As the British entered the Mizo hills (part of the Indo-Burmese range of hills, then known as the Lushai hills) to chase the headhunting tribal raiders and try to gain control over them by securing a foothold in the heart of the hills at Aizawl, they witnessed an amazing ecological phenomenon: a severe famine apparently caused by rats. The Mizo hills are covered extensively by various species of bamboo, which periodically rot, flower and seed. The bamboo seeds appeared to be a delicious food item for jungle rats, which emerged in massive numbers to devour them, and the consumption of bamboo seeds seemed to produce a vast increase in the rodent population. Once the millions of rats had exhausted the bamboo seed, they began to attack the standing crops in the fields. As they devoured the grains the resulting scarcity of food led to massive hardship, starvation and deaths.

THE FAMINES

In the famine of 1881, which was the first to happen under British rule, about 15,000 people perished. In 1912 another famine resulting from the same circumstances took place, affecting a region covering the Mizo hills, Chin hills, Chittagong hills, and the Chin hills falling under Burmese jurisdiction. The Government of Burma organised a great battle against the rodents and destroyed scores of thousands of them. In the Mizo hills, on the initiative of the administration, the tribals set and reset traps in their fields. Individual farmers could traps as many as 500 rats in a single night, and were often seen with basketfuls of dead or flattened rats on their backs, which they had taken out of their long log-traps early in the morning.

The Mizos ate rats. Trapped rats would be dried over the fire and then use as food. But the abundant supply of rats at these times would have diminished their value, moreover, a diet of rats would hardly make up for the loss of rice, which was their staple food. Some of the tribals, who had rice left from the last harvest, struggled to protect it from the invading rats. The unfortunate remainder, who
constituted the majority, would search the forest for roots, jungle yams and other wild produce. Wild sago palm was collected from the forests, dried, pounded and its pith sifted, the powder being made into a kind of dumpling that was wrapped in a leaf and boiled. The resulting food for the family was a very sticky insipid mass, full of gritty particles.

Others ate a kind of wild yam found in the jungle. The plant itself was a creeper. The upper part of its root was inedible, but lower down it changed into a long tuber rich in starch and somewhat resembling a potato in taste. The root was vertical and often very long, so to get out the tuber the tribals frequently had to dig to a great depth in very hard soil. Tragic instances were related of tribals searching for these wild produce to satisfy their hunger. It was reported that the entire forest in many parts of the country was honeycombed with yam pits – most of them four to ten feet deep and large enough to admit the body of a man. One heartbreaking scene is recorded, of a grown up man sitting near one of the holes and crying like a child, because after toiling for hours tracing the roots of a yam he found his way blocked by a huge rock, and therefore he would have to return to his family empty-handed. At another site there was a widow with her baby on her back, working with all her feeble strength to extract the tuber. Often she would become so exhausted that she would lie down to rest, only to find insects crawling all over her – and if she did not get out of the jungle before the dusk, the wolves would devour her.

ANTICIPATION OF FAMINES

The colonial administrators found it interesting that the tribals could correctly predict the next famine from indications in their surroundings. This was on the basis of their past experience. The Mizos had for ages gone through the ravages of the bamboo flowering, and dreaded its impact on their lives. They had observed that there were two distinct varieties of bamboos in their region, which they named as Mau and Thing. The colonial botanists found that the Mau variety was known to European botany as *Melocanna bambu soidef* and the Thing as *Bambusa tulda*. Both these varieties had periodic reproductive blooming; in others words, they rotted, flowered and set their seeds every thirty to fifty years. It was during these times that the devastation described by the Mizos as Tom occurred. With the aid of the Mizo elders the colonial administrators constructed a record of the past famines, and on that basis could predict the approximate years of the impending series of famines. For example,

- *Mautam* 1862
- *Thingtam* 1881
- *Mautam* 1911
- *Thingtam* 1929
On the basis of this calculation, the administrators had made advance preparation for the impending 1929-30 famine. Indeed, by 1925 the signs of bamboo flowering were already visible. This time the administrators had an active ally in combating the natural calamity – the missionaries.

The Baptist Mission Society was one of the first groups of missionaries to arrive in the Mizo hills. They had witnessed the ravages of the 1881 famine, and had been active in reducing the suffering of the people in the famine of 1912. This time they began preparation to counter the natural disaster that the Mizos were about to experience. Rev. J. H. Lorrain of the Baptist Mission post at Lungleh wrote to the Superintendent of Lushai Hills,

I am taking this liberty of writing to you regarding the expected thingtam famine and although I have no connection with the government I trust the expression of my own opinion as to the means which might be employed successfully to counteract the effects of such a visitation will not be unwelcome to one like yourself who has the welfare of the Lushai people so much at heart.9

Lorrain then went on to suggest measures to counter the catastrophe. These were 1) ordering the tribals to save a little grain in rat-proof baskets, and 2) application of Liverpool virus to spread a deadly epidemic amongst the rodents, which would destroy them totally.

The Government appreciated the initiatives of the missionaries but found the measures impracticable on the following grounds: 1) the tribals themselves produced a bare subsistence.10 Most of them did not have a full year’s rice, hence to enforce compulsory saving might create more hardship for them and even provoke reactions. 2) No virus had been found to be effective in controlling rat population in other parts of the country. Moreover, the most deadly and rapid spreading virus, the plague bacillus, had had little effect on the rat population of north and western India during the past 28 years.11 This rendered the application of Liverpool virus out of question. The Superintendent suggested the use of rat-traps and a poison (barium carbonate) instead. The latter would be most effective as well as easy to apply. But the most important task was to reduce the food supply available to the rats: thus the bamboo forests were to be burnt, and standing crops in the fields were to be protected.

THE RAT-BAMBOO CONNECTION

By 1925, the bamboos had started to flower, and signs of fear among the people were visible. Soon there was a massive increase in the number of jungle rats. The people had already begun to destroy them. In December 1924, 45,000 to 50,000
rats were killed in Aizawl subdivision alone.\textsuperscript{12} A war against the rats had begun, in which the people, the administrative machinery and non-governmental agencies like the Church combined to fight the menace.

There was no doubt that the famine was caused by the rats invading the standing crops. What remained a mystery was the rapid multiplication of the rats after they had consumed the bamboo seeds. Alexander Mackenzie wrote in 1884, ‘the famine arose according to the concurrent testimony of all persons concerned, from the depredation of rats. In the previous season bamboos had seeded; the supply of food thus provided caused an immense increase in multiplication of rats’.\textsuperscript{13} There was corroboration of this from missionary witnesses, and like others they were also perplexed by the possible connections between the bamboo seed and the multiplication of rats. The Baptist Mission report stated,

The periodical flowering, seeding and dying down of certain species of bamboo all over these hills was followed last autumn by an enormous increase in the number of jungle rats ... the connection between the flowering of bamboos and invasion of rats is a disputed point, but the theory which seems to be most satisfactory is that the bamboo fruits has the property of making the rats which eat it, extraordinarily prolific. Whatever may have been the cause directly, the bamboos had seeded and the rats begun to increase and swarm everywhere.\textsuperscript{14}

In a letter to the administration, Rev. Lorrain wrote,

It appeared that the rats began to get more than extraordinarily troublesome years before the simultaneous seeding of the raw-thing bamboos but as soon as the seeding was over they increased to such an extent that no human power could save the crops from their depredation.\textsuperscript{15}

Although it was established that bamboo seeds had something to do with the increase in the rat population, no one was sure of the explanation. They felt that perhaps the seeds had some properties that made the rats extraordinarily prolific in terms of reproduction.\textsuperscript{16} Perhaps there was some hormonal change in the rats due to the excessive protein that the bamboo seed contained, enabling the female rat to produce a litter much earlier in age than in normal circumstances.\textsuperscript{17} Others brushed aside this theory, saying that whenever there is an increase in the supply of food it is normal to find an increase in the rat population.\textsuperscript{18} Perhaps rats were migrating from deficit areas to areas of abundance. The third theory was that it was only a visible increase, not a real one. Generally the rats lived in their holes, but with the bamboo flowering they came above ground to eat the delicacy and became more visible to the people. This would be misconstrued by the people as an increase in the number of rats, as they were not used to seeing so many at a time.

The theory that gained most credence was the first one. Although the people, the administration and the Missionaries were firm in their belief of this theory, the administration made no attempt to establish its scientific basis. They concentrated on relief and rehabilitation.
FAMINE RELIEF AND THE IMAGE OF THE RAJ

The Mizo tribals had experienced many such famines, and were used to the hardships, starvation and death that accompany the phenomenon. What they were not used to was being assisted in such times of crisis: this was the difference that the British made to the tribals. Their first taste of British aid was when they began to migrate towards the plains. The tribals would not normally descend to the plains except for raiding purposes or trading, but the hardship due to scarcity of food pushed them down to the plains. In the first batch, about eighty families from the village Kalgom, followed by the eastern Chiefs and then the western Chiefs, migrated to the Dhaleshwari river valley via Jhalnacherra. This caused alarm among the tea labourers of the plains, as they feared the tribals, but the administration apprised them of the situation and calmed them. The distressed tribals were desperately looking for food and livelihood till the famine subsided. They were willing to sell their labour and trade forest products which they had brought along. The administration facilitated their entrepreneurship by temporarily abolishing the duty charged on such products at forest toll stations. They were offered employment in clearing the jungle and felling of trees – jobs to which they were well suited. Within the hills, the administration realised the importance of having a communication network for taking relief to the tribals. So they employed the tribal manpower to construct roads and railways. The missionaries also employed them to construct houses, clear jungle, prepare gardens, etc.

But the problem of food supply still remained. About 18,000 maunds of rice and 2,000 maunds of paddy was exported to the interiors of Mizo hills in 1881-82 alone. During that crisis the total expenditure in famine relief stood at Rs. 2,240. Of this 1,100 was used for the purchase of paddy and rice, and Rs. 1040 for hire of boats to transport the supply. The missionaries and the administration also supplied cooked food to the hungry. Private traders were encouraged to send rice up to the main markets of Tipaimukh on the east and Changsili on the west. They were asked to open their storehouses of rice and paddy, and they were also provided with Frontier Police protection against possible attack from the tribals. The Government itself opened two storehouses at Tipaimukh and Guturmukh; these were not to compete with the private traders, but to act as a reserve. In addition, government officials visited the affected areas. In 1881 Rai Han Charan Bahadur, the Special Extra Assistant Commissioner, accompanied by Mr. Place, Subdivisional Officer of Hailakandi, visited the frontier areas. Bengalee doctors from Silchar and Chittagong were impressed to treat the sick. In 1911-12, W. N. Kennedy of the Lushai hills borrowed a sum of Rs. 80,000 from the British Government to help the Mautam famine victims.

The administration also took initiatives to reduce the spread of the famine. Since invasion of rats was the main cause of the famine two methods were applied to combat their attack. One was to destroy the rats in large numbers. The Government provided the people with rat traps, designed specially on the French
model and further developed by a Dr. Chitre. They also used log traps around the paddy field, and rewards were announced for killing rats. In one night alone farmers trapped about 500 rats in one trap by setting and resetting it. But the destruction of rats in such massive numbers did not seem to make any impact on the exploding rat population.

The other initiative was to encourage the people to save: this came mainly from the missionaries. People made large rice bins with clappers attached to the bed by a string. During the night some member of family who was awake would occasionally pull the string to flap the clapper and make a sound to scare the rats. It worked for a time, but soon the hungry rats got used to the sound and were not afraid any more. Nor did other saving devices work for long, as the tribal economy was basically a subsistence economy, and they hardly had any surplus to save, except for the Chief and his patrons. The Government did not want to antagonise the tribals by making it compulsory to save, but it arranged to see that those who had surplus food shared with those less fortunate. Tribals were employed to descend to Demagiri and bring back sacks of rice to the hills.

Thus the combined efforts of the Colonial administration and the Church were able to relieve the distress of the famine affected people to a considerable extent. Significantly, this effected a metamorphosis of the image of the Raj in the minds of the tribals. The British first came into contact with the tribals of Mizo hills in 1826, when the latter raided the Sylhet plains and perpetrated headhunting and kidnapping. This began a long story of confrontation, warfare and punitive expeditions. When the British annexed the Cachar plains they also confronted the Mizos, who regularly made raids there for purposes of headhunting and kidnapping. After the discovery of tea in Assam there was a rush to acquire foothill lands for starting tea gardens in the Cachar area as well. This threatened the tribals, who feared that soon the Europeans would invade the hills and deprive them of their homeland. Since then they had led a valiant fight against the white men, resisting every advance of the British towards their hills. In fact, they would often attack the plains, loot settlements, kidnap people, and practise headhunting on the British subjects. This was to register their protest and to scare the Europeans from invading the Hills. The white-skinned Europeans were objects of hatred for the Mizos. They were also amazed at the physical look of these newcomers. ‘These enemies [British] are different from other people we have ever seen. They are white as goats. They clothe themselves from head to feet. They cover their feet with leather and we believe they will not able to climb the slopes of the hills’.

The Europeans were also ridiculed for their white skins, as ‘half-cooked’ people. But the same Europeans came across as kind and helpful people during the successive famine-related hardships, as Church records testify:

In many ways we have been able to alleviate the want and distress around us and gratitude of the poor people has been most pleasing to witness. Scores of men and women who had no food to eat have been enabled to go down to Demagiri to a fresh supply of food by the loan of a few pounds of rice apiece. Many others have been kept
from want by being employed in building, road-making, jungle cutting, gardening and other works about the compound. While not a few who have been unable to work have been assisted with gifts of rice. It has been a peculiar privilege to be living in the Lusai hills this year and thus be able to help the people in their hour of need. They have always looked upon us as their friends and at such times as this, the poor especially find our presence a source of comfort and strength for they feel that they come to us in their extremity and be sure of a helping hand.24

The same was true of the administration too. The same report further stated,

Whatever feelings of resentment may have lingered in the hearts of some of these hill people against those who have occupied their country in order to prevent a repetition of their headhunting raids upon the peaceful inhabitants of the plains, this famine must have surely dispelled it. For there are hundreds who would have starved to death this year but for the kindly help rendered by the Government in bringing up thousands of sacks of rice to supply their need.25

This report stated the situation after the second famine under the British rule. Since then, three more famines have stalked the hills of Mizoram. The relief measures provided by the Raj had a profound effect on the overall image of the Raj in the minds of people, who began to look up to the Raj as a kind and merciful system manned by white-skinned Europeans. The administration was paternalistic, and the white men were now addressed as Saab-Pa (white-father), Mirang Bawipa, Mikang Topa or Mirang Topa or Mirang Lalpa, meaning white master, nice white people, or even the white Lord. One British officer, Lewin, was so popular among the Mizos that he was known to the villagers as Thangliana – a Mizo name. While the administration attended to the requirements of the people and their needs, the administrators merged totally with the people, learning their languages and within a short time participating in their festivals, rituals and even their routine social life.

The impact of famine relief on the image of the Raj can be better understood when contrasted with the indifference of the Indian State when a similar famine occurred in 1958. People constantly referred to the benevolence and kindness of the British, and recalled how they were better off during British rule; when their distresses were cared for if natural disasters took place. It may be mentioned that the insurgency in Mizoram started only after the 1958 famine, and that the Mizo National Front which led the secessionist movement was originally a voluntary organisation called the Mizo National Famine Front, formed to co-ordinate famine relief efforts. The lamentation of a Mizo poet after the Indian government launched repression against the Mizos, gives poignant expression to the peoples’ perception of the Raj:

I dare not contemplate this grief of our land
Departed are our civilised white skinned masters
Oh, God who succour the poor, I pray thee
Set the tottering land on its feet once again.26
NOTES

3 Ibid.
4 Ibid.
5 Ibid.
6 Ibid.
7 Ibid.
9 Rev. Lorraine to the Superintendent of Lushai hills, 17 January 1925.
10 J. Needham, Sub divisional Officer, Lungleh to the Superintendent Lushai Hills, 5 February 1925.
11 Report of Col. Hodgson, director of Pasteur Institute, attached to the letter to N. E. Parry, Suptd. Lushai Hills from J. E. Webster, 19 March 1925.
12 N. E. Perry, Suptd. of Lushai hills to the Commissioner Surma Valley and Hill Division, Silchar 19 January 1925.
14 Report for 1912.
15 Lorraine, 1925.
16 Report for 1912.
17 Dr. S. Trivedi, Dept. of Forests, Govt of Arunachal Pradesh and Prof. H. Y. Mohanram, Department of Botany, Delhi university have conducted research on the phenomenon. 
18 Hodgson, 1925.
19 Mackenzie, 1884.
20 Ibid.
21 Ibid.
23 Ibid., p. 116.
24 Report for 1912.
25 Ibid.