Worldwide Report

EPIDEMIOLOGY

Reproduced From Best Available Copy

FBIS FOREIGN BROADCAST INFORMATION SERVICE
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.


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

CONTENTS

HUMAN DISEASES

ALGERIA

Seasonal Health Threats Noted
(Algiers EL MOUDJAHID, 12 Aug 86; Rabat MAROC SOIR, 12 Aug 86) 1

Precautions Against Intestinal Diseases
Cholera in Southern Region 2

Briefs
Cholera Epidemic 3

BANGLADESH

Sylhet Malaria Outbreak Requires Attention
(Dhaka THE NEW NATION, 2 Aug 86) ......................... 4

CUBA

Briefs
AIDS Screening in Blood Banks 5

GHANA

Briefs
Mass Immunization Program 6

- a -
GUYANA

Venezuela To Assist With Vaccination Program
(Georgetown CATHOLIC STANDARD, 27 Jul 86) ............................ 7

Malaria on Increase; Collaborative Efforts Reported
(Georgetown MIRROR, 20 Jul, 10 Aug 86; Georgetown
GUYANA CHRONICLE, 7 Aug 86) ........................................... 8

Soviet Assistance
Regional Cooperation
Rise in Incidence

New Health Center Opened To Serve Essequibo Area
(Georgetown GUYANA CHRONICLE, 9 Aug 86) ........................ 10

INDIA

'Mysterious' Sickle Cell Diseases Spreading in Orissa
(New Delhi PATRIOT, 22 Aug 86) ........................................... 11

Dysentery Deaths on Rise in Bastar
(Madhya Pradesh; Calcutta THE TELEGRAPH, 14 Aug 86) ....... 12

MALAYSIA

Briefs
Penang Dengue Fever Figures
National Dengue Rate Declines
Dengue in Perak
Dengue in Sarawak

ANIMAL DISEASES

BANGLADESH

Briefs
Cattle Disease Epidemic

VIETNAM

Ly Nhan District Treats Diseased Cattle
(HA NAM NINH, 27 Jun 86) .............................................. 15

PLANT DISEASES AND INSECT PESTS

INTER-AFRICAN AFFAIRS

Grasshopper Plague Follows End of Drought
(Johannes von Dohnanyi; DIE WELTWOCHE, 14 Aug 86) ........... 16

- b -
GUINEA-BISSAU

Briefs
Appeal for Locust Aid

INDONESIA

Briefs
Insects Attack Coconut Trees

VIETNAM

Vegetation Protection Department's Notice on Pests
(Hanoi Domestic Service, 10 Sep 86) ................. 22

Hai Hau District Fifth-Month Crop Heavily Damaged
(Thanh Binh; HA NAM NINH, 27 Jun 86) ................. 23

Insect Situation in Hai Hung, Haiphong Report
(Hanoi Domestic Service, 15 Sep 86) ..................... 24

Briefs
Warning on Insect Infestation
Hau Giang Pest Control

/9986
SEASONAL HEALTH THREATS NOTED

Precautions Against Intestinal Diseases

Algiers EL MOUDJAHID in French 12 Aug 86 p 3

[Text] (APS)--The commencement of heat waves characteristic of this season of the year marks the reappearance of different manifestations of the classic and seasonal pathology, particularly the customary outbreak of summer diarrhea.

Actually, the term generally covers a rather broad range of enteric or intestinal maladies, essentially related to poor hygiene. Such diseases may be due to microbes (bacteria or viruses) that infect victims through water. It is in fact the consumption of unsafe drinking water, contaminated by fecal material or unfit for drinking because of a failure to follow the most basic rules such as systematic chlorination (two drops per liter of water) of drinking water or the nonchlorination of well water in rural areas, that is the cause of numerous cases of intestinal diseases this year.

And yet, a new procedure for chlorinating wells by using a common porous brick found at any retailer of construction materials and filled with bleaching powder, has been developed by the departments of the Ministry of Public Health and is now being disseminated daily on television. This new procedure has the advantage of making it possible to obtain safe drinking water for 3 months from a well thus treated. It is a fairly simple, inexpensive procedure whose effectiveness is such that it protects from disease. All families draw their drinking water from the same spot.

If one fails to obey these simple individual and family rules of hygiene, one will be exposed to many fearful diarrhea-type diseases such as typhoid and gastroenteritis, which reach seasonal peaks in various regions of the country each year.

It is time to recall the need for absolute respect for the basic rules of hygiene so fundamental during the summer season: individual personal hygiene, first of all, particularly careful washing of hands before eating, the chlorination of drinking water or its boiling in the preparation of baby formula, chlorination of wells by bleaching powder contained in a porous brick plunged into the well for 3 months and replaced at the end of that time, the dumping of garbage in controlled public areas, the sanitation of latrines, a ban on the use of all types of grey waters (sewage), particularly for gardening or what is even more dangerous, market gardening.
Many of these measures are part of a more general program implemented by the Ministry of Public Health with the aid of UNICEF since 1984 for the purpose of reducing infant mortality. It is young children that pay the highest tribute to diarrhea, which has led to a national program to fight diarrheal-type diseases in effect since the summer of 1984.

It should be recalled that on the occasion of the holiday of Aid El-Adha, the observation of rules of hygiene must be scrupulously followed so that no one will be needlessly exposed to the numerous diseases of so-called hydric transmission, so labeled because it is contaminated water that spreads them.

Communes bear considerable responsibility for protecting the health of their residents. By surveying the wells, ensuring the availability of bleaching powder, guaranteeing respect for general measures of sanitation and hygiene and overseeing the execution of instructions from the proper departments of health, they will protect the health of their population.

The best means of fighting such diseases is to ensure a regular supply of safe drinking water and the hygienic elimination of waste. It is no secret that one can eliminate avoidable risks by taking a minimum of public hygiene measures.

Actually, the real problem is that of the availability, at least at regular hours, of safe drinking water and general respect for all the above rules of hygiene. It is indispensable that everyone feel individually responsible for health problems: the citizen himself, regarding his individual health and that of his family, and the commune regarding problems concerning the collective health of its residents.

Cholera in Southern Region

Rabat MAROC SOIR in French 12 Aug 86 p 3

[Text] (MAP) -- Several persons have died of cholera in the region of Biskra, an oasis in southern Algeria, and dozens more are being cared for in hospitals as a result of the disease, medical sources in Algiers reported on Saturday.

The same sources nevertheless stressed that the disease has not reached epidemic proportions and observed that the Algerian Ministry of Health has not yet presented any bulletin on the subject.

For about a week, a campaign has been waged throughout Algeria on radio, television and in the newspapers, aimed at making people aware of the need to disinfect well and tap water with bleach.

11,464
CSO: 5400/4609
BRIEFS

CHOLERA EPIDEMIC—Over a thousand cases of cholera have been recorded since the start of the summer in Algeria, resulting in several dozen deaths. No official information has been given about the exact number. The epidemic is causing alarmist rumors to be spread. The use of polluted water to irrigate crops may be the cause of the cholera outbreak. [Text] [Paris Domestic Service in French 1400 GMT 30 Aug 86 LD] /12232

CSO: 5400/4611
SYLHET MALARIA OUTBREAK REQUIRES ATTENTION

Dhaka THE NEW NATION in English 2 Aug 86 p 5

[Editorial] The outbreak of Malaria in the border regions of Sylhet as reported in a local Bengali daily would deserve serious attention of the health authorities. The report quoting diverse sources says that the number of afflicted persons exceeds 8 thousand. The Civil Surgeon of Sylhet has confirmed reports of death from malaria in Sunamganj district. In the bordering Meghalaya state of India malaria is said to have broken out on a wide scale.

Hilly regions are always an endemic area of malaria but this year the prevalence of the disease is said to have been greater as inadequate rainfall has helped the breeding of the malaria-carrying type of anophelis mosquitoes. The local authorities are said to have taken certain preventive measures to halt the spread of the disease and are also undertaking a programme of large-scale spraying. But the seriousness of the matter being beyond question, local efforts may have to be supplemented by centrally directed programmes.

Malaria is not only curable and preventable but also eradicable and the country by now should have been completely rid of this public health menace. But the periodic recurrence of this disease would show that even the rudiments of a universal health care are yet absent and in that case the slogan of "health for all by the year 2000" would appear as little more than a futuristic boast. Of course the matter does not rest with the health authorities and physicians alone. Preventive medicine involves a whole range of factors including sanitation, community awareness and outlook, and above all, living standard of the people. It has often been demonstrated that our public health program is partly a problem of management and coordination of health services. It would be a good start anyway toward universal health if we could by now make serious efforts to eradicate those afflictions whose lingering presence prevents us from making any bold stride towards the projected universal health care.

/13104
CSO: 5450/0201
AIDS SCREENING IN BLOOD BANKS--The entire country's blood banks are using a modern testing method designed to screen all donations of blood so as to prevent the possible transmission of AIDS [Acquired Immune Deficiency Syndrome] by this means. As is known, sexual relations and the receipt of blood or its fractions are fundamental factors in the exposure of a person to the contracting of AIDS. Officials of the Public Health Ministry stated yesterday to GRANMA that the technique in use is the one designated ELISA [enzyme-linked immunosorbent assay]--an English acronym that can be translated into Spanish as "immunoenzymatic analysis"--a blood screening test in which the enzymatic and immunological reactions are mixed, and which yields dependable results. In the case of blood banks, the application of this technique (which also opens the possibility of detecting the hepatitis B virus as well as numerous bacterial, viral and parasitical diseases) prevents the spreading of AIDS on a nationwide level through this medium, and provides assurance to any patient needing to receive a donation of blood, or of any of its fractions, that it is not possible to contract this disease in our country through a blood transfusion. The ELISA reader, as this equipment is commonly called, has also been installed in the Provincial Hygiene and Epidemiology Centers. The network that has been established by Cuba for the implementation of this technique places us among the few countries in the world that presently do this screening on a nationwide scale. It is worth noting in this regard that no product whatever derived from blood has been imported into this country since 1983. Last year's blood donations totaled more than half a million, 252,031 of which were made voluntarily by the Revolutionary Defense Committees. [Excerpts] [Article by Jose A. de la Osa] [Havana GRANMA in Spanish 21 Jun 86 p 2] 9238

CSO: 5400/2082
BRIEFS

MASS IMMUNIZATION PROGRAM—The second phase of this year's mass immunisation programme against six childhood diseases has been launched at Agona Nkwanta in the Western Region with a call on parents, particularly women of child-bearing age to ensure that they make themselves and their infants available for the free vaccination. The six killer diseases for which effective vaccines are available are measles, polio, tetanus, diphtheria, whooping cough and tuberculosis for children up to two years old. In an address at the launching ceremony which also marked World Health Day, the Western Regional Director of Health Services, Dr K.O. Adade said women aged between 15 and 45 years will also be given tetanus injection to protect their newborn babies from getting tetanus infection. He observed that tetanus infection is the greatest killer in that age group. The Regional Secretary, Col (rtd) W.A. Thompson in a speech read for him by his Under-Secretary, Mr Amoako to launch the programme, charged teachers, chiefs, CDRs and other revolutionary organs to assist the authorities to step up their activities under the Primary Health Care (PHC) programme. A Public Health Nurse immunising one of the babies after the launching ceremony while other mothers wait for their turn. [Text] [Accra PEOPLE'S DAILY GRAPHIC in English 11 Aug 86 p 1] /9317

CSO: 5400/188
VENEZUELA TO ASSIST WITH VACCINATION PROGRAM

Georgetown CATHOLIC STANDARD in English 27 Jul 86 p 1

[Text]

WITHIN a month Venezuela, in co-operation with the Ministry of Health, will undertake a massive infant vaccination programme in Guyana, as part of a programme of friendly co-operation between the two countries.

About 70,000 infants will be protected against polio, measles, rubella, diphtheria, tetanus and whooping cough.

The programme will also provide booster doses for children at nursery, primary and secondary school levels.

The vaccination will be carried out at hospitals, health centres and in villages with the help of some Venezuelan doctors.

Teams of specialists in the prevention and treatment of malaria are also scheduled to arrive within a month-and-a-half to train malaria workers and share information with Guayanese doctors.

Venezuela itself has to cope with the disease in its hinterland, and especially in the border areas.

Its Centre for Tropical Diseases is said to be one of the most advanced in the world and has developed special techniques for the treatment of malaria and other diseases carried by the mosquito.

As a back-up to the work of its medical teams, Venezuela will also supply drugs, especially quinine tablets. Some drugs have already arrived.

Venezuela has also offered to train Guayanese doctors in Venezuela especially in the areas of traumatology, cardiology and tropical medicine.

Within six months between five and ten trainee doctors are expected to be in Venezuela.

On-going training courses of Guayanese for four to six months are also in progress in Venezuela in carpentry, electricity, electronics and husbandry.

Between six and eight students are at present on these courses.
MALARIA ON INCREASE; COLLABORATIVE EFFORTS REPORTED

Soviet Assistance

Georgetown MIRROR in English 20 Jul 86 p 3

[Text] The Soviet Union will provide specialists’ assistance to help combat malaria in Guyana. Soviet organisations will be sending doctors to this country and supplying medical equipment.

The anti-malaria project was worked out earlier this year when a high-level Soviet delegation visited the country. Agreement was also reached between Guyana and the USSR to help develop the bauxite and gold sectors. In addition, the USSR will help set up a livestock breeding complex and a timber processing plant in Guyana.

This year a long term agreement was reached on the purchase by the Soviet Union of Guyana bauxite in exchange for deliveries of Soviet machinery and equipment. In 1985, commodities exchanged between the two countries exceeded 25 million roubles.

(Source: APN)

Regional Cooperation

Georgetown GUYANA CHRONICLE in English 7 Aug 86 pp 4-5

[Text] Guyana will be collaborating with its immediate neighbours—Venezuela, Brazil and Suriname—in the fight to eradicate malaria, Minister of Health, Dr Richard van West Charles has said.

The health Minister, in a recent interview with the Chronicle, said that since it is difficult for countries to fight malaria individually, cooperation among countries is a necessary strategy in combating this disease.

He recalled that last November Guyana hosted the first technical meeting of a joint programme for the prevention and control of malaria. Participating countries included Brazil, French Guiana, Suriname, Trinidad and Tobago and Venezuela.

A call was issued at that meeting for countries to work together to prepare realistic national anti-malaria plans for their respective countries.
Areas of cooperation between Guyana and Venezuela, according to this plan, include training programmes and so far Guyanese Dr Keith Carter has undergone training in Venezuela through a fellowship granted by the Pan American Health Organisation (PAHO).

Venezuela has also donated anti-malaria drugs to Guyana and the two countries will collaborate further to train personnel in microscopy for the detection of the parasite in Venezuela.

Meanwhile the Ministry of Health is continuing its malaria eradication programme in the administrative regions. It has recently received a quantity of items purchased with a $100 000 (US) grant from the United Nations Development Programme (UNDP) for use in the regional malaria eradication and treatment programme.

Minister Van West Charles has observed that there is constant movement of people from one area to another in some regions making the collaboration among neighbouring states even more important in the malaria eradication programme.

**Rise in Incidence**

Georgetown MIRROR in English 10 Aug 86 p 4

(Text) The increase in malaria in Guyana in both the interior and coastal areas is recognised as one of the major dangers facing the Guyanese population.

In last week's Mirror rising figures which were gleaned from the 1983 Ministry of Health report showed that there were 2,102 reported that year.

However, later figures show a startling rise to over 7,000 cases last year, which is more than three times the 1983 figure. In 1984 malaria rose to a little above 3,000 cases.

It is estimated that the 1986 figures will show an even greater increase over the 1985 figure. By mid-year 1986 there were already some 5,000 cases which means that by the end of this year malaria might be in the 10,000 range.

The PPP, which has raised this matter before in Parliament, is again posing questions on the incidence of malaria and asking what the Ministry of Health is doing to prevent this increase. Services which once existed and had at then made Guyana almost malaria-free, have been discarded.

/9317
CS0: 5440/124
NEW HEALTH CENTER OPENED TO SERVE ESSEQUIBO AREA

Georgetown GUYANA CHRONICLE in English 9 Aug 86 pp 1, 3

[Text]

A NEW $30,000 health centre at Hog Island, Essequibo River was opened Thursday by Minister of Health, Dr. Richard Van West-Charles, who at the same ceremony also handed over a launch to the Medex stationed on the island.

The health centre was constructed largely through the self-help efforts of the residents with assistance from the Ministry of Health and the Regional Administration, Region 3.

The centre will provide health services to more than 2,000 residents at Hog Island, in addition to the residents of neighbouring Fort Island, Great Trull Island, Small Trull Island, Morasi and Karia Karia.

The opening of the centre is part of a national programme to establish health facilities in rural locations to reduce dependence on hospitals in the city and other highly populated areas.

The 85-HP launch will enable the Medex and other health workers to make regular visits to the nearby islands and other riverain communities further up the river.

Minister Van West-Charles in his brief remarks at the opening of the centre praised the co-operative spirit of the community at Hog Island. The health centre and the launch are tangible evidence of the Government's commitment to extend health care to all Guyanese in every location in the country, he said.

The Ministry of Health is working to remove discrimination in the health services between the City and rural areas. Programmes are under way to train persons to be placed on all the inhabited islands to ensure the permanent presence of health personnel, the Minister said.

With the opening of the health centre, residents of Hog Island and outlying areas will now be provided with services that were previously available only at hospitals at Suddie, Wakenaam, and Georgetown. A Medex is also stationed on the island full-time. Among the services that will be provided by the centre will be maternal and child care, hypertensive and diabetic clinics, immunisation and dental services.

Present at the opening were Regional Chairman, Region 3, Cde. Angaa Rupes; Medical Director, Regional Health Services, Dr. N. Gobin; Manager of Regional Health Services, Cde Mike Wahab; Chief Medical Officer, Dr. Enid Denbow, Medical Officer of Health, Maternal and Child Health, Dr. R. Cummings; Chief Medex, Cde. K. Brijlall; Regional Health Officer, Region 3, Dr. N. Manichand and Hospital Administrator, Region 3, Cde. Barbara Lancaster.
'MYSTERIOUS' SICKLE CELL DISEASES SPREADING IN ORISSA

New Delhi PATRIOT in English 22 Aug 86 p 6

[Text] Bhubaneswar, Apr 21 — A mysterious disease, with disabling effects, is spreading in western Orissa.

Known as the sickle cell (SC), the disease was discovered by a team of doctors from Britain, led by Prof C R Serpent, about six months back in Sambalpur district.

The SC disease, said to be a genetic disorder, was discovered when the British doctors conducted a sample survey of about 518 patients.

After a careful scrutiny, the doctors concluded that it is a common and potentially serious health problem in western Orissa.

The sickle cell disease is the abnormal amount of haemoglobin in the red cells which leads to the destruction of red blood cells in the patient.

When oxygen tension in the blood is reduced, destruction of red cells leads to anaemia and often leads to hemolytic jaundice.

Besides, the red cells which contain the abnormal haemoglobin get deformed (sickle shaped) at reduced oxygen tension.

According to official sources, a proper survey has yet to be conducted to ascertain whether the SC disease is prevalent in other parts of Orissa also although the possibility of its presence in southern Orissa and the coastal regions has not been ruled out.

The reason behind the spread of the disease is not yet known but some have ascribed its origin to eating habits relating to specific type of crops.

Last year a national seminar on 'sickle cell gene in India' was held at the Department of Anthropology and Sociology, Sambalpur University.

The seminar had recommended that a study be done by physical anthropologists to ascertain gene frequencies of the Hb S gene and the existence of associated genes found to co-exist in different ethnic groups in Orissa and neighbouring States.

The seminar emphasised the need to know whether the sickle cell is stable or transient in the population that possesses it.

It advised that people should be told to avoid consanguineous marriages and that social prejudice against persons with sickle cell gene should be discouraged.

The seminar urged the Government to tackle the issue as a public health problem.

Meanwhile, the Orissa Government has asked the Indian Council of Medical Research (ICMR) to set up a sickle cell centre in Sambalpur to conduct research into ways of tackling the deadly disease.
DYSENTERY DEATHS ON RISE IN BASTAR

Calcutta THE TELEGRAPH in English 14 Aug 86 p 7

[Article by Madhya Pradesh]

[Text]

Raipur: Gross negligence on the part of the public health department, the public health engineering department and the local authorities has once again resulted in a large number of deaths due to acute dysentery among tribal children in Bastar. The killer epidemic has been striking the Bastar district annually for the past three years and taken a toll of about 600 lives, most of them tribal children. Over 500 deaths took place in 1984 alone. Last year, it claimed 80-70 lives. The epidemic breaks out around May-June and spreads widely in July.

Criminal negligence in the tribal areas and bureaucracy in the state, particularly in the Chhattisgarh region, have always gone hand in hand. Last year, for example, when the killer dysentery hit the Dhamtari tehsil of Raipur district, medical relief was provided only when the villagers complained to the Prime minister, Mr Rajiv Gandhi, who was touring the area, and on the personal intervention of the state chief minister, Mr Motilal Vora.

Polluted drinking water and malnutrition are said to be the main causes for the rise in the incidence of dysentery in the tribal areas. It has been observed that the medical authorities have been extremely lax in taking preventive steps before the epidemic spreads and providing medical relief once it hits the people. The public health department also shares the blame for not streamlining the supply of pure drinking water in these areas.

Personal supervision: This year, however, the new collector of the Bastar region, Mr Parshuram, did not leave the task of providing medical relief to the affected people totally to the medical and other officials, but personally supervised the operations. He has also ordered a magisterial probe into the outbreak of the epidemic.

The first case of acute dysentery came to light in Kunvakonda village of the Dantewara tehsil of Bastar district in May. The higher authorities of the public health department were aware of the situation and, in fact, visited the village more than once, but perhaps did not take things seriously. Meanwhile, the doctor of the primary health centre (PHC) of the village was relieved of his post for postgraduation studies, without a replacement being appointed to handle the epidemic. Now the doctor is facing suspension. In Melavada village, the epidemic took a serious turn in July, but the doctor of the village PHC had been absent for a whole fortnight. Equally negligent was the revenue department, which failed to inform the collector of Bastar.

Though the subdivisional officer (SDO) of Dantewada (who himself was on leave during the outbreak) has suspended the parwari of the affected village for his failure to inform him of the epidemic, the tehsildar, who was officiating as the SDO, did not even inform the district administration either.
BRIEFS

PENANG DENGUE FEVER FIGURES—Penang has the second highest number of dengue fever cases after Selangor with 191 cases to date this year. The director of Penang Municipal Health Services said on 7 September that 124 cases were detected in Georgetown. Speaking at the closing of a month-long antidengue campaign, he described the number of cases in Georgetown as worrying because it was four times the total number of cases detected in the whole of last year. [Summary] [Kuala Lumpur Domestic Service in English 1130 GMT 7 Sep 86 BK] /12232

NATIONAL DENGUE RATE DECLARES—Juala Lumpur, 11 September (OANA-BERNAMA)—The number of dengue cases in the country has been declining since July, Dr Chong Chee Tsun, head of the vector-borne diseases control programme said Thursday. He told BERNAMA only four cases were reported Wednesday—three in central Malaysian state of Selangor and a haemorrhagic fever case in the federal capital. He said that according to records, about 20 cases a day were reported in June, while in the last fortnight only 5 were reported. June recorded the highest number with 258 cases, followed by July with 200 and August with 134. [Excerpts] [Kuala Lumpur BERNAMA in English 1109 GMT 9 Sep 86 BK] /12232

DENGUE IN PERAK—Three more dengue fever cases, including one dengue hemorrhagic fever, have been reported during the last 3 days in Perak, bringing the total number of cases in the state this year to 197. A state health service spokesman said that the dengue hemorrhagic fever was reported in Ipoh on 9 September. [Summary] [Kuala Lumpur Domestic Service in Malay 1230 GMT 10 Sep 86 BK] /12232

DENGUE IN SARAWAK—Seven more dengue fever cases have been reported during the last 12 days in Sarawak, bringing the total number of cases in the state to 96 this year. A health service spokesman said two of the seven new patients were suffering from dengue hemorrhagic fever. [Summary] [Kuala Lumpur Domestic Service in Malay 1230 GMT 10 Sep 86 BK] /12232

CSO: 5400/4419
BRIEFS

CATTLE DISEASE EPIDEMIC—Cattle disease has broken out in an epidemic form in different places of Satkhira district for the last two months. It is learnt that at least 230 heads of cattle perished during the period. Of them, 100 died in Assasuni, 50 in Shyammagar, 40 in Tala and 30 in other upazilas. It is learnt alleged that no effective measures have yet been taken to combat the disease. Inadequate supply of medicines and shortage of required number of officers are learnt to have precipitated the situation. However, when contacted, the District Livestock Officer told this correspondent that due to lack of proper cooperation and communication system the department could not take immediate measures for treatment of the heads of cattle at affected areas. [Text] [Dhaka THE NEW NATION in English 4 Aug 86 p 2] /13104

CSO: 5450/0202
GRASSHOPPER PLAGUE FOLLOWS END OF DROUGHT

Zurich DIE WELTWOCHEN in German 14 Aug 86 p 11

[Article by Johannes von Dohnanyi: "They Fly and Fly, Eat and Eat: After Years of Drought, Africa Again Has Enough Rain but With the Rain Come the Locusts"]

[Text] As the rains began in Africa after the long years of drought, there was rejoicing. The people went first to church to light a candle for the Christian God. During the evening, however, the tribal elders sacrificed to the old gods. Just to be sure.

But the joy did not last long. For as early as October of last year, the field experts of the UN Food and Agriculture Organization (FAO) discovered signs of a new Biblical plague that was threatening to befall the African continent. The teletype messages that were sent out a little later from the FAO headquarters in Rome to the affected countries and all potential member states left no doubts about the seriousness of the situation: "It is to be feared that there will be a plague of locusts in the coming months. Immediate countermeasures are necessary."

[Boxed item: Plague. The FAO in Rome has but together a crisis staff to combat the locust plague that is threatening Africa. The locusts and grasshoppers that are now in various stages of incubation, hatching and swarming must be carefully observed and combatted in time.]

The African locusts do not have much in common with the cute green or brown grasshoppers that hop over our meadows during the summer months. They are about as long as an index finger and have a wingspan of up to 15 centimeters. In her approximately 120 days of life, each female lays about 400 eggs, from which the young insects hatch in 2 to 4 weeks, depending upon the type of locust. It is a cloud of destruction that then rises from the breeding grounds. Being the tireless fliers that they are, the locusts can remain in the air for up to 12 hours at a time and thereby maintain a constant "travel speed" of about 18 kilometers per hour. Ranges of over 5,000 kilometers are not unusual for locust swarms. And wherever they pass, they leave nothing: each insect eats an amount equal to its body weight daily. The Africans call this Biblical plague the "teeth of the wind." A name can hardly be more appropriate.
The Black Continent was last caught completely unprepared by the flying insects in 1928. After the colonial powers finally had the plague under control, they set up an effective early-warning system all the way across the continent, which subsequently turned out to be a blessing in the next plague in the 1940's. But there has been a shift in the African problems since the end of World War II. With the new independence came desires for economic and social development. Agriculture, the traditional backbone of African society, lost more and more standing and was regarded less and less. With increasing industrialization, on the one hand, and more bureaucracy, on the other, one lost sight of the organizations for combatting locusts. Then came the great droughts that cost hundreds of thousands of lives, if not millions.

Harvest prospects for this year were again good for the first time in years. The rainy season began on time in most regions and—what is even more important—it continued steadily during the growth phase of the young plants. But in the soil moistened by rain, the locust eggs that had been laid in the dry earth during the years of the drought could also thrive. "We still do not fully understand the relationships," Lukas Brader from the FAO has to admit in answer to the question of what has caused the locusts to hatch now of all times. "The observation that there are always outbreaks after dry years is nothing new. The phenomenon must have to do with the change and the recovery of the vegetation."

Meanwhile, Mr Brader has no time to think about the causes. For, as so often happens, the cries of alarm from his organization died away unheard as long as the catastrophe was not right at hand. "Many donors rely on our forecasts only in part. Before they react, they want to see the facts," complains the FAO specialist. "But when we do not act immediately, then we must expect the plague to spread to more than a million hectares." Even in agriculturally undeveloped Africa, 1 million hectares produces more than 400,000 tons of food for the tables of the people. In other words, despite the rain and the reconstruction aid for agriculture, hunger is threatening to prevail in broad areas of Africa in the coming years as well.

Meanwhile, the FAO is registering cries for help from all four corners of Africa. "A quite serious situation, because it is unusual," FAO General Director Edouard Saouma lectured the participants in regard to locusts in the most recent crisis meeting. "That means, namely, that this time the four main families are multiplying simultaneously." The brown, red, desert and African migratory locusts have their traditionally living spaces. It is here that the females lay their eggs. And it is from this habitat that the swarms then begin their destructive journeys. "Theoretically, it is not at all so difficult to keep the locusts under control," points out the Africa-experienced Dr Heinrich von Loesch from the FAO press department. "One must merely take action in time, before the swarms can leave their breeding grounds." In the past, however, it has always turned out to be difficult to get control of even individual outbreaks and so this time the problems have quadrupled for those combatting the locusts. The first swarms have already crossed the border of the Sudan into Uganda, Eritrea and the coastal regions of the Red Sea. Swarms rising in Tanzania have invaded Burundi and northern Kenya. The brown locusts that hatched in South Africa are threatening not only 116,000 square miles of agricultural land in the Boor republic. The
winged insects have paid no attention to the political conflict in the region and have flown over the borders of Zambia, Zimbabwe and Angola. And they have already laid their eggs in 25,000 square miles in Botswana. The domestic difficulties in the Sudan or in Eritrea, for example, are thereby hardly facilitating the work of the FAO experts. "There are a number of regions where we have not been able to go because of the civil wars."

Poisonous Clouds Against the Grasshoppers

Meanwhile, as if these problems were not enough, the Sahel Zone has also reported to the crisis staff in Rome. In this region, however, it is not the locusts but "ordinary" grasshoppers that are puzzling not only the insect controllers but also animal sociologists. In contrast to the locust, the grasshopper is actually a loner. Neither is it able to fly long distances with its weak wings. In the past, these characteristics made these insects relatively easy to control in the Sahel as well. In the meantime, the grasshoppers are beginning to adapt their social behavior more and more to that of the migratory locusts. "We have discovered enormous breeding grounds that are adapted not only to individual insects but also for social communities, so to speak," reports an FAO employee. "And since the original living space for these communities soon becomes too small, the grasshoppers as well are now starting to migrate." Theoretically, the short flying distances of which the grasshopper colonies are capable make them easily identifiable and vulnerable targets. But Lukas Brader is not so optimistic: "It is mainly a problem of logistics." The nonexistent or poorly developed roads, which made the rapid and extensive distribution of aid impossible during the catastrophic drought, are responsible this time for the fact that pesticides and spraying equipment cannot be delivered quickly enough to the breeding grounds of the grasshoppers. There is a lack of spare parts. Hardly any of the affected countries has enough aircraft or helicopters to destroy the insects with clouds of poison from the air. But that would be the most certain way of gaining control of the new plague in a short time. Four and half liters of insecticide sprayed from the air can kill about 3 million locusts. No doubt, wrote the American development agency U.S. AID in a report published recently: "It is the worst plague of locusts in six decades."

Meanwhile, there is no longer anyone with the FAO who doubts that the current outbreak has the potential of the 1928 locust catastrophe. "If we are not able to destroy the swarms in time, the plague could theoretically spread to India," says Lukas Brader in describing the "locust MCA," the maximum credible accident with insects. In this case, 20 percent of the land mass of our planet would be threatened by the voracious insects. Even in the past, the traditional defensive methods of African farmers, who attacked their enemies with rattles and fans, proved to be folklore at best. What can one hope to do with wooden rattles when—as in Somalia in 1958—a swarm of an estimated 40 billion locusts comes down and eats up an area of almost 1,000 square kilometers within hours. In view of such magnitudes, even the stomachs of North African Bedouins are of no effect. The desert dwellers view the locusts as manna suddenly fallen from heaven and enrich their meager menus with roasted insect bodies.
"We need all the up-to-date aid that is available—and fast," says Lukas Brader in summarizing the problems of the FAO. "To be sure, some of the support promised in May arrived too late. But if we tackle the plague immediately and above all jointly, then we could probably still prevent the worst."

But precisely this "jointly" is another problem all too frequently experienced in the much-sung "community of nations." There are countries that do not want to be coordinated," is how the FAO carefully describes the permanent conflict between anonymous multilateral aid and bilateral aid having publicity value for the donor country. The result is that "some countries get more aid than they need whereas other countries come out empty-handed." And other countries, including Switzerland, have so far not taken any part at all in this latest relief action for Africa. As always in such cases, the available aid is more than scarce. So far, the international community has provided $18 million for the coming 2 years. The Republic of South Africa by itself has heretofore invested $7 million of its own resources in the fight against the locusts and yet has achieved no more than partial victories.

"At least 2 more years," is the minimum time that Lukas Brader foresees before the outbreak of the four types of locusts as well as the grasshoppers in the Sahel could be brought under control. But the expert does not want to be tied down: "The plague of 1928 lasted more than a decade altogether." The successful control of the locust is "of the greatest importance for the food situation in Africa," explained Ide Oumarou, general secretary of the Organization for African Unity, to the donor countries and aid institutions. Nevertheless, it is unlikely that the politician still believes that he could achieve significant success with this appeal. He admitted that in the richest countries Africa has become synonymous with hunger. A Biblical plague more or less no longer makes any difference there.

9746
CSO: 5400/178
APPEAL FOR LOCUST AID--Bissau, 7 September (AFP)--Guinea-Bissau yesterday appealed to the international community for solidarity and support in order to stem an invasion of locusts in the north of the country. The appeal was launched by Planning Minister Barthlommeu Simoes Pereira during a meeting with Guinea-Bissau's traditional fund donors. Mr Pereifa expressed Guinea-Bissau's worry over the ensuing pest disaster which is likely to affect agricultural production, especially as harvest is approaching. The minister, who announced his country's decision to establish an administrative commission to combat the locusts, including government representatives and donor countries and organizations, specified that Guinea-Bissau needs insecticides, equipment, and means of transport. [Text] [Paris AFP in French 0850 GMT 7 Sep 86 AB] /12232

CSO: 5400/190
BRIEFS

INSECTS ATTACK COCONUT TREES--Jayapura, August 28 (ANTARA)--Some 50,000 coconut trees in Irian Jaya are now being attacked by 'brontispa' insects, largely in the regencies of Jayapura, Sorong and Biak Numfor. "The insects are decimating not only the hybrid coconuts but also other kinds of coconuts, except oil-palm trees which are still untouched," said Ibrahim, chief of the Irian Jaya plantation service Thursday. He said the insects began attacking last February and his service is now working to fight them. The attack, however, has lately spread to other regencies in the province, he added. According to Ibrahim, the brontispa insects are tiny and black in shape and generally affect young plants on the stems. [Text] [Jakarta ANTARA NEWS BULLETIN in English 28 Aug 86 pp A1, A2] /9317

CSO: 5400/4417
VEGETATION PROTECTION DEPARTMENT'S NOTICE ON PESTS

BK121004 Hanoi Domestic Service in Vietnamese 1100 GMT 10 Sep 86

[Summary] "The Vegetation Protection Department of the Ministry of Agriculture recently issued a notice saying that the brown and rice planthoppers have damaged more than 100,000 hectares of 10th-month rice in provinces of the delta, northern midlands, and central areas."

In the Mekong River delta area, brown planthoppers ravaged more than 40,000 hectares of summer-fall and 10th-month rice. In Tien Giang, Hau Giang, and Dong Thap Provinces cotton leaf rollers damaged more than 200,000 hectares of summer-fall rice, of which 8,000 hectares were heavily damaged.

It is predicted that in the days ahead an infestation of brown and rice planthoppers will develop in a vast area in the northern provinces and will ravage rice seedlings and 10th-month rice in the southern provinces.

"The Vegetation Protection Department urged northern provinces to strive to continue eradicating brown planthoppers, especially in extensively ravaged areas by applying the basic method of spraying gasoline mixed with chemical substances on areas ravaged by harmful insects."

The department also urged southern provinces to continue spraying insecticides on areas damaged by brown planthoppers, cotton leaf rollers, and stem borers, while attempting to discover the appearance of other harmful insects to promptly eradicate them early.

/12232
CSO: 4209/4420
HAI HAU DISTRICT FIFTH-MONTH CROP HEAVILY DAMAGED

Nam Dinh HA NAM NINH in Vietnamese 27 Jun 86 p 1

[Article by Thanh Binh: "Hai Hau Harvest Season"]

[Excerpt] After nearly 15 days in the fields, the farmers of agricultural cooperatives in Hai Hau District have harvested nearly one-half of the total 2,500 hectares of fifth-month and spring rice. The rice harvest is presently more toilsome than before because of the cloudy and rain-threatening skies and the fact that the rice is not as level and golden ripe as during previous seasons.

Hai Hau has up to 6,000 hectares infested with plant hoppers, including 2,000 hectares seriously affected and up to 70 hectares destroyed. District leaders have stated that, in coordination with development and achievement of Directive 79 of the Party Central Committee, everyone from the district to the villages and cooperatives is concernedly following and closely supervising the harvest, honestly evaluating the production results, resolving the contracted output problem in a fair manner consistent with each cooperative member family, and creating a basis for good product recovery. According to evaluations, the overall yield throughout the district will not exceed a figure of 45 quintals per hectare. Although the success of this crop will not meet initial estimates, it is not diminishing the seething atmosphere of the harvest season in Hai Hau. When harvested rice became wet, the people worked night and day to thresh, dry and clean the rice, ensuring paddy of warehouse delivery standards. In Hai Phong, Hai Ninh, Hai Giang, Hai Van, Hai Bac, Truc Phu, Truc Dai, etc., tens of thousands of people are going into the fields daily. The river piers, markets and roads are completely cleared of people.

Also during this period, Hai Hau has basically completed sowing of the entire tenth-month seedling areas with a structure of: 85 percent moc tuyen, 15 percent nep tam and a few other varieties. From actual practice during the fifth-month and spring crop, the cooperatives in Hai Hau have conducted seedling pest eradication from the seed immersion, seedbed construction and seedling levee coating steps. Now, after completing the sowing, the cooperatives are assigning each member of the pest eradication teams to follow each seedling area daily in readiness to use manual and mechanical sprayers to eliminate insects and disease.
INSECT SITUATION IN HAI HUNG, HAIPHONG REPORT

BKI60542 Hanoi Domestic Service in Vietnamese 1100 GMT 15 Sep 86

[Summary] "According to a report from the vegetation protection detachment of Hai Hung Province, some 20,000 hectares of rice in the province have been affected by stem borers. All the responsible comrades in the province agreed that there are twice as many stem borers this year as last year. The province has nearly 6,500 hectares of rice affected by brown planthoppers with a density varying from a few hundred to 4,000 per square meter. Hundreds of thousands of brown planthoppers per square meter can be found in some areas in Kien Duc, Kinh Mon, Ha Le, and Kim Chi villages. Moreover, some 12,000 hectares have been affected by nigrospora oryzae, 5,000 hectares by rice leaf beetles, and 2,000 hectares by ground beetles."

"Specialized agencies in Haiphong report that as of 8 September more than 13,000 hectares of 10th-month rice have been affected by stem borers, nearly 4,000 hectares by nigrospora oryzae, 3,000 hectares by small leaf rollers, nearly 1,000 hectares by ground beetles, and 600 hectares by brown planthoppers. After a check at various places, the situation gives some cause for concern. In Tu Loc District, up to 7,000 hectares of 10th-month rice—nearly half of the area plan—have been affected by insects. This area includes 4,500 hectares affected by brown planthoppers."

Faced with this worsening insect situation, district and village authorities are urged to concentrate all efforts on eradicating insects, mainly during the period from 15 to 20 September.

Generally speaking, until now insects have not caused much damage. If local authorities know how to mobilize the people's strength to eradicate insects, the damage can be limited.

/9599
CSO: 5400/4422
WARNING ON INSECT INFESTATION--Stem borers and yellow-rice borers have begun to swarm. In some localities, swarms of up to 2,000 of each could be found in a single night at some places. Brown planthoppers have affected small areas, with nests of 5,000 per square meter. Army worms have also appeared. It is recommended that a nighttime campaign be launched to catch butterflies with lamps and nets and to nip stem borers' nests from now until the end of September. Follow-up action must be taken to watch the army worm situation from now until the end of September so that timely preventive measures can be taken. Brown planthoppers can be eradicated manually. If insecticide is used, it must not be diluted. Attention must be paid to the detection, prevention, and control of other insects such as rice leaf rollers, ground beetles, and rice bugs.

['Recent' Message from Vegetation Protection Department to Provincial Detachments] [Text] [Hanoi Domestic Service in Vietnamese 1100 GMT 11 Sep 86 BK] /12232

HAU GIANG PEST CONTROL--Hau Giang Province has saved 31,200 hectares of the total of 47,000 hectares of high-yield 10th-month rice from harmful insects and diseases. The two districts which had the largest affected areas--Vinh Chau, 7,000 hectares and Thanh Tri, 7,531 hectares--have managed to save most of their crop. Hau Giang is striving to completely eliminate harmful insects and disease by mid-September to save the remaining pest-stricken 15,800 hectares of 10th-month rice. [Text] [Hanoi Domestic Service in Vietnamese 2300 GMT 11 Sep 86 BK] /9599

CSO: 5400/4422