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VACCINATION CAMPAIGN AGAINST MEASLES, TETANUS

Luanda JORNAL DE ANGOLA in Portuguese 24 Jul 84 p 12

[Text] From 24 to 31 July, Luanda Province will conduct a vaccination campaign against measles and tetanus for children from six months to three years of age and for women from 15 to 45 years of age.

The approaching months could see an increase in cases of measles. To immunize children of the above ages mothers and educators are urged to cooperate fully by taking children to vaccination centers near their residential areas.

In the case of Cazenga township, they will have to go to the centers located in Cazenga Popular, Cazenga Municipal and Hoji ya Henda; in Ingombota, there is a center in the area of the same name; in Maculusso, on the Cabo Island and "Augusto N’Gangula."

For the Sambizanga residents, there are vaccination centers at their disposal located in the Sao Paulo, Petrangol and Sambizanga neighborhoods, while for those in Samba, for those Kinanga, Costa do Sol and a school which the program does not identify.

In the Rangel township, the children and mothers who have not yet appeared should go to Terra Nova and Cidadela Desportiva. In Maiana, for the centers of Prenda, Kassequel, Catambor and the Josina Machal Hospital Centers. In Kiala, there are centers open in the barrios with the same name, Palanca and Neves Bendinha. In Viana, vaccines are being given in Baia and Regedoria; in Cacuaco, in the town headquarters, in Kikolo, Funda and Kifangondo.

It has been announced that the mother who accompanies her child should be vaccinated against tetanus at the same time.

8870
CSO: 5400/165
TSHESEBE HIT BY MEASLES

Gaborone BOTSWANA DAILY NEWS in English 6 Aug 84 p 6

[Text]

TSHESEBE, AUGUST 1:
Tshesebe Primary School in the North East has been hit by an outbreak of measles and about fifty six pupils of that school are reported to have been affected.
Following the outbreak, the North East District Council has sent a nursing sister to the school to treat the pupils against the disease.
According to the North East District Council Deputy Secretary, Mrs Silvia Makgatle, the outbreak started in mid-July and the Tsamaya clinic staff were sent to the area but the situation went out of control.
Mrs Makgatle yesterday visited the school and has appealed to parents in Tshesebe and surrounding villages through the local councillor to cooperate with the health team.
The Deputy Council Secretary said the public could help by reporting measles cases to the health team.
The Headteacher of the school, Mr Moses Malunga, fears that should the situation worsen, the standard seven pupils would be greatly affected because their examinations start on August 8.

CSO: 5400/170
TSETSE FLY ERADICATION RESEARCH EXAMINED

Addis Ababa THE ETHIOPIAN HERALD in English 27 Jul 84 pp 3-4

[Article by Nasser Shiffa]

[Text] Research activities were not encouraged, nor were findings developed and implemented in Ethiopia in the past. Absence of an adequate number of qualified personnel and dire shortage of facilities and finance were among the major stumbling blocks.

However, since the advent of the revolution, particularly with the establishment of the Science and Technology Commission, there has been a progress in research activities. Two recent agricultural research findings are cases in point.

Whereas one of these findings concerns itself with the discovery of new species of clover, the other finding pertains to the successful photographing of an elusive predator in the act of killing a tse-tse fly. The two findings have given rise to fresh thinking about matters affecting the development of animal husbandry and human well-being. In both cases, the research activities were carried under the auspices of the International Livestock Centre for Africa (ILCA) in Addis Ababa.

We have just been informed that Ethiopia is located on one of the world's best resources of forage crops. Research carried out at the ILCA headquarters in Addis Ababa has shown that little-known Ethiopian clovers easily outperform commercial varieties of pasture crops. The discovery is a remarkable achievement in a country which has to support 66 million cattle, sheep and goats. It is believed that the finding could encourage research on other African crops, often neglected in agricultural projects.

Another piece of good news is that an Ethiopian researcher has for the first time, photographed an elusive predator in the act of killing a tse-tse fly. Getachew Tikubet's achievement is expected to contribute immensely to the understanding of a possible biological control of the insect, which spreads trypanosomiasis, better known as sleeping sickness in many parts of Africa.

Favourite Diet

The predator is the robber fly, a distant relative of the tse-tse and more than its size. It is so named because it makes use of its victims in order to
steal the contents of their stomachs, and has long been known as a predator of mosquitoes, butter flies and many other insects. But researchers at ILCA in Addis Ababa report that in some places at least its favourite diet seems to be the tse-tse. The centre's release describes how Getachew trapped the flies while studying the ecology of the tse-tse in the Fincha Valley of Central Ethiopia.

The Ethiopian researcher found that each of his traps collected up to 40 robber flies per day during the rainy season and immediately afterwards. Once trapped, predator and victim were gassed with chloroform and pinned down before being photographed.

Robber flies of the family Asilidae, over-power their prey with long legs, then inject a digestive enzyme which dissolves abdominal muscle tissue, paralyzing and eventually killing their victim. Getachew Tikubet found out that, inside his trap, the process of capture and murder had taken less than 30 seconds.

What was, perhaps, most interesting was that the other insects in the trap such as butter flies, were left unharmed. This is said to suggest that in the Fincha Valley, at least, the robber fly has developed taste for tse-tse in preference to other insects.

However, scientists will have to do a great deal of work before robber flies can be released to control tse-tse. No control method could be successfully implemented without accurate information on the prevailing conditions of the vector and the disease it transmits. In this respect, ILCA believes that preliminary work will have to be done on the flies' habitats, population structure, longevity, breeding habits and behaviour. Necessary precautions will have to be taken before releasing large numbers of predators.

What is more, the immediate control and the eventual eradication of tsetse flies in the southern and western regions of Ethiopia will contribute greatly to the promotion of the national economy. The ultimate disappearance of trypanosomiasis from Ethiopia will have a two-fold advantage. It will ensure healthy livestock production and release of vast tracts of arable land in the lowlands of Ethiopia, presently occupied by tse-tse hampering settlement schemes.

CSO: 5400/169
GASTROENTERITIS EPIDEMIC—Asansol, July 29 (UNI)—Nearly 500 persons have been affected and three have died so far from gastroenteritis which has been raging in the coal belt for the past two weeks, official reports said. The worst affected area is Jamuria, where the reports said, the disease started with the contamination of water. It has now spread to Sripur area also, the reports added. [Text] [Calcutta THE TELEGRAPH in English 30 Jul 84 p 2]

RATNAGIRI MALARIA TOLL—Malaria has far claimed four lives in Mandagad tehsal of the district. Over 500 persons are affected by the disease, it was officially stated here on Tuesday. [Text] [Bombay THE TIMES OF INDIA in English 2 Aug 84 p 6]

MALARIA IN TRIPURA—Agartala, Aug 4 (PTI)—A killer variety of malaria has struck six of 10 sub-divisions in the three districts of Tripura leaving at least 20 persons, including children, dead during the last fortnight, according to health directorate sources. The sources said over 10,000 people have been affected, the worst hit being the tribal dominated areas in North District. [Text] [Calcutta THE TELEGRAPH in English 5 Aug 84 p 5]

HEPATITIS IN GUJARAT—Ahmedabad, Aug 5 (PTI)—The Hepatitis-B virus is still prevalent in Gujarat, even after taking a heavy toll of 825 lives so far this year. Four persons died of the deadly disease and 21 new cases were admitted in the infectious diseases hospital in this worst-hit city in the last two days, taking the death toll to 497. A record number of 12,750 cases were reported from all over the state till the end of July and 2343 of them were from Ahmedabad. Junagadh, from where the disease spread in an epidemic form all over the state, reported 67 deaths. [Text] [Calcutta THE TELEGRAPH in English 6 Aug 84 p 6]

ENTERITIS, HEPATITIS STATISTICS—New Delhi, Aug 1 (PTI)—A total of 3,290 deaths have occurred due to enteritis in the states of West Bengal, Assam, Tripura and Orissa, the deputy minister for health, Miss Kumud Joshi, told the Rajya Sabha today. However, there was no shortage of anti-dysentery and anti-diarrhoeal drugs for the treatment of enteritis. Approximately 1,167 deaths have occurred due to viral hepatitis in 1984. This includes 707 deaths from Gujarat reported up to July 14. [Text] [Calcutta THE TELEGRAPH in English 2 Aug 84 p 5]
GASTROENTERITIS, CHOLERA DEATHS--New Delhi, Aug 24 (AFP)--A total of 458 people have died of gastroentritis and cholera over the past three weeks in the northern state of Uttar Pradesh, and nearly 800 have died this year, reports said today. A state health ministry spokesman said the diseases had claimed 792 lives from January 1 to August 18, when nearly 6,000 people in several districts were affected. He said deaths not officially reported could swell the numbers further. Pratapgarh, Basti and Shahjahanpur were some of the worst-hit areas. [Excerpt] [Hong Kong AFP in English 1306 GMT 24 Aug 84 BK]

ENCEPHALITIS DEATHS REPORTED--(TOINS)--Encephalitis has claimed seven lives in Bharaskol village in Durg district within a week, according to reports received at Raipur. [Text] [Bombay THE TIMES OF INDIA in English 25 Jul 84 p 7]

MORE JAUNDICE DEATHS--She further informed that there were 11,725 seizures and 714 deaths due to jaundice in Gujarat up to 16 July this year. The causative agents of the disease had been identified as hepatitis-B, hepatitis-A and non-A and non-B virus, she added. [Text] [New Delhi PATRIOT in English 27 Jul 84 p 5]

TRIPURA MALARIA EPIDEMIC--Agartala, July 18 (PTI)--The Tripura government has alerted all the primary health centres, village dispensaries and anti-malaria squads in the state following reports that malaria is raging in virulent form in North and South districts of the state, according to a press release issued here yesterday. Meanwhile, Mr Nagendra Jamatia, TUJS leader in the state Assembly said at least 16 persons, mostly children, have succumbed to malaria in these two districts in the past one week. Mr Jamatia, who returned here after a tour of the hilly areas, told newsmen that deaths have been reported from Amarpur, Dumbarangar, Ambassa, Kamalpur, Manu and Chaumanu areas of the two districts. [Text] [Calcutta THE TELEGRAPH in English 19 Jul 84 p 5]

CSO: 5450/0086
Diarrrhea cases on Java--Thirty-six people have reportedly died of diarrhea and hundreds of others were in critical condition in two villages in the Babelan sub-district, Bekasi, 30 km east of here, since early July. In Kedung Jaya, one of the two villages, twenty of 383 people suffering from diarrhea reportedly died. Most of them were children under 10 years old. In Babelan Kota 105 people suffered from the disease. Sixteen died. Local newspaper reports quoted residents as saying that they first thought the disease to be the common measles and accordingly treated it in the traditional way. They only resorted to medicine when the epidemic worsened and some of them died. This fast-spreading disease reportedly has also hit the village of Pusaka Rakyat, district of Taruma Jaya. Some 30 people were suspected to be suffering from diarrhea, Pusaka Rakyat village chief, Neman, said. [Excerpt] [Jakarta THE JAKARTA POST in English 20 Aug 84 p 2]

Malaria cases in Kalimantan--A malignant malaria-type disease is raging in the Sebaman IV resettlement area located 250 km northeast of Banjarmasin, South Kalimantan. The disease, believed to have spread since last June, has so far claimed 23 lives. Most of the fatalities lived far away from health centers. Local health officers conducted mass injections in the area of 8,756 settlers last month. However, new cases are reported daily. [Summary] [BK260506 Jakarta BERITA BUANA in Indonesian 18 Aug 84 p 2]

Cholera outbreak in Aceh--Jakarta (JP)--Hundreds of people have contracted cholera in the district of Purba Ligan as the disease continues to spread over more areas in the North Sumatra Province of Aceh. ANTARA NEWS AGENCY reported on 9 July the disease is spreading so rapidly in Purba Ligan that between 16 and 20 people daily contracted the disease in the past 2 weeks. Some 6,500 people live in four villages in the district, which is located about 112 km southeast of the provincial capital of Banda Aceh. In Banda Aceh itself at least 20 people have died and more than 300 others have been treated in hospitals since the outbreak of the disease early last month. Although no deaths have yet been reported from Purba Ligan, officials feared a heavy toll as very few medical facilities are available in the remote settlements. The only communication with the outside world is by riverboat in a journey of more than 3 hours to Banda Aceh. [Excerpt] [BK180545 Jakarta JAKARTA POST in English 10 Jul 84 p 1]
BRIEFS

CHAMPASSAK ANTI-MALARIA WORK—In early April 1984 the public health section of Khong District, Champassak Province, sent a number of specialized task cadres along with over 50 second-group medical students of the agricultural co-op to spray DDT in 6 cantons in the district: Na Fang, Houai Hai, "Ban Boung," Hatsai, Kounkadon, and Khon. In mid-May 1984 they were able to successfully spray four cantons, 38 villages, and over 3,000 families. [Excerpt] [Vientiane PASASON in Lao 29 May 84 pp 1, 2] 9884

VIENTIANE ANTI-MALARIA WORK—In the first 6 months of 1984 the cadres in the public health section in Vientiane Capital attentively and fairly effectively gave anti-malaria vaccinations to the people involved in production within seven districts around Vientiane Capital. They were able to successfully vaccinate a total of 11,138 for different disease prevention in 37 cantons, to disseminate public health forty-eight times to 2,678 listeners, and to draw blood for malaria analysis in 2 districts (Saithani and Nasaithong), 8 cantons, 21 villages, and 2,732 examinees. They sprayed DDT in 2 districts, 4 cantons, and 35 villages. The people received 50 percent protection. They used 1,815 kg of DDT, distributed 164,500 tablets of anti-malaria medicine, built an experimental site for malaria follow-up, and advised the people to boil water for drinking and to eat clean and sanitary food. They also inoculated and treated dysentery in 7 districts around Vientiane Capital using a total of 6,605 packages of (Olalit) medicine, and they successfully inoculated medicines for different diseases sixty-seven times. In the first 6 months they were able to achieve 100 percent of the plan. [Excerpt] [Vientiane VIENTIANE MAI in Lao 23 Jun 84 pp 1, 2] 9884

CSO: 5400/4442
BRIEFS

DENIQUE, MALARIA THREATEN CAPITAL--Toluca, Mexico, 26 Jul--Federal and state authorities have established a cordon sanitaire to control hemorrhagic dengue and malaria epidemics in the south of the state, given that they threaten to reach the Federal District. Sanitary Control Department Chief Jose Luis Gutierrez Zetina stated that 10 cases of hemorrhagic dengue and some 112 cases of malaria have been detected among adolescents. He indicated that these diseases probably came from Guerrero State, where there are frequent epidemics of them. [Text] [Mexico City EXCELSIOR in Spanish 27 Jul 84 p 18-D WA]

FIRST AIDS VICTIM--Chihuahua, Mexico, 23 Aug (NOTIMEX)--Acquired Immune Deficiency Syndrome (AIDS) has claimed its first victim in Mexico and there is danger of more cases, Asevero Morales Beltran, chief of epidemiology of the Secretariat of Health and Assistance, said here today. He pointed out that the Mexican with AIDS, who lived in the capital city of the northern state of Chihuahua, contacted the disease in the United States, where he lived temporarily. [Excerpt] [FL240144 Mexico City NOTIMEX in Spanish 0030 GMT 24 Aug 84]
CAMPAIGN TO COMBAT SCHISTOSOMIASIS, MALARIA

Maputo NOTICIAS in Portuguese 27 Jul 84 p 3

[Text] In its last edition, A SAUDE EM MOZAMBIQUE [HEALTH IN MOZAMBIQUE] reports that the Ministry of Health is to carry out a campaign to control schistosomiasis, malaria and intestinal parasitosis in N'Guri located in the Mueda district, Cabo Delgado Province.

The project, which the National Institute of Health and Preventive Medicine is to carry out, also includes the implantation of an entire system of epidemiological vigilance, with the training of local personnel to assure the control of endemic disease and thereby reduce or eliminate its transmission so that the region will not become an area of infection as a result of the excessive increase of vectors and by human migrations which the region has experienced.

According to the same source, the measures were taken when the presence of "anopheles gambiaca," one of the main carriers of malaria in Mozambique, and snails of the "bulinus" genus, carriers of the vesical schistosomiasis, were detected.

The studies carried out last year consisted of works involving the identification of existing mosquitoes as well as snails. They also completed a geographical survey of the region and a parasitological study of the groups most susceptible to catching schistosomiasis, namely, primary-school children living in the area and workmen engaged in cleaning canals.

From the study, the presence of schistosomiasis was found among 55 percent of the students and 44 percent among workers.

Methodological Testing

According to the same bulletin, it is known that in tropical and subtropical climates these hydraulic operations increase the population's risks by increasing the malaria, schistosomiasis and filaria carriers and other parasites associated with the population's sanitary conditions, raising the rate of incidence among the people, which also raises morbidity and mortality, and thus affects production and productivity.
The article, however, also mentions that the work being carried out in the N'Guri will also make it possible to test a methodology capable of being applied in other areas in the country where similar conditions exist.

N'Guri is a project of a thousand hectares recently inaugurated where rice is the predominant crop, and also other crops, mainly horticulture, maize, sugar cane, banana, and beans.

8870
CSO: 5400/165
BIG RISE IN TETANUS CASES REPORTED

Karachi DAWN in English 23 Aug 84 p l

[Text] Karachi, Aug 22--As many as 32 cases of tetanus were reported at the Jinnah Post-graduate Medical Centre and Civil Hospital on Wednesday. It was the largest number of tetanus cases in the recent years.

Most of the victims are children from the slum areas of Lyari, Mehmoudabad and Landhi. All the patients were admitted and are getting treatment at the two major city hospitals.

The National Institute of Child Health attached to the JPMC had so far admitted 26 patients, all of them children. Some three to four cases are reported daily at the Institute, official sources confirmed.

Similarly, six cases were reported at the Civil Hospital and all were admitted for treatment. Other hospitals of the city have no facilities to treat the tetanus cases.

The major causes of the disease were stated to be the cutting of umbilical cord of newly born babies, lack of immunisation and, above all, the unhygienic conditions prevailing in the different parts of the city in the post-rains period.

The number of such cases was very high following the recent rains. The number had gradually reduced, however, at least at the Civil Hospital, with improvement made in the hygienic conditions by the civic agencies.

Earlier, the Emergency Operation Theatre was closed following the discovery of the tetanus germs. The Operation theatre is still closed and plans are underway to reopen it after fumigation.

Meanwhile, hundreds of gastroenteritis cases were reported at the major hospitals on Wednesday. At least 20 patients reported at the Civil Hospital within three hours on Wednesday afternoon. Similar cases were also reported at the JPMC, and Abbasi Shaheed Hospital. Most of the new patients were children from the slum areas of the city.

CSO: 5400/4729
BILHARZIA OUTBREAK HITS KALOMO

Lusaka ZAMBIA DAILY MAIL in English 6 Aug 84 p 5

[Text] AN outbreak of bilharzia has hit Katapazi in Kalomo district where scores of people including school-children are receiving treatment.

Katapazi Rural Health Centre officer-in-charge, Mr Bartholomew Simfukwe confirmed the outbreak of the disease yesterday saying bilharzia had reached alarming proportions in the area.

Mr Simfukwe said the majority of pupils at the local primary school were found with bilharzia when the school health services team toured Katapazi and already many of them were receiving treatment.

Several other villagers were being treated for the same water borne disease and the situation had been aggravated by the scarcity of water which forced people to drink untreated and stagnant water from ponds.

"We are doing the best we can to contain the disease which is spreading fast although I cannot give you the exact figures because we have not yet carried out a survey," Mr Simfukwe said.

Katapazi like other areas in Kalomo has been hit by serious water shortage because of drought, and along the few streams with running water villagers have grown vegetables which they are failing to sell due to lack of market.

Villagers complained that transport was a major problem as they had to walk a long distance to the main road from which the United Bus Company of Zambia (UBZ) was running an irregular service.

They claimed they had enough cabbages, onions, rape and other vegetables with which they could easily flood the market in Livingstone.

CSO: 5400/171
ANTI-RABIES DRIVE UNDER WAY

Lusaka ZAMBIA DAILY MAIL in English 13 Aug 84 p 3

[Article by Dr Nabil Hussein]

[Excerpts] THE Department of Veterinary and Tsetse Control Services will this morning launch the most extensive rabies control operation in Lusaka.

The only specialized diagnostic laboratory in Zambia is the Central Veterinary Research Institute (CVRI), in Lusaka.

Diagnosis is usually done by histopathological methods and if the case is found to be negative, mice inoculations are done and mice are observed for three weeks. Any mice showing symptoms, is again retested.

CVRI recently introduced a new rapid and more accurate test that can give results within three-four hours by using the fluorescent antibody technique. Results are always sent to both owners of suspected animals and the nearest veterinary authority by telephone or telegrams to start the suitable control measures in their areas if needed.

The success of any control programme depends on the eradication of the disease from domesticated dogs and cats and the limitation of spread from wild-living animals, so far as is practical.

The urban type of rabies is best controlled by firm legislation demanding the destruction of all stray animals, strict confinement, muzzling of domestic pets while the campaign is underway, mass vaccination within a wide radius of the infected zone, the provision of adequate diagnostic facilities and a continual and educational campaign. In rural areas where sylvatic rabies is endemic, stray dogs should be eradicated and prophylactic immunization of domestic dogs and cats carried out to prevent further spread and to protect their owners.

To achieve a successful national control programme in Zambia, studies have been carried at CVRI to clarify the epidemiology of rabies in the country. It was noticed during the period from 1975 to 1982 that infection is highly concentrated in dogs where human population is high especially along the line of rail. About 1,076 positive cases were confirmed during the period of
study. People in these places usually keep large numbers of dogs for security reasons. Some of them do not feed the animals properly, so they wander searching for food, thus catching and spreading the disease. So, it is better to keep only one or two dogs, feed them well and have them vaccinated regularly.

The cycle of the disease in populated areas seems to be going from dog to dog and from dogs to man. However, the case in the Southern Province was found to be different, where a great number of cattle are raised on the Kafue flat. Infection was found high among cattle (about 84 cases) within a triangular area limited by Kalomo, Namwala and Mazabuka. There is a probability that jackals may be playing an important role in spreading the disease from the nearby Kafue National Park, either to cattle straight or indirectly through dogs (about 13 jackal cases were positives). Further studies are going on at the research institute.

In addition to these studies, great efforts have been put in at Central Veterinary Research Institute to start local production of anti-rabies vaccine using the available facilities. Due to lack of foreign exchange, there is always difficulties for continuous supply of vaccines which affects any control programme. Vaccine production started last year, under the supervision of the World Health Organisation (WHO). Thousands of doses are produced now, but before being available on the market they should be carefully tested and standardized.

The Veterinary and Tsetse Control Service department in the Ministry of Agriculture will today start a rabies control campaign. It needs the help and assistance from all the authorities and the public in order to control one of the most dangerous and incurable disease to mankind. All the pet owners are requested to bring their animals to the campaign centres which will be scattered in all areas of Lusaka Province, where their animals will be registered and vaccinated.

CSO: 5400/171
MAUN, July 30: The Veterinary Department here has been requested to conduct rabies vaccination campaigns at all cattle posts.

At a full Council meeting here last week, Councillor S. Ngande of Ikoga tabled a motion claiming that many dogs in the area were suffering from rabies.

Mr Ngande also claimed that there were several instances in which dogs threatened people and even attacked other domestic animals.

In an interview, the Veterinary Officer, Dr E. Welwood, assured that the dogs in the Ikoga area had been vaccinated and that his Department usually visited cattle posts.

He however indicated that they would not be able to visit all the cattle posts.

The council meeting also questioned why there were no repair shops for guns in Maun whilst so many people in the area owned guns.

In response to the question, Acting Council Secretary Mr K. Mogalakwe said that the government did not prohibit the establishment of gun repair shops but that no one had shown any interest in investing in such an enterprise.

Councillor K. Rabanna disclosed that chiefs and headmen did not have copies of Council bye-laws, and urged that they be supplied with copies of the bye-laws in order to assist in controlling late parties which are a nuisance to the people.

Two Councillors were sent to Zaudumo to tell the people there that the council had postponed their decision to drill a borehole in their village in 1985/1986 to the 1986/1987 plan because of the unfavourable conditions in the area.

The council Chairperson, Mrs B. Moremi, told the meeting that an organisation known as the Botswana Association of Local Authorities had been formed.

Mrs Moremi also informed the councillors that they would be affected by the dissolution of parliament, but they would however remain councillors until further notice.
BRIEFS

THREAT OF ANTHRAX—Following on the heels of the rinderpest epidemic which the veterinary service had great difficulty checking, Chadian livestock is now menaced by another large-scale scourge. Anthrax has appeared just outside our provinces, specifically, in the southwestern district on the borders of Doba-Lai and Koumra-Lai. To forestall this mortal danger, the Tandjile veterinary sector has undertaken anti-anthrax vaccination campaigns in villages on the periphery and in important centers. Nevertheless, the village of Mibgue, 21 kilometers from Lai, remains an affected pocket. Mr Sabour, head of the Tandjile veterinary sector, emphasized that this anti-anthrax vaccination campaign, suspended due to the rainy season, will be resumed in the coming months at the same time as the anti-rinderpest campaign. In the city of Lai, a vaccination campaign has been underway for 20 days in the fight against animal diseases. The veterinary sector is also battling clandestine slaughtering, the consequences of which can only be disastrous at this point. [Text] [Ndjamena INFO TCHAD in French 9 Jul 84 p 5] 9825

CSO: 5400/168
BRIEFS

ANIMAL LEUKEMIA IN SLOVAKIA—Last year, employees of the Veterinary Service examined 245,843 animals in 843 agricultural enterprises in the Slovak Socialist Republic. The examinations have revealed that more than 10,000 animals suffered from leukemia, which represents 4.26 percent of their total number. [Summary] [Bratislava SLOBODA in Slovak 26 Jul 84 p 3]

CSO: 5400/3011
SAVANNAKHET VETERINARY WORK—Over 7,000 draft animals in 2 districts in Savannakhet Province received vaccinations for disease prevention in this year's dry season by the provincial veterinary cadres along with the district veterinary unit concerned. This vaccination for disease prevention was carried out in Khanthaboury and Outhoumphon Districts where there were over 4,000 buffalo and over 3,000 cattle. They also treated over 300 livestock that had contracted disease of which there were a number of cattle, buffalo, and pigs. After this task was carried out they were able to eliminate epidemics in a great many animals where many years ago different kinds of domestic animals, especially cattle and buffalo in Khanthaboury and Outhoumphon Districts and other localities within Savannakhet Province, often had many diseases, e.g., hoof-and-mouth and pasteurellosis. This year the provincial and also district agricultural sections have been paying special attention to animal husbandry and have also been protecting the health of livestock. Therefore, from the province on down to districts and cantons they have strongly improved and expanded their veterinary network resulting in a gradual decrease in animal disease. [Text] [Vientiane PASASON in Lao 12 Jun 84 p 1] 9884

VIENTIANE VETERINARY WORK—Since March 1984 the veterinary cadres in Saisettha District, Vientiane Capital, have all been attentively serving their specialized task continuously and effectively. During this period they gave anti-cholera vaccinations to pigs and for pasteurellosis and hoof-and-mouth disease for a total of 367 cattle and buffalo of the people's livestock. Along with the vaccinations there was also training for regular veterinary cadres whose purpose was to train cadres for future work in different areas around the district. [Text] [Vientiane VIENTIANE MAI in Lao 28 May 84 pp 1, 4] 9884

CSO: 5400/4442
FOOT-AND-MOUTH DISEASE HITS ILOCOS WORK ANIMALS

Manila BULLETIN TODAY in English 6 Aug 84 p 24
[Article by Milton P. Pascua]

[Text]

VIGAN, Ilocos Sur — Despite sufficient rainfall during the past weeks, many Ilocos farmers failed to prepare their ricelands for transplanting because of the recent outbreak of foot and mouth disease affecting thousands of work animals.

Ernesto Mendoza, provincial veterinarian said that 18 towns were seriously hit by the animal disease which has delayed rice planting up to September.

Mendoza said a total of 3,978 work animals have been infected and 11 percent were carabao — the most common work animal where the rest were cattle.

The town affected were Cabugao, San Juan, Magsingal, Sto. Domingo, San Ildefonso, Bantay, San Vicente, Santa, Narvacan, Sta. Maria, Burgos, San Esteban, Santiago, Lidilida, Condón, Calimuyo and Sta. Lucia.

It was reported that the epidemic started in Santa Maria and spread fast in the neighboring towns including the provinces of La Union and Abra.

The Ministry of Agriculture has been conducting massive vaccination in affected areas to cordon-off the disease from spreading to other areas of Ilocos.

Veterinarian advised farmers to isolate infected animals and seek immediate treatment. The mortality rate may be low but the disease is highly infectious, Mendoza said.

Once an animal is affected it could no longer be used to plow rice fields until fully recovered. It may take weeks before the animal can fully recover, an agriculture official said.

The symptoms of the disease which is prevalent during rainy season are excessive salivation, inflammation of the gums, tongue and cheeks. In many instances, blisters may appear at the mouth and feet.

Farmers were advised to keep their work animals in dry barns and observe strict sanitation in their surrounding areas.

CSO: 5400/4448
FOOT-AND-MOUTH CAMPAIGN ENDANGERS BUFFALO

Harare THE FINANCIAL GAZETTE in English 3 Aug 84 'The Farming Gazette'
Supplement p 28

HUNDREDS of buffalo die in Zimbabwe each year as part of annual exercises to control foot and mouth disease.

The buffalo elimination policy first came into effect in 1978 in an effort to control the disease. Since then, an estimated 2 500 buffalo have been killed.

Successive governments have made the department of Veterinary Services responsible for carrying out the programme. Dr J Thomson, the department's director, explained that all exported fresh meat, untreated trophies and milk products must come from areas of Zimbabwe which are free from foot and mouth disease.

PROTECTION

"This not only complies with EEC requirements" he said, "But protects the health of our own livestock industry and exports of other countries as well."

Buffalo are the only animals to carry all three types of foot and mouth disease at the same time. They can remain carriers for many years without showing any clinical signs of the disease, and virtually every primary outbreak of the disease has occurred where cattle and buffalo mix.

Culling operations, which have been extended to cover most of Matabeleland, affect all buffalo outside National Parks areas, the object being to prevent them mixing with beef cattle herds.

Dr Thomson points out that should an outbreak of foot and mouth disease occur anywhere in the country, exports of EEC beef would be suspended for at least a year.

Negotiations are currently in progress to review and possibly extend the $50 million contract to supply beef to Europe under the Lome convention.

DISTRESSED

Conservationists in Zimbabwe admit the need for the EEC injection of foreign currency, but are distressed by the harsh conditions imposed as they affect the buffalo.

They are worried that this may be the thin end of the wedge. They ask if further demands will be made by other contracts, which may result in the elimination of further species of Zimbabwean game animals.

The Department of Veterinary Services itself has gone some way towards reducing the numbers of buffalo affected by culling exercises. Where possible, game fences in the Victoria Falls area and parts of south-eastern Zimbabwe have been extended to enclose buffalo which would otherwise have been shot.

In addition, they have provided a small breeding nucleus of specially raised disease-free buffalo. But building up such a herd takes time — and that is something that the surviving free-ranging buffalo do not have.
BRIEFS

AUS PESTS ATTACK—Sailkupa (Jhenidah), Aug 8—The Aus paddy on about 5000 acres of land in most of the unions under Sailkupa upazila has been attacked by pests causing heavy damage to the crop. It is learnt that during last April when Aus paddy was just coming to fruition there was an attack of Pamri insects. And now when paddy is on the way to marutity, the pests are found active again in an extensive area of Sailkupa upazila including Abypur, Farilpur, Dignagore, Umedpur, Sailkupa and Bogra unions where 2-3 thousand acres of land had already been badly affected. According to the farmers, the green leaves of the paddy plants are being eaten up by black coloured Pamri insects. They opined that if proper action was not taken to check the pests the production might fall consideratly. [Excerpt] [Dhaka THE NATION in English 9 Aug 84 p 2]
FRUIT BLIGHT CAUSES SERIOUS DAMAGE

Port Louis LE MAURICIEN in French 25 Jun 84 p 1,4

[Article: "Mango Trees and Fruit Afflicted with Black Spot"]

[Text] Mango trees and their fruit are currently being attacked by a bacterial disease which is causing serious damage in a great number of orchards. The culprit is "Xanthomonas campetris pv. mangiferae Indicae" (blackrot of crucifers). In fact, agricultural authorities have noted a flare-up of this disease throughout various regions of the island ever since the passage of the cyclone Bakoly last December. What are its symptoms? The leaves and fruit tend to become covered with black spots and the mangoes degenerate, developing lesions on their skin surrounded by rotten pockets.

Mr S. P. Benimadhu, science officer with the Ministry of Agriculture, assisted by Mrs V. Jahangeer, technical officer, carried out a painstaking study which concluded that the only means of combatting this devastating disease is to develop and cultivate in Mauritius varieties of mango that either tolerate or are resistant to these diseases.

Our current varieties, particularly the "Red House" and "Victoria" mango, are those which are most affected and the development of varieties, according to Mr Benimadhu, could aid in the struggle against this disease. Since bacteria is difficult to control, except by using antibiotics which is prohibitive, there is no other way. Mr Benimadhu indicated that a certain link between insects and this disease was noted at the Abercrombie station, but this has not yet been confirmed.

Until resistant varieties have been developed, one of the only means of prevention is to spray a copper-based fungicide on the fruit settings. The result will be a reduced incidence of the disease in this luscious fruit.

Black spot in mangoes is not new in Mauritius. The disease has always existed, but in a benign form in the past. Moreover, it is found in several countries bordering the Indian Ocean, particularly in South Africa and in Reunion, which have tolerant mangoes such as "August," "Early Gold" and "Jose." The disease made its first appearance in 1915 in India and Pakistan.
Its presence in Mauritius was not recognized until sometime around the 1970's and research studies have been undertaken since 1972 to curb it. Test runs have come up positive. The bacteria attack the stems, causing polyhedric spots to form. The stem is also invaded by secondary fungi and the small branches drop off. At a more advanced stage, necroses 5-10 mm in diameter appear.

Rain and warm temperatures encourage rapid proliferation of this bacteria on mango trees. The bacteria, which resemble miniature rods, gram negative, with polar flagella, are also found in love apple patches.
INCREASED PEST ATTACKS ON COTTON CROP REPORTED

Karachi DAWN in English 17 Aug 84 Business Supplement p I

[Text]

KARACHI, Aug 16: The sucking insect pest complex has increased its activity on cotton crop considerably, has mostly crossed economic injury level in most of the cotton growing areas of Sind due to current heavy rains in the province.

A handout issued by the Pakistan Central Cotton Committee (PCCC) here today said in parts of Hyderabad, Tharparkar and Badin districts, the attack of spotted bollworm is feared to have crossed the economic injury level. The recent heavy rains in low-lying areas of the province may have inundated some cotton fields.

Cotton growers advised

Cotton growers of the province have been asked to be vigilant and take steps to drain out excessive standing rain water from their cotton fields as it may cause shedding of leaves. flowers, fruits and may even cause death of the cotton plants due to suffocation of root zone.

It said farmers have been time and again advised by Provincial Agriculture Department to start immediately spraying operations and save their crop from attack of insect pests in their own as well as in the larger interest.

The farmers have now been asked to start spraying operations regularly against sucking insect pest as well as bollworm complex immediately without any delay at 10-15 days interval. They should control the attack of bollworms particularly spotted and pink bollworms by regular spraying during August and September, as during these months cotton crop is in active state of re-production.

If re-productive parts like buds, flowers, and young bolls are infested by the worms, it may result in considerable loss to cotton yield. Cotton growers have been asked to apply insecticides at recommended doses as prescribed by Sind Agriculture Department at the given frequency of 10-15 days to reduce pest population below the economic injury level.

Farmers of all categories, particularly of low-income group have been advised to seek assistance from the nearest plant protection officers, extension workers, emergency centres, pesticides and sprayers dealers to procure sprayers and pesticides against interest free loans available with commercial banks and interest free taqavi loans from Assistant Commissioners to save their crop and also to avoid low yield.

Requested

The PCCC has requested provincial extension staff, pesticides and sprayers importers and distributors as well as local dealers to help farmers, particularly low-income group ones who being illiterate might face difficulty in getting interest free loans at this critical juncture. Officers and staff of commercial banks have also been requested to rise to the occasion and help needy farmers with resources to protect their crop against pest menace.

Necessary guidance in the form of leaflets, literature etc., have already been distributed in local language by PCCC and other agencies. Sind Agriculture Department is also regularly making announcements over Radio Pakistan stations at Hyderabad and Khairpur for required farm practices particularly pest situation and methods to control it. Farmers should listen to these programmes to save the crop from pest attacks.—PPI
BUKIDNON GOVERNOR DENIES LOCUST THREATS—Governor Carlos Fortich of Bukidnon denied yesterday the reported locust threats and infestations in at least 18 municipalities in his province. Fortich, in his telegram report to Minister Salvador Escudero III, of the Ministry of Agriculture and Food (MAF), dated Aug. 2, denied any locust threat saying that the writer, BT correspondence Casiano Navarro Jr., had never interviewed provincial agriculturist Pacifico Ramos Jr. Fortich, however, confirmed in the same telegram that a small area in Bukidnon was lately attacked by locust swarms but claimed it is now fully under control. He said that palay and corn both in the upland and in the lowland areas will be harvested by the end of August and is expected to yield surplus food production in the province. Fortich likewise allayed speculation that rodents, locusts and other pest infestations on agricultural crops in the province could upset agricultural production in the area. [Text] [Manila BULLETIN TODAY in English 5 Aug 84 p 36]

CSO: 5400/4447

END