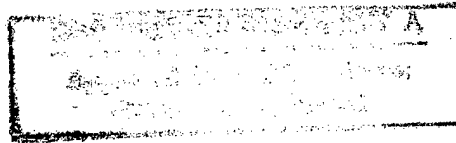


263206

JPRS 81486

9 August 1982



19980914 135

Worldwide Report

EPIDEMIOLOGY

No. 289

FBIS

FOREIGN BROADCAST INFORMATION SERVICE

3
66
A04

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

9 August 1982

WORLDWIDE REPORT

EPIDEMIOLOGY

No. 289

CONTENTS

HUMAN DISEASES

AUSTRALIA

- Government Action Urged To Wipe Out 'Wild' Rubella
(Paul Gross; THE AUSTRALIAN, 7 Jun 82) 1
- Incidence of TB Up Sharply in Victoria, Report Indicates
(Mark Metherell; THE AGE, 3 Jun 82) 3

BANGLADESH

- Report on Japanese Encephalitis in Bangladesh
(Shamsul Huq Zahid; THE BANGLADESH TIMES, 18 Jul 82) 5
- Briefs
Diphtheria, Tetanus in Dacca 7

BRAZIL

- Disease Incidence in Brasilia Related to Migration
(Jofran Frejat Interview; CORREIO BRAZILIENSE, 21 Jun 82) 8
- Outbreak of Hepatitis in Paraiba Confirmed
(O ESTADO DE SAO PAULO, 26 Jun 82) 16
- Briefs
Meningitis Outbreak Denied 18

COLOMBIA

- Briefs
Putumayo Malaria Outbreak 19

CZECHOSLOVAKIA

Briefs

Encephalitis-Bearing Ticks Reported 20

EGYPT

Health Ministry Initiates Polio Vaccination Campaign
(AL-AHRAM, 20, 22 Jul 82) 21

Campaign Begins in Cairo, by Faruq 'Abd-al-Majid
Rise in Polio Cases Checked

INDIA

Press Told Achievements in Biomedical Research
(THE HINDU, 16 Jun 82) 22

'Alarming' Rise in Malaria Reported in Calcutta
(THE STATESMAN, 24 Jun 82) 24

Briefs

Jammu Cholera Cases 25
Cochin Dysentery Reports 25
Unidentified Disease Takes Lives 25
Banda Measles Deaths 25

INDONESIA

Briefs

Gastroenteritis in West Java 26
Measles in Central Java 26
Measles Outbreak in Tangerang 26

ISRAEL

Interferon Treatment Used for Viruses
(Arnon Magen; DAVAR, 8 Jun 82) 27

MEXICO

Veracruz Tuberculosis Cases
(J. Cabrera Parra; EXCELSIOR, 5 Jul 82) 28

NEW ZEALAND

Preschool Immunization Against Diphtheria Inadequate
(THE PRESS, 26 Jun 82) 30

PHILIPPINES

Briefs

Gastroenteritis, Malaria Outbreak in Jolo 31

SOUTH AFRICA

Cancer Vaccine Given to Babies (RAND DAILY MAIL, 5 Jul 82)	32
Fifth Typhoid Victim Dies (THE CITIZEN, 22 Jul 82)	33
Polio Scare Hits Vaal Triangle (Charles Mogale; SOWETAN, 16 Jul 82)	34
Carriers Found Among Typhoid Suffers (THE CITIZEN, 21 Jul 82)	35
Briefs	
Polio Epidemic Abates	36
More Typhoid Cases	36
Two Typhoid Deaths	36
Typhoid Kills Again	36

TANZANIA

Jumbe Says Dysentery Outbreak To Be Contained at Month's End (DAILY NEWS, 1 Jul 82)	37
--	----

THAILAND

Dysentery Rate Increases, Thousands Die (DAO SIAM, 19 Jun 82)	38
High Rabies Death Rate Noted (SIAM RAT, 28 May 82)	39
Briefs	
Leprosy Budget Insufficient	41

ZAMBIA

Briefs	
Measles Deaths in Lusaka Province	42
Mwinilunga District Deaths	42

ZIMBABWE

Vendors Linked To Spread of Typhoid (THE SUNDAY MAIL, 11 Jul 82)	43
TB Rate Still Rising (THE SUNDAY MAIL, 11 Jul 82)	44

ANIMAL DISEASES

AUSTRALIA

- Buffalo Raising Seen As Way To End Northern Territory Cattle Disease
(THE SYDNEY MORNING HERALD, 7 Jun 82) 45

BRAZIL

- Outbreak of Foot-and-Mouth Disease in State of Sao Paulo Reported
(FOLHA DE SAO PAULO, 12 Jun 82) 46

COLOMBIA

- Bogota Anti-Rabies Campaign
(EL TIEMPO, 30 Jun 82) 48

EGYPT

- Cattle Disease Controlled, Measures Taken To Prevent Epidemic
(Muhammad Imbabi; AKHBAR AL-YAWM, 29 May 82) 49

NEW ZEALAND

- Grazing Management Seen Controlling Ryegrass Staggers
(THE NEW ZEALAND HERALD, 25 Jun 82) 52
- Endophyte-Free Ryegrass
Seaweed Derivative Test

TANZANIA

- Largest Rinderpest Campaign in Five Years To Be Undertaken
(DAILY NEWS, 28 Jun 82) 54

PLANT DISEASES AND INSECT PESTS

AUSTRALIA

- Poisonous Cane Toads Pose Threat to Northern Territory
(THE WEST AUSTRALIAN, 1 Jun 82) 55

PAKISTAN

- Briefs
Locust Threat Reported 57

TANZANIA

- Minister Notes Plans for Eradication of Pests Damaging Bananas
(DAILY NEWS, 1 Jul 82) 58
- Workshop on Control of Armyworms, Migrant Pests Concluded
(Hashim Chindole; DAILY NEWS, 12 Jul 82) 59

AUSTRALIA

GOVERNMENT ACTION URGED TO WIPE OUT 'WILD' RUBELLA

Canberra THE AUSTRALIAN in English 7 Jun 82 p 10

[Article by Paul Gross]

[Excerpts] The existence of "wild rubella in Australian school children and adults is a major health problem requiring government policies at Commonwealth, State and local levels to minimise the damage caused by the virus.

Forty-one years after Norman (later Sir Norman) Gregg published in Sydney a seminal paper linking the rubella virus in pregnancy with deafness, cataracts and congenital heart disease in later life, it has been established that about half the children in Australian schools for the deaf are there because of the wild rubella virus. In 1980, 90 percent of deaf-blind children in Australia were the victims of rubella.

According to the best guesses--we have no hard national statistics in Australia--somewhere between 10 and 20 percent of Australian women of child-bearing age are unprotected against rubella, despite the fact that the Cendehill rubella vaccine was approved for use in Australia in 1970.

In a non-epidemic year about one in 2000 babies would have congenital rubella but if there was an epidemic, the rate could be one in 50 babies.

Why does this situation persist when the adverse effects on the foetus are near totally preventable?

In a report in June 1981, the National Health and Medical Research Council urged the States to adopt health education programs in schools, immediately before seeking parental consent for immunisation. The council was concerned that the possible effects on the foetus be more widely known, along with the availability of effective prevention methods. It believes that the primary target group is the adolescent--and it says that the most appropriate policy is a high-school immunisation campaign. But recent Australian research suggests that about 9 percent of Australian girls are missed in high school campaigns. Australia's major campaign against rubella began about 1970, so we should now be seeing the benefits of the school campaign.

A National Congenital Rubella Surveillance Program was started in the United Kingdom in 1971. The US has a Birth Defects Monitoring Program and the National Congenital Rubella Syndrome Registry, both operated by the centres for disease control of the US Public Health Service.

By contrast, the perinatal research unit at the Commonwealth Institute of Health and the West Australian NHMRC research centre are starting points for measurement of the problem--but they are not active approaches to prevention, and they record data only on babies with the syndrome. But in recent months each State has finally agreed to make rubella a notifiable disease.

With such developments overseas--and the improved results achieved by the US program--perhaps it is now time to ask if Australia's federal, State and local government policies for rubella prevention are adequate for the 1980s.

First, there have been some real achievements in rubella prevention in Australia in the 1970s.

Second, it is local government that has the major operational responsibility for prevention of rubella and it has had budget constraints.

Third, there is much effort expended by voluntary groups on exhortations to prevent tubella, including groups like the Victorian Deafness Council. They have a full-time job--and inadequate resources--to look after the consequences of rubella and other conditions.

Fourth, Australia's policies are recommended by the NHMRC which has adopted a philosophy akin to the UK philosophy, nowhere near as "active" as the US approach, which some consider to be "over-reactive."

A fifth indicator of our national reluctance (some would call it caution) is that from 1967 to 1977, only \$62,500 was spent on a rubella vaccination research project sponsored by the Children's Medical Research Foundation and the project was temporarily suspended in 1976 because of lack of NHMRC support. Last year, a research proposal to NHMRC was recommended for funding but no funds were available. Should rubella have a higher priority in NHMRC research grants?

Whatever the answer, Australia may now need:

--More detailed policy statements on rubella prevention by governments and oppositions.

--The medical profession to adopt a more active measurement of blood samples in pregnant women in both general practice and specialist clinics.

--A detailed national research agenda to improve our knowledge of rubella.

--Specific policies for school and maternal health services to educate the public on how to prevent this expensive national problem.

CSO: 5400/7568

AUSTRALIA

INCIDENCE OF TB UP SHARPLY IN VICTORIA, REPORT INDICATES

Melbourne THE AGE in English 3 Jun 82 p 16

[Article by Mark Methere11]

[Text] The incidence of tuberculosis has risen sharply in Victoria in recent years even though the State spends as much on TB services as all other States combined, a Government report has found.

A complete reorganisation of the Health Commission's tuberculosis branch has been recommended in the report, prepared by a working party on TB services in Victoria which was released yesterday.

The working party said Victoria spent \$6.3 million last year on TB services compared to \$520,000 spent in New South Wales. The Victorian service staff establishment was 356 compared to 48 in NSW.

But despite the resources devoted to TB in Victoria, the incidence of the disease has risen from 8.3 per 100,000 population in 1976 to 10.1 in 1980. This compares with NSW where the incidence fell from 11.8 to 8.4 in the same period.

The report said a survey had shown that most of the increase in TB cases after 1977 in Victoria could be attributed to the influx of Indo-Chinese refugees. But it said there had been a slight increase in incidence among Australian-born children up to four year olds.

The working party which was appointed by the previous State Government last September, was led by Dr Jonathan Streeton, a consultant physician.

The report said the disparity in costs was not due to Victoria having any higher incidence of TB. "The rate in Victoria over the past few years closely approximates that of other States and in fact for most of those (earlier) years it has had one of the lowest rates per total population," the report said.

"The most striking differences between TB services in Victoria and other States is in the organisation and service delivery areas. These differences... explain to a large extent the reason why Victoria's expenditure on TB is higher than any other State."

Key differences outlined by the working party included:

--Victoria is the only State to maintain a specific hospital, Heatherton, for inpatient treatment. In other States TB patient care has been integrated into public hospitals.

--In most other States outpatient chest clinics had been integrated with public hospitals, removing duplication of expensive X-ray and other services.

Progressively in other States, TB services were being integrated with other services such as occupational health, chest medicine and sexually transmitted diseases clinics.

The report said that because of the way the service was structured and the expenditure involved "Victoria has a far larger complement of staff employed exclusively in the area of TB than any other State."

The working party recommended a "complete organisational restructuring of the TB branch so as to incorporate the various sections into the one organisational restructuring of the TB branch so as to incorporate the various sections into the one organisation, thus leading to flexibility and to a more efficient use of facilities."

It is recommended that the branch be incorporated within the clinical services branch of the Health Commission's public health division and that the position of director of tuberculosis be abolished and be replaced by a chief medical officer (tuberculosis).

The report suggested that the TB facility at Heatherton Hospital be closed and patients be transferred to appropriate units at Fairfield or Alfred hospitals.

It said that the school vaccination programme should be speeded up to cover schools at a maximum of every two years, but that the prior tuberculin skin test should be scrapped.

CSO: 5400/7568

REPORT ON JAPANESE ENCEPHALITIS IN BANGLADESH

Dacca THE BANGLADESH TIMES in English 18 Jun 82 pp 1, 8

[Article by Shamsul Huq Zahid]

[Text]

Bangladesh has got yet another health problem—Japanese Encephalitis (JE)—which is popularly known as 'brain fever.'

Sporadic cases of JE have been noticed during last few years in the country, except a mild outbreak of the killer disease in Madhupur area in Tangail during mid-1977. The disease, caused by a virus, was then described by the doctors and local people as 'mysterious disease', claimed at least seven lives—out of 25 attacked by it.

First noticed in the latter half of the last century in Japan, the disease usually transmitted by the mosquitoes travelled to the sub-continent via China, South Korea, Vietnam, Thailand and Burma. JE has been a serious concern for India as it claimed 1434 lives in 1980. Epidemics have been increasingly noted in last three decades in Vietnam; Thailand; Burma and Nepal. The disease characterised by fever, headaches, coma and neck rigidity has the high fatality rate. Between 20-40 per cent of the patients die and sometimes the death rate can be over 50 per cent. JE injures the central nervous system of those who succumb to it.

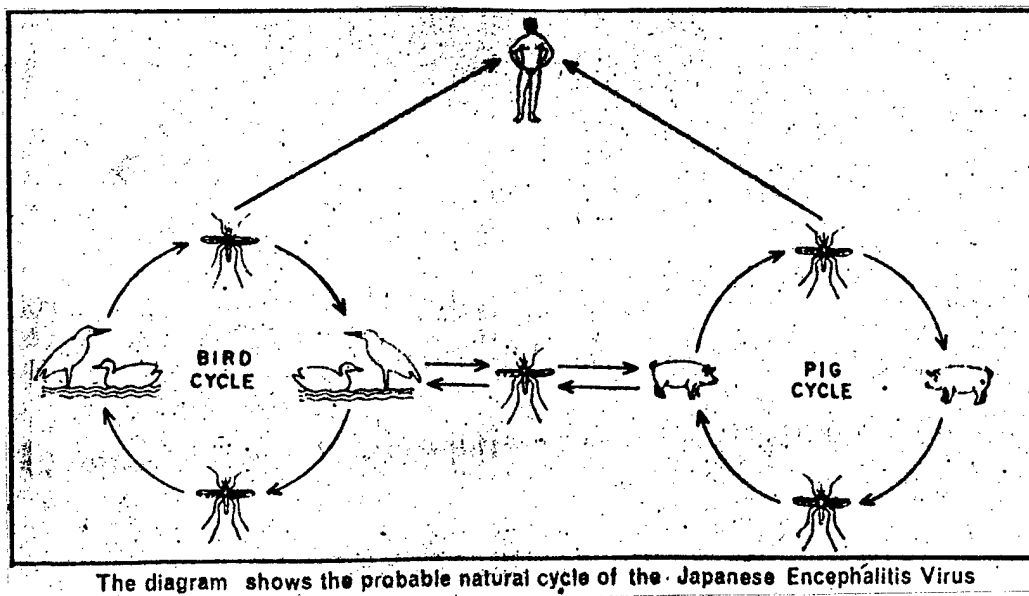
A number of culicine and anopheline mosquitoes transmit the JE virus mainly to pigs and sometimes to large birds like pond herons, egrets

and ducks. Pigs and birds maintain the life cycle of the virus. Humans only accidentally enter the transmission cycle of the JE virus. In India, chief carrier of the virus has been found to be culex tritaeniorhynchus which breeds successfully in rice fields with stagnant irrigation water.

Bangladesh virologists first came to know about the disease in mid-1977 when they heard about the outbreak of a mysterious disease in the tribal population in Madhupur. They brought the blood samples of the victims who survived the disease and detected the presence of the JE virus.

The institute which is known as National Institute of Preventive and Social Medicine (NIPSOM) carried out field studies in various parts of the country including Maulavi Bazar, Thakurgaon, Tangail, Sakthira and Rangamati. In some places the scientists found the presence of antibodies to JE virus. This increased the possibility of JE infection in these places except Maulavi Bazar where infection rate was higher. Limited pig population possibly keeps the incidence of this dreaded disease in the country very low.

Many medical experts believe that it is the environmental change caused by the spread of irrigation responsible for the spread of the disease.



CSO: 5400/7087

BANGLADESH

BRIEFS

DIPHThERIA, TETANUS IN DACCA--The spread of diseases like diphtheria and tetanus has increased in the metropolitan area of Dacca. In April and May, 162 persons died of these two diseases in the Dacca Metropolitan Contagious Diseases Hospital. [BK120811 Dacca SANGBAD in Bengali 4 Jun 82 p 1 BK]

CSO: 5400/7095

DISEASE INCIDENCE IN BRASILIA RELATED TO MIGRATION

Brasilia CORREIO BRAZILIENSE in Portuguese 21 Jun 82 p 5

[Interview with Jofran Frejat, secretary of health for the Federal District; date and place not given]

[Text] Jofran Frejat, secretary of health for the Federal District, said in an interview with CORREIO BRAZILIENSE that the incidence of so-called endemic diseases is highest for Chagas' disease, brought in from the Goias and Minas Gerais regions. The secretary also discussed, in the course of this interview, the incidence of diseases brought in by the flow of migrants--individuals coming to the Federal District in search of medical aid and bringing with them diseases found in their regions. Frejat acknowledged that because of migration, there has for years now been an increase in certain pathological conditions.

Jofran Frejat also announced the establishment of a kind of hospital-shelter for individuals needing treatment but not requiring hospitalization. "He (the patient) is in constant contact with the hospital, but this is a kind of hotel in which the individual can convalesce."

The text of the interview follows.

CORREIO BRAZILIENSE: Are diseases brought in by the migrant flow to be found in Brasilia?

Jofran Frejat: Well, diseases brought in by carriers of maladies which are endemic in a certain region and which are transferred to others can be found in any place in the country. Here in Brasilia in particular, the disease with the highest incidence or most prevalent is precisely Chagas' disease, which is endemic in the region of Goias and Minas Gerais, and the patients come here to the Federal District. But on the other hand, we have no evidence--a survey is made periodically by the technicians at the Ministry of Health, which we at the secretariat of health follow closely--of infected barber bugs. We have no evidence that the barber bug, which transmits Chagas' disease, for example, is infected. In the rural parts of the Federal District the barber bug is found, but we have not as yet identified any carrying the disease. Thus what we are getting here in fact is patients who

already had the disease, who got it in childhood, in the rural areas of Goias, Minas Gerais, Bahia and Piaui, and who come from there and are treated in our hospitals here. Naturally, when these people settle in the rural part of the Federal District and are bitten by uninfected barber bugs, they will infect those insects which bite them and the latter can then carry the disease to a patient or an individual who would otherwise have no way of contracting the disease. But for this to happen, it is also necessary that they live in homes made of wattle and daub, favorable to the survival of the barber bug, and these are increasingly rare. But this happens in the rural sector. It does not happen easily or readily, but it can happen. What does happen is that we have hospitals which are generally overloaded with this kind of problem. You see, with Chagas' disease, which frequently involves heart damage, we very often have to use pacemakers, which are relatively expensive to install, to maintain a certain regularity in the heartbeat. This is another pathological situation. Well, again in connection with Chagas' disease, we might mention the patient suffering from an enlarged esophagus or colon, also consequences of the disease, that is to say they are clinical manifestations of it in an organ other than the heart. They too often undergo surgery here.

These people come from other regions, and are treated here, and generally they either return to their places of origin or remain in the Federal District working or studying or engaged in some other activity.

CORREIO BRAZILIENSE: What about goiter?

Jofran Frejat: This is another disease with an endemic incidence in this area near the Federal District. Endemic thyroid enlargement is also called goiter. It represents an iodine deficiency. The Ministry of Health has already issued regulations to the effect that salt must be iodized. But often, in these cities in the interior, this recommendation is not followed, non-iodized salt is used, and goiter develops. It is not a serious illness, but it is often accompanied by certain deficiencies of a mental sort, when the patient suffers from hypothyroidism. And it can have another very serious specific aspect, the swelling in the throat, for which patients come to us for surgery to resolve the problem, because it develops as a deformity of the neck. These are the endemic diseases prevalent in this area. We also have cases of malaria, not in the Federal District, but mainly in individuals living in the Parana Valley, and along those nearby rivers where they go to fish. Fishermen frequently end up as malaria carriers, so that we must provide them with treatment. The endemic diseases here are really those common ones for which there is vaccination: whooping cough, measles, chicken pox--this is not eliminated by vaccination--and polio, which is already showing a considerable decline. Some years ago, Ministry of Health technicians established that there was a possible center of schistosomiasis in Planaltina, because periwinkles, which are the intermediate host for this disease, were found there. Naturally, with the migration of people who were schistosomiasis carriers from the Northeast, these periwinkles could be contaminated and they could then pass on the disease to healthy individuals. The fact is that there was no clear evidence that we had an endemic schistosomiasis problem here. But this has already occurred in other Brazilian cities. Rio de

Janeiro has already had schistosomiasis outbreaks and so have various other Brazilian cities because of this migration. Moreover, this was a concern in connection with the Amazon region, as well. When the people of the Northeast began to migrate to the Amazon region, there was concern that schistosomiasis might be carried from where it is most frequent in the Northeast (Bahia, Paraiba and Pernambuco) to the Amazon area. Many of these diseases can be subjected to relatively intensive control. An example is leishmaniasis, which is now to be found in Brazil, in Rio de Janeiro.

Host Animals

CORREIO BRAZILIENSE: Where is it typical?

Jofran Frejat: Leishmaniasis is found in almost all the countries of South America except Chile. Cutaneous leishmaniasis is known in Brazil as tropical ulcer. It is quite common in Sao Paulo, but can be found in any region of Brazil. The intermediate host can be a dog, cat, etc. This is why we here in the Federal District have long been concerned about preventing diseases in dogs from being transferred to man. Apart from rabies, there are leishmaniasis and a number of other zoonoses which can be passed on to man. We have done intensive work here on keeping dogs off the streets. I do not know if you recall that there was great concern sometime back about the number of dogs running loose in the streets. Today greater care is taken and we have succeeded in overcoming the resistance of the people, mainly in the satellite cities, who do not want the dogcatcher to take away their pets. It is very curious, because they let their dogs out, but when the dogcatcher's wagon approaches, then they bring them in. And this constant battle continues. One day they overturned a dogcatcher's wagon, and on another day attacked one of our employees who was picking up dogs. But the people must understand that dogs must not be in the streets unless they are leashed.

CORREIO BRAZILIENSE: And this disease of which you spoke which is carried by dogs--is it transmitted only by bites?

Jofran Frejat: No, that's not it. There is an insect, the Phlebotomus, which can bite the infected dog and then bite a human being, thus passing on the disease. This also happens with yellow fever, which is not an urban disease, but occurs in the jungle, where the Aedes aegypti, a species of mosquito, bites a monkey, which is generally the carrier, and then transfers the disease to the hunter or the fisherman or any other individual in the forest. Any of these diseases can develop endemically in a region. The concern we must have, and which the Ministry of Health does have with yellow fever, and it is now being extended to malaria, is to prevent its possible transfer as an outbreak to the larger cities, as has happened with leishmaniasis now in Rio de Janeiro.

CORREIO BRAZILIENSE: It is thought to have been brought in by the flow of migrants?

Jofran Frejat: Probably some infected person, and this occurs frequently. Those working in dermatology or medical clinics, for example, often see

patients suffering from tropical ulcer, or in other words cutaneous leishmaniasis, or visceral leishmaniasis, also known as kala-azar.

CORREIO BRAZILIENSE: What are the symptoms?

Jofran Frejat: Well, it generally begins with a period of fever, an incubation period, which may last from 10 days to 4 months. Lymphonodi, or swollen ganglia, develop, along with hepatic or splenic lesions, that is to say lesions on or swelling of the liver or spleen, temperature variations with fever peaks, prostration and reduced working capacity. If suitable treatment is not provided, the visceral type, or kala-azar, can lead to death. But we have excellent resources today for its treatment--the antimonials, that is the pentavalent compounds of antimony which provide excellent treatment with a certain ease. And the solution to preventing the spread of this disease is the elimination of the possibility of its transmission by the Phlebotomus, which bites the dog or cat and passes the disease to man. It is really then a public health question. Fortunately, with this work of catching and vaccinating dogs which is being pursued here in the Federal District, we have reduced the incidence. As far as I can remember, we have not recently had a single case of leishmaniasis. Naturally, this is the result of this work which is being done. Since 1979, we have vaccinated an average of between 100,000 and 120,000 dogs annually, and we are picking up these dogs en masse. The people must understand that it is necessary that we pick up these dogs.

CORREIO BRAZILIENSE: Does the mosquito only transmit the disease if the dog is infected?

Jofran Frejat: Oh, yes. If it bites a dog which is not infected, there is no way it can transmit the disease to a human being. But the dog is not only a carrier of rabies or only of leishmaniasis, but of a whole series of other zoonoses. There are 20 diseases in all it can transmit. Thus a dog can serve an important guard function, but if it is infected, it can be dangerous to the family. We often see that our children want to sleep with their dogs in their arms. They are close to the dogs all the time and may be licked by them, and this is something everyone knows.

CORREIO BRAZILIENSE: Are you saying that you have not found outbreaks of any disease which is not native here?

Jofran Frejat: Not any prevalent disease. For example we have schistosomiasis carriers who come mainly from the Northeast, but no case in the Federal District itself.

CORREIO BRAZILIENSE: Are you speaking of individuals who come for treatment or of individuals who come without knowing they have the disease? I mean those who come with this migratory flow.

Jofran Frejat: Well, you see, the Federal District has a curious characteristic. A short time ago the secretariat of social services published a very important and interesting work on the migratory flow into the Federal

District. An unprecedented phenomenon was noted here. Three percent of the migrants come here for educational purposes and 2.8 percent seeking medical aid. In other words, the percentages are practically the same, and this very rarely happens anywhere else in the country. Generally speaking, those seeking education constitute a much higher percentage than the people seeking medical aid. It is to be expected then that these people coming in search of medical aid will come because of the diseases native to their regions. In fact, with people coming in over a period of years we note an increase in certain diseases here. For example this case of schistosomiasis, as I said, and the number of patients who are carriers of Chagas' disease or have goiter. Now this work which is being pursued here, this regionalization campaign, in which individuals are provided with aid near their homes and are supervised from the very beginning, has prevented us from having major problems.

Poliomyelitis

Look at the case of poliomyelitis, for example. We used to have an average of 15 cases of polio a year in the Federal District. Last year we had three, in unvaccinated children. And now, in 1982, we have not had a single case. Measles, which is another endemic disease which could even possibly become epidemic, has a rather high incidence in Brazil as a whole, and we had here 2,500 cases in 1980. We succeeded in reducing this figure to fewer than 700 cases in 1981. This is an important step, and the figure should drop further, because we have succeeded in vaccinating practically 84 percent of the population under a year of age, thus preventing them from getting measles, or if they do, guaranteeing that it will be mild. Measles kills more patients than polio. The complications of measles are very important. Quite commonly mothers still believe, because of what their grandmothers told them, that children must have measles because we all get measles. There are really major problems in connection with the health education of various segments of the population. A short time ago we identified three cases of typhoid fever in one of the slums in the Federal District, more specifically in Chaparral, in Taguatinga. And we tried to undertake mass vaccination in that satellite city, and we reached a rather significant number with the first dose. But when it came to the second dose, there was tremendous resistance, since the vaccine hurts a little on being injected. And not infrequently the people say: "Listen, I prefer having the disease to taking the vaccine," not realizing that this could really lead to a very serious situation, with hospitalization lasting 2 or 3 months for the treatment of typhoid fever. This task of reeducating and redirecting the people is a very difficult one. I personally went to this poor quarter, going from hut to hut to urge the people to be vaccinated. Even so the results were not what the people hoped, and they could have been better. There is stubborn resistance. It is still believed that much will be resolved by time, that it is possible to get the disease and not die. But they forget that sometimes it is necessary to stay 2, 3 or more months in a hospital, totally unable to work.

CORREIO BRAZILIENSE: The diseases related to migration then are goiter and Chagas' disease...

Jofran Frejat: Yes, they are becoming a public health problem here, that is to say a problem in the preventive sector, because we are working to prevent their occurrence. But it also becomes a medical aid, a curative medicine problem. This pertains to the individual who comes with goiter already developed, who already has schistosomiasis, or already has Chagas' disease. For them, naturally, there is no longer any way to prevent the disease. We can only improve the situation of the patient so that he will lead a life of relatively good quality. Thus we probably do not have any major center which could become endemic at present. Now there are other diseases for which there is vaccination, for example polio, measles, whooping cough, diphtheria, tetanus, etc. The work being done on them, involving the regionalization of care in health centers, is such that we have achieved vaccination levels never before reached. Thus we have--look at the proportion--a level of vaccination against polio of 97 percent, although the goal is 100 percent, that would be the ideal for us, a full 100 percent. We have an 84 percent level of vaccination against measles. That against whooping cough, diphtheria and tetanus is 94 or 93 percent. This then is a rather high index, which practically makes it possible to break the chain of the disease. But I believe that Brasilia is a special case. Brasilia was the first unit in the Federation to establish a system of primary care allowing the people to obtain practically immediate medical care without waiting in line or other major problems. And this is happening now, moreover, because some years ago one saw what could be seen yesterday on a television program showing this in other cities of the country--those lines of people waiting from 8 or 9 in the evening until the following day to see a doctor. We have really succeeded in eliminating this in the Federal District. And we have also achieved medical coverage which gives the people ready access to health centers and hospitals with greater ease. Although the situation is not yet ideal, we are proceeding rapidly toward a rather reassuring situation. Another important fact is that these health centers also provide education, because we offer regular courses for pregnant women, adolescents, a whole series of segments of society which need help, which is practically unknown in Brazil. And this has really provided the people with important information, so that they can learn how to care for themselves. There is information on hygiene, on vaccination, preparing babies' bottles, etc., apart from the child growth and development program. The result of this is a monthly or bimonthly follow-up, and children are checked as they develop, to see whether they are growing properly or not, if they have worms, etc. This has reduced infant mortality in the Federal District to the lowest level in Brazil. Today we have infant mortality of 33.5 per thousand live born, the lowest rate in Brazil, and it should drop further. We should end the year 1982 with a much lower rate than that.

CORREIO BRAZILIENSE: And concerning migration, have you any figures as to whether it is increasing or decreasing, or whether there is any change in direction?

Jofran Frejat: In the medical sector, migration is increasing. This is a natural process. Whenever medical care is improved or better access for the people is provided, there is a tendency for the number of migrants seeking

medical aid to increase. I would not be able to say how many are seeking to engage in other activities, such as for example education or work. Perhaps the secretariats involved, or even the secretariat of social services itself, which has surveyed this, could tell you. Now in the health area, we have a rather significant increase.

CORREIO BRAZILIENSE: But is the migration mainly from the geoeconomic region or does it come from the Northeast?

Jofran Frejat: No, we have here people from Bahia, Piaui, Maranhao, even the Amazon region, from Mato Grosso, Goias and Minas Gerais, and then from all of this surrounding region here, Unai, Padre Bernardo--they all come into the Federal District.

CORREIO BRAZILIENSE: Would this involve people who come only to be treated and then return?

Jofran Frejat: Only for treatment, and then they go back. They come, they are treated and they return. And very often the problem is the following: they come and are treated but have no way to get home. We have maintained relations with the social service secretariat so that--and they have collaborated--we can provide tickets for patients to return home. But this is for those who are fully and completely recovered. But you see, there are patients who still have rather major problems of a physical nature but could stay at home being cared for by their families while they convalesce, but are not in suitable condition to return to their cities of origin. Very often as a result of this they stay, taking up space in a hospital for weeks or months. And no immediate solution can really be provided to this problem either by the secretariat of social services, however much goodwill it may have, or by us. The solution would in fact be what Governor Lamaison has already proposed--establishing a support hospital to accommodate these people and to free the most urgently, acutely and seriously needed beds in the central hospitals.

CORREIO BRAZILIENSE: Is there any plan as yet?

Jofran Frejat: Yes, we have a plan and we even have the premises, we already have everything....

CORREIO BRAZILIENSE: Where?

Jofran Frejat: The facility will be behind the kennel, beyond the Buriti Palace--back there.

Shelter

CORREIO BRAZILIENSE: What will this be called, a motel?

Jofran Frejat: No, it is not a motel. It is a kind of hospital-shelter. This is very common in the United States. But there it is not quite the

same. There the patients being treated for diseases such as cancer, for example, are treated in the hospital and then go to a residential facility almost adjacent to the hospital. In other words, they are in permanent touch with the hospital, but it is a kind of hotel where the individuals convalesce. Take the example of the Brazilian children who have gone to the United States for chemotherapy for leukemia or problems of that nature. Memorial Hospital in New York has beside it what amounts to a hotel, called Paison House, where the children even in the acute stage and their parents are accommodated. Even in the acute phase, while being given their own medication, they remain there and do not take up hospital beds unless they are in serious danger. It is a kind of hospital-shelter, where they have medical care, although it is basically a lodging facility. What we want here is for them to have medical care, not the kind requiring a doctor on permanent duty, but a place where the doctor goes and checks the patients and the nursing personnel takes care of them. Consider the case of a seriously injured patient, who is immobilized with hanging weights for a long time. He may stay 3, 4 or 5 months in the hospital, taking up space, when what he really needs is some nursing care and some medication. But he is occupying a bed. This is not his desire, although he has every reason to want a bed, but he could be located in other premises providing less intensive care, instead of a very crowded and highly complex hospital like the Base Hospital, Taguatinga Hospital, Gama Hospital, etc. For example, patients with malignant diseases receiving chemotherapy treatment would also be placed there, because all they really need is to be transferred for their chemotherapy and returned to the premises. For the rest, they need nursing care to see that they are taking their medication properly and to see to body hygiene and other things of this sort. This then is the plan drafted by the government of the Federal District, which wants, by the end of its administration, to have a complete health system, not only in the primary sector, as we have explained, but in the areas of secondary and tertiary care as well.

5157

CSO: 5400/2181

OUTBREAK OF HEPATITIS IN PARAIBA CONFIRMED

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 26 Jun 82 p 13

[Text] The outbreak of hepatitis in the Paraiba Valley has been confirmed. This statement was made by an official of the regional health secretariat, which has its headquarters in Sao Jose dos Campos. He preferred not to be identified, out of fear of reprisals, because the state health secretariat has said officially that "Announcement of this news may create a panic among the people."

In Sao Jose dos Campos, 140 cases per 1,000 inhabitants were reported last year, while in Santa Branca, more than 400 cases per 1,000 inhabitants were diagnosed in January and February of this year. This is one of the highest indices yet encountered.

Although the regional health authorities point to the indiscriminate use of water taps or sources in settlements not yet supplied by the SABESP distribution network, a sanitarian in Taubate, who is also employed by the state health secretariat, said yesterday that "The problem is directly linked with the lack of sanitation in the Paraiba Valley." He said that, to mention only one example, "95 percent of the sewage is treated" in Sao Jose dos Campos, the city with the largest population in the region--about 300,000. Meanwhile, Taubate, the second largest city, with a population of 200,000, dumps all of its sewage without any treatment whatsoever into the Paraiba. According to official figures, only 14 percent of the domestic sewage in the valley is treated, on an average, while industry has reached the 20 percent level.

Thus, according to this sanitarian, although the river is "self-purifying," there is the "hypothesis"--because it has not yet been proved by research--that an outbreak occurring in one town can serve to spread the disease to the neighboring communities. The towns located on the upper part of the river which discharge their raw sewage into the Paraiba will spread disease to the towns located downstream, which use the same river as their main source of drinking water for distribution to the population.

The State Sanitation Company, however, has since March been implementing Article 9 of the Health Code, which requires the residents of homes served by the collection network to connect their sewers with the system, and it is

even serving notice on slum dwellers. Two inspectors from the local health center, aided by the SABESP, are drafting reports on homeowners and summarily closing septic tanks. However this sanitarian wonders: "Why require the hookup if the sewage is not treated and will further contaminate the Paraiba?"

5157

CSO: 5400:2181

BRAZIL

BRIEFS

MENINGITIS OUTBREAK DENIED--Mogi das Cruzes--Although two deaths and three confirmed cases have been reported since the beginning of this month, the clinical director at the Santa Casa de Mogi, Francisco Bezerra, yesterday denied that there had been an outbreak of meningitis in the city. He gave assurance that the multiple cases "should not frighten the population," explaining that the disease is common in this cold season. The most recent cases, resulting in death, involved a resident of the Braz Cubas district, 35 years old, and a one and a half year old child whose family lives in downtown Mogi. This child was initially hospitalized in serious condition for what was thought to be bronchial pneumonia. In order to confirm the diagnoses of meningoencephalitis for both the victims, the Santa Casa clinic directors ordered postmortem studies. The problem caused by the occurrence of cases in the municipality was discussed by the aldermen in a meeting at the municipal chambers yesterday, and it was decided to ask the authorities in the health sector to take urgent steps. [Text] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 25 Jun 82 p 14] 5157

CSO: 5400/2181

COLOMBIA

04-188
BRIEFS

PUTUMAYO MALARIA OUTBREAK--Land and cattle activity. Natives and farmers under the jurisdiction of the township of San Jose de Ocune, located in Macocova, of the indigenous reservation of Cavasi, in Putumayo, are being decimated by a malaria epidemic. This was reported to the minister of health in a dramatic letter containing a request for a medical team and drugs to control the illness. Those who signed the letter anxiously requested aid and addressed the minister as follows: "Doctor, we would be grateful for your attention to our requests, because if you do not do so very soon, we will die--some from fever, others from starvation. The children are the ones who will starve, because the parents, who are afflicted with malaria, cannot work to support their children." [Text]
[Bogota EL TIEMPO in Spanish 26 Jun 82 p 5-F] 8255

CSO: 5400/2185

CZECHOSLOVAKIA

BRIEFS

ENCEPHALITIS-BEARING TICKS REPORTED--Population has been warned that ticks bearing viral encephalitis have been found in several areas of Central Bohemia region. Areas reported were Brezinice, Dobris, Kokorin, Kutna Hora, Vltava River area south of Prague to the end of Central Bohemia region, Sazava River and Berounka River Basin. Areas specially infested in the Kutna Hora locality were Zbraslavice, Cervene Janovice and Habrkovice. [Prague SVOBODNE SLOVO in Czech 29 Jul 82 p 4]

CSO: 5400/3009

HEALTH MINISTRY INITIATES POLIO VACCINATION CAMPAIGN

Campaign Begins in Cairo

Cairo AL-AHRAM in Arabic 20 Jul 82 p 8

[Article by Faruq 'Abd-al-Majid]

[Text] The Ministry of Health began yesterday an inoculation campaign against polio in Cairo Governorate, gradually extending it to the other governorates. This is to include the high-density residential quarters beset by the problems of sewer overflows or the shortage of water. The campaign aims at administering three doses of the vaccine at 6-week intervals to approximately one-third of a million children in Cairo, ranging in age from 2 months to 3 years.

Minister of Health Sabri Zaki announced that there are sufficient quantities of the vaccine and they have been distributed to the [governorates'] health directorates, rural units and health bureaus which will administer them to citizens free of charge. He added that Egypt is completely free of any epidemic disease and that the degree of readiness has been raised in all quarters to confront any disease which might arrive in the country during the summer solstice as a result of the return of Egyptians working abroad and the approaching pilgrimage season.

Rise in Polio Cases Checked

Cairo AL-AHRAM in Arabic 22 Jul 82 p 1

[Text] Dr Imam Zahglul, head of the Vital Medicines and Vaccines Authority, announced that the campaign against polio in the governorates of Cairo, al-Qalyubiyah, al-Minufiyah, Gizah, Alexandria and Asyut has achieved noticeable success in protecting children from the threat of this disease. These governorates had been selected because they were distinguished by a noticeable elevation in the rate of affliction and children up to the age of 3 years were inoculated.

CSO: 5400/5020

PRESS TOLD ACHIEVEMENTS IN BIOMEDICAL RESEARCH

Madras THE HINDU in English 16 Jun 82 p 9

[Text] NEW DELHI, June 15--Two experimental leprosy vaccines, developed by Indian scientists, have successfully gone through animal trials and are ready for the first phase of clinical trials.

This was stated by Dr. V. Ramalingaswami, Director-General of the Indian Council of Medical Research (ICMR), while highlighting the achievements in the field of biomedical research at a press conference here.

Dr. Ramalingaswami said that the ICMR, with the help of experts, had drawn up the criteria to be satisfied about safety, effectiveness and quality control of vaccines. These had been conveyed to the two groups of scientists who had developed the vaccines to ascertain whether they conformed to these criteria. After receiving their replies, the ICMR would recommend to the Drug Controller clearance for the first phase of clinical trials.

No hazard: According to him, the vaccines are not based on human leprosy bacilli and hence posed no hazard. The one developed by the Bombay group is based on bacilli originally derived from a leprosy patient in 1950, but subsequently grown in different media. The vaccine developed by the Delhi group is based on bacilli derived from micro-bacteria and not from leprosy patients.

Dr. Ramalingaswami said that it would take some years before these vaccines are established for mass application after different phases of clinical trials.

Another breakthrough: Dr. Ramalingaswami referred to another significant contribution made by an Indian scientist to prevent deformity in leprosy patients. He said the scientist--Dr. Srinivasan of the Central Leprosy Research and Training Institute at Chingleput, in Tamil Nadu--had developed a method which would impart sensitivity to the nerves in the legs of the patient and this, in turn, would help prevent ulcers developing in the sole of the foot of the patient.

Asked about the work of a group of scientists in Madras, Dr. Ramalingaswami said this group had not yet reached the stage of vaccine development. This group, he said, had reported to have cultured leprosy bacilli and it was for

the scientific community to assess the claim. The question of any progress towards development of vaccine would come later, he added.

Malaria control: The ICMR chief said that in diarrhoeal diseases, the oral rehydration solution developed by one of the ICMR institutes had proved quite effective. In malaria, an integrated environmental control method was sought to be adopted to tackle the recrudescence of the disease, as it had not been possible to control it anymore with chemical insecticides alone. The new method sought to reduce the source of breeding of mosquitoes and control the spread of mosquitoes with the help of microbial insecticides. The integrated method would be tried first in Kaira district of Gujarat.

Contraception research: As regards research in contraception, Dr. Ramalingaswami said the effort was to broaden the range of contraceptive choices. With a view to covering more of younger couples, reversible methods were being explored. He listed, among the achievements, the demonstration of the efficacy of an indigenous plant product (misaptent) for inducing abortion, development of a simple, reliable and inexpensive pregnancy kit, studies on long-acting injectibles, subdermal implants and 'inhibin', a male contraceptive agent.

He said that efforts to develop an anti-fertility vaccine were progressing. Besides the research by scientists in Delhi, work had been initiated on a new vaccine at the Indian Institute of Science, Bangalore.

Regional research centres: Dr. Ramalingaswami said the infrastructure had been strengthened to enable scientists work on problems encountered in different regions of the country. Regional medical research centres would be set up at Belgaum, Bhubaneswar, Jabalpur, Jaipur, Patna, Port Blair, and Shilong. Research manpower was being built through the talent search scheme.

The ICMR has decided to create supernumerary cadre to attract scientists from abroad to work here and the strength of the cadre would be 20.

CSO: 5400/7081

'ALARMING' RISE IN MALARIA REPORTED IN CALCUTTA

Calcutta THE STATESMAN in English 24 Jun 82 p 3

[Text] WHILE malaria cases are increasing alarmingly in Calcutta and five other districts of West Bengal every year, the incidence of malaria is still less in the State than those of Bihar and Orissa. According to Mr Nani Bhat-tacharya, West Bengal's Health Minister, last year the highest number of cases were reported from Bihar.

In West Bengal, 55,265 malaria cases were detected last year against 81,986 in Orissa and 91,199 in Bihar. All efforts to eradicate the disease have proved useless so far as the mosquitoes carrying malaria parasites have become virtually immune to common insecticides.

Calcutta is the worst affected city in the eastern region. The incidence of malaria has gone up three-fold in the city since 1979. According to official figures, 2,342 malaria cases were reported in Calcutta during 1979. Next year, the figures shot up to 4,400 and in 1981, the State Health Department recorded 6,639 malaria cases in the city alone.

The situation is equally alarming in five districts. In Midnapore, 3,215 malaria cases were detected in 1979. But during the past two years, the cases were on the rise. In 1980, 4,976 malaria cases were recorded there and the cases increased further to 6,746 in 1981.

The latest target of the disease is Jalpaiguri district in north Bengal. While 128 cases were detected in the district in 1979 and only 64 cases in 1980, nearly 4,500 people were reported to be suffering from the disease in that district in 1981.

Among other districts, the number of malaria cases detected in Bankura was 441 in 1979, 1,211 in 1980 and 1,439 in 1981. In Cooch Behar, the figures were 102 (1979), 132 (1980) and 316 (1981). In Darjeeling district, the numbers were 104, 75 and 138 during the years under review.

Only in Purulia district, malaria cases have reportedly gone down. While 4,076 cases were detected there in 1979, the number suddenly shot up to 8,803 in 1980. But the next year, the malaria cases came down to 5,481 in Purulia.

BRIEFS

JAMMU CHOLERA CASES--POONCH, June 17 (PTI)--Cholera, dysentery and malaria have broken out in the twin border districts of Poonch and Rajouri of Jammu. No casualty has been reported as yet from anywhere but a large number of persons are, however, suffering from these diseases for the past one week. Teams of medical officers have been rushed to the rural areas to provide medical aid and to take preventive measures to check the epidemic. [Text] [Bombay THE TIMES OF INDIA in English 18 Jun 82 p 15]

COCHIN DYSENTERY REPORTS--COCHIN, June 18 (PTI)--Twenty-two persons, most of them children have died of dysentery in the coastal Vypin region, near Cochin, during the last 75 days. Giving this information, Dr. E. T. Kuriakose, Ernakulam district medical officer, told newsmen today that over 2,000 dysentery cases were treated in various hospitals and dispensaries in the area. As many as 92 fresh cases were reported yesterday. All measures have been taken to control the spread of the disease which had broken out in an epidemic form in the area, Dr. Kuriakose said. [Text] [Bombay THE TIMES OF INDIA in English 19 Jun 82 p 5]

UNIDENTIFIED DISEASE TAKES LIVES--CALCUTTA, June 22--An unidentified disease has claimed a toll of 76 persons during the past few months in Dhupuri Madharihat and Alipurduar blocks of Jalpaiguri district, according to Dr. S. Ghosh, Director School of Tropical Medicine. Dr Ghosh told PTI today that a three-member team of specialists from the Institute had returned here after a visit to the affected areas in the blocks for investigation. It was now preparing its report on the findings, he said. The blood sera of seven victims collected by the para-medical staff on examination revealed that the death was not caused by malaria, as suspected earlier, he added. Dr. Ghosh said that the team during its four-day stay had examined 78 new cases of fever. The blood smear report of the patients said that 18 of them, who had taken chloroquine tablets repeatedly had enlarged spleens and livers. He said it was suspected that these patients were affected by "Kala Azar" and sera of ten had been sent for test to confirm this ('Kala Azar' is a tropical disease caused by a parasite and spread by sand flies. The affected persons will have fever and anaemia. [Text] [Madras THE HINDU in English 23 Jun 82 p 6]

BANDA MEASLES DEATHS--BANDA, June 22 (UNI)--Altogether 15 children have died due to measles this month at Nadanmau village under Bisanda block of the district, about 50 km from here, according to reports reaching here. Chief medical officer G C Agarwal however reported only eight deaths. [Text] [New Delhi PATRIOT in English 23 Jun 82 p 4]

CSO: 5400/7085

BRIEFS

GASTROENTERITIS IN WEST JAVA--Gastroenteritis which coursed through several areas of Bandung Regency leaving dozens dead of the hundreds of victims in April 1981 erupted again in early May. Five of the 386 victims are recorded as having died. Dr A. Abikusna, chief of the Health Service for the Bandung Regency regional government, who was contacted by SINAR HARAPAN, confirmed that the epidemic has spread into 7 of the 26 subdistricts. Generally, information regarding the illness of those who died of the disease was delayed in reaching local health officials and these victims were brought in for treatment only after they were critically ill. All victims who were found in time were treated immediately with tetracycline, oralit, or other medications. Lime was poured into wells. [Excerpts] [Jakarta SINAR HARAPAN in Indonesian 1 Jun 82 p 3] 6804

MEASLES IN CENTRAL JAVA--Six children under 5 years of age died of measles. They all came from Gandek Hamlet, Gedongsari Village, Kedu Subdistrict, Temanggung Regency. Symptoms of the disease are gradual loss of appetite, physical deterioration, rising fever, red cornea, and a skin rash. Children in good physical condition can be cured, but the lives of those who are malnourished are threatened by the disease. [Excerpts] [Jakarta MERDEKA in Indonesian 2 Jun 82 p 4] 6804

MEASLES OUTBREAK IN TANGERANG--Tangerang, 17 Jul (ANTARA)--Twenty-eight children below 5 years of age have died when a measles epidemic swept their kampong at Bayawakan, Kelebet village, Mauk Keca Matan in Tangerang while 119 others of the tots could be saved after medical treatment. The 2-day epidemic, which broke out at the kampong on 5-6 July was quickly brought under control and prevented to spread to neighbour kampongs and areas, the chief of the public relations of the Tangerang government, Nunu Nukman, announced here today. Reached by telephone today, Tarmizi, health official of the contagious diseases section of the Health Service of Tangerang explained that the measles (morbili) known locally as "campak" actually was not a fatal ailment if properly treated. What had killed these children at Kelebet village, Tarmizi, he said, were additional ailments, complications and malnutrition. He reported that a special team of paramedics had been sent to the stricken village to help the people. [Excerpt] [Jakarta ANTARA in English 1123 GMT 17 Jul 82]

INTERFERON TREATMENT USED FOR VIRUSES

Tel Aviv DAVAR in Hebrew 8 Jun 82 p 4

[Article by Arnon Magen: "Success at Kaplan in Treating Severe Virus Infections"]

[Text] Doctors at the Kaplan Hospital in Rehovot have cured 12 of 15 patients who were stricken with near-fatal severe virus infections by interferon treatment. In some of the cases the recovery was actually dramatic.

As of now it is being used only to a limited extent, only in clinical tests, and not as a routine treatment. There are very few known clinical tests with interferon which have been so successful.

Four of the patients had spreading simple herpes, three had encephalitis, one had a significant increase in the mucosity of the throat, and one had dermatitis which had developed as a result of measles. All of them recovered completely except for one, but in that case the spread of the infection had arrested. Six others had severe hepatitis, and three of them were cured. The other three died. Most of the patients manifested deficiencies in the immunity mechanism, the symptom of which was that they did not produce interferon which is the natural element formed by the body in reaction to virus infections.

The interferon given to the patients was the leucocytic type which is produced by the Biological Institute in Nes Ziyvona.

The successful treatment was reported by Stanley Levy and Talia Hahn of the Kaplan Hospital and Hagai Rosenberg and Tamar Pino of the Biological Institute in New Ziyvona in the current edition of KETAV HA'ET HAYISRAELI LEMADA'EI HAREFU'A [The Israeli Journal of Medical Sciences] which is published in English by the Medical Confederation in Israel.

The 15 patients, who ranged in age from 3 months to 66 years, were transferred to Kaplan from various hospitals in Israel when they were all in critical condition. Most of them were given the interferon as a last attempt to save their lives or because there was no other treatment.

The authors of the article in recapitulating the test state that it is desirable to administer interferon to patients with virus infections provided that it is given at an early stage of the infection. The treatment is especially effective on those patients who do not produce interferon as a reaction to the virus infections.

VERACRUZ TUBERCULOSIS CASES

Mexico City EXCELSIOR in Spanish 5 Jul 82 pp 5-A, 33-A

[Article by J. Cabrera Parra]

[Excerpt] Zongolica, Ver., 4 July--A little more than 40 persons have become victims of tuberculosis in the first half of the present year in the state of Veracruz, where poverty and neglect overwhelm a population of more than half a million inhabitants that is increasing at a rate of 2.5 percent, considered to be extremely high, given the shortage of services available to them.

Located within one of the wealthiest areas of the Sierra Madre Oriental, Zongolica is one of the poorest areas in the country, in which a great variety of diseases each year decimates a mainly mestizo population, that dies from all forms of enteritis, from diarrheal diseases that spread because of a shortage of drinking water, from whooping cough, and from anemia, as well as from the rheumatic fever that disables both children and the old, at least two cases of which appear in any community of 10 to 500 inhabitants. In towns like Mixtla de Altamirano, Acutzingo, Soledad Atzompa, and chiefly Zongolica (capital of the XX Federal Electoral District) alone, 40 cases of tuberculosis have appeared in less than 6 months.

The 17 health centers that are located in this district--the most important of which are located in the cities of Orizaba and Ciudad Guzman--are inadequate to treat the needs of a population that is overcome by acute malnutrition (85 percent suffers from irreversible malnutrition) and who consequently do not attain a minimum acceptable growth, which is 10 percent less than the normal. A drinking water shortage, which affects more than 85 percent of the towns, prevents the inhabitants from engaging in habits of personal cleanliness. These must be performed in small streams, for the most part contaminated.

In spite of the wealth of the region, there are no means of environmental sanitation, since almost all of the houses lack drainage. Physiological needs are taken care of outdoors, in courtyards or roads, where the natives walk about barefoot, which causes them to absorb viruses and microbes from the excrement that is putrefied by the sun. It is also easy to note, in addition to the stunted growth, deformations of the nose, mouth, or face, caused in general by disfiguring viruses or microbes.

The rivers and rivulets that cross the plateaus and the valleys--the Orizaba, Blanco, Tonto, Atoyac, and Metlac--for the most part are contaminated, to the extent that less than 2 months ago more than 14 persons died from the mere fact of having touched the water of the Atoyac River, which contains deadly contamination produced by the factories of Orizaba and Cordoba because of the indifference of the federal authorities. The state government has recently started a comprehensive health program which, together with SAHOP [Secretariat for Human Settlements and Public Works], may be able to attain results soon.

8255

CSO: 5400/2186

PRESCHOOL IMMUNIZATION AGAINST DIPHTHERIA INADEQUATE

Christchurch THE PRESS in English 26 Jun 82 p 1

[Excerpts]

One in 10 children under the age of five in Christchurch are not adequately immunised against diphtheria, a statistic that is of concern to the Health Department, according to the Deputy Medical Officer of Health in Christchurch, Dr M. A. Brieseman.

Lack of adequate immunisation against whooping cough is also worrying Dr Brieseman, who said yesterday that there was an outbreak of whooping cough in Christchurch.

"The Health Department is looking into it at the moment: we are trying to find out why there is so much whooping cough about," he said.

The outbreak had affected even some of the children who had been vaccinated against the disease, he said.

"Many people tend to think that diphtheria is a disease that is not about any more, and so they do not worry very much about keeping up the vaccines," Dr Brieseman said.

"Consequently, a number of children are left unprotected."

Dr Brieseman said it was possible that there could be an outbreak, especially among children in close con-

tact with one another at schools or play schools.

Dr Brieseman said that in 1980, 91 per cent of all children starting school at the age of five had been immunised against diphtheria.

The Health Department had added another 4 per cent to his figure by its immunisation programme in schools.

Dr Brieseman said there had been two cases of diphtheria reported in Christchurch in recent years, both in 1976.

An article in the latest "New Zealand Medical Journal" by Mr C. J. Clements, of the Health Department in Wellington, said that preschool children were not adequately protected against diphtheria, and he called for a significant rise in the preschool immunisation rate.

The article said that a survey of nine Wellington schools last winter showed that 11.11 per cent of Maori children were not immunised, compared with 0.85 per cent of European children.

Mr Clements suggests that a computer-based recall system for every notified birth, linked to Social Welfare benefits, would improve the rate of childhood immunisation.

BRIEFS

GASTROENTERITIS, MALARIA OUTBREAK IN JOLO--Jolo, July 12--Brig. Gen. Mariano G. Miranda, commanding general of the 1st Infantry (Tabak) division, Philippine Army, said the islet sitio of Tubigan in Pangutaran, Sulu, had an outbreak of gastroenteritis and malaria, and not cholera as earlier reported. Miranda led a group of army officers in visiting the sitio. Dr. Nelsa Amin, provincial health officer, supervised free medical consultation and treatment to stricken residents. Miranda met with Mayor Sahibil Baga and Barangay Captain Arola Saji and other barangay officials and residents. The people asked for standby medicine for diarrhea, malaria, cold and fever. The general promised to ask government agencies to give medicine. The general also said he will find out if chemicals could be sprayed in several places to eradicate malaria-bearing mosquitoes and flies. He asked the people, mostly Visayans, Tausugs, Samals, and Badjaos, to observe cleanliness, construct toilets, cook their food properly, and boil their drinking water. [Text] [Manila BULLETIN TODAY in English 13 Jul 82 p 9]

CSO: 5400/5683

CANCER VACCINE GIVEN TO BABIES

Johannesburg RAND DAILY MAIL in English 5 Jul 82 p 4

[Text]

A NEWLY developed vaccine preventing liver cancer is being administered to black babies in Kangwane.

The inoculation programme — first of its kind in the world — is headed by Professor M C Kew of the University of the Witwatersrand.

Professor Kew said the programme was aimed at preventing the hepatitis-B virus from reaching the chronic conditions of liver cancer, cirrhosis and chronic hepatitis. This could be done by inoculating babies and very small children before they contracted and carried the disease.

He said infancy was the most dangerous stage because the child's body had not yet developed sufficient antibodies to combat infection. The chronic conditions of the disease could therefore

be prevented by harnessing the virus at its early stages of development.

Professor Kew said the virus was carried in the bloodstream and was transmitted by mosquitos, bed bugs, blood transfusions and the use of unsterilised instruments in tribal rituals.

He said there was a high incidence of the disease among blacks in South Africa and attributed this to rural living conditions and rituals.

The vaccine, developed in the United States, was tested extensively on animals and humans before being approved by the Food and Drug Association in America (FDA).

The inoculation programme has been financed by the New York Blood Transfusion Centre, the Institute of Viriology in South Africa and the Department of Medicine at the Johannesburg Hospital.

CSO: 5400/5692

FIFTH TYPHOID VICTIM DIES

Johannesburg THE CITIZEN in English 22 Jul 82 p 11

[Text]

A FIFTH person has died in the typhoid outbreak at the Weskoppies Psychiatric Hospital in Pretoria and 23 patients are still being treated for the disease.

Five of these patients who, according to Dr James Gilliland, deputy Director-General of Health, are in a serious condition, are being treated at the Kalafong Hospital.

The latest death occurred at Weskoppies, but Dr Gilliland said the situation there appeared to be stabilizing.

It has now been established that 20 patients at Weskoppies are carriers of the disease and they have been isolated from the other patients.

They are not ill, but they are being

treated to rid their systems of the typhoid bacteria. They may have become typhoid carriers in the hospital as it needed only one person to bring it in.

Meanwhile, the ward in which the outbreak occurred, which contains 300 patients, is still being isolated as well.

"We will continue to keep it isolated until we are absolutely sure there are no more cases of typhoid," Dr Gilliland said.

There was no danger of the disease spreading to other parts of the city.

● The Department of Health has not been notified of any more cases of polio and the latest figures remain at 242 children affected, with 22 deaths.

SOUTH AFRICA

POLIO SCARE HITS VAAL TRIANGLE

Johannesburg SOWETAN in English 16 Jul 82 p 1

[Article by Charles Mogale]

[Text] A big polio scare has hit the Vaal Triangle--and at least 7 000 children were vaccinated in Evaton township alone this week.

Hundreds of parents who could not make it to the front of the queues have been forced to make several trips to the vaccination points in bids to get their children immunised.

The scare stems from unconfirmed reports in the township that a Vaal kid had been found to have contracted the disease by doctors at Baragwanath Hospital in Johannesburg.

Staff at the treatment points said they had been working extra hours from the beginning of the vaccination crusade. The 2 000 kids treated yesterday were said to be "nothing compared to the crowds we've had all week."

Some parents interviewed in the crowds said they had stayed away from work to be able to take their children for vaccination.

By early yesterday morning, the queue at the Methodist Church in Bodea Road was more than 600 metres long and the crowds were still pouring in.

The township has no clinic and the residents have to rely on the one in Zone 7 Sebokeng for their needs.

The Vereeniging Medical Officer of Health, Dr Henry Benrstein, said his area was "well protected" and the fears were unfounded. He said there had been no known cases of polio since the big scare and if it were traced, it could only have come from visitors to the area.

CSO: 5400/5684

CARRIERS FOUND AMONG TYPHOID SUFFERS

Johannesburg THE CITIZEN in English 21 Jul 82 p 14

[Text]

AN unspecified number of typhoid carriers have been identified among the patients at the Weskoppies Hospital Pretoria, Dr James Gilliland, Deputy Director-General of Health said yesterday.

However, another Weskoppies patient, who was being treated for typhoid at the Kalafong Hospital, near Pretoria, died on Monday night. This brings the death toll from the typhoid outbreak at Weskoppies to four.

Another patient has also contracted the disease, bringing to 17 the number who are currently being treated for

it.

Dr Gilliland said he was not sure how many typhoid carriers had been identified to date, as not all the tests had been completed nor had all the laboratory results been obtained.

Isolated

Those who had been identified were also undergoing treatment, and the ward at the hospital when the outbreak occurred is still being isolated.

Dr Gilliland said it was possible that some of these people had become carriers of the disease in the hospital. A person can be a typhoid carrier without showing any of the symptoms of the disease.

Meanwhile, another child has died from polio, the 22nd since the outbreak began in Gazankulu early in April.

Since Friday, 16 more polio cases from Gazankulu and Lebowa have been reported. This means that since April, 242 children, all under the age of five, have contracted the disease. Six cases have been reported at Gra-Rankuwa and one in the Johannesburg area.

Polio

Dr Gilliland said that in the rural areas, about 65 percent of the population was immunised against polio. The number in the badly affected areas was much lower.

CSO: 5400/5688

BRIEFS

POLIO EPIDEMIC ABATES--Two more children have died at the Letaba Hospital from polio but health authorities say the epidemic is abating. The deputy director general of health, Dr James Gilliland, said yesterday five more children had been admitted to the hospital suffering from polio. The total number of children who have been admitted to hospitals in the Transvaal following the outbreak of the epidemic is 247. Twenty-four have died. "There has been a good response to the immunisation campaign and the normal character of polio is that within two to three weeks of mass immunisation the disease starts to diminish," Dr Gilliland said.--Sapa [Text] [Johannesburg THE CITIZEN in English 23 Jul 82 p 13]

MORE TYPHOID CASES--Two more patients from the Weskoppies Psychiatric Hospital in Pretoria have contracted typhoid. The outbreak at the hospital has so far claimed five lives. The Deputy Director-General of Health, Dr James Gilliland said yesterday that 19 typhoid cases were being treated at Weskoppies and six at the Kalafong Hospital. All patients were improving with the exception of one at Kalafong who was "seriously ill." [Text] [Johannesburg THE CITIZEN in English 23 Jul 82 p 8]

TWO TYPHOID DEATHS--Two people who were admitted to the Weskoppies Hospital near Pretoria and then transferred to the Provincial Hospital, Kalafong, have died of typhoid. Another five cases have been confirmed while another 11 are being treated, but tests still have to confirm whether they have typhoid. Deputy Director-General of Health, Dr James Gilliland, said late yesterday that the 11 victims had been "clinically diagnosed" as having typhoid but they were still awaiting confirmation. "Clinical diagnosis takes some time before we can confirm anything," he added. The people who had died of the disease and the admitted case were all Blacks. No whites had contracted the disease, he said. Dr Gilliland said "about 15 cases are admitted to Weskoppies every day and I am quite sure that one of the victims was infected with typhoid." [Text] [Johannesburg THE CITIZEN in English 19 Jul 82 p 3]

TYPHOID KILLS AGAIN--A third person has died in a typhoid outbreak in Pretoria. The Deputy Director-General of Health, Dr James Gilliland, confirmed that another 17 people were being treated for the disease. The first victims were patients admitted to Pretoria's Weskoppies Mental Hospital. They were transferred to the Kalafong Hospital for blacks in Atteridgeville. Dr Gilliland said today that the disease had not been caused by conditions at Weskoppies Hospital, but had been brought in by one of the patients admitted. Dr Gilliland said he could not definitely tell where the disease might have originated. [Text] [Johannesburg SOWETAN in English 20 Jul 82 p 2]

JUMBE SAYS DYSENTERY OUTBREAK TO BE CONTAINED AT MONTH'S END

Dar es Salaam DAILY NEWS in English 1 July 82 p 1

[Text]

THE Chairman of the Zanzibar Revolutionary Council and President of Zanzibar, Ndugu Aboud Jumbe, said yesterday the dysentery outbreak on the Isles was expected to be completely contained by the end of this month.

Ndugu Jumbe, who was addressing regional commissioners, medical personnel who had been combating the outbreak and other government officials, directed that action should be taken against those suffering from the disease but refused to be sent to hospitals.

According to Radio Tanzania Zanzibar monitored in Dar es Salaam last night, Ndugu Jumbe explained that individuals who contracted the disease but refused to go to hospitals were behind its spread.

Such people should be forcefully taken to hospital, he said.

Ndugu Jumbe recalled that the dysentery outbreak had occurred in the Isles in the past but the disease was completely wiped out following a co-ordinated onslaught against it.

The Party should educate the people on the importance of observing the basic rules of health in order to completely wipe out the disease just as they did to cholera.

DYSENTERY RATE INCREASES, THOUSANDS DIE

Bangkok DAO SIAM in Thai 19 Jun 82 pp 3, 11

[Article: "Many Thais Die from Dysentery"]

[Text] Mr Phaetkhati Chirayut, director of the Bureau of Common Infectious Diseases, Department of Infectious Disease Control, said that even though the severe infectious diseases, KAT fever, smallpox, and yaws, have been eliminated completely for quite a while and cholera, malaria and leprosy have become less severe, certain types of infectious diseases are still a great problem today: those characterized by diarrhea. These diseases are an important national public health problem because they are the cause of 50 percent of all deaths of infants and children under 5 and the number one cause of death in children under the age of 1 year from infectious disease. From discussion in a report of the Bureau of Epidemiology [line illegible] public health, it appears that there has been a yearly increase in the incidence of dysentery, from 98,662 in 1977 to 199,493 in 1981.

The director of the Bureau of Common Infectious Diseases revealed that in the past 4-5 years approximately 90,000 children under 5 died each year from infectious diseases, of which 20,000 could have been prevented by vaccinations. In addition, 80-90 percent of sicknesses of children under 5, that is of pre-school-age children, are preventable infectious diseases. Therefore, the fifth public health development plan has as its goal the reduction of the rate of sickness and death from infectious diseases preventable through vaccination--diphtheria, whooping cough, tetanus, polio, and tuberculosis--through budgetary support from the government and foreign aid.

Mr Phaetkhati Chirayut, director of the Bureau of Common Infectious Diseases, pointed out that in 1982 the Department of Infectious Disease Control set the goal of improving protection of children against diseases by vaccinating 70 percent of infants at 1 year against tuberculosis, diphtheria, tetanus and polio; and vaccinating at least 80 percent of school-age children in years 1 through 6 against tuberculosis, diphtheria, tetanus, and typhoid. At the same time, vaccination against tetanus will be given to at least 60 percent of pregnant women. For dysentery, from which the rate of sickness and death is still high, the Department of Infectious Disease Control has set the goal of reducing the death rate by giving powdered sugar and mineral salts, and guarding against infections due to food, and of reducing the rate of sickness by improving sanitation of mothers and children in terms of food and clean water.

HIGH RABIES DEATH RATE NOTED

Bangkok SIAM RAT in Thai 28 May 82 pp 1, 12

[Article: "A Thai a Day is Killed by Rabid Dogs; Statistics for Males Greater Than Females; Doctors Say There is No Cure"]

[Text] It has been revealed that at least one person a day dies from rabies. There is no cure, only prevention. It has been noted that males are bitten more frequently than females.

Assistant Professor Dr Bunyiam Kiantiwut of parasitology, Department of Public Health, Mahidon University, revealed to SIAM RAT that rabies is still an important problem in our villages, because our prevention measures are not as good as they should be. There is still a high death rate of approximately 365-370 people per year, or an average of one person per day. And these figures are lower than the actual rate, because they only show those people who see a doctor, while in the very rural areas people are unable to get care from doctors. Therefore it is understood that there are many more cases.

Dr Bunyiam went on to reveal that rabies is very severe--that as many as contract the disease will die, because there is no cure. There is only prevention. That is, when one is bitten by a rabid dog, one must hurry to get a protective vaccination. If one waits until symptoms of rabies occur, there is no way to cure it.

In addition, Dr Bunyiam went on to say that medical data show that 49 percent of the incidences of disease are in the central region. The lowest incidence is in the south, while the incidence in the north and northeast are even. Dr Bunyiam gives as the reason for this the fact that more people live in the central region, so when they are bitten they see a doctor at the big hospitals, especially Phrabamratnaratun hospital. And when the figures are analyzed, it turns out that males are bitten by rabid dogs more often than women.

Dr Bunyiam told of the protective vaccine against rabies in our villages. He said that there is not yet enough to use widely because the Sawapha Institute and the Department of Medical Science have not been able to produce much. They are still making the special vaccine from sheep's brains,

containing myelin-cis, which is found in the tissue of the brain and spinal chord of sheep. Myelin-cis itself contains various neuro-paralytic factors that can cause paralysis, although this is rare. They have not yet been able to manufacture vaccines from humans and duck embryos, which are very effective protection, nor can they be bought from foreign countries because of the expense. The Ministry of Public Health's budget is not large enough. However, private clinics use the vaccine ordered from abroad because it is more effective protection.

9937

CSO: 5400/5663

BRIEFS

LEPROSY BUDGET INSUFFICIENT--The budget of only 3,000 baht per year is insufficient to care for leprosy victims, which requires millions of baht. A charitable foundation is asking people to collect donations. Ms Sumali Chatikuanit, head of the Commission to Propagate Technical Skills and public relations person for the Royal Foundation for People's Aid, told about the foundation's work and the obstacles they have met. She said at present they are increasing aid to leprosy victims in settlements by enhancing their livelihood by promoting cloth-weaving in the settlement. At the same time they are trying to find more markets for them. In addition, to promote education a group has been assigned to set up a school for the children of the patients and the citizens. They have now begun operating in Phrapradaeng district, where there are 2,600 people. The commission has plans to improve the education of the people in this area. For this work, the foundation needs a large budget. For the welfare budget to promote a better livelihood, 400,000 baht are needed; to establish schools, 1,407,020 baht; and the Commission to Propagate Technical Skills needs about 217,000 baht. Altogether, the foundation will need 2,157,320 baht for 1982. However, at present the foundation is receiving only 3,000 baht in support from the Ministry of Public Health, which certainly is not enough. Ms Sumali said that they therefore would like to scrape up assistance from believers, who together could gather donations for the foundation to prolong the lives of leprosy victims. [Text] [Bangkok SIAM RAT in Thai 18 Jun 82 p 5] 9937

CSO: 5400/5663

BRIEFS

MEASLES DEATHS IN LUSAKA PROVINCE--Forty-one children have died from measles in Lusaka between January and April this year, Provincial medical officer Dr Chitwa Chimbini said yesterday. Dr Chimbini said there were 383 cases of measles reported in the province during that period and he blamed lack of health consciousness among the public for the high infant mortality in the province. [Excerpt] [Lusaka TIMES OF ZAMBIA in English 13 Jul 82 p 5]

MWINILUNGA DISTRICT DEATHS--An outbreak of measles killed 51 children in Mwinilunga district last month. Minister of Health Mr Ben Kakoma said at the weekend that the toll could be higher as some deaths may not have been reported to local medical authorities. The minister said this at the opening of the first Mwinilunga district Party conference. He attributed the deaths to villagers not reporting incidences of the disease to local medical authorities on time. He only heard of the measles outbreak during a recent visit to Mwinilunga hospital. [Excerpt] [Lusaka TIMES OF ZAMBIA in English 9 Jul 82 p 1]

CSO: 5400/5691

VENDORS LINKED TO SPREAD OF TYPHOID

Harare THE SUNDAY MAIL in English 11 Jul 82 p 1

[Text]

THE number of notified typhoid cases in Harare doubled from 123 in 1980 to 250 last year, says the City Health Department's annual report.

It blamed the increase on two probable factors:

A failure to enforce proper hygiene measures on fruit and vegetable vendors, and water supply problems caused by drought, forcing people to drink contaminated water.

Most vegetables were obtained from known endemic typhoid areas like Murewa and Mhondoro. Prosecutions for illegal vegetable and fruit vending had been relaxed or suspended while adequate facilities to form people's markets were being provided.

The report said the increased number of typhoid cases from the city "is a cause for great concern", especially when there were not enough health inspectors.

"It is hoped that with stricter control on the proliferation of squatter settlements and enforcement of the council's by-laws, the typhoid threat could be averted."

A remarkable decrease in notified anthrax cases — from 544 in 1980 to 91 in 1981 — had been achieved through effective veterinary control measures and the general awareness of the public to the hazard of eating uninspected carcases.

The department's sampling section reported that despite a slight improvement "several food premises are not meeting the re-

quired standard of hygiene".

"Particularly bad bacteriological results were obtained from a batch of nine samples of cooked meats obtained from the supermarket of a well-known departmental store," it says.

Two of the samples had staphylococcus aureus bacteria and two other samples had excrement.

Frozen dairy confectionery had also been contaminated by faeces.

"Bacteriological tests carried out on this product continue to be unsatisfactory. Of 128 samples submitted 37 (28.9 percent) were found to contain coliform organisms including four (10.8 percent) which contained faecal contamination.

"Continuous health education is necessary in this field but is seriously hampered by staff shortages," says the report.

A total of 1495 swabs were taken from food handlers' hands and cutlery and crockery in hotels, restaurants, children's homes and factories. Of those, 87.4 percent were satisfactory compared with 85.6 percent in 1980.

Samples of fruit and vegetables examined for pesticides were all found to be within World Health Organisation limits. Ten of 127 samples of sausages, mince meat and polony did not conform to legal requirements on preservatives or meat content. But repeat samples were satisfactory.

TB RATE STILL RISING

Harare THE SUNDAY MAIL in English 11 Jul 82 p 5

[Text]

THE high number of notified tuberculosis cases in Harare, which doubled in four years to 899 in 1982, is "a grim reminder for an aggressive policy to eradicate this very preventable disease", the City Health Department's annual report advises.

"Improved housing, a wide immunisation coverage against TB, and improved nutrition, should completely wipe out this disease", it said.

As in many parts of the world, most of the TB patients come from high-density suburbs, large families and lower socio-economic groups.

There was a high "defaulter" rate among those patients, making out-patient treatment and follow-up quite difficult. The rural-urban drift caused by dual homes, also made contact tracing difficult.

Since there were insufficient medical services in most communal areas, TB patients had to come to the cities for diagnosis and treatment.

"Unfortunately, the majority of them arrive in the late stages of the

disease, thus a large proportion of them dies in comparison with the city TB patients", says the report.

Of 784 cases notified TB in 1981 at the Beatrice Road Infectious Diseases Hospital (405 city and 379 rural cases), 29 patients died, of whom 24—83 per cent—were rural.

In an effort to control the disease, the health department ensured that all babies born at city clinics received BCG vaccinations at birth.

The report showed a considerable decrease in measles death rates. Of 1 103 measles admissions in 1980, only 176 patients (1.6 per cent) died, compared to 5.73 per cent of 1 030 admissions in 1978 and 5.19 per cent of 2 460 patients in 1979.

The number of cases of whooping cough also dropped from 157 in 1980 to 64 last year.

"The decrease . . . must be attributed mainly to the intensive immunisation campaign within the city."

Seven rabid patients were admitted to the city's two infectious diseases hospitals. They all died.

BUFFALO RAISING SEEN AS WAY TO END NORTHERN TERRITORY CATTLE DISEASE

Sydney THE SYDNEY MORNING HERALD in English 7 Jun 82 p 10

[Text]

Wild buffalo in Australia are to be domesticated as part of a Northern Territory Government program to eradicate cattle diseases in the territory by 1992.

The NT Minister for Primary Production, Mr Steele, said yesterday buffalo farming would gradually replace the present contract slaughter of feral buffalo.

He was announcing a decision by the NT Government to spend \$100,000 in the next financial year to control tuberculosis in feral buffalo.

Buffalo catchers would have to deliver female buffalo under the age of three to a marshalling facility. They would be paid a set fee, he said.

"These buffalo will be held for between five and seven days while being tested for TB.

"Buffalo found to be infected will be sent for slaughter while disease-free animals will be sold at cost to farmers wishing to run domesticated buffalo herds under an ap-

proved program related to the brucellosis-TB eradication campaign."

Mr Steele said a recent survey had indicated there were between 223,000 and 282,000 buffalo in the Top End.

An estimated 3 per cent of buffalo were infected with TB, compared with 0.44 per cent of cattle. Feral buffalo posed "a significant threat" to the eradication campaign, he said.

"Apart from TB, the territory was one of the few disease-free buffalo herds in the world, and there are markets for buffalo meat. The submission of the present system of catching feral buffalo by a phased development of controlled, disease-free herds will ensure the continuation of a viable industry."

The present method of contract slaughter of buffalo would continue at a planned rate, Mr Steele said.

The Government was now considering proposals for the killing of up to 150,000 buffalo on the coastal fringes and other areas of the Top End.

CSO: 5400/7568

BRAZIL

OUTBREAK OF FOOT-AND-MOUTH DISEASE IN STATE OF SAO PAULO REPORTED

Sao Paulo FOLHA DE SAO PAULO in Portuguese 12 Jun 82 p 20

[Text] Ribeirao Preto--An outbreak of foot-and-mouth disease reported in the town of Jabuticabal, which has caused the death of more than a thousand animals, continues to concern those raising swine and cattle. Although Agriculture House in Jabuticabal reports that the outbreak is now being brought under control, the fears of the animal breeders are justified, mainly because of the shortage of vaccines.

The incidence of the disease is highest on the hog-breeding farms near the neighborhood of Estiva do Palmital, where the municipal slaughterhouse, which may have been the source of the disease outbreak, is located. The slaughterhouse is reported to have been discarding refuse from the slaughtering into a stream which passes nearby, thus contributing to the spread of the outbreak to about 25 rural properties, at a minimum.

According to Carmen Lucia Grisido Nascimento, the Agriculture House veterinarian, there are 10,000 to 12,000 head of cattle in the municipality and 12,000 to 14,000 hogs which need to be immunized.

"These animals," the veterinarian said, "will be immunized with the vaccine containing the A-24 virus strain, which provides about 60 percent protection. But we have only 10,000 doses of this vaccine, which would have been used up except that many farmers do not fully believe in its effectiveness."

Rio Grande do Sul Concerned

Marques da Rocha, the secretary of agriculture for Rio Grande do Sul, will send technicians to Sao Paulo in the coming days to attempt to identify the virus responsible for the outbreaks of foot-and-mouth disease in the cattle and swine herds of some areas in Sao Paulo. The purpose is to prevent the disease from spreading to the herds in Rio Grande do Sul, particularly in view of the plans for holding the major Esteio Exhibit.

According to secretariat of agriculture technicians, the virus which has attacked the Sao Paulo herds has not as yet been identified. Even so, they hope that the spread of the disease to Rio Grande do Sul can be prevented, particularly in view of the considerable distance and the steps taken to find an efficient antidote.

The International Animal Exhibit is held every 2 years in Esteio, a municipality located about 30 kilometers to the north of Porto Alegre. It is the main farming event in the state. For this reason, there is great fear about the damage a possible outbreak of foot-and-mouth disease might do in terms of publicity. The exhibit is scheduled to be held from 25 August to 5 September.

5157

CSO: 5400:2181

COLOMBIA

BOGOTA ANTI-RABIES CAMPAIGN

Bogota EL TIEMPO in Spanish 30 Jun 82 p 1-B

[Excerpt] The Regional Health Department will continue its round-up campaign of stray dogs in Bogota, since they are the main transmitters of deadly human rabies and the ones that daily leave some 10 tons of excrement on the streets.

There are about 100,000 stray dogs in Bogota, which means an equal number of risks to which a person may be exposing himself if he happens to be bitten by a rabid dog, said Secretary of Health Luis Jose Villamizar Herrera.

The official stated that whenever action is taken against the animals or their owners, "people band together to try to prevent a dog from being taken away, even when it is for the very good of the citizenry, itself."

The Zoonosis Department has been instructed to be careful in their retention of animals, but "people will oppose everything, even if for their own good. Therefore the employees must in turn do what is necessary in order to carry out the mission that has been entrusted to them," said Villamizar Herrera.

He added that the dog round-up is very necessary because, in addition to being the dangerous transmitters of rabies, the dogs are the ones that scatter garbage in the streets.

Evidence of the effectiveness of the control carried out by the Health Department against the stray dogs is the fact that this time last year four cases of canine rabies and another four cases of human rabies had already been spotted. During the entire year six cases of human rabies were reported.

This year, up to now, there has been only one case of human rabies, in the Bosa area, said Villamizar Herrera.

8255

CSO: 5400/2182

CATTLE DISEASE CONTROLLED, MEASURES TAKEN TO PREVENT EPIDEMIC

Cairo AKHBAR AL-YAWM in Arabic 29 May 82 p 4

[Article by Muhammad Imbabi: "Severe Cattle Disease Controlled: Veterinary Committees Investigating Any New Reservoirs"]

[Text] The severe unexpected disease which infected cattle in a group of governorates in Upper Egypt has been controlled. This is the case in Al-Fayyum governorate. It has been stopped in Bani Suwayf governorate and at the feeding station in Qina governorate, and it is in the process of being controlled at the Friesian station in the same governorate. A plan was drawn up to raise the level of hygiene for the animals, to use sterilization to prevent the infection from spreading, and to treat the fever and diarrhea to combat the disease.

Dr Subhi Kamil, Undersecretary of the Ministry of Agriculture for Veterinary Affairs, discussed the disease which infected cattle in a number of Upper Egypt governorates. He said that this disease is spreading in countries around the world, among them Egypt. He said that the disease has been controlled, just as we previously controlled the bovine plague, which was one of the most severe animal diseases in the world. It was finally eradicated in Egypt after it was endemic there until 1967.

The acute form of the disease which occurred recently and the presence of the current, highly virulent virus, can be attributed to one of two possibilities: Either this virus entered Egypt with imported animals, since there can be animals which carry and secrete the infection without showing symptoms for up to 6 months; or the locally present virus for this disease, which existed in the country before, has increased its virulence due to various factors which require practical study, especially the fact that the form of animal husbandry in Egypt has changed. There are now large herds of animals in environments with an extremely poor level of hygiene, where there are no suitable conditions to limit the transmission of infection between animals. Also, nutritional requirements and green fodder are not abundant in these environments. This results in the animals having low resistance when they are herded together, rapid transmission of the infectious agents between them, and therefore, increased virulence of the virus.

Role of Quarantine

However, if we dismiss the second possibility as some say (virulence of the virus as a result of increased concentrations of the animals in unhygienic conditions) and we give preference to the virus entering with imported animals, then what is the role of quarantine for the animals?

Dr Subhi Kamil states that there is a scientific principle which asserts that importing animals is an activity surrounded by dangers, no matter how strong the quarantine measures taken against the imported animals. This asserts that many progressive countries such as England, the United States, and other European countries have displayed--and still are displaying--symptoms of diseases brought to them in spite of the strict quarantine measures they take.

Thus, handling animals imported to Egypt at quarantine stations guarantees preventing any damage from them, since the period that cattle are held at the quarantine stations scattered about the ports is 32 days. During this time they are immunized against the diseases that are endemic in Egypt because of their sensitivity to these diseases, some of which are not found in Europe. These animals arrive with health certificates which show that Egyptian veterinary stipulations have been fulfilled. These stipulations are in full accord with the recommendations of the International Office for Animal Epidemics.

However, with respect to the cattle which are imported from Sudan, they are imported here for slaughtering only. Therefore, they are held first at the [Aswan] High Dam quarantine station, then transferred directly to the Cairo quarantine station attached to the slaughterhouse.

In any case, epidemics are a matter which sometimes may be beyond the control of some nations. For example, Denmark is a country which is free of foot-and-mouth disease. This is an epidemic disease which Denmark has eliminated since 1970, but it reappeared in recent weeks. The strange thing is that it reappeared on an isolated island.

We Do Not Fear the Disease

The question now is: "Has the disease been confined in Egypt, and how is it possible to avoid this epidemic and others in the future?"

Dr Subhi Kamil says: "So that some of the butchers who are manipulating people's food do not trade on the problem and take advantage of circumstances to realize profits for themselves, I assure you that the veterinary agencies do not fear the appearance of animal disease, because our duty is to confront any disease, when and where it appears."

The methods of fighting this disease are currently restricted to raising the level of hygiene for the animals, using sterilization to prevent transmission of the infection, and treating the fever and diarrhea. However, with respect to using vaccine for this disease, it is well-known that this requires consideration, to study the current form of the disease, since there are side effects to the use of vaccine which cannot be ignored. One of them is the fact

that it results in an adverse effect on the immune mechanisms in the animal's body, and consequently great sensitivity to various diseases. It may also result in spreading the infection. This method has succeeded for the present in controlling the pathological reservoirs, since the diseases is almost halted. Follow-up on this disease is still continuing; the veterinary committees are moving about in all parts of the republic to investigate any new reservoir as soon as it appears.

Path to Preventing Epidemic

As for preventing such diseases in the future, a research working group is now being formed of professors at veterinary medicine colleges and the Animal Health Research Institute and veterinary medicine specialists in the ministry of agriculture. It will follow up on studies and measures to confront the situation and the likelihood of epidemic diseases appearing in light of increased importation and intensified raising of animals in all governorates of the republic.

It is necessary only to increase awareness among the populace and the large-scale breeders to improve the hygiene and nutrition conditions for the animals; to use effective disinfectants from time to time; to isolate the animals which have been purchased recently for several days before adding them to the other herds in order to limit the spread of any infection; not to slaughter any sick animals; and to quickly burn the dead carcasses, bury them, and not throw into canals and irrigation ditches, because they cause the infection to spread.

9605

CSO: 5400/5014

GRAZING MANAGEMENT SEEN CONTROLLING RYEGRASS STAGGERS

Endophyte-Free Ryegrass

Auckland THE NEW ZEALAND HERALD in English 25 Jun 82 p 9

[Text]

Recent research into the nervous disorder, ryegrass staggers, suggests that in the foreseeable future it will have to be controlled by grazing management.

Scientists now know that ryegrass staggers is closely associated with a fungus known as lolium endophyte found within some, but not all, perennial ryegrass plants.

Dr P. H. Mortimer told the recent Ruakura Farmers' Conference that it was possible to grow ryegrass free of endophyte.

But in Ruakura trials testing the truth of the assumption that animals on such pasture would not contract ryegrass staggers, another major discovery emerged.

Stem Weevil

Ryegrass plots with a high endophyte incidence showed a much better regrowth than the low endophyte plots after grazing — the difference being more than three fold.

Dr Mortimer said it was found that the low endophyte plots had growing tillers severely damaged by the larvae of Argentine stem weevil. Negligible damage occurred on the high endophyte plots.

"The trial indicated for the first time a remarkable and strong association between the incidence of endophyte

infection in perennial ryegrass and resistance conferred by such infections against predations by stem weevil larvae," he said.

"This finding is likely to have wide ramifications in pasture agronomy, agronomic entomology, plant selection and breeding, as well as in animal disease control," he said.

It seemed likely that researchers developing improved ryegrass strains had unwittingly selected largely ryegrass types containing a high incidence of the lolium endophyte fungus.

Protection

The new ryegrass strains were actually selected because they gave better pasture production. But the

extra production really came about because the fungus was protecting the grass against attack by weevils.

The risk of serious outbreaks of ryegrass staggers arises from the overgrazing of pastures with ryegrass dominant in summer and autumn.

Dr Mortimer said the leaf sheath of the grass carried high endophyte infestation — the safest grazing was of swards more than three centimetres above the ground.

He said management control for ryegrass staggers would include:

- Avoidance of set stocking. If ryegrass staggers appeared while animals were set stocked, rotational grazing with daily shifts should be started.

- Encouraging the white

clover component of summer-autumn pastures.

- Laboratory test on collected leaf samples might soon make it possible to identify the extent of endophyte infection in different paddocks and use them accordingly. The endophyte count analysed would be applicable to a particular paddock over one or more seasons.

- Farmers training themselves to recognise the earliest stages of ryegrass staggers and move stock to safer grazing or feed supplements. From these early stages all animals recovered quickly and completely.

- The use of crops for safe feed and for flushing ewes before mating was strongly recommended.

Seaweed Derivative Test

Auckland THE NEW ZEALAND HERALD in English 25 Jun 82 p 9

[Text]

Promising results are being claimed for a North Canterbury trial, testing the effectiveness of a product derived from seaweed in reducing the incidence of ryegrass staggers in weaned calves.

Mr J. R. McKenzie, an animal production consultant, says when weaned Friesian bull calves were drenched four times at monthly intervals with 20 millilitres of the product, the incidence of ryegrass

staggers was reduced by 50 per cent, and the associated death rate was also reduced.

He carried out the trial with the assistance of a Ministry of Agriculture and Fisheries farm adviser, Mr Phillip Everest.

Mr McKenzie said the trial was aimed as a prevention programme before the onset of ryegrass staggers.

What action the product, marketed as an anim-

al health aid, had to reduce the level of ryegrass staggers was not known and further research was urgently needed.

Ruakura research scientists working on ryegrass staggers told a questioner at the farmers' conference at the agricultural centre last week that they were unaware of the trial carried out with the product.

Mr McKenzie mentioned that the seaweed derivative had added quantities in chelate form of copper, zinc and magnesium.

"A common link in a number of so-called farmer remedies for ryegrass staggers is the element magnesium," he said.

"Possibly the high level of magnesium in the product, combined with other elements, is having some blocking action in the development of the syndrome."

CSO: 5400/9089

LARGEST RINDERPEST CAMPAIGN IN FIVE YEARS TO BE UNDERTAKEN

Dar es Salaam DAILY NEWS in English 28 Jun 82 p 3

[Text]

FIVE MILLION/- is to be spent in anti-rinderpest campaign, the biggest in 14 years, under which more than 2.5 million head of cattle would be vaccinated against the disease in five northern Tanzania regions.

Kilimanjaro Regional Livestock Development Officer, Dr. L. Tesha, said over the weekend the campaign would start mid next month in Arusha, Dodoma, Kilimanjaro, Singida and Tanga regions.

Some 2.5 million/- in foreign exchange had been obtained to meet the purchase of the imported vaccines while the rest of the money would be raised locally, explained Ndugu Tesha.

He said that the campaign was unique since, for the first time all areas in Kilimanjaro and Tanga regions and some areas in Dodoma and Singida regions, would be covered.

In the past, the campaign involved only Hai District in Kilimanjaro while in Tanga region it covered only the border areas with Kenya. In Dodoma — Kondoa District

and in Singida Iramba District.

"Under this campaign, more areas will be covered for effective control of the disease," he added.

Dr. Tesha said dead buffaloes were recently found in the Serengeti National Park. On being examined, it was found out they had died of rinderpest.

"We are very much informed that this disease is spreading fast from a neighbouring country, hence the need to intensify the campaign," he stressed.

He said since Arusha Region was fully covered under the annual campaign against the disease, there was no doubt that the disease that killed the buffaloes was from outside the rinderpest controlled areas.

Ndugu Tesha said that about 300,000 head of cattle would be vaccinated in Kilimanjaro Region, particularly in the lower lands while the campaign would skip the zero-grazing highland areas of the region.

CSO: 5400/5671

AUSTRALIA

POISONOUS CANE TOADS POSE THREAT TO NORTHERN TERRITORY

Perth THE WEST AUSTRALIAN in English 1 Jun 82 p 31

[Text] Darwin, Mon--A biological disaster is said to be approaching the sensitive wetlands of the Northern Territory--and no one has an answer to it.

The carnivorous Queensland cane toad has hopped its way to the border and is poised to leap into the Territory's gulf region, to the despair of conservationists and wildlife authorities.

The Northern Territory Conservation Commission has been monitoring the incidence and slow movement--about three kilometres a year--of the poisonous toad round the border since 1980.

The last ground survey, late last year, reported most occurrences about 65 kilometres east of the border, but an individual report in February indicated that the species had moved on to Westmoreland station adjacent to the border.

Its advance is inevitable because of a lack of natural predators and the absence of man-made biological control agents.

The Australian National University in Canberra and the University of New England at Armidale in NSW are studying the population dynamics of the toad in relation to possible biological control.

Other groups throughout the Pacific region are also engaged in similar work but no one has yet come up with any effective weapon against the species.

The northern regional parks and wildlife manager, Mr Robert Fox, said today that the toads were prolific breeders and poisonous to most of their natural predators.

"One can find tens of thousands of cane toads in areas where they have become established because of these two factors," Mr Fox said.

"Their major effect on the Northern Territory environment would be one of displacement. They would simply push aside all other species."

The NT Chief Minister, Mr Everingham, said in the Legislative Assembly last week: "It would seem that unless we can erect something in the nature of a cane toad fence rather like the rabbit fence that they used to have between States, cane toads may eventually move into the gulf region."

Mr Everingham, a Queenslander, said he did not think that cane toads had any evil effect on the environment.

But his statement quickly came under fire from the Labor Opposition Leader Mr Bob Collins.

Mr Collins said: "They have in fact a very great impact and a very adverse effect on the environment."

They could reduce the NT's population of the "unique and attractive" dasyure, or native cat, he said.

CSO: 5400/7568

BRIEFS

LOCUST THREAT REPORTED--Groups of locust are expected "to pass any time" through the desert areas of Baluchistan and Sind, according to information received from Plant Protection Organisation of Iran. Wide-spread, high density population of locust was noticed in coastal plains of the Northern side of Chabahar in Iranian Baluchistan due to heavy rains (about 582mm) in last five months. These favourable conditions resulted in sudden increase in locust population, and an area of 150 square kilometers is affected. The Press release said. "These groups of locust swarm, if not fully destroyed in the country of origin will arrive in Pakistani Baluchistan and Sind while migrating to summer breeding zone in the deserts along our eastern border and in India," it said. The Department of Plant Protection is keeping strict watch over the situation, and in addition to normal ground operations, one aircraft has been shifted to Jiwani, (Gawadar) to meet any emergency. About a dozen sub-outposts at strategic points in Baluchistan and Sind have also been in operation to intercept the incoming locust swarm. A hotline between these sub-outposts and headquarters here is maintained through wireless to get the latest information and control the day to day operations. [Karachi DAWN in English 2 Jul 82 p 11]

CSO: 5400/5670

MINISTER NOTES PLANS FOR ERADICATION OF PESTS DAMAGING BANANAS

Dar es Salaam DAILY NEWS in English 1 Jul 82 p 3

[Excerpt]

PLANS for the eradication of nematodes and weevils which have been attacking bananas in Kagera Region and threatening the crop in three other regions have been completed, the Minister for Agriculture, Ndugu John Machunda, said in Parliament yesterday.

The Minister, who was winding up debate on his Ministry's estimates for 1982/83, did not go into details over the plans yesterday.

He had, however, told the House on presenting the estimates on Tuesday that a pesticide which had been proved to kill both the nematodes and weevils had been recommended for use in fighting the pests.

The pesticide, *Carbo Furan*, had been preferred to *Dieldrin* which was hitherto in use but was proved to have little effect on nematodes.

The Minister said *Carbo Furan* had been recommended following trials on its use.

Experimental trials to find a more suitable pesticide were still being undertaken, he said, explaining that the aim was to find a more potent one which could prevent the damage to bananas at a lower cost.

Ndugu Machunda said requests had been made for the supply of the envisaged pesticide but efforts to procure it were hampered by lack of foreign exchange.

The Ministry had discussed with the European Economic Community (EEC) over the possibility of getting assistance in obtaining the pesticide; Ndugu Machunda told the House.

He said the EEC had shown interest in assisting in this and had promised to send in their experts to work out details on the undertaking.

Ndugu Machunda said although the nematodes and banana weevils had spread in Kagera Region, it was feared they could spread to Kilimanjaro, Arusha and Mbeya regions which are the other major banana producing areas.

Concern over the banana pests was raised during the debate by the MP for Bukoba Rural, Ndugu E.W. Rwegasira, during the debate earlier yesterday.

Ndugu Machunda also said in his winding-up that the Ministry would act on all views expressed by the MPs during the debate.

WORKSHOP ON CONTROL OF ARMYWORMS, MIGRANT PESTS CONCLUDED

Dar es Salaam DAILY NEWS in English 12 Jul 82 p 1

[Article by Hashim Chindole]

[Text]

A FIVE-DAY international workshop on the control of armyworms and other migrant pests ended here over the weekend with a call for the immediate establishment of a joint armyworm intelligence system in Eastern Africa to prevent spread of the pest.

Delegates from Kenya, Uganda, Tanzania, Sudan, Ethiopia, Somalia and Malawi said that the move would ensure early detection of outbreaks, particularly of armyworms and quelea quelea before they spread to devastate crops and range lands.

They observed, however, that the intelligence system to be established would, among other things, require intensification and strengthening of forecast and research services by member countries of the Desert Locust Control Organisation for Eastern Africa (DLCO-EA) by working with the United Nations Food and Agriculture Organisation (FAO), the Lon-

don-based Centre for Overseas Pest Research (COPR) and DLCO-EA.

The participants also recommended that national governments should allocate enough funds in their annual budgets to enable agricultural officers implement national pest control programmes effectively and only seek assistance from the DLCO-EA when necessary.

They also stressed on the installation of meteorological stations in the member countries and the necessity of the DLCO-EA to enhance the ability of these countries in fostering forecast services.

Sponsored by FAO, COPR and DLCO-EA, the workshop discussed concrete approaches to effective control of armyworms, locust and quelea quelea based on ecological, biological and weather conditions obtaining in the countries concerned.

The workshop also reviewed previous activities of the DLCO-EA in the control of pests in collaboration with other international organisations.