility of tourism. Thus village community is concern about to give the walking feasibility for tourist.

Village community is always trying to conserve their indigenous cultures and to conserve these they used lot of warning rules for all. One of the example has been represent here from the place of Natural Root Bridge "1.Do not inflict any injury to the tree be it by cutting or plucking its roots and stems; 2. Do not litter this spot and its surroundings; 3. Do not consume any intoxicating drinks here; 4. Do not make this spot a place of profits. Violators will be prosecuted as per laws prevailing the village"- By order Dorbar Shhong Nohwet, Mawlynnong village.

There are natural stone basins with depressions in front of many homes to collect rainwater. The village was dotted with small houses each sporting a colourful neat garden. Clean

concrete walkways and beautiful flowerbeds all along marked the village that is home to 87 Khasi households. Interestingly, there were no fences between the houses and huts. There is a small tea stall at the entrance of the village. Every home has separate structure for rain-water harvesting. Water conservation is being adopted by all the villagers.



The Khasis are also known for their worship of nature and conservation of forests, where the people have not been allowed to pluck any leaves or cut any branches for centuries. If anyone takes something from here, he has to clean the whole village to atone for his 'sins'.

Large crowds of visitors have been thronging to the village curious to find out why Mawlynnong has earned the reputation for being arguably the cleanest and best educated in India - all its residents can read and write and each house has a toilet. That is no mean achievement in a country that is still struggling to educate its population and address basic water and sanitation issues. Mawlynnong is much loved by its inhabitants who work hard to keep it clean. Every person has access to a toilet. While in most rural villages in India, there are no toilets available and no proper sanitation facilities; Mawlynnong is one such village in India where every household has one attached toilet. The village with cent per cent literacy is a very conscious one and the villagers are also engaged in spreading the message of conservation and protection of the forests. Trees of native species are planted to ensure that the virgin forest is kept intact and is replenished. The villagers keep their surroundings clean by voluntarily performing all the civic duties such as sweeping the roads and lanes, watering the plants in public area and cleaning the drains. This village is over hundred years old and people residing in this village have

been maintaining this sense of cleanliness right from the time of their ancestors. The bathrooms were half open.

It is five in the morning and pouring with rain. But that does not prevent a group of volunteers in the village from rising early to sweep the roads. It is a process that is repeated several times a day. Some cleaners have been hired by the village council to sweep the roads - but many villagers take turns to make sure they are swept several times a day because it is not possible to pay so many people. The streets are all dotted with dustbins made of bamboo. Every piece of litter and almost every leaf that has fallen from a tree are immediately discarded. Plastic bags are completely banned and all waste disposals are environmentally friendly. Rubbish is thrown into a pit dug in a forest near the village where it is left to turn into compost. The waste is collected in the dustbins made of bamboo, directed to a pit and then used as manure.

Village age-old persons are always devoting their time to clean their houses. They collect all the waste leaves from their courtier and deposit these at a fixed manure producing place. During my survey I observed one age-old woman was busy to collect the waste items from her house arena with the help of brooming. Not only age-old person I saw 5-10 aged girls were engaged to collect the waste items from roadside.

The Sky Walk is a 'machaan' or tree observatory, which rises 80 feet above the ground. The Sky Walk provides a panoramic view of the lush green village and its enchanting surroundings. The people of this village put everything to an eco-friendly use. Even the garbage is collected in special bamboo dustbins and then transferred to pits to be put to use as manure later. There is no better place than this to witness the harmony between man and nature. Mawlynnong is home to awe-inspiring 'living root bridges', which are bridges across streams, naturally made by the roots of huge trees. Take a walk across these bridges and feel the nature growing and breathing beneath your feet.

Mawlynnong's reputation for cleanliness has even earned it a place on the Asia's tourism map. Hundreds of visitors from all over India now visit the village throughout the year. Most of those visitors are impressed with what they see. For the villagers, cleanliness is next to Godliness. The captivating view of the forests, bamboo houses and lush green

surrounding will keep you mesmerize for days and months. It has so much of warmth in itself that one can easily adapt to the surroundings here and might even think of settling down here. Mawlynnong has limited accommodation to offer its visitors. All they have is a cozy tree house in the village. People visiting Mawlynnong need to book well in advance and inform the village headman. There are home-stays operated by locals at Mawlynnong. The room is a cute little hut built on a tree with a window facing a patch of wilderness. The houses, entirely made of bamboo, had two cozy rooms on both side and a central area. Outside was a machan which looked onto the jungle and a small waterfall. The machan was suspended at least 80 to 100 feet in the air, supported and constructed by bamboo on stilts. Connecting the verandah to the first machan, was a narrow bamboo bridge. Staying in a tree house like this one was indeed a childhood dream come true. The rooms had comfortable double beds also made of bamboo, clean linen and blankets, mosquito-nets and squeaky clean bathrooms. Despite their daily schedule of farming and cultivating broomsticks, have worked hard to earn this distinction. The hotels in the village do not serve any ready-made dish, they needed to be ordered. Being an eco-tourism destination the role of local inhabitants is significantly comprehensive. The village-rooms adorned with beautifully crafted with bamboo material even heightened it. In home-stay there was rice, the staple food, and traditional non-vegetarian dishes. As an advanced tourist destination, there is separate sanitation, and separate guest accommodations are created as they are aware of the fact that their economy is by and large dependent on the revenues generated from tourism. So each home provides separate accommodation with fooding and lodging to the tourists who wish to stay there for some days. Over the period of time, the village was developed as a sustainable Eco-Tourism destination. The villagers themselves have enhanced their capabilities to utilize the potential values as a key to the rural development. Being a 100% literate village, they have adopted an eco-friendly sustainable simple habit to generate global travelers. The villagers have explored and built tourist attractions while ensuring that the ecosystem of the place remains intact. The parameters of cleanliness of the village comprise of harnessing clean energy, restoring, harvesting and conserving water, no use of plastics, use of

bamboo made dust bin, eco-friendly homes, eco-friendly discipline and lifestyle to conserve and protect the forest. If we adopt such model in other part of remote rural and tribal habitats, we won't only move forward to attain economic prosperity but we would adopt such a sustainable model to preserve and sustain our ecosystem. This surely also is a measure to counter the adversity of Global Climate Change as well. *The Young Khasi girl selling fruit to the occasional visitors to the living root bridge.* Village has a reserved parking place for the tourists, in front of the village community hall. Khasi community is always trying to maintain their cleanness identity. At the heart of the village where lots of tourist are coming and parking their vehicles, village community highlighted their instructions to save their aesthetic village. They present their community instructions both in English and Khasi language on signboard. This instruction is act as a non formal education mode to clean the village. Thus formal cleanness education from schools and informal community instructions based education for all (both village dwellers and tourists) provide us an aesthetic cleanness village.

REFERENCES:

- Borah, Bikash Jyoti (November 16, 2011). Did you know: The Cleanest Village in Asia is in India? *The Better India*. Pandya, Mamata. (March,2000).Teacher Education for Environmental Education in India. Paper presented at the 3rd UNESCO, Tokyo. Centre for environment education.
- Positive news, happy stories. New Delhi Office: C-62 Community Centre, Janakpuri New Delhi-58(India).
- Phukan, Rumani Saikia. (September 17, 2014). What Makes Mawlynnong Village Different From Others?
- Raymond, Kharmujai. (Aug 21, 2014).Learning from Meghalaya village to keep India clean. *The Economic Times*. **IANS**.
- Ranja, Ilica. Jun, 2013 . Mawlynnong in Meghalaya. *Asia's Cleanest Village*. CFO CONNECT. P.41-43.
- Sonowal, C.J. (2009).Environmental Education in Schools: The Indian Scenario. *Kamla-Raj* 2009. *J Hum Ecol*, 28(1):15-36 (2009)
- Teidor Lyngdoh and G. Sridhar. Mawlynnong – Asia's Cleanest Village- Rural Tourism Vs Tragedy of Commons

BIBLIOGRAPHY:

- Barrett, F. J. (2000). Cultivating an aesthetic of unfolding: Jazz improvisation as a self-organizing system. In S. Linstead & H. Hopfl (Eds.), *The aesthetics of organization* (pp. 228-245). London: Sage.
- Bharat. A newsletter jointly produced bt WSP and Ministry of Drinking

- Water and Sanitation (Rajiv Das, Tapan Kumar. Asia's Cleanest Village and God's Own Garden. *A quarterly newsletter on water and sanitation in India*. Swajal nirmal bharat. Vol 1 Issue 3
- Centre for Environment Education, Greening Formal Education: Concerns, Efforts and Future Directions. Preliminary Report, Ahmedabad, India, 1998.
- Centre for Environment Education, Environmental Education in India, A Report, Ahmedabad, India, 1998.
- Chhaya, M.P. (2015). Frank environmental education, class 5, prescribed by Meghalaya board of school education. Frank bros. & co. Chennai.
- Gamwell, P. (2005). Intermediate students' experiences with an arts-based unit: An action research. *Canadian Journal of Education*, vol. 28, pp. 359-383. (Gandhi National Drinking Water Mission), Government of India, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi 110 003, vol.1. Issue 3. Report: Dr. Tapan Kumar Das. P.1-3.
- Langstieh B.T., "Genetic diversity and relationships among the tribes of Meghalaya compared to other Indian and Continental populations". *Human Biology*. Aug 2004;76(4):569-90. Singh, Jyotsna. (25 September 2009). BBC News on "India's 'green and clean' village".
- Irwin, R. L. (2003). Toward an aesthetic of unfolding in/sights through curriculum. *Journal of the Canadian Association for Curriculum Studies*, 1(2),
- Kindler, A.M. (2004). Introduction: Development and learning in art. In Eisner, E.W. & Day, M.D. *Handbook of research and policy in art education* (pp. 227-232). Mahwah, NJ: Lawrence Erlbaum Associates.
- Kliebard, Herbert. M. (1992a). *Forgiving the American Curriculum: Essays in Curriculum History and Theory*. Boston: Routledge & Kegan Paul.
- Joshua Project - Khasi of Bangladesh Ethnic People Profile. Journal of the Asiatic Society of Bengal, Volume 71, Part 3 - By Asiatic Society (Calcutta, India), Asiatic Society of Bengal – page 63
- M. J. Ravindranath, Environmental Education in Teacher Education, a paper, 1999, Centre for Environment Education
- Meghalaya Travel guide book. Produced by The directorate of tourism, Govt. of Meghalaya, Shilong
- Nagaraja, K.S. (1985). Khasi - A Descriptive Analysis. Poona: Deccan College Postgraduate Research Institute.
- Nordhoff, Sebastian; Hammarström, Harald; Forkel, Robert; Haspelmath, Martin, eds. (2013). "Khasi". *Glottolog* 2.2. Leipzig: Max Planck Institute for Evolutionary Anthropology.
- Pryse, William. 1855. An Introduction to The Khasi Language. (Reproduced 1988)
- Rabel, Lili. 1961. Khasi, a language of Assam. Baton Rouge, La: Louisiana State Press.
- Rabel-Heymann. 1977. Gender in Khasi nouns. *Journal of Mon-Khmer Studies* 6:247-272
- Roberts, H. 1891. A grammar of the Khasi language for the use of schools, native students, officers and English residents. London : Kegan Paul, Trench, Trübner.
- 'See our World'-book for class four. 2008. Sunflower publishers Pvt. Ltd. Tura: Meghalaya.
- Sharma, Rajendra (2015). Frank environmental education, class 7, prescribed by Meghalaya board of school education. Frank bros. & co. Chennai.
- Sharma, Rajendra (2015). Frank environmental education, class 6, prescribed by Meghalaya board of school education. Frank bros. & co. Chennai.

Tapas Pal- Khasi Tribe and their Socio-Culture geography: A Study on Asia's Cleanest Village Mawlynnong

- Sharma, Rajendra (2015). Frank environmental education, class 8, prescribed by Meghalaya board of school education. Frank bros. & co. Chennai.
- Singh, Nissor. 1906. Khasi-English dictionary. Shillong: Eastern Bengal and Assam State Secretariat Press.
- Slattery, P. (2006). *Curriculum development in the postmodern era, 2nd. Ed.* New York: Routledge.
- Slattery, P. (2011). Glossary of Terms. (unpublished document). Available on Blackboard.
- Smith, M. L. & Rottenberg, C. (1991), Unintended consequences of external testing in elementary schools. *Educational Measurement: Issues and Practice*, 10: 7–11.
- Springgay, S. (2010). Knitting as an aesthetic of civic engagement: Reconceptualizing feminist pedagogy through touch. *Feminist Teacher*, 20(2), 111-123.
- "The Khasi language is no longer in danger". *United Nations Educational, Scientific and Cultural Organization*. 2012-06-04. Retrieved 2012-09-29.

Webliography:

- Bulmer, Marge, nd. Edward Kienholtz. Retrieved from <http://www.artscenecal.com/ArticlesFile/Archive/Articles1996/Articles0796/EKienholtz.html> Swajal Nirmal
- Basquait, Jean-Michel (1984). *Untitled (Skull)*. Retrieved from http://upload.wikimedia.org/wikipedia/en/e/e1/U...C_1984.jpg Basquait, Jean-Michel (1982). *Jack Johnson*.
- "Cherrapunjee". www.cherrapunjee.com. Retrieved 2010-05-07.
- criticism and the art of education. *The Encyclopaedia of Informal Education*. Retrieved from www.infed.org/thinkers/eisner.htm. Basquait, Jean-Michel (1983). *La Columbia*. Retrieved from http://www.brooklynpaper.com/stories/28/16/28_1...quiat.html
- Jitaditya Narzary. Dec 04, 2014 . Mawlynnong: Rustic Idyll <http://www.freepressjournal.in/mawlynnong-rustic-idyll/#sthash.RafFh626.dpuf>
- Jackson Pollock.com. *Jackson Pollock*. Retrieved November 15, 2011, from <http://www.jacksonpollock.com/index.php> Retrieved from <http://www.soho-art.com/cgi-bin/shop/shop.pl?fi...ction=form> To see about Cleanliness taught in schools: <http://www.eai.in/green-communities/mawlynnong>
- Kienholz Biography. *Edward and Nancy Kienholz Portrait*. Retrieved November 15, 2011, from http://www.lalouver.com/html/kienholz_bio.html Smith, M. K. (2005) Elliot W. Eisner, connoisseurship, U.S. Department of Education. (2002). *Learning in the arts and student academic and social development*. Washington, DC: U.S. Government Printing Office. doi: 10.1111/j.1745-3992.1991.tb00210.x To see about Asia's cleanest village <http://www.nblog.in/2011/06/mawlynnong-cleanest-village-of-asia.html>
- Vaivhav Todi. October 15, 2014 by The Land Out There. The cleanest village in Asia: Mawlynnong Meghalaya. To see about importance of ecotourism of Mawlynnong village <http://megtourism.gov.in/tours/NaklairTours-Mawlynnong.pdf>
- The Estate of Jean-Michel Basquiat. (2010). *Jean-Michel Basquiat*. Retrieved from <http://basquiat.com/>
- The Solomon R. Guggenheim Foundation. (2011). *Anselm Kiefer*. Retrieved from http://www.guggenheim.org/new-york/collections/collection-online/show-full/bio/?artist_name=Anselm%20Kiefer&page=1&f=Name&cr=1 To see about South Asia's news related Mawlynnong village http://news.bbc.co.uk/2/hi/south_asia/8259789.stm

Tapas Pal- Khasi Tribe and their Socio-Culture geography: A Study on Asia's Cleanest Village Mawlynnong

New York Times. at: <http://slugpost.com/2014/03/13/mawlynnong-cleanest-village-india/#sthash.RIekLhwV.dpuf>

To see about sanitation of Mawlynnong village <http://sanitationupdates.wordpress.com/2009/09/26/indias-green-and-clean-village/>
To see about <http://www.tuisligh.com/india/mawlynnong-the-cleanest-village-in-asia/>

Pollock, Jackson. (1950). *Autumn Rhythm*. Retrieved from <http://www.metmuseum.org/toah/works-of-art/57.92>To see about <http://www.ekitli.org/2011/05/11/the-cleanest-village-in-asia-is-in-india/>

Jyotsna Singh . India's 'green and clean' village. The village has set a standard of cleanliness much admired throughout India. BBC News, Meghalaya 25 September 2009

Resources for the independent traveler. 11/7/2011. <http://humanplanet.com/timothyallen/2011/03/living-root-bridges-bbc-human-planet/>

Mawlynnong – life in tune with nature. By Yahoo! India Travel. Wed 6 Feb, 2013 4:13

Yahoo Lifestyle/Kalpna Sunder - The bamboo-and-cane Mawlynnong guest house.

The mawlynnong trek – II. 8th - 10th November 2013 - A report by Aparna Khanikar (Award Leader, Maria's Public School, Guwahati)

Map 2 from wikimapia

Map 4 from http://en.wikipedia.org/wiki/Khasi_people#/media/File:1947-Khasi_states.png

United Nations Educational, Scientific and Cultural Organization., 2014a. Ecological Sciences for Sustainable Development. Available at: <http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/capacity-building-and-partnerships/educational-materials/>

United Nations Educational, Scientific and Cultural Organization., 2014b. Shaping the Future We Want: UN Decade of Education for Sustainable Development. Paris: UNESCO. Available at: <http://unesdoc.unesco.org/images/0023/002301/230171e.pdf>

<http://www.newindianexpress.com/states/kerala/Seminar-on-Cleanliness-and-Religions/2014/01/02/article1977875.ece>

Photo courtesy:

Meghalaya Travel guide book. Produced by The directorate of tourism, Govt. of Meghalaya, Shillong. p.5

Calendar published from the Epiphany society for rural uplift, Mawlynnong, concept & creative –infocus production/design & layout-reginald sunn, 2015.

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Kakra photo Chinneo lhungdim. Off the beaten path in India: The Mawlynnong Village from

<http://www.gotsaga.com/detailsaga/off-the-beaten-path-in-india-the-mawlynnong-village/5460>

Plate 86 from <http://blog.thomascook.in/mawlynnong-the-cleanest-village-in-asia/>