

Health problems of Burma.

ASIAN RELATIONS  
CONFERENCE

*March—April 1947*

HEALTH PROBLEMS  
OF BURMA

by  
Maung Sein

GROUP C: ECONOMIC DEVELOPMENT & SOCIAL SERVICES  
TOPIC VI: LABOUR PROBLEMS AND SOCIAL SERVICES

INDIAN COUNCIL OF WORLD AFFAIRS  
NEW DELHI

MAUNG SEIN is a Burmese doctor from Rangoon with an intimate knowledge of conditions of Public Health in Burma.

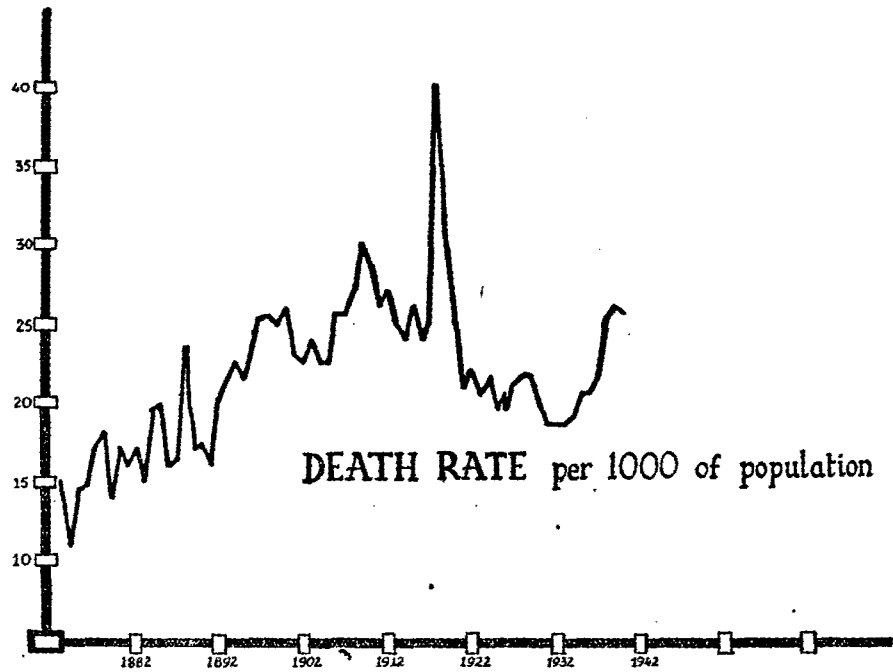
*This paper has been submitted to the Asian Relations Conference by the author.  
The author alone is responsible for statements of fact or opinion in this paper.*

## THE HEALTH PROBLEMS OF BURMA

"Health is a privilege to those who seek it. It cannot be taken for granted, it is not inherent : *it must be earned*. It requires considerable initiative and perseverance to maintain. Many shun this responsibility. Even though it is generally accepted by the masses that many diseases are preventable, illness is still considered an unanticipated incident."

For any nation to thrive, for it to make appreciable progress and headway in economic, social and political fields individuals who constitute it must be fit and be in the best of physical and mental health. Morbidity usually leads to sickness and death causing unhappiness. A healthy energetic community is an asset to a nation, the chief source of its hidden strength. The exact visualisation and proper solution of health problems is of utmost national importance and cannot be over-emphasised especially when a country is striving for its political and economic independence as our country Burma today. Some parts of the country are among the most unhealthy regions of the world. Therefore health problems should receive top-most priority, for time is against us, for with every day the measures are delayed, Anopheles "The Malaria Mosquito" and Treponema Pallidum "The germ of Syphilis" are slowly but surely draining the vitality of the nation and death is taking its daily unnecessary, avoidable, toll.

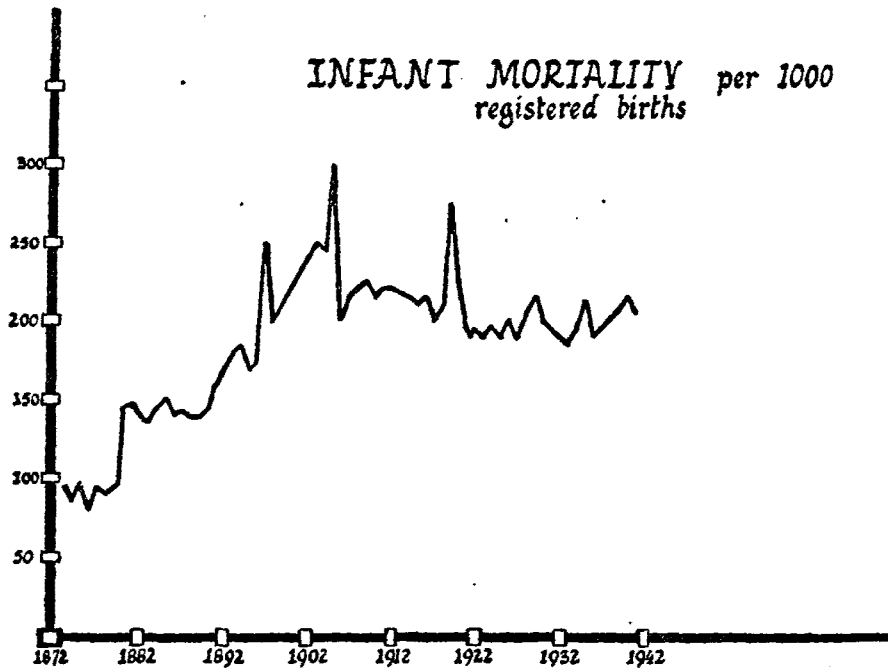
A picture of the conditions of the country would help us to understand the problem. An average Burman, (as in other agricultural countries), spends most of his life in his village. He is brought into the world by the old family folk, or an untrained midwife, or rarely, by a trained midwife whose services are readily utilised when made available. His average income is higher than that of many of his other brethren. The children usually go about bare-footed while the adults of both sexes wear leather or wooden sandals. Due to the mild climate, and to the relative absence of dust and sand as compared to some Middle East countries, he keeps himself fairly clean by means of his daily baths. When he gets sick, he is attended by the village "Sesaya" (Village Doctor) whose art though empirical has some valuable drugs in its Pharmacopoeia. The health and medical services are conspicuous by their absence. The monks "The Phoongyis" in times of need usually look after the sick. The houses are made of wood, bamboo and matting. The buildings are 3 to 4 feet above the ground with good ventilation in the form of two to three windows. Besides this the matting which forms the walls permits the air to permeate through. The fact that the house is above the ground prevents the structure from getting damp and also prevents domestic animals dirtying and contaminating the floor. But unfortunately the huts are not mosquito-proof. There is no definite village planning, although the houses are built in straight lines. This leaves much to be desired as far as village planning is concerned. Due to the better economic conditions and excellent monastery system "by which any needy person can go to the monastery and get a free meal when in need, very few people go hungry. The average Burman is therefore well covered".



DEATH RATE per 1000 of population

The nutrition of the Burmese people is much better than that of people of most other countries. Although the staple diet is rice, Beri-Beri is a rare disease among Burmese, as Colonel Taylor found in his preliminary survey in 1926. The simple reason being the average Burmese diet is generous and varied. A common Burmese meal is made up of a fair amount of hand-pound rice (in villages) or milled rice (in towns), enough to meet his daily energy requirements, and two to three curries, one of which invariably consists of proteins of high biological value, e.g. mutton, chicken or fish. Even the poorest section of the population spend most of their incomes on food. The meal is largely made up of large amounts of raw and boiled vegetables in the form of thin soup (Hingyo). "Ngapi" (fish-paste) which is a national dish and forms the basic ingredient of many a Burmese dish is very rich in calcium and vitamin B & D. Fish is plentiful and cheap in our country because of innumerable creeks in the delta region and tributaries of the Irrawady in Upper Burma. Salt fish which can be kept for long periods is very widely sold all over the country. Poultry and ducks are bred by most villagers. Shoots, tender leaves as those of Tamarind are widely used in the Burmese culinary. Amla (Zeebyuthi-thii) which is very rich in vitamin C is eaten both by the old and young alike. Tea, (mostly without milk and sugar) and Coffee are widely used by all sections of the population, and all the towns and most of the larger villages have Tea shops. Nevertheless the Burmese dietary though better than most of the Eastern countries has room for a great deal of improvement. Much remains to be done as far as infant feeding is concerned. The cause of appalling high mortality rate 203.85 per 1000 (highest in the world) is not far to seek when the feeding of infants is left to mere chance due to absence of skilled advice and proper facilities not only in villages, but even in some of the larger towns. The children are weaned on adult diets which invariably lead to malnourishment. The majority of infant deaths occur not within the first week of life. The infant comes safely through all the hazards of child-birth in spite of the meagre facilities and the unhealthy environment, only to fall prey three weeks later to diarrhoea or Cachexia resulting from faulty nutrition. 81% of all infantile deaths occur at this critical time. Out of every 100 children born, about 19 children will be dead before the age of one month due to causes of which the underlying factor of all is faulty nutrition. Burmans by nature and by upbringing are not very fond of milk, and very few Burmans go in for keeping cows, which is left to the Indian community. It is next to impossible to get clean hygienic milk in Burma, the only meagre supply being the adulterated, badly contaminated milk sold by the Indian milkman. The deficiencies in Burmese nutrition are of proteins in very poor communities, and calcium and vitamins A & B irrespective of the economic status of the bread-winners in the family. Goitre due to deficiency of iodine occurs in the Chin and Northern hill tracts of Burma. Milk must be incorporated into our national diet for its body-building value. Its high contents of proteins and fat soluble vitamins make it an ideal food for both the old and young alike. Our brethren in the villages do not care much for fruits although the varied mild climate of Burma is favourable to the growth of tropical fruits, e.g. mangoes, papayas, melons, Durians, mangosteens, bananas and citrus fruits as oranges and limes. As the Commissioner of Public Health says in one of his reports, the provision of plenty of green vegetables and fruits containing vitamins and minerals in a tropical country like ours should not be difficult. "It looks to me if the above simple facts are brought home to the people and facilities given to act up to it, there will be great im-

INFANT MORTALITY per 1000  
registered births



provement in the health of the nation." Some idea of the present health of the nation may be learnt from the following facts.

The general mortality for Burma per thousand is between 230 to 237, slightly better than India's (236 to 243), but worse than Japan's (175 to 192) and is twice that of U.S.A and three times that of Netherlands, the country with the lowest mortality rate of 85 per 1000. The mortality rate according to age and sex is highest among the females between the ages of 20 to 40 years due to hazards and morbidity associated with child-birth. The mortality according to age declines rapidly from birth reaching its lowest minimum in the age period 10 to 15 years and increases again to its maximum at the end of life, the increase being more gradual than the fall. The birth-rate of Burma is between 17 to 36, the lowest perhaps among all the South-East Asian countries, e.g.

India.....	30	to	34
Philippines.....	32	to	38
Japan.....	29	to	34

Among Burmans it is 36.5 and among foreigners it is lowest among Indian Hindus due to the presence of fewer womenfolk. In Burma the males outnumber the females by a very small margin, the ratio being 104 males to every 100 females. Perhaps no country in the world has such shockingly high infantile mortality rates (deaths under one year per thousand births) as Burma has ranging from 187 to 219 for the last 20 years. It is rather disappointing to note that *infantile mortality in Burma has not declined during the last 20 years*. Even other Asian countries have lower rates :

India.....	162
Ceylon.....	158
Philippines.....	137
Japan.....	106

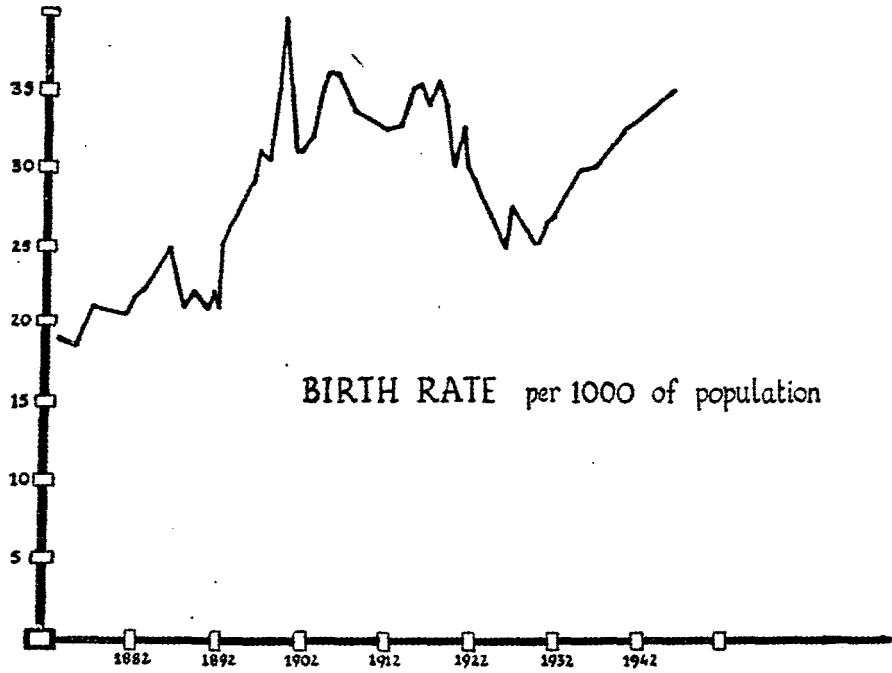
During the first year of life the number of infants who *die every year is four times that occurring in U.S.A.* (50 per 1000) and the West in general and at least *six times that in the country with the lowest mortality rate, i.e. New Zealand* (31 per 1000). The infant mortality constitutes 28.72% of the total mortality. Most of these deaths do not, however, occur during child-birth in spite of the non-existing lying-in facilities offered to the villagers.

Of all infant deaths	12.2%	occur within 1 week
"    "    "	10.22%	"    over 1 week but less than a month,
"    "    "	60 to 80%	"    over 1 month but not exceeding 6 months,
"    "    "	16.73%	"    over 6 months but not exceeding 1 year.*

The population of the country has been during the last 10 years 14,500,000. Of these 12,000,000 stay in regular registration areas, which comprise of 168,848

\* Note :—These figures refer to the normal years upto 1939, after which due to disturbed world conditions and the lack of reliable statistical data, figures for years after 1939 have been ignored.





sq. miles. Of these 10,500,000 stay in rural areas, and only 1,500,000 in urban areas or towns. That means that Burma is primarily a land of villages where the bulk of the nation lives. Besides these 2,500,000 stay mostly in inaccessible villages comprising 114,737 sq. miles where registration of vital statistics is either defective or non-existent. 300,000 deaths occur every year. 60,600 deaths or 38.9% of the total yearly deaths occur from Malaria or its complications. The mortality due to it is, in fact, very much higher but the Headman (in whose hands the collection and registration of vital statistics is left) tends to include most of the fatal cases under the heading "Fevers". This gives an incomplete picture of the havoc caused by Anopheles and Plasmodia for it does not include chronic ill-health and the other diseases, e.g. Tuberculosis, diarrhoea, anaemia to which the person ultimately falls prey to, and to the financial and working hours loss the nation suffers. Out of every 4,000,000 people treated in Government Hospitals in Burma every year, 600,000 are treated for Malaria alone. Such is the magnitude of the ravages caused by this disease. Next to Malaria in magnitude and importance come the Respiratory Diseases which claim 320,000 victims or 8 persons out of every 100 cases. These comprise mainly Pneumonia. Its high mortality rate is due to its occurrence amongst innocent infants who cannot look after themselves and to the non-availability of Chemo-Therapeutical drugs such as Sulfanamides, in villages, brings it to the position of No. 2 Death Killer. Ulcerative Inflammations of the Alimentary tract claim 260,000 victims. This disease ultimately causes malnutrition due to failure of absorption of ingested food. The other important diseases in order of importance are :

Scabies.....	102,840	cases.
Diarrhoea .....	54,067	„
Influenza.....	48,555	„
Amoebic Dysentery.....	24,115	„
Rheumatic Fever.....	17,157	„
Bacillary Dysentery.....	13,146	„
Leprosy.....	11,599	„

The above tables only give one an idea of the diseases that are prevalent in the country. The exact incident cannot be gauged accurately as the proper diagnosis and detection of these diseases can only be done by trained clinicians with proper diagnostic facilities at their disposal, an essential service which is non-existent in our villages, at the moment. In our country at the moment venereal diseases present an important problem. It is impossible to give accurate estimates regarding the prevalence of venereal disease in the country. The general opinion among medical practitioners is that its incidence is very high. As public health statistics only relate to death, they afford no clue, for death is rarely ascribed to Syphilis and Gonorrhoea. The information collected by Child Welfare centres is that a large number of mothers attending the Centres are infected with Syphilis which accounts for a high number of abortions. 2 persons out of every 100 who come to get treatment in hospital are infected with venereal diseases, Syphilis claiming more victims than Gonorrhoea, probably due to its insidious nature. We should not underestimate its killing power especially when one realises the havoc and the maiming

effect that *Treponema Pallidum* causes to cardiac vascular and nervous tissues. The rate for General Paralysis of Insane is higher than in India, and Syphilis forms by far the most important cause of Insanity in Burma. Trachoma though present is not so wide-spread as in India or in Middle East countries. Tuberculosis is conspicuous by the high mortality associated with the pulmonary form which forms the chief bulk of the cases in the country. As Professors Cumming and Loewe found in their survey, the incidence of infection is very low in Upper Burma, low in Lower Burma and only in Rangoon is the incidence high. The two skin diseases Leprosy and Scabies are perhaps caused by Vitamin B deficiency and due to the public failing to recognise the sufficient importance of segregation. Ring Worm and fungus diseases are fairly common in the moist regions. Of the major epidemic diseases Cholera and Plague constitute the chief diseases, which especially in Upper Burma towns have gained the notoriety of visiting the populace every year. Death rate from Cholera is 0.12 and from Plague 0.27. Smallpox though occurring every now and then has fortunately shown the lowest incidence since 1875 and is showing a downward trend. From this brief survey it will be seen that most of the diseases which take a heavy toll of Burmese man-power are preventable provided enough energy and money are utilized in combating them. An insight into the working of the Health Organisation would be of some interest.

In the days of our Burmese Kings we had physicians called "Thamadavs" and also Alchemists who used to look after the suffering humanity. With the disintegration of the Burmese Organisation, the Monks took up the art of healing. They did a fairly good job and the pharmacopoeia was fairly complete. They have been using Chaulmoogra Oil in the treatment of Leprosy for the last 200 years. With the annexation of Burma by the British in 1885, the British brought over the organisation which they had developed in India to Burma making very little attempts to create a new improved organisation suited to the local conditions. *The Medical needs of the people of the country were then regarded as matters of secondary importance* and little effort was made to improve the environments so long as the surrounding cantonments of Military outposts were not reservoirs of infectious or epidemic diseases. In short the policy of *Laissez-faire* or "let sleeping dogs lie" in matters of health was adopted. The Government, however, made provision for the medical needs of its Military and Civil servants. As a corollary to these decisions it was necessary to open Government Hospitals and dispensaries where medical aid, necessarily free, could be obtained by Government employees. This led to the creation of State Public special Hospitals (Class II) and Military Police, Canal and Forest Dispensaries. This was the first stage in the Medical Organisation. It was soon realised that a Government actuated by humanitarian motives and beneficent intentions must bring the benefits of modern medical science within the reach of civil population. As a result, State Public Government Hospitals and Dispensaries (Class I) were established for important towns, as in Rangoon, in towns of Upper and Lower Burma and later in Frontier districts like Bhamo, Myitkyina and Chin Hills.

---

*Note:—*The statistics about the prevalence of diseases apply only to 31 out of 40 districts where regular registration and collection of vital statistics is done. In the so-called backward areas as Bhamo, Katha, Myitkyina, the registration and vital statistics are defective or unreliable.

At the same time or a little earlier various religious bodies established Hospitals, which in spite of their sectarian character were freely resorted to and were very popular with the civil population. These private Hospitals were being assisted by the Government (Class IV Private Aided Hospitals). The third or the last stage which occurred in point of time, was associated with the establishment of Civil Hospitals and Dispensaries in important towns and villages. These institutions originally built, equipped and supplied by the Government were slowly being handed over to the Local Bodies in accordance with the policy of the Local Self-Government (Class III Local Fund Hospitals). They are financed by the Municipal Committees or by local funds or Hospital Committees under "Section 72 (1) C of Burma Municipal Act". Government still exercises general supervision and control as they directly or indirectly receive substantial grants and aids. At the moment Public Health Administration of Burma is under the control of Minister of Education, Local Government and Public Health. It is divided into 2 Branches (i) Medical which broadly deals with curative Medicine and is under the Inspector General of Civil Hospitals who is the head and (ii) Public Health "Prophylactic or Preventive Medicine." Burma just before the outbreak of War had a total of 315 Hospitals.

State Public Hospitals.....	47 of which 4 in special areas
State Special Hospitals.....	41 (Police 29)
Local Fund Hospitals.....	174
Private Aided Hospitals.....	28
Private non-aided Hospitals.....	11
Railway Hospitals.....	9

The majority of the Hospitals are run by local Government Committees. Bigger Commercial Firms have their own Hospitals. The pay of all the Medical Officers attached to State and Local Fund Hospitals is met by the local Government, while Doctors attached to Private aided and non-aided and Railway Hospitals are paid by the management concerned. Most of the Hospitals in larger towns, e.g., Mandalay, Maymyo, Toungoo, Mergui, Akyab, Syriam, are equipped with X-Ray Equipment and facilities for laboratory diagnosis, the premier Hospital in the country being the Rangoon General Hospital fully equipped with laboratory, X-Ray, radium and other up-to-date facilities. It was designed as a Hospital of 540 beds, but due to its increasing popularity now has about 847 beds and is also a teaching Hospital for the Medical College attached to it which trains Graduates and Licentiates. 20,000 surgical operations were performed in this Hospital in one year with a mortality rate of only 2.38%. These figures speak for themselves. This Hospital was the first in the East to have its own blood-transfusion service in 1934. Out of the population of 14,500,000 million about 4,000,000 people were treated in Government Hospitals every year of which over 2,000,000 were men, 1,000,000 women and 1,000,000 children. There are 1,500 qualified Practitioners in the country or 1 Doctor for 9,000 of the population, far fewer Doctors than even in India "ratio 1 : 6000". This shows Burma has a long way to go as compared with United Kingdom "ratio 1 : 1000". Of these about 500 are under Government employ as Civil Surgeons, Assistant Surgeons, Sub-Assistant Surgeons (Licentiates), the Specialist appointments being held by the personnel from Indian Medical

Service. Although Burmese women (especially Karens) make excellent Nurses, there were only 470 trained Nurses in the Hospitals (the number of private nurses being negligible) of which three quarters are Burmese women, i.e., 1 nurse to 21,000 of population. Although Burma has more nurses per capita than India, still our country needs many more nurses. Burmese women do not have any natural or acquired aversion for this profession and do not regard nursing as a low profession as is thought of in some other Eastern countries. It seems reasonable to expect that appreciable progress in the problem of nurses for the nation could be made if increased training facility, which at the moment is only limited to 7 towns, is extended to larger towns and a National Nursing college and a National Nursing Service is formed with as attractive scales of pay for women as they would get in any other profession.

The Health organisation in the country is made up of the Health Department with the Director of Public Health with his two Assistants and a field Organisation of District Health Officers, Assistant Health Officers, Sanitary Inspectors, Vaccinators and Sub-Assistant Surgeons placed on special duties in times of epidemics. The collection of vital statistics is done by village headmen monthly in areas "within 5 miles", quarterly if over 5 miles and half yearly to the Township Officers or to the closest Police Station and ultimately sent to the District Health Officer after each quarter. With three different Administration Services involved, it is not surprising that files are at times lost or misplaced. Very few Municipalities have Health Officers on their staff. When Health Officers are appointed their powers are limited as their appointment being in the hands of the Municipalities they do not get enough co-operation and so cannot take any action unpopular to them. Owing to financial stringency the improvement of water supply is proceeding very slowly. When every District Council is urged by the Health Authorities to improve the existing water supply, the usual answer is that no funds are available. In spite of the increasing popularity of the Bored Hole Latrines, much remains to be done in matters of sewage and rubbish disposal. All these are inter-twined with a good water supply. 46 to 58 per 1,000 of population or 1.6 million out of 14 million persons every year are successfully vaccinated. In the whole country only 210 Midwives were employed during child-birth. In the whole country there were only 34 child welfare Societies. These societies have tried their best to educate the public. How vast the problem is, may be judged from the fact that Thamaing, a suburb 8 miles outside Rangoon has a mortality rate of 506 per 1000, i.e. half the children die in the first year of their life. A beginning has been made in improving village sanitation with the opening of rural Health Unit at Hlegu and Rural Uplift centre at Tatkon. The examination of School children is done on voluntary basis.

Let us see how much the nation is spending on looking after its Health. Every year the nation spends Rs. 4.3 millions for the maintenance of all Hospitals which works out to Rs. 1/5/6 per patient treated or As. -/4/6 per head of population. For Public Health purposes Rs. 5.8 to 5.1 million are spent yearly. Out of a total expenditure of 6.8 million on public health and medical services in 1934-35 Rs. 5,439,960 were spent in towns and only Rs. 778,521 in rural areas where the bulk of the population stays. 16.8 per cent of income of Local Bodies was spent on Health Services. The nation as a whole spends As. -/9/- to As. -/10/- only per capita

in its attempt to ward off sickness. Even the Western countries with a healthier climate and less pressing health problems spend far more (England Rs. 54/8/11; U. S. A. Rs. 51/6/-). Although Burma per capita is spending more than India (Lowest Bihar As. -/1/7 : Highest Bombay As. -/5/9) and many other Eastern countries, it should be spending far more. Even assuming that the average income of a Burman is 1/17th of that in the West, we should be spending over Rs. 3/- per capita.

Now that it is an accepted idea that maintaining people fit and healthy is as much the responsibility of the Government, as it is of the individuals who constitute a nation, we must be clear about certain points. Whether we Burmese will be healthy and fit can be accurately predicted by the amount of money we decide to spend on Health Sources. Any economy in this respect is a false economy. As is the slogan of the New York Health Department "Health is a purchasable commodity", if we are willing to spend even  $\frac{1}{4}$  of what the Western countries are spending it will more than justify the tremendous gains the Burmese nation will have in the form of appreciably less reduced Morbidity, a fitter nation which can get to its pressing problems with greater audacity and vigour, and not the least is the increase of Happiness caused by the reduction of sorrow and misery which the loss by disease of breadwinner in the family ultimately entails. With these points in mind let us come to the more concrete problems. Since 40% of Sickness and Death are caused by Malaria, far more energetic measures and larger amounts of money must be spent to eradicate this Arch-Killer. It looks avoiding the issue if only a paltry sum of Rs. 115,000/- (amount spent in 1935) is spent in preventing Malaria when the economic damage caused by disease runs into millions of rupees every year.....Countries should not expect their health problems to be solved by themselves unless its people get down to the job with all energy and resources at their disposal. It would be a good idea if a Common Organisation with pooling of research and common problems be resorted to by all Asian countries who have to combat this disease. A very decisive unhealthy factor which indirectly leads to in the increase of venereal diseases is the obscene literature published in most countries (the best example being the so-called Health literature originating at Amritsar-India). Necessary legislation should be passed by all participating countries forbidding the sale and export of these. Facilities should be given to every Asian country for the free flow of drugs from one country to another with as few Tariff and Exchange barriers coming in the way. We in the East have got a wealth of drugs lying hidden in their crude state in the forests. If each country with a broad sense of vision sets out to investigate the pharmacopoeia of its own indigenous system of medicine, not only would some important finds be made but we would be depending less on outside resources. For a really efficient Health Service to develop, *a cheap and readily available source of drugs is a pre-requisite necessity.* Greater emphasis should be placed on Rural Sanitation and Health than has been the practice in the past with necessary legislation to precede it, e.g. the Burma Municipal Act was written at the time when Municipal Presidents were Government Servants. It omits to reserve for the Government adequate powers of Central control over public affairs. It is like allowing a child to grow over without parental control and, when spoilt to promptly clamp

---

*Note* :—These deductions are based on 1936-37 figures League of Nations Publication inter Governmental relations Preparatory papers Rural Hygiene—By Major Bozman.

it into jail. Though the Government has got power to supersede corrupt or incompetent Committees, this step can only be taken when it becomes a public scandal. Plague, which is a major epidemic disease in Burma, would cease to be a problem every year, if every Municipality had legislation (and enforced it in the correct sense of the world) on the provision of Rat-proof Godowns—for storage of grain—as it is these and the market places which constitute a reservoir of Infection. Cholera would become a thing of the past, if all Municipalities had not only bye-laws which prohibited the sale of any food-stuff exposed to flies by means of Capital Punishment and heavy fines, but also made adequate provision for providing fly-proof places of sale.

We have to strive a long way to achieve a desirable state of affairs. These problems cannot be shelved if we are to be a healthy Nation and take our rightful place among the Nations of the world.

---