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EPIDEMIOLOGY

No. 283

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MALARIA CASES INCREASE 60 PERCENT NATIONWIDE IN 4 YEARS

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 1 May 82 p 16

[Text] In the past 4 years, malaria cases in Brazil have increased by 60 percent, from 120,000 cases in 1978 to 197,000 recorded by the Health Ministry in 1981, with 99.5 percent occurring in the Amazonia Legal. It was on the basis of these figures, surprising to malaria researchers, that the First National Meeting of Malaria Experts held yesterday at the Institute of Tropical Medicine, Sao Paulo University (USP), called malaria "a major national project that has been neglected by the authorities."

A preliminary paper to set up a national malaria research program and request financing from FINEP (Funding Authority for Studies and Products), an agency of the Federal Planning Secretariat, was prepared at the meeting. The CNPq (National Scientific and Technological Development Council) and SUCAM (Superintendency for Public Health Campaigns), under the Health Ministry, are also financing this research at the present time.

According to Wilson Chagas de Araujo, the FINEP representative at the meeting, that agency is enthusiastic about the project and will try to develop new malaria study groups, besides helping the teams that have already been set up. Although the total amount of resources to be specifically allocated to malaria research has not been determined, Araujo pointed out that the FNDCT (National Scientific and Technological Development Fund) increased its budget for FINEP research by 110 percent this year.

According to Carlos Corbett from the USP Medical School, the idea of organizing a national meeting of researchers arose in February during the Tropical Medicine Congress, where many papers on malaria were presented, demonstrating a new scientific interest in the disease. Since SUCAM's budget is quite small, the researchers joined together to demand more funds from FINEP. The research problem is a very serious one, Corbett explained, since universities do not have their own funds for scientific projects.

Although USP and UNESP (Julio de Mesquita, Jr Sao Paulo State University) have campuses in the Amazon, they began using them in the medical area, and specifically for malaria, only a short time ago. The Northern universities only have a campus area, but not the resources to set up the laboratory facilities needed for research, according to Corbett. As for research
institutes in that region, they mainly send expeditions into the jungle to collect material for later study.

In the opinion of Marcos Boulos, from the USP Infectious Disease Clinic, the government could prevent malaria cases by investing more money in health projects, and not just in economic programs. Aside from the financial issue, the large economic projects in Amazonia Legal—that covers 52 percent of the country—also contribute to transmitting the disease, since they cause large migrations of non-immune people into a highly endemic area.

According to the experts, the government seldom tries to implement preventive projects in the region. An exception was made when the hydroelectric power plant was built in Tucurui, Para, and a hospital was set up there. The new agricultural frontiers and mining claims are also becoming dangerous. The experts explained that the first meeting hopes to encourage training in entomology (to study the transmitting mosquitos). With the discovery of DDT in 1940, people believed that mosquitos did not need to be studied any longer because they would naturally be eliminated. This did not happen, and some insects developed an immunity to DDT.

Besides being a very serious illness, malaria should be a national priority, Corbett added, because over a period of time people living in endemic areas lose their ability to work, and the Amazon covers half the country.

9805
CSO: 5400/2147
The high incidence of malaria and tuberculosis and the endemism of yellow fever in the Amazon region, which also has a low food production requiring imports of basic commodities from the south, are the main health problems of the local population today. This is what Durval de Araujo Goncalves, a public health officer, would have reported to the Congressional Investigating Committee (CPI) on Hunger if at least one of its members had shown up to hear him.

In his paper, the health officer, who has spent most of his professional career working for the Superintendency for Public Health Campaigns (SUCAM), criticized the federal government for failing to exercise stricter control over expenditures and use of public monies and condemned the "political game" that impedes development of the Roraima region. Giving the background of the various governors of the territory, Durval Goncalves pointed out that "the poor and even the better-off people living in Roraima cannot feed themselves adequately because of the play of political interests." According to what he said, these interests "have up to now prevented the region from having an economic base and from obtaining the most common foodstuffs."

The doctor's paper also denounced the leprosy problem in the Amazon region: "With the closing down of the Aleixo Leprosarium in Manaus, all the lepers became beggars in the main streets of the city and many were hospitalized in Roraima, Rondonia, or any other place where they could survive." According to Durval Goncalves, this disease began to become a major concern in Roraima Territory in 1976, when there was a considerable increase in lepers. The doctor believes that the policy of closing down sanitariums, on the basis of the argument that lepers need to be integrated into society, will not serve any purpose without a support program behind it.
HEPATITIS IN SANTA BRANCA—With a new case recorded yesterday, the number of people with hepatitis in Santa Branca municipio since January has increased to 44. Although the incidence has abated in recent weeks, the head of the local health center, Eloino Gomes dos Santos, believes that new cases could still appear. Most people, however, feel that the outbreak is under control, since the city government decided to follow a decision by CETESB [Basic Sanitation Technology Company] and began channeling the open drains that spill into Barretos River to the place where the treatment station receives the water consumed by the people. All the same, the head of the health center is asking CETESB to evaluate the measures already adopted by City Hall, from among those recommended, so as to have "an idea of the solution to the problem." [Text] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 7 May 82 p 15] 9805
"RARE EPIDEMIC" IN CAQUETA—Florecia, 6 May—Six children died this week in the town of Solano as a result of a rare epidemic, said the mayor of this town, Omar Antunduaga. The malady is manifested through fever and nausea. It has not been possible to control the disease, owing to the lack of medical supplies, added the official, who made an anxious appeal to the regional authorities for medical personnel capable of meeting the emergency. The Caqueta Branch Service of the Department of Health did not know the origin of the disease and arranged to send a committee for preliminary medical evaluation and analysis, for the purpose of accurately diagnosing the disease. Experts in the Branch Service of the Department of Health attributed the pathology to a virus of the plasmodium genus, which finds a favorable medium for development in winter. The Solano area is considered to be one of the most malarial in the department. [Text] [Bogota EL TIEMPO in Spanish 7 May 82 p. 3-A] 8255

CSO: 5400/2158
EGYPT: PHARMACEUTICALS INDUSTRY GROWS

Cairo THE EGYPTIAN GAZETTE in English 23 May 82 p 3

EGYPT'S pharmaceutical production in 1981 stood at LE 217 million, against LE 4 million in 1960. In the meantime locally produced drugs represented 82 per cent of the country's total consumption, against 10 per cent in 1952, a pharmaceuticals industry study said.

A summary of the study was presented yesterday by Dr Abdul Sallam, a former Minister of Health and now the chairman of the Arab Company for Drug Industries and Medical Appliances (ACDIMA) at a symposium held as part of celebrations marking the silver jubilee of the National Research Centre.

The per capita consumption of drugs rose from LE00.22 in 1952 to LE 6 in 1981, Dr Sallam added noting that drug consumption in Egypt was expected to stand at LE 1,500 million in the year 2000 of which LE 1,200 million worth will be locally produced.

The chairman of a leading local pharmaceutical company (CID), Dr Ahmed Abul Enein, said that the 1981 figures as well as those of the first four months of 1982 show that the rise in drug consumption rates in Egypt is double the international rate.

He added that drugs valued at LE 400 million were consumed in the year 1981-1982 and that the targeted production for 1982—1983 is LE 460 million.

Dr Mohieddin Abdul Samie, a senior research professor at the centre, said that there have been strides in the transfer of pharmaceutical technology to the extent that the most sophisticated drugs have been developed in Egyptian plants.

The symposium recommended further plants to help reach self-sufficiency be established. It also recommended reconsideration of all policies related to the drug industry and drug consumption.

— MEN

CSO: 5400/5015
NEW BLOODBANKS PLANNED

Cairo THE EGYPTIAN GAZETTE in English 25 May 82 p 2

THE Ministry of Health has worked out a plan to open six blood banks in the governorates of Cairo, Alexandria, Assiut, Faiyum, Gharbia and Dakahlia at a total cost of L.E. 10 million. The plan also includes the development of another five blood banks at other governorates, Dr. Kamal Abdul Moniem, Director of the Blood Banks Department at the Ministry of Health, announced yesterday.

The new blood banks will be provided with the latest equipment to examine the stored blood periodically and to discard the blood samples infected with any micro-organisms. The number of blood donors has been increased due to the Ministry's blood donation campaign last year, Dr. Abdul Moniem said. The number of blood sacs that have been collected reached 242,000 last year with an increase of 81.3 percent in comparison with 1980, he added.

The long-term plan of the Ministry of Health aims at establishing a central blood bank in every governorate. These central banks will be provided with blood research laboratories and a number of computers to provide any required data on the spot.

The Ministry of Health has urged all political parties and medical associations in Egypt to participate in a national campaign for blood donation in a bid to cover the actual needs of hospitals, Dr. Abdul Moniem pointed out. — GSS

CSO: 5400/5015
DISEASE PREVENTION MEASURES—Phnom Penh, 15 Apr (SPK)—Preventive measures against contagious diseases were taken at the beginning of this dry season in various localities of Kandal Province. About 400,000 persons, that is the population of Leuk Dek and Dangkao Districts, were vaccinated against cholera. The health service is also worried about malaria and tuberculosis which have appeared in some localities. In 1981 the provincial health service treated more than 900,000 patients and delivered 7,000 women. Twenty-two thousand patients were hospitalized. Kandal Province now has a hospital, 11 district dispensaries and 167 communal infirmaries. [Phnom Penh SPK in French 0400 GMT 15 Apr 82 BK]
BLACK FEVER VECTOR FOUND

Janakpurdham, May 11-

The sand flies (mosquito) that is known for spreading the black fever is found in Dhanusa, Mahottari and Sarlahi districts, reports RSS.

Some persons have also been affected by the disease. According to the Nepal Malaria Eradication Association, Dhanusha district office, a team has already arrived here to investigate about the disease and a detailed report will be available by next month.

Preliminary works have also been done for the use of new medicines on the malaria patients.

Meanwhile, spraying of malathion has started in the southern parts of Dhanusha, Mahottari and Sarlahi districts for eradicating malaria.

According to the district office a population of 437,554 in the Nepal-India border is to be protected from malaria through the work conducted here. Altogether 958 employees are engaged in the task.

The area was once considered free from malaria and the number of malaria patients is growing at present especially from last year. Spraying of malathion has started now as DDT has been found resistant to the mosquitoes.

Two malaria eradication volunteers have been deputed to each village panchayat in Dhanusha, Mahottari and Sarlahi for detection and necessary assistance to the villagers.

The Janakpur zonal hospital is also geared to provide the results of the blood test to each patient within an hour.

About one thousand persons are learnt to have been infected by malaria and mosquitoes are suspected to have transferred the disease from those who come from India.
MEDICAL COMMISSION SET UP FOR ADMINISTRATION OF HOSPITALS

Karachi DAWN in English 27 May 82 p 10

[Text]

An eight-member National Commission on the Administration of hospitals and Medical Educational Institutions has been set up by the Federal Government to examine the existing organisational, administrative and financial set-up of government - dispensary hospitals, it was announced in Karachi on Wednesday.

Headed by Mr. Justice Mian Burhanuddin, a judge of the Supreme Court, the Commission shall submit its recommendations to the Federal Government within one year.

The terms of reference of the Commission shall be:

(a) To examine the existing organisational, administrative and financial set-up of dispensaries, civil hospitals, teaching hospitals, special institutions and rural health centres etc.

(b) To assess whether the supportive services, e.g. x-ray department, operation theatres, laboratories etc., available to dispensaries, hospitals and institutions etc. are adequate.

(c) To assess as to whether the supportive services, e.g. x-ray department, operation theatres, laboratories etc., available to dispensaries, hospitals and institutions etc. are adequate.

(d) To critically analyse the existing out-patient service and casualty departments and the procedure of reference to specialists.

(e) To study the system of procurement of drugs, equipment and other supplies for the dispensaries, hospitals and institutions, and to analyse the complaints regarding non-availability and pilferage of hospital supplies.

(f) To analyse the existing hospital budget allocation vis-a-vis their requirement and to suggest measures to enhance the financial resources, including levy of fees on patients (if considered appropriate) and (g) To suggest remedial measures.

CSO: 5400/5608
WHO EXPERT TO HELP DISEASE CONTROL PROJECTS

Karachi MORNING NEWS in English 21 May 82 p 2

[Text]

ISLAMABAD, May 20: Dr W.A. Hassouna, world Health Organisation (WHO) expert and Director, Health and Social Research Group, Institute of National Training, Egypt will visit Pakistan from May 21 to June 3 at the invitation of Government of Pakistan.

His visit is aimed at assisting the social welfare wing, Ministry of Health in its projects and development efforts to enhance maximum community participation in disease control measures such as malaria and leprosy, it was officially announced here yesterday.

The project supported by community—oriented strategies to control malaria aims at developing most effective and comparatively economical community based methods for prevention and control of malaria within the socio-economic conditions of our country.

The project will be implemented jointly by the Directorate of Malaria Control and Ministry of Health and Social Welfare with the assistance of WHO.

The other project, “social and economic aspects of leprosy” has been designed with a view to identify the measures that may be helpful in the treatment and social and economic rehabilitation of leprosy patients and their families.
RAWALPINDI, May 20: Lt-Gen. Fahim Ahmad Khan, Surgeon General, Pakistan Army performed the earth-breaking ceremony of the Department of the Radiotherapy at the Combined Military Hospital here this morning.

This is the most modern unit of the radiotherapy, the first of its kind in Pakistan. It will provide the latest facilities of treatment to the patients of cancer.

Speaking on the occasion, Lt-Gen. Fahim said that it would be a memorable day in the history of the Army Medical Corps, when we would have the latest treatment facility in cancer disease. He said that today the country had about six centres of cancer treatment but this department in the Combined Military Hospital would be the first centre to provide Mevatron Linear Accelerator facility for the treatment.

The two-storey building of the department will be constructed in one year at an estimated cost of about Rs. 35 lakh and latest equipment for the unit worth Rs. one crore has already been acquired. The department will have 50-bed ward besides outdoor patients treatment facilities.
EMERGENCY MEDICAL FUND FOR TREATMENT ABROAD

Karachi BUSINESS RECORDER in English 21 May 82 p 3

An “Emergency Medical Relief Fund” is being set up to provide monetary assistance to needy people who can only be cured abroad, Sindh Governor Lt-Gen. S. M. Abbasi informed the Council of Sindh yesterday morning.

He said he himself would act as Chairman of the Board of Governors of the new Fund.

The other members of the board will include the Provincial Ministers for Health, Social Welfare and Education, the Secretary of the Social Welfare Department and three members from the public.

The Sindh Governor, said that the provincial government will provide an initial donation of Rs 10 lakh for the fund.

Donations from philanthropists and well-to-do people would be welcome, he added.

He said arrangements will be made to provide the necessary foreign exchange component for sick people travelling abroad through the fund’s assistance.

Lt-Gen. Abbott stated that he felt the need for instituting such a fund after receiving many pathetic letters from sick people—especially children—who could not be cured of their ailments within Pakistan, due to lack of skilled medical specialist, but because of a shortage of the latest hospital equipment and facilities.

Such people could only hope for a cure abroad, he continued, and the government would try to help them in a humanitarian spirit.

He said all applications for assistance from the “Emergency Medical Relief Fund” would be studied by a panel of medical experts and subjected to a case-by-case examination.

Referring to a suggestion made by a council member that Zakat money should be made available for the use of the new fund, the Sindh Governor said “lump sum” allocations from Zakat revenues were not possible.

However, efforts would be made to utilise Zakat money on a case-to-case basis whenever possible, he added.

He also said that the funds earmarked for the Social Welfare Department are to be increased.

Social Welfare Minister, Begum Tazeen Faridi, welcomed the announcement made by the Sindh Governor, and voiced the hope that overseas Pakistanis and wealthy people would donate to the new fund.

CSO: 5400/5604
Diabetes is more prevalent among women than men in Pakistan, according to a survey conducted by a team of research scholars of the Research Centre of the Pakistan Medical Research Council. A seven-year study was conducted by the team headed by Dr. Zulfiqar Haider, Director of the Pakistan Medical Research Centre at Fatima Jinnah Medical College. Dr. Fayyazuddin and Dr. Surraiya Obaidullah and a large number of medical officers, biochemists, micro-biologists and consultants included in the team.

The study covered 1,000 patients suffering from diabetes mellitus with variable duration of symptoms registered between 1972 and 1976 at the diabetic clinic of the clinical research unit of Fatima Jinnah Medical College, Lahore.

Of 1,000 patients 638 were female and 362 male patients i.e. 63.8 per cent were women and 36.2 per cent were male patients. A vast majority of them were in the age group between 30 and 59 years and 16 patients, all juvenile diabetics were less than 20 years of age. There were 46 patients in the age group between 20-29 years.

Half of the patients were overweight, 340 had normal weight and 100 patients were underweight. The major complications of diabetes and associated conditions included hypertension (26.6 per cent), cataracts (16.4 per cent), neuropathy (17.9 per cent), ischaemic heart disease (8.5 per cent), retinopathy (11 per cent), renal stones (3.9 per cent), gall bladder diseases (2.2 per cent) and pulmonary tuberculosis (3.8 per cent).

The study team observed that diabetes mellitus in Pakistan generally conforms to the pattern seen in the temperate zones except for variation in a minority of patients. In Pakistan there had been no major changes in the dietary habits which consists of chapattis, rice, pulses, meat, vegetables and dairy products. The patients under study were drawn from socio-economic groups with a vast majority from the middle or lower-middle classes.

As regards prevalence of coronary heart disease in patients suffering from maturity onset diabetes mellitus the team observed that out of 500 patients they found 45 patients with objective evidence of coronary heart disease (about 9 per cent). They said that the prevalence of coronary heart disease amongst diabetics has shown variations in different parts of the world. An incidence of over 40 per cent has been reported from the Western countries as against 1.62 per cent in Bangladesh. Some recent studies from different parts of the Indo-Pak Sub-Continent have observed 15 to 20 per cent of diabetics with objective evidence of coronary heart disease. "We have been impressed by the relative rarity of clinical manifest peripheral vascular disease amongst our patients. This could be due to a female preponderance with low frequency of smoking habits and relatively fewer patients above the age of 60 years," observed the team.
[Text] Inaugurating the Sir Syed Homoeopathic Medical College and Hospital, established by the Hahnemannian Cancer Relief Society of Pakistan, the Provincial Health Minister Syed Ahad Yusuf said here the other day that the Government would "be giving its maximum assistance for the development of homoeopathy in the country." We are glad homoeopathy is receiving increasing attention from the authorities. Some time ago President Zia-ul-Haq had also stressed that along with the Western system of treatment (allopathy), homoeopathy and Tibb should be given an equal chance without prejudice. Both Tibb and homoeopathy have, by and large remained neglected so far as State patronage to them is concerned. Partly it is the result of lack of proper appreciation by the authorities of the excellence of these two medical systems, but mainly it is the drug manufacturing concerns which have used their influence to hinder the progress of Tibb and homoeopathy to protect their vested interests.

Judged from the allopathic standards, homoeopathic cures are miraculous. In some of the difficult and dreaded diseases such as organic heart troubles, mental disorders, shattered nerves and all such ailments where allopathy at best provides palliatives and temporary relief, homoeopathy effects permanent cure. Even in acute cases, it cures the trouble speedily--more quickly than one would believe without experiencing it. The ever-increasing number of people turning to homoeopathy for treatment should be able to convince any skeptic that there must be some good reason why they are attracted towards a medical science which is comparatively new, and is suffering from so many handicaps in this country.

We have written on this topic a number of times and we revert to this subject again only because a cool attitude of the Government towards homoeopathy and Tibb is hurting the interests of the nation. Neighbouring India has placed allopathy, Ayurvedic and homoeopathy on an equal footing. All the three of them enjoy the same patronage and privileges in that country.

In his recent speech, the Provincial Minister also pointed out the shortcomings of the homoeopaths who are not up to the mark in proficiency. He also suggested that homoeopaths should conduct "extensive research" in the science to make it more effective. There is no denying the standards of homoeopathy
in Pakistan are low and there is practically no research on this science here. But we are afraid, the responsibility for this sorry state of affairs rests squarely with the Government which provides crores of rupees to allopathy and has also created a system for maintaining standards of allopathic education, but has left homeopathy to fend for itself. Is it fair to demand that research in homoeopathy, and for that matter in Tibb, should be conducted purely with private resources or that their educational standards should be maintained at a high level without any official help?

We strongly feel that in the interest of the people and the country, the present lop-sided medical policy should be abandoned in favour of a balanced policy doing justice to homoeopathy and Tibb.

CSO: 5400/5604
HIGH INCIDENCE OF TUBERCULOSIS AMONG RAILWAY WORKERS REPORTED

Karachi MORNING NEWS in English 22 May 82 p 8

A very high prevalence and incidence rate of tuberculosis among railway working population groups has been reported.

According to the Medical Gazette, a fortnightly journal, a study carried out among patients of pulmonary tuberculosis, referred to the chest unit of Cairns Hospital, Pakistan Railways, Lahore, during the period from Jan. 1 to June 30, 1981, shows that among the 100 new cases of pulmonary tuberculosis attending the unit, 62 per cent were males and 38 per females.

Both among the males as well as the females, maximum distribution was found in the age group of 15-44 years, i.e. the maximum productive age group in males and that of child-bearing age-group in females was most affected. This proves that the working capability of the railway employees suffers heavily in their peak-age of 15-44 years resulting in colossal economic loss.

In a survey of Railway Loco Shed Colony, Lahore, in 1958, it was noted that the incidence of tuberculosis in males was 6.94 per cent and in females 2.53 per cent. Among males, the maximum number of cases (50 per cent) was found in age-group above 30 years, whereas in females and maximum number of cases was found in age-group of 0.14 (0-14) years. This may be due to the reason that maximum number of females of this age-group came under study in 1958.

In the present study also, the maximum number of males was found in age group of above 30 years, but among females, the maximum number belonged to the age group of 15-29 years (i.e. the prime age of child-bearing) leaving maximum stress among the females.

CSO: 5400/5604
HOSPITAL BED SHORTAGE--WAZIRABAD, May. 17--The Punjab Minister for Health and Education, Ch. Hamid Naser Chatha, has said 50 per cent people of Pakistan have to travel six to seven miles to visit a hospital or dispensary. He was addressing a meeting here after inaugurating the Free Medicine Bank set up by Tanzeem-e-Tajaran Wazirabad. He said there was only one hospital bed for 2,326 person and a hospital for 180,0400 persons in Pakistan. He called upon the philanthrooists to help the government in extending health cover to the people. He said 60-bed modern hospital would be set up at Wazirabad at an estimated cost of Rs. 6 million. The construction work would be started in July this year, he added. He disclosed that Punjab Governor Lt. Gen. Ghulam Jilani Khan has granted a sum of Rs. 40 lakh from the special fund for constructing the new building of the Government Girls College, Wazirabad and the construction work would be started within next three months. The governor has also approved for establishing a technical school at Wazirabad, he added. He said the government was doing its best to provide medical care to the people and of the hospitals in the province has been doubled. [Islamabad THE MUSLIM in English 18 May 82 p 6]

CSO: 5400/5604
MALARIA OUTBREAK—Diego Lorio, director of the national system for the eradication of malaria, has told this newspaper that a malaria epidemic is affecting Puerto Obaldia, San Blas and Darien. Lorio, who just completed a tour of the affected areas, said that "the area is in a state of emergency and for this reason the government has allocated a special 33,000-balboa fund to attack this problem and to keep it from spreading to other parts of the country." He noted that the situation is the result of malaria cases in Colombia, adding that the epidemic spread to Panama through illegal immigrants. [PA311219 Panama City MATUTINO in Spanish 14 May 82 pp 12A, 8A PA]
ARMED FORCES MALARIA CAMPAIGN—More than 400 armed forces troopers were laid low last year—not to the enemy—but to malaria. Of the 412, there were two deaths traceable to the illness. Gen. Fabian C. Ver, AFP chief of staff, yesterday told the armed forces surgeon general to start battling the disease, particularly in Palawan, Sulu, Basilan and Tawi-Tawi. This will involve the fight against the "anopheles" mosquitos, which is the carrier of the disease. The target: Breeding places like swamps and other bodies of water. The weapons: Oil and chemicals spread over the water to prevent eggs from reaching maturity. Ver directed Brig. Gen. Evaristo Sanchez, AFP surgeon general, to coordinate with the health ministry in the anti-malaria field operation. Advance teams have been sent out to require soldiers deployed in those areas to take anti-malaria drugs. [Text] [Manila PHILIPPINES DAILY EXPRESS in English 1 Jun 82 p 2]
A NEW drug recently launched on the South African market is being hailed by experts in tropical medicine as a "major breakthrough" in the treatment of bilharzia.

There are at least three million sufferers of bilharzia in South Africa and 200-million throughout the world.

Up to now, however, there has been no satisfactory treatment for the disease, especially in the underdeveloped parts of the world.

Drugs were administered either by injection, or patients had to take a series of tablets which they often did not do or they had to be hospitalized. The drugs often produced particularly unpleasant, and sometimes dangerous, side-effects.

The new drug, Biltricide, which can be obtained only on prescription, does produce some side-effects but these are mild and disappear quickly.

More important, however, is the fact that a bilharzia sufferer requires only a single dose of Biltricide, which comes in tablet form.

In about 95 percent of cases, "the bilharzia worms which invade the human body, will be killed off within 24 hours. For the other five percent of cases a second dose will probably do the trick.

"This has major implications for South Africa, especially in the rural areas where it is difficult to keep an eye on patients to ensure they take their medication properly — or to ensure that they come back for follow up treatment," Mr Colin Williams of Bayer Pharmaceuticals said at a Press conference yesterday.

The Department of Health is planning to use Biltricide in a major three pronged attack on the disease: To eliminate the disease in humans; to eliminate the water snails which harbour the eggs of the bilharzia worms; and to educate the public about how bilharzia is contracted.

"The Defence Force has also shown an interest in Biltricide because a growing number of national servicemen are contracting the disease up on the border," Mr Williams said.
CONTROL of sexually transmitted diseases (STD) is a frustrating task, lament a leading VD specialist in Pattaya.

Aside from the health risks inherent in prostitution, sanctions are weak and virtually non-existent, rendering authorities almost powerless in waging a successful war against the disease.

"Because prostitution is illegal, the law does not provide for sanctions against violators of health regulations. In principle, it does not acknowledge that any violation exists," the specialist says.

"Therefore, control procedures are merely recommendatory, and those who are afflicted with the disease actually have the choice of whether or not to submit to treatment."

It is a widely-accepted fact that many tourists come to Pattaya for its sexual attractions. And indeed, the possibilities are many and the choices varied. In South Pattaya, the hub of the resort's busy nightlife, about 100 beer bars and massage parlours offer the services of an estimated 5,000 resident prostitutes.

The number is significantly boosted by throngs of prostitutes who descend on the city for special occasions, such as during the arrival of navy ships. Activity at the strip peaks during these occasions; the number of prostitutes almost doubles the women arriving in busloads to help entertain the sex-starved sailors.

According to our source, nearly half of these sailors contract STD during their "fun-filled" visit to South Pattaya's bars. The estimate is a compilation of reports from ship doctors, who are requested to send back information on such cases, together with data on the prostitute who could have passed on the affliction.

Such information, which includes name of the beer bar and the name of the prostitute and her distinguishing characteristics, is expected to assist authorities in identifying the local carrier.

Unfortunately, however, such reports are not always helpful, as only about half of the women suspected of having STD are ever identified.

In many cases, the reports are too sketchy for positive identification; in other instances, the prostitute may have already moved on to another beer bar — without leaving a forwarding address.

If and when positive identification is made, however, the matter is reported to the beer bar or massage parlour operator and treatment is urgently recommended. Also recommended is a three-day rest for the afflicted party, until tests and treatment are concluded.

But the recommendation is not always followed. Some have refused to submit to treatment, because "it is too inconvenient," or, during the peak season, because a few days rest means substantial loss in income.

During the busy season, prostitutes reportedly average some 30,000 baht a month. Of those who do go for treatment, according to one clinic, many fail to show up for follow-up visits.

Particularly cooperative massage parlour and beer bar owners supposedly deduct 100 to 200 baht from the fees of prostitutes who refuse to go for treatment. But perhaps because the fine is meagre compared to potential lost income, many willingly suffer the fine and continue working.

Aside from these problems, other difficulties plague the war against
sexually-transmitted diseases. According to our source, 40 per cent of women with gonorrhea manifest no symptoms.

Furthermore, this particular disease, which is highly infectious, can be transmitted within 24 hours to 14 days. About half of reported cases involve a gonorrhea strain which is resistant to penicillin.

Another medical practitioner expressed concern about the growing number of STD cases called "non-specific urethritis," which indicates the presence of multiple infections. Such cases are reportedly difficult to treat and succumb only to a series of various treatments.

Concern has also been expressed by those from whom the sex-shopper is supposed to be protected. Complained one beer bar operator: "Everyone blames the prostitute as the transmitter of VD. What about the sailors who could have been the ones infecting the girls?"

The girls themselves, are wary of sexually-transmitted diseases; according to one strip habitue, some prostitutes now screen clients and have been known to hesitate going out with men who have done the rounds of the bars and massage parlours.

The problem, one doctor acknowledged, is the highly infectious nature of the disease. With the infection passed from prostitute to client to another prostitute and so on, it is impossible and useless to identify the original transmitter.

The only thing that can be done is for the women involved in this occupation to continuously guard and protect themselves against this "occupational hazard."

At present, the effort to control and monitor sexually-transmitted diseases revolves around a small pink booklet which serves both as an ID card and as a record of check-ups. But again, procuring the card is largely optional. By some estimates, only about 80 per cent of prostitutes maintain or carry such booklets, which in many cases are irregularly updated.

PROSTITUTES

Of the card-carrying prostitutes, about half report to the VD Control Clinic, while the rest go to the six or so clinics in the city. One established clinic reportedly treats about 10 cases per day, while another admitted to receiving an average of about 100 cases per month, the number including both prostitutes, and their clients.

Of late, however, measures have been discussed to improve the health situation in the city. In February, City Hall officials and representatives of the VD Control Clinic met to formulate regulations aimed at solving the problem. A subsequent forum was held between City officials and massage parlour and beer bar owners and operators to further discuss the matter.

Most suggestions at both meetings centred on the same ID booklet and record of check-ups. Among the recommendations being considered are: Standardisation of ID booklets, compulsory possession of the ID booklet and regular VD check-ups. Because the prostitutes' health problems are, in effect, beyond the jurisdiction of the law, the onus still remains with the private sector — the beer bar and massage parlour operators.

Authorities admit that an effective campaign can only be successfully waged with the full cooperation and active participation of this interest group. Thus far, there has been little success in organising the private sector for a sustained campaign against the disease.

MEASURES

Other measures have been suggested. A local doctor volunteered that the Government, first of all, should take a strong stand against what has appeared to be merely token efforts by the private sector in combating spread of STDs.

The former should actively solicit the participation of the private sector in policing their ranks, and in exacting high standards of hygiene from these establishments.

Another suggestion is to conduct a full-scale educational campaign for staff of hotels, beer bars and massage parlours. The former should actively solicit the participation of the private sector in policing their ranks, and in exacting high standards of hygiene from these establishments.

A plausible suggestion is for hotels and travel agents to advise tourists to ask for the ID booklets from prostitutes, to ensure that the latter are free of any infection.

And perhaps the most workable one, a suggestion has been put forward for all establishments dealing with these kinds of transactions to form an organisation for the purpose of maintaining and enforcing high health standards among its members.

These members will then be "accredited," and a sign posted outside its premises, indicating the relatively safety of patronising its "working girls."

"But finally," our source concluded, "even if all these suggestions are effectively implemented, the risk of contracting sexually transmitted diseases cannot be completely eliminated. As long as there is prostitution, there will always be the disease."

CSO: 5400/5614
BRIEFS

CHOLERA IN SURAT THANI—Surat Thani—Cholera has broken out in this province, and so far 23 people have been hospitalised in Muang District, a source said. The spread of the contagious disease was evidently a result of the drought in the south, particularly in Surat Thani. The provincial public health official Dr Somchat Chuaichan, said that cholera has been spreading from Muang District to some outlying districts since earlier this week. Dr Somchat said 23 people—9 children and 14 adults—have so far been hospitalised in Muang District. The most hard-hit area was reported to be on the banks of the Tapi River which is the source of drinking water for the local people. In Tha Chang District, three cases were reported yesterday. All health centres and health stations in the province have been ordered to have the populace vaccinated against the "inaba" strain of cholera. [Text] [BK181013 Bangkok POST in English 16 Apr 82 p 5 BK]

ANTHRAX CASES REPORTED IN NORTH—At least two people have died on anthrax passed on to them by infected cattle. Another 15 people have been admitted to the hospital at Nakhon Chiang Mai in Muang District after contracting the disease which is believed to have come from cattle illegally smuggled into the province from Burma. Provincial infectious disease control section chief Mongkhon Na Songkhla told a press conference in Chiang Mai yesterday that anthrax has been detected in three districts here—Chiang Dao, Mae Taeng and Sansai. Public Health Ministry officials in Bangkok said yesterday that teams of local public health and livestock department officials have been sent to vaccinate villagers and cattle. The officials said anthrax in human beings was first recorded in 1960. Between then and last year, more than 1,000 cases of the disease have been reported in various provinces. About 100 of the victims died. [BK090237 Bangkok POST in English 5 May 82 p 2 BK]

RABIES, DIARRHEA—Forty-six people in Thailand have died from rabies since the beginning of this year, according to a report from the Public Health Ministry. The ministry also reported that 57 people had died from acute diarrhea so far this year, and another 19,138 people had suffered from the disease. Meanwhile, the ministry's epidemiology division warned that all persons who caught rabies would die from the disease as there was no way to cure it. It said that each year between 200 and 300 people died from rabies, but few Bangkok residents died from the disease. [BK131335 Bangkok POST in English 13 May 82 p 2 BK]

CSO: 5400/5613
FEBRUARY ANIMAL DISEASE STATISTICS PROVIDED

Luanda JORNAL DE ANGOLA in Portuguese 8 May 82 p 2.

[Text] In a report reaching us yesterday, the Ministry of Agriculture provided the People's Republic of Angola's animal disease statistics for February this year.

Thus, regarding African swine fever in Kuanza Kuango Province, they discovered two foci in the Menongue township.

As for bovine contagious peripneumonia, they discovered 1 focus in Kacholiongo township, Huambo Province; 5 in Mocamedes Province; 2 in Camacui township; 1 in Kilengue; and 1 in Caconda, totaling 16 foci.

In Bibala township in Mocamedes Province they discovered hematic carbuncle in 1 focus; there were 3 foci in Huila Province, 2 in Kilengue township and 1 in Caconda township.

Nine foci of symptomatic carbuncle were detected, 6 in Benguela Province—1 in Chichomba township, 1 in Kipungo township, 1 in Kulukume, 2 in Xilengues, 1 in Caconda and 3 in Balombo township.

One bovine tuberculosis focus was detected in Lubenda township, Cabinda Province, and two streptricosis foci in Malanje township and 1 in Malanje Province in Macari township.

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8870
CSO: 5400/5987
DISEASE ATTACKS THOROUGHBREDS IN MATO GROSSO DO SUL

Sao Paulo. O ESTADO DE SAO PAULO in Portuguese 4 May 82 p 40

[Article by Antonio Jose do Carmo]

[Text] A disease is decimating herds of purebred horses in Mato Grosso do Sul. The "Trypanosoma equi," the agent causing "hind-quarters disease" [cadeiras], has already killed thousands of animals throughout the state. It began appearing in the Mato Grosso lowlands, but now it is also out of control in the area close to the border with Sao Paulo.

In the Nova Andradina region alone, where there are 35,000 head, 400 purebred and half-blood horses died last year. Some ranches were left with no way to manage their cattle, with the death of animals trained as cow ponies. And this year again, the Secretariat of Agriculture has made some studied showing that the disease is recurring in various areas.

The major problem with "Trypanosoma equi" is that Brazil has not yet been authorized to make the vaccine. Veterinary medicine has recorded virtually no outbreaks of this disease in the past 30 years, and in some States such as Sao Paulo, the disease has always been considered "nonexistent." However, according to Veterinarian Jose Rogerio Borges, who has worked for the Animal Health Protection and Inspection Department in Mato Grosso do Sul for 10 years, the spread of "hind-quarters disease" can in a short period of time endanger all the horses in the country.

The disease is spread by any fly or sucking insect such as the motuca fly, that obtains the virus from the capybara--found in great numbers on ranches in Mato Grosso--and then infects the horse. The same vectors later carry the disease to the entire herd.

The capybara, the carrier of the virus, has to resist three stages in the development of the disease: incubation, a semi-acute phase, and an acute phase. If it does not die during this time, it goes on to the chronic phase, as a transmitter of the disease. The virus acts with tremendous speed in horses. The contaminated stallion or mare has a fever, does not lose its appetite, but, on the third day, loses motor control over its hind legs. Death is certain in less than 7 days.
"Naganol"

In the middle of last year, 176 animals died in the space of 40 days at the Santo Antonio Ranch in Nova Andradina municipio. The owner, Eduardo Aizz Haik, sent a number of letters to the government and made many trips in an attempt to obtain permission from the Ministry of Agriculture to buy vaccines abroad. In one of the letters he said: "I don't have a plane or any other means to smuggle goods." Haik got the address of Bayer in Sao Paulo, but he was told that the manufacture of the cure for the "hind-quarters disease" was not economical for the company and that they could produce it in a limited quantity only if they received exemption from federal tax. "Naganol," one of the few effective immunizing agents, manufactured with salt derived from urea, is currently found on the Argentine market. In areas where the disease is most prevalent, such as in the Mato Grosso lowlands, there are illegal middlemen selling the product without a label or a receipt for the rancher.

According to Veterinarian Jose Rogerio Borges, the first reaction of the rancher who sees his herds decimated is to hunt down and kill the capybaras on his property. Although this action is condemned by environmentalist agencies, it cannot be stopped because the National Environmental Protection Institute (INAMB) does not have the means to control this killing on the ranches.

On the property of Eduardo Aiziz Haik alone, with 1,200 alqueires of land, there are more than 2,000 capybaras living in the fields, and he has personally promised to exterminate them, by building traps near the lakes, so that they will get used to a programmed feeding and it will be easier to kill them. In this way, up to 30 capybaras can be killed at a time.

In Baitapora, Anaurilandia and Nova Andradina counties, there are at least 40,000 horses, of which about 20 percent are descended from or are purebred English, Arabians, quarter horses or mangalarga. Hundreds died from hind-quarters-disease" in recent months, but no record has been made of this by the government.

Moreover, ranchers suspect that the presence of dead capybaras near lakes may be a sign that the disease is spreading, since they are not totally immune to the action of the virus. The most recent cases were recorded in the beginning of the month in Nova Andradina, at the Silvana farm, owned by the Sao Paulo industrialist Atilio Tinelli, and in Brasilandia, at the Pedra ranch along the border between Sao Paulo and Mato Grosso do Sul.

The greatest danger is that the disease will cross the Parna River and begin to kill horses in municipios such as Castilho, where race horses are bred for the Sao Paulo Jockey Club and for the Army. The Pirajussara horse farm, belonging to Tito Melo Zarvos, is one of the largest and best run in the country, with the best selection of thoroughbreds, used in official races. This horse farm, located on the banks of the Parana River, is threatened by the disease.

The same thing is true of the Anglo-Arab horse farm belonging to Francisco Sampaio de Souza, which supplies horses for the Calvary. Concerned about the spread of the disease when it was at its most critical stage last June, the Rural Andradina Union requested several veterinary laboratories to provide information on immunizing agents similar to the imported ones—to no avail.
FREE ANIMAL VACCINATION PROGRAM—The milk producers of Cauca, Narino and Putumayo, members of the Lacteos Purace Cooperative, Colpurace, with headquarters in Popayan, today will begin to benefit from the most revolutionary means adopted in recent years by an association: free vaccinations for the prevention and elimination of foot and mouth disease and brucellosis, or contagious miscarriage. This important decision was unanimously approved at the most recent special general assembly of the association in order to encourage milk production in the southern part of the country and to strengthen the cooperative organization in the country, according to its manager, Felipe Zambrano Munoz. [Excerpt from article by Jorge A. Sanchez Vargas] [Bogota EL TIEMPO in Spanish 12 May 82 p 7-A] 8255

CSO: 5400/2167
FOOT-AND-MOUTH DISEASE--Duesseldorff, 1 Jun (DPA)--Foot and mouth disease has now occurred in north-Rhine Westphalia. Large parts of the GDR and Denmark were affected by it. According to the Ministry of Agriculture in Duesseldorf on Tuesday, 18 pigs went down with the disease in a piggery in Wuppertal. There is suspicion that the virus was brought in feedstuffs. It is not yet known whether there is a connection with cases in the GDR and Denmark. [Text] [LD020510 Hamburg DPA in German 1713 GMT 1 Jun 82 LD]
The foot-and-mouth disease is being sent more or less deliberately across the Baltic if one is to believe certain Danish media and now also the Christian People's Party, which wants all contact with our southern neighbor interrupted until the German Democratic Republic takes effective measures against the disease.

The bacteria may be spread via the air. There is foot-and-mouth disease in the German Democratic Republic. The possibility of a connection, therefore, cannot be excluded, and people in the German Democratic Republic may probably now also, with a certain right, be wondering how much may be sent in the opposite direction. Such a reaction would at least be logical.

The fact is that these claims are being hurled into the bacteria-filled air without the least proof, and the German Democratic Republic is now being openly accused of being lenient in carrying through safety measures in the areas affected by the disease.

In today's LAND OG FOLK, this claim is being thoroughly refuted. There are even many indications that the measures, including the total isolation of the areas affected, are quite a bit more serious than in Funen, where possible disease carriers of all kinds move freely to and from the farms affected by the disease, thereby making any kind of protection illusory. The bill is being paid by the farmers affected and by the entire agricultural export industry.

Before flinging accusations of lenience at a country where the safety measures and this entire matter have been taken quite a bit more seriously than in Denmark, Minister of Agriculture Bjørn Westh, among others, who has not refrained either from waging 'bacteriological' and psychological warfare in the form of insinuations, ought to take effective countermeasures in Denmark. For example, only last Wednesday did a Conservative M.P. propose that material be sent to all farmers, showing and explaining the symptoms and course of the disease.

On the whole, the Danish authorities have not been displaying much incentive and efficiency in this matter, and, consequently, the accusations hurled at a neighboring country which not only has reported its cases of foot-and-mouth disease to an international organization in Paris but has also endeavored to take effective measures against the disease, appear the more unacceptable.
The authorities in the German Democratic Republic have carried through far-reaching measures to combat the foot-and-mouth disease which hit seven municipalities in the north-eastern part of the country. They left no stone unturned. The strictest quarantine regulations were introduced. In the villages, guards have been checking that nobody violated the strict regulations of isolation. It is now nearly 3 weeks since the most recent case of the dreaded disease was ascertained, and in five municipalities all restrictions have been removed. Because of preventive measures and immediate efforts, the foot-and-mouth disease was limited to a few thousand animals.

The First Outbreak

The foot-and-mouth disease broke out on 14-15 March, but the same thing happened here as in all of the cases of the disease in Denmark. It took time before the virus disease could be established.

"The first case was not very typical. That is usually the case. The disease takes a certain time to develop entirely. And, of course, there are a number of different forms of virus diseases," the chief veterinarian of the German Democratic Republic, Professor, Dr. Helmut Schwedler tells LAND OG FOLK.

On 17 March, the results from the laboratory were ready: it was foot-and-mouth disease, and on 18 March the international office for animal diseases in Paris was notified by telex.

They do not know in the German Democratic Republic from where the disease has come. Helmut Schwedler says that it is a complete mystery.

Compensation

Animals in the German Democratic Republic have been vaccinated against foot-and-mouth disease since 1950. This has had the effect that the course of the disease has been milder, and that perhaps only a few percent of the cattle in a single barn have been infected.
"We have also been wondering why the vaccinations did not have the intended effect. However, there are many subcategories of the disease. It may be a question of an unknown subcategory," says Helmut Schwedler.

"The vaccination has the effect that the disease will take a different and milder course. Not all animals are infected. For example, only one third or one fourth or a few percent of the animals become infected with the disease. We do not slaughter the sick animals. They are put in quarantine. No animals are moved. Persons who have been working in the barn in question cannot go home to their families during that period. Food is provided for them; there are kitchens and wash rooms," Helmut Schwedler says.

Areas were closed off, the first ones being the barns with the sick animals, the next ones the villages, and the third ones the entire municipalities. No weddings were allowed to take place, and all social events were canceled. Workers were not allowed to leave their homes in the villages concerned to go to work in the towns.

The workers affected by the quarantine regulations have had their normal average wages paid from a special fund available to the veterinary authorities. On the other hand, the mayors of the villages in question have been able to offer them other work, typically work such as helping with the disinfection of barns, etc.

People who had planned their vacations and had paid for their tickets got their money back. And arrangements were made with the enterprises concerned to postpone the vacations of the workers involved to later dates. Owners of restaurants who had to close their restaurants were compensated for their losses.

"These are all of them measures which it has been possible to carry through thanks to our social system," says Helmut Schwedler.

A Few Thousand Cases

The German Democratic Republic also has to take other kinds of measures to combat the foot-and-mouth disease on account of the large barns with at least 250 cows or more or more than 1 thousand calves in one barn.

The foot-and-mouth disease occurred in a dozen places. There were, for example, two or three cases in a municipality which typically has 50,000 pigs and 10,000-15,000 cows.

Most of the sick animals were cows and calves. Approximately 4,000 cows and 1,000 sheep became ill. The new-born calves presented the greatest problem. They were without resistance, and 60 calves, 1-4 weeks old, were put to death. The same thing happened to a stock of 1,400 pigs which contracted the disease, incidentally, after the disease had been stopped in the municipality concerned. It was concluded that this was the best thing to do instead of exposing the population to further difficulties.

Finally, all sick animals individually and privately owned have been put to death. This applies to pigs and sheep--mostly pigs. A total of 40-50 pigs privately owned were put to death, and the owners received full compensation. In special cases, further compensation was paid.
"We cannot say that the vaccinations have had no effect, but they just have not had the effect which we had imagined," says Helmut Schwedler.

He stresses that the disease has taken a fast course, and that it did not develop into an epidemic. The reason for this is that the farmers have done their best, and that the citizens have helped.

"The state immediately took all the necessary measures," says Helmut Schwedler. Now people may again vacation on the Baltic, the beaches and the water of which are extremely popular among citizens of the German Democratic Republic.
ANIMAL VACCINATION DRIVE NOTED

BK081006 Phnom Penh Domestic Service in Cambodian 1230 GMT 7 May 82

[Text] Since liberation on 7 January 1979, under the correct leadership of the KPRP, our revolutionary authorities and people have paid attention to animal breeding, particularly to tending and strengthening the draft force for use in the production drive in order to achieve self-sufficiency in food.

In contribution to tending and strengthening draft animals for use in tilling land and growing the rainy-season rice, during the first quarter of 1982 the Agriculture Ministry's animal production and veterinary directorate, in close cooperation with the provincial veterinary services and district and commune authorities, launched campaigns to vaccinate cattle in various areas throughout the country against such diseases as foot-and-mouth disease, black leg, hemorrhagic septicemia, antrax, rinderpest and diamond skin. The veterinary teams vaccinated 237,013 oxen, 59,760 buffaloes, 22,441 hogs and thousands of chickens. The vaccinations of oxen were as follows: 26,400 head in Takeo Province; 13,277 head in Battambang Province; 14,877 head in Kompong Chhnang Province; 21,065 head in Kompong Cham Province; 17,279 head in Kompong Speu Province; and 13,764 head in Prey Veng Province.

With the close attention of the local authorities, our fraternal peasants throughout the country are striving to breed farm animals in order to fulfill the plans of increasing the number of oxen by 4.5 percent, buffaloes by 3 percent, and hogs by 25 percent as against the 1981 herd in order to use them in stimulating the 1982 rainy-season rice production drive as a contribution to implementing the resolutions of the fourth party congress.

CSO: 5400/5613
TREATMENT OF FOOT-AND-MOUTH DISEASE NOTED

BK221221 Phnom Penh Domestic Service in Cambodian 1100 GMT 21 May 82

[Agricultural program article on foot-and-mouth and blackleg diseases]

[Excerpt] I. Foot-And-Mouth Disease:

Treatment through scientific methods: In order to treat cattle and buffalo affected by this foot-and-mouth disease effectively, use from 200 to 500 ml of antiserum or inject the blood of an animal just cured from the foot-and-mouth disease caused by the same type of virus at a 1 ml per 1 kg of weight ration. Lacking serum, treatment can be made with the application of tincture of iodine, permanganate, boric acid, white alum, nitoric acid, penicillin ointment or cod-liver oil. It is also possible to force the animals to swallow (sulfadiazin), (sulfameracin) or (trisulfa) pills or give them injections of penicillin mixed with streptomycin, procaine and so on.

According to traditional methods, if the disease hits the mouth, the animals are given fodder which is easy to swallow such as rice gruel, morning glory, young grass or cooked vegetables chopped up into small pieces or pounded. Then they can be forcefed. Crabs and bamboo shoots can be pounded together and then the liquid from this can be filtered to be given to the afflicted animals. Another method is to make them swallow the liquid obtained from pounding together the bark of ficus politoria, bignonia longissima and eugenia acutangula, ficus politoria fruits and mentha piperata.

Before making them take these potions, however, the mouths of the animals should first be cleaned with boiled water with a pinch of salt or a lukewarm liquid made from sour fruit. Lemons cut into two halves or crushed sour carambolas can be used to clean the mouths.

To treat the disease which affects the cloves, the hooves should be cleaned daily with liquid from sour fruit, salt water, soap water or potash or liquid in which the skin of cicca racemosa fruit or ratan seeds were soaked.

To treat the disease which forms on the teats, a 1/1,000 solution of permanaganate is used to clean the udder and teats and penicillin ointment or cod-liver oil is applied. In addition, pills and injections should be used.
To prevent this disease, preventive drugs prepared from four types of viruses—the (OAP) and (Asia-1) types—containing 300 ml per bottle are used. A head of cattle or buffalo requires a 3 ml injection.

Preventive and sanitary measures: When this disease appears in one region, it is absolutely forbidden to bring cattle and products out of that region. Afflicted animals should be separated from healthy ones. The spreading of microorganisms should be inhibited by sprinkling lime water or cresyl water in and around the shelters of the diseased animals.

CSO: 5400/5613
CATTLE VACCINATED IN TAKEO

BK061028 Phnom Penh Domestic Service in Cambodian 1230 GMT 4 May 82

[Text] In addition to encouraging the people to breed more draft animals and taking good care of them, the Takeo Provincial Animal Production and Veterinary Service has paid particular attention to the health of cattle by launching several campaigns to provide them with immunizations against contagious diseases. Recently, a campaign to vaccinate cattle against such diseases as hemorrhagic septicemia, black leg, anthrax, foot-and-mouth disease and rinderpest was in full swing. The campaign began in September 1981 and was divided into two stages. The first stage was to vaccinate cattle against hemorrhagic septicemia, black leg, anthrax and foot-and-mouth disease. The second stage was aimed against rinderpest.

From the beginning of the campaign to the end of the first quarter of 1982, despite shortages of transportation and fuel oil, the cadres and personnel of the veterinary service in close cooperation with local authorities managed to give vaccinations to 53,812 head of cattle and buffalo throughout the province. [Passage indistinct] including 15,491 head of cattle.

According to the chief of the Animal Production and Veterinary Service of the province, as the cattle and buffaloes are resting from dry season field work and thanks to the material assistance of the veterinary directorate, on 10 May the province's Animal Production and Veterinary Service will successfully complete the first stage of the vaccination campaign for cattle owners throughout the province.

CSO: 5400/5613
HEMORRHAGIC SEPTICAEMIA MEASURES--Pokhara, May 24--The local veterinary hospital has started taking steps to check the disease of haemorrhagic septicaemia from spreading to other parts of Kaski district, reports RSS. The hospital has been providing free vaccines to control the disease that is reported to have killed cattle at Ganganguda, Rupakot and Hansapur village panchayats of the district. [Kathmandu THE RISING NEPAL in English 25 May 82 p 4]
TANGA REGION CATTLE DEATHS

Dar es Salaam DAILY NEWS in English 21 May 82 p 3

[Text] OVER 100,000 herd of cattle died last year in Tanga Region due to three major animal diseases, an annual report for 1981 released in Tanga yesterday by the Regional Livestock Development Office has said.

According to the report, the three diseases are Anaplasmosis (Ndigana Baridi), East Coast Fever (Ndigana Moto) and Trypanosomiasis (Malale).

It said anaplasmosis alone killed 205 cattle out of 1,661 which were attacked by the diseases during the year.

However, the report noted that the number of cattle infected by the disease represented an increase of 76 per cent over the 1980 figure which was 935 cattle. Likewise, the death toll shot up from 168 in 1980 to 205 in 1981 or an increase of 22 per cent, it added.

The disease broke out mainly in Lushoto District where 600 cases were reported although the district suffered the lowest death toll of only 11 cattle. Handeni District suffered most with 73 deaths being recorded during the year, the report said.

Although East Coast Fever killed 628 cattle — the highest figure during the period under review — this shows a considerable decrease in comparison to 1980 during which 1,112 cattle died from the disease.

Also the number of cattle infected by the disease fell from over 1,000 cases reported during 1980 to 674 in 1981. Again the most hit district was Handeni where all the 500 cattle attacked by the disease died, the report noted.

It said many deaths in Handeni occurred in areas with dips which were either not operating or under repair.

CSO: 5400/5603
VIETNAM-HOG EPIDEMIC BELIEVED TO COME FROM CHINA

Hanoi QUAN DOI NHAN DAN in Vietnamese 25 Apr 82 p 2

[The Enemy Unmasked Column by Nguyen Duc Nhuan: "Where Did the Hog Epidemic Come From?"]

[Text] As soon as the bell announcing the end of the afternoon working hours had stopped, sister Chanh was already hurriedly running home. Paying no attention to preparing dinner, she headed toward her pigpen, then hurriedly went to the kitchen to mix one spoonful of shrimp sauce into a cup of rice gruel and fed it to the pig. The pig remained still. His two eyes with slow vision winked once in a while.

Hopelessly, sister Chanh cleaned her hands quickly, then entered her house to talk with her husband: "Well! We are not lucky and have to accept it. When you are through with your dinner, go to beg the head of the administrative bureau for.... By luck we might earn back the capital put in."

In spite of what she told her husband she was seized by impatience. Sister Chanh reached for a scarf, rolled it around her neck, then hurriedly went to the collective zone of the state farm. She reported the situation of her family to the head of the administrative bureau and convinced him to let her and her husband kill the sick pig for meat. The head of the bureau instructed, "If you want to sell the meat, you must carry it far away!"

At midnight of the same day, when the pig could not utter any sound, brother Chanh, assisted by a friend who worked in the same construction cell, pulled it out of the pen, killed it, shaved its hair....

The consequences were extremely detrimental. Soon hogs in many families became sick and didn't want to eat their rice chaff. Then hog epidemic spread very quickly throughout three neighboring villages in the district. The district medical clinic sent groups of cadres to the localities. The district people's committees held meetings of appropriate personnel of the villages, organs and sectors to determine the causes of the epidemic. The head of border defense post P.T., gave this information: Recently a number of plastic bags containing pigs whose hair had been shaved have been spotted floating down the river from China into our country. According to the conclusions of quarantine cadre groups, the pigs contained dangerous epidemic germs.
More than anyone else, sister Chanh knew too well that her husband was the one who brought that "precious thing" home and caused the epidemic to spread. The fact was that one day when he was going to the forest to cut wood he saw a hog whose hair had been shaved on the bank of a brook. He cut and brought home its liver and hind leg, thus bringing home the epidemic coming from China, sabotaging our people's animal husbandry.

8418
CSO: 5400/5991
ANTI-RABIES VACCINE—The long awaited anti-rabies vaccine ordered from France is expected in the country soon, a spokesman for the Department of Veterinary and Tsetse Control Services said in Lusaka yesterday. The consignment of 100,000 doses will be enough to meet the country's demand. The spokesman asked all provincial officers to make bids for their provinces and added that vaccination against rabies was a continuous process requiring a total of 100,000 doses a year. [Excerpt] [Lusaka TIMES OF ZAMBIA in English 21 May 82 p 5]

CSO: 5400/5609
BRIEFS

COLORADO BEETLE RETURNS--For the first time in two years, the Colorado beetle [Leptinotarsa decemlineata] has been found in North Schleswig. Two living beetles have been confirmed at Kegnaes, and a dead beetle has been found in Skaerbaek, near Skovmose. The National Plant Inspectorate in Kolding has been informed of the finds. Colorado beetles present a great danger for the potato harvest, since they eat blades of the potato plants. Inspector Jens Fick of the National Plant Inspectorate states that it is the warm weather and wind from the southeast which have brought the beetles here from Poland and East Germany. Widespread spraying is taking place in those countries in order to save their potato plants. [Text] [Copenhagen BERLINGSKE TIDENDE in Danish 9 Jun 82 p 3]

CSO: 5400/2170
THREAT TO BANANA CROP—Kingston, Jamaica, Monday (CANA)—The Jamaica banana industry, still recovering from a 1980 hurricane battering, now fears it could be wiped out by the "black death," killer fungus, reported to be ravishing fields in the French Caribbean Island of Martinique. Fears about the fungus spreading to Jamaica were discussed here at a weekend one-day seminar, put on by an agro-chemical importing company, Arnold Otto Myer (JA) Limited. Professor Andre Wybou, a Florida pesticide and research developer, brought to Jamaica by the company for the seminar, told industry officials: "The fact that the disease is in Martinique means that the islands between Jamaica and Martinique would be a stepping stone for it to spread to this country." The disease spread rapidly and over long distances, he explained. The correct name for the fungus is "black sigatoka," the most deadly of the lot which also comes in yellow and brown varieties. The fungus, which in the past has appeared in Central America, destroys the banana leaves, with which the plant cannot survive. Professor Sybou pointed out that the disease was extremely expensive to treat, so that "only cultivations with very high yields," can normally afford it. The professor recommended that the Jamaican banana officials closely monitor the situation in the other banana producing islands. [Text] [Bridgetown ADVOCATE-NEWS in English 18 May 82 p 3]
BRIEFS

COFFEE RUST-INFECTED SACKS—Ciudad Juarez, Chih., 17 May—Agents of the frontier customs guard confiscated 7,500 sacks infested with coffee rust, as well as merchandise of illegal origin valued at 11 million pesos. [Excerpt] [Mexico City EXCELSIOR in Spanish 18 May 82 p 6-D]

CSO: 5400/2159
THE NOTORIOUS grain borer, locally called Scania, which is destroying stored maize in Tabora, Shinyanga, Mwanza and Morogoro Regions, will be the subject of a major agricultural seminar to be held at Nzega in Tabora Region between May 31 and June 5.

The borer, scientifically called Prostephanus truncatus, has been nicknamed Scania because it resembles the powerful Scania trucks from Sweden. A two-man team from the Tropical Products Institute (TPI) first reported the pest last year.

A subsequent TPI report was the first record of infestation by this pest in Africa, which has since progressively spread to other regions—keeping Agriculture Ministry officials literally on their toes.

The Nzega meeting, involving mostly personnel dealing with produce inspection and storage, was expected to thrash out a strategy for effective control of the great grain borer, an official of the Ministry of Agriculture said in Dar es Salaam yesterday.

The meeting would discuss various experiences in fighting the pest, a bostrychid beetle, similar in general form to the lesser grain borer and the bamboo beetle.

The greater grain borer is a well known pest of stored maize in the United States and Central America.

The Ministry of Agriculture feared that the insect could spread to other regions, and particularly the country's major maize producers.

Lack of effective quarantine measures could have allowed the beetle to move with grain from Tabora to other regions. This was expected to be one of the issues to be discussed at the seminar, he said.

The seminar was among other efforts made by the Ministry of Agriculture to contain the pest which also bores other grains and the support structures of crop stores.

The Ministry of Agriculture is already taking steps to contain the pest by testing a variety of insecticides. It has advised maize growers to shell their maize and not mixed it with old maize.

He said the ministry had requested the UN Food and Agricultural Organisation (FAO) for assistance. A delegation was expected to arrive from Rome to assess the extent of the damage and how the UN body could assist.

The seminar at Nzega has been organised by the Ministry of Agriculture and financed by the United States Agency for International Development (USAID).

Resource personnel from the Ministry of Agriculture would conduct the seminar, expected to be attended by at least 75 participants and observers.

US volunteer peace corps whose work in rural Tanzania is connected with crop storage in villages, will also take part.
GREATER grain borer, the vermin which has already caused severe losses to farmers in five regions in Tanzania, may soon be the guest of Zambian farmers as officials reported today that the Latin American native grain eater has now spread to Rukwa region bordering Zambia.

Tanzanian agricultural officials gearing up to launch a major campaign to eradicate the grain-damaging beetle, locally nicknamed "scania," said Rukwa’s Mpanda district was the latest area to be infested by the borer. Britain’s Tropical Products Institute (TPI) which sent a team here last year identified the beetle as "prospephanus truncutus", a native of Latin American countries which could have been imported into Tanzania in grains sold to the country through international aid agreements.

Worried Tanzanian officials held a meeting with the UN Food and Agriculture Organisation (FAO) experts on measures to fight the pest which was first spotted in Tabora. It has since infested Mwanza, Shinyanga, Morogoro and now Rukwa region.

A seminar and workshop on how to combat the pest is billed for Nzega in Tabora region on May 31 where US volunteer peace corps and other international agencies would offer basic methods to Tanzanian ratei officials.

United States Agency for International Development is funding the Nzega seminar at a cost of K100,000. Other expenses would be met by the Tanzanian government.

Three experts from US peace corps would come to Tanzania to conduct seminars in the five infested regions, officials reported.

Britain is sending two experts from the TPI to assist Tanzanian experts on research work on the pest. FAO will send two experts to Tanzania next month to work out a strategy on how to eliminate the "scania" which resembles Swedish scania trucks.

Examine

The FAO experts will specifically examine ways of controlling the pest from spreading to other regions, quarantine methods, quantities of foodstuffs transacted between regions and storage facilities.

Earlier attempts to control the spread of the pest failed because of the prevailing acute shortage of foodstuffs in Tanzania in which people tried to bear quarantines.

Experts quoted by local newspapers said although their efforts would this time be supplemented by international agencies, they were fighting an uphill battle as the pest was jumping from one region to another for people were smuggling foodstuffs from infested grain-surplus regions to food deficit areas.

The government here has drafted several agro-institutions including the National Milling Corporation, Tanzania Agriculture Research Organisation, Tanzania Pesticides Research Institute, Agricultural Extension services, technical services and plant protection personnel, in the campaign.

Officials have said this is the first time several government agencies and ministries have been brought together to fight a grain-eating pest since independence in 1960.

Colonial administrators successfully fought another similar pest trogoderma granarium (kapra beetle) in 1958. But they expressed fear that possibilities of the pest spreading to neighbouring countries could not be ruled out.

"Smuggling of foodstuffs across our borders is a common feature. Without preventive measures, our neighbours should not blame us in case the pest visits them as well", an official said today as he elaborated on the pest.
PREVENTING, ERADICATING BLAST ATTACKING 5TH-MONTH SPRING RICE

Hanoi QUAN DOI NHAN DAN in Vietnamese 15 Apr 82 p 1

[Article: "Prevent and Eradicate Blast That Attacks the 5th-Month Spring Rice"]

[Text] Blast and aphelenchoides oryzae have appeared in a number of localities. Localities such as Tan Hoa-Hoai Duc have been seriously damaged, and the pest has begun to occur in other localities such as Song Phuong, Dan Phuong-Dan Phuong, Nam Vien-Me Linh... The recent days' weather being favorable for the appearance of the pest, the latter can develop strongly in the near future and can cause serious harm on a large scale, especially in former areas of epidemic clusters, in areas of high intensive cultivation, in ricefields receiving large quantities of nitrogenous fertilizers and having good crops and in ricefields of varieties NN8, XI and of a number of varieties 1,561, 104...

Therefore, it is immediately necessary that district vegetation protection stations inspect ricefields carefully and guide the cooperatives in inspecting and in preventing and eradicating, paying attention to former areas of epidemic clusters, to areas of high intensive cultivation, to ricefields receiving large quantities of nitrogenous fertilizers, and to fertile areas. Make preventive applications of kitazin in ricefields with outbreaks of the pest, paying attention to applying fertilizers in a balanced manner. We suggest that the districts distribute kitazin on a priority basis to areas of epidemic clusters and of serious damage and that there be no distribution on an average basis nor distribution to cooperative members.

In addition, pay attention to inspecting, to following up the development of brown planthoppers, butterflies, rice leaf folders, larvae, stem borers..., to seal off, prevent and eradicate insect clusters, to prevent their spread.

8418
CSO: 5400/5991
INSECTS, DISEASES ELIMINATED—Due to unfavorable weather with a long period of overcast sky, a number of rice areas in Nghe Tinh were infested by blast and mealy bugs. The agricultural sector in Nghe Tinh has provided preventive and eradicating measures for vegetation protection units of the cooperatives in the province along with directing the cooperatives in regularly inspecting ricefields so as to discover and eliminate the insects and diseases and not allow them to expand. Thanks to active prevention and eradication Can Loc, Duc Tho, Thanh Chuong and Nam Dan districts rescued in time the entire fifth-month spring rice area that suffered from blast. Nam Thuong (Nam Dan) village was infested by 2,000 mealy bugs per square meters. The agricultural sector helped Nam Thuong in time to eradicate mealy bugs and rescue rice crops along with providing the cooperatives in the province with information and measures for eradicating mealy bugs and protecting rice crops. [Excerpt] [Hanoi QUAN DOI NHAN DAN in Vietnamese 17 Apr 82 p 1] 8418