The report contains worldwide press and radio coverage of incidence, outbreak, and other aspects of human, animal, and plant diseases, insect pests and control, sanitation conditions, immunization and public health programs.
## CONTENTS

### HUMAN DISEASES

#### BAHRAIN

**Briefs**
- 33 New Cholera Cases
- 45 Cholera Victims

#### BURMA

- Intensified Fight Against Vector-Borne Diseases
  *(Editorial; THE WORKING PEOPLE'S DAILY, 20 Aug 78)*
- Several Townships Hold Conferences on Infectious Disease
  *(THE WORKING PEOPLE'S DAILY, 31 Aug 78)*

#### COLOMBIA

**Briefs**
- Campaign Against Dengue

#### ECUADOR

- Scientists Confirm Three Species of Paragonimus Parasites
  *(EL UNIVERSO, 11 Aug 78)*

#### GHANA

**Briefs**
- Two Deaths in Cholera Outbreak

#### MALAYSIA

- Inadequate Sewage Facilities Create Health Problems
  *(Zainah Anwar; NEW SUNDAY TIMES, 25 Jun 78)*

---

- a -

[III - INT - 134]
<table>
<thead>
<tr>
<th>CONTENTS (Continued)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholera Under Control After Hitting Peak</td>
<td>13</td>
</tr>
<tr>
<td>(NEW STRAITS TIMES, 4 Sep 78)</td>
<td></td>
</tr>
<tr>
<td>Woman Dies of Cholera in Kuantan District</td>
<td>14</td>
</tr>
<tr>
<td>(NEW STRAITS TIMES, 28 Aug 78)</td>
<td></td>
</tr>
<tr>
<td>MEXICO</td>
<td></td>
</tr>
<tr>
<td>Briefs</td>
<td></td>
</tr>
<tr>
<td>Gastrointestinal IIs Rampant</td>
<td>15</td>
</tr>
<tr>
<td>NAMIBIA</td>
<td></td>
</tr>
<tr>
<td>Crowded, Unhygienic Conditions Noted in Katutura</td>
<td>16</td>
</tr>
<tr>
<td>(Dale Perrott-Humphrey; THE WINDHOEK ADVERTISER, 8 Sep 78)</td>
<td></td>
</tr>
<tr>
<td>NEPAL</td>
<td></td>
</tr>
<tr>
<td>Briefs</td>
<td></td>
</tr>
<tr>
<td>Measles Outbreak</td>
<td>18</td>
</tr>
<tr>
<td>RHODESIA</td>
<td></td>
</tr>
<tr>
<td>Townships Hit by Scabies</td>
<td>19</td>
</tr>
<tr>
<td>(THE HERALD, 11 Sep 78)</td>
<td></td>
</tr>
<tr>
<td>SIERRA LEONE</td>
<td></td>
</tr>
<tr>
<td>Briefs</td>
<td></td>
</tr>
<tr>
<td>Cholera Tests Negative</td>
<td>20</td>
</tr>
<tr>
<td>SOUTH AFRICA</td>
<td></td>
</tr>
<tr>
<td>Continued Small Pox Vaccination Justified</td>
<td>21</td>
</tr>
<tr>
<td>(THE STAR, 29 Aug 78)</td>
<td></td>
</tr>
<tr>
<td>SRI LANKA</td>
<td></td>
</tr>
<tr>
<td>Briefs</td>
<td></td>
</tr>
<tr>
<td>New Dysentery Strain</td>
<td>22</td>
</tr>
<tr>
<td>TURKEY</td>
<td></td>
</tr>
<tr>
<td>Intestinal Infection Spreading Due To Lack of Medicine</td>
<td>23</td>
</tr>
<tr>
<td>(AKSAM, 31 Aug 78)</td>
<td></td>
</tr>
</tbody>
</table>
## CONTENTS (Continued)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholera in Diyarbakir, People Cautioned About Health Matters</td>
<td>24</td>
</tr>
<tr>
<td>(AKSAM, 25 Jul 78)</td>
<td></td>
</tr>
<tr>
<td><strong>Briefs</strong></td>
<td></td>
</tr>
<tr>
<td>Cholera Reported in Ankara</td>
<td>27</td>
</tr>
<tr>
<td><strong>URUGUAY</strong></td>
<td></td>
</tr>
<tr>
<td>Health Ministry on Nutrition, 'Mesotherapy,' I.D. Cards</td>
<td>28</td>
</tr>
<tr>
<td>(Various sources, various dates)</td>
<td></td>
</tr>
<tr>
<td>Nutrition Measures Adopted, by Dario Pimentel</td>
<td></td>
</tr>
<tr>
<td>'Mesotherapy' Possibilities Studied</td>
<td></td>
</tr>
<tr>
<td>Identification Card Red Tape</td>
<td></td>
</tr>
<tr>
<td>Dental Care Receives National Attention</td>
<td>35</td>
</tr>
<tr>
<td>(Various sources, various dates)</td>
<td></td>
</tr>
<tr>
<td>Dental School Services</td>
<td></td>
</tr>
<tr>
<td>National Dental Health Program</td>
<td></td>
</tr>
<tr>
<td>Water Fluoridation Plan</td>
<td></td>
</tr>
<tr>
<td>Dental Authority Opposes Fluoridation</td>
<td></td>
</tr>
<tr>
<td><strong>ANIMAL DISEASES</strong></td>
<td></td>
</tr>
<tr>
<td><strong>BOTSWANA</strong></td>
<td></td>
</tr>
<tr>
<td>French Arrive To Set Up Vaccine Production Plant</td>
<td>44</td>
</tr>
<tr>
<td>(DAILY NEWS, 22, 25 Aug 78)</td>
<td></td>
</tr>
<tr>
<td>Four-Man Team</td>
<td></td>
</tr>
<tr>
<td>Laboratory Equipment</td>
<td></td>
</tr>
<tr>
<td><strong>BRAZIL</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Briefs</strong></td>
<td></td>
</tr>
<tr>
<td>Hogs Killed in Ceara</td>
<td>46</td>
</tr>
<tr>
<td>Hogs Killed</td>
<td>46</td>
</tr>
<tr>
<td>Swine Fever Restitution</td>
<td>46</td>
</tr>
<tr>
<td><strong>BURMA</strong></td>
<td></td>
</tr>
<tr>
<td>Veterinary Team Tours Villages, Treats Cattle</td>
<td>47</td>
</tr>
<tr>
<td>(THE WORKING PEOPLE'S DAILY, 21 Aug 78)</td>
<td></td>
</tr>
</tbody>
</table>
CONTENTS (Continued)

KENYA

Briefs
Foot-and-Mouth Disease 48
Rinderpest Vaccination Campaign 48

MALAYSIA

Fears of Cattle Disease Outbreak in Estate
(NEW STRAITS TIMES, 31 Aug 78).......................... 49

PLANT DISEASES AND INSECT PESTS

INTER-AFRICAN AFFIARS

Briefs
Details on Anti-Cricket Council Meeting 50

BURMA

Efforts Should Be Made To Combat Annual Pest Attacks
(Editorial; THE WORKING PEOPLE'S DAILY, 28 Aug 78).......................... 51

Spray Teams Attack Leaf-Rollers in Hmaawi
(THE WORKING PEOPLE'S DAILY, 26 Aug 78)................. 53

Farmers Urged To Use Pest Control Methods
(THE WORKING PEOPLE'S DAILY, 26 Aug 78)................. 54

RHODESIA

Fusarium Bark Disease Threatening Coffee Crop
(Frederick Cleary; THE SUNDAY MAIL, 10 Sep 78).......... 56
BAHRAIN

BRIEFS

33 NEW CHOLERA CASES--Manama, 12 September--A responsible source in the Bahraini health ministry has said that despite the discovery of new cholera cases in Bahrain only one death has been registered. The majority of the cholera patients has already left hospitals, leaving only 52 cases under treatment. The responsible source announced that 33 new cases had been discovered in the past 3 days, bringing the total to 184. He added that it has been confirmed that the new cases were among citizens who took their vacations abroad. He appealed to citizens to abide by rules of cleanliness and avoid eating in restaurants because the majority of those afflicted with the disease had done so. [Text] [Manama Gulf News Agency in Arabic 0905 GMT 12 Sep 78 JN]

45 CHOLERA VICTIMS--Bahrain, Sun--A total of 45 cholera victims and 26 symptomless carriers have been discovered in Bahrain since the disease was first reported on 10 Aug, the Health Ministry said today. [Text] [Kuala Lumpur NEW STRAITS TIMES in English 28 Aug 78 p 28]

CSO: 5400
INTENSIFIED FIGHT AGAINST VECTOR-BORNE DISEASES

[Editorial]

[Text]

The malaria control unit of Shwebo Township, Sagaing Division, recently carried out extensive spraying operations to prevent an outbreak of malaria.

The spraying operations, carried out under a two-month special project in June and July covered 51 villages with more than 3,000 dwelling places and 500 other buildings.

This is timely action for though Burma has been waging a relentless malaria control programme since 1953 with considerable success, there has been a resurgence of the disease in some regions during the past few years as a result of vectors becoming immune to certain insecticides or due to people moving from endemic to malaria free zones.

Considering the fact that the number of malaria cases has more than doubled in the world in the last five years and that South-East Asia being the hardest hit with the situation having “deteriorated” in some of our neighbouring countries according to a recent World Health Organization report, it is not surprising that there has been a resurgence of this disease in some parts of Burma.

Since this disease causes morbidity and mortality among the people and hinders socio-economic development, we will have to do everything to the best of our ability and limits of our available resources to keep this crippling disease under control if not eradicated.

Malaria is not the only vector-borne disease which is harming the physical well-being of the people and our social and economic progress. Dengue haemorrhagic fever has claimed a considerable number of young lives while Japanese encephalitis has also made its presence felt especially in the northern and eastern parts of the country.

Since a vector-borne disease like malaria is a regional problem, this paper has felt it necessary to suggest combating such disease through greater regional or international cooperation if it is to be brought under control.

It is gratifying to learn that a memorandum of understanding has been signed between Burma and Canada for the implementation of a vector-borne
disease control programme under which the Canadian International Development Agency will contribute $5.65 million to help fight vector-borne diseases in Burma under a five year programme.

Besides the Canadian International Development Agency, the World Health Organization will be contributing $1.4 million and UNICEF $1.6 million towards the programme designed to reduce morbidity and mortality due to five major vector-borne diseases—malaria, plague, dengue haemorrhagic fever, filariasis and Japanese encephalitis—by 25 percent by 1982.

While efforts are being made by Burma towards controlling the vector-borne diseases with CIDA grants and in active collaboration with the United Nations agencies concerned, no less attention is needed to educate and organize the people to ensure their active participation in the implementation of the programme and to immediately report outbreak of any disease to the nearest health authority for prompt remedial action.
Paung, 29 Aug--A talk on infectious diseases was held at the townhall here yesterday. The educative talk was attended by Party and Council functionaries, Township Health Department personnel, officials of Mon State Health Department, Red Cross Brigade members, teachers and students of the State High School here.

The ceremony was presided over by Township People's Council Executive Committee member and chairman of social affairs committee U Aye Hlaing with Township Medical Officer Dr Khin Maung Swe officiating as master of ceremonies.

Dr Aung Gyi of Mon State Health Department gave talks on cholera while Dr Nyunt Lwin spoke about dengue haemorrhagic fever. U Kin Nyung, supervisor of epidemic disease control team gave a talk on viral hepatitis and jaundice. 

Nabetgyi

Nabetgyi, 25 Aug--Fifteen persons including children from Kanbe, Bay-yin Kyunle, Mutein, Mugwa and Nadaungkyya villages situated along Mu River, Taze Township, died of cholera recently.

The disease reportedly spread from Kanbalu Township to these villages.

Taze Township Medical Officer Dr Khin Kyaing and staff of Nabetgyi Hospital toured villages where cholera broke out from 9 to 23 August and attended to people suffering from gastro enteric disorders and gave preventive inoculations to villagers.

Dr Khin Kyaing and party, together with local Party and Council functionaries, chlorinated surface wells and carried out disinfectant spraying in the villages where cholera broke out.
Talks on health education were also organized in rural areas.

The six villages where cholera broke out is now free of the disease. (216)

Kanbalu

Kanbalu, 25 Aug—An elderly nun of Tawya monastery here died of gastroenteric disorders at the hospital here today.

The nun was Daw Marlar (83).

The monastery was disinfected by Township Health Department personnel.

More than 80 under-trial prisoners from Kanbalu police lockup were inoculated against cholera on 24 August while the working people of Ward 4 here were given inoculations against cholera today. (056)

CSO: 5400
CAMPAIGN AGAINST DENGUE--Bogota--The government announced today that the dengue epidemic plaguing Atlantico Department has been controlled through a fumigation campaign. The Atlantico governor said that all of Barranquilla's outskirts had been sprayed and that the campaign will be intensified to eradicate the dengue-carrying mosquito. [Bogota Radio Cadena Nacional in Spanish 1730 GMT 4 Sep 78]
SCIENTISTS CONFIRM THREE SPECIES OF PARAGONIMUS PARASITES

Guayaquil EL UNIVERSO in Spanish 11 Aug 78 p 2

[Text] "Scientists have demonstrated for the first time that three species of paragonimus, parasites found in tropical countries, end their biological cycle by settling into the lung tissue in human beings and other mammals which consume raw river crayfish. The symptoms of the illness they cause can be confused with tuberculosis. The infection is also found in river prawns. The problem affects citizens of Ecuador on the coast and in Oriente province."

This was the wording of the published report originating in Freiburg, Federal Republic of Germany (DCA-FMT), which was distributed by the Dr Hideyo Noguchi Scientific Research Program at the Leopoldo Izquieta Perez National Hygiene Institute. During the interview granted by Dr Manuel E. Arzube, head of the Department of Anthropozoanosis at that institute, he said, among other interesting things, the following:

a. Paragonimus is a worm which settles in the lungs of man and some forest vertebrates. It is a disease typical of woodland animals, which our farmers have contracted due to the habit of eating pangora (sweetwater crayfish found in the mountain areas) and eating them raw.

b. According to domestic literature on the disease, 511 cases were reported between 1921 and 1967, and in a recent work, it is reported that there were 316 cases between 1972 and 1976.

c. The disease is localized in the mountains on the coast and in the eastern and western spurs of the Andes chain, being clearly identified by the presence of cases in human beings, the finding of infected crayfish and snails which play a role in the developmental cycle of the parasite, and the finding of the adult parasites in adult mammals.

d. When this disease is suspected, all that is needed is an examination of fresh sputum, in which the eggs of the parasite can be seen.

e. The most common symptoms of this disease are coughing, bloody sputum (bright red or brownish), pain in the chest, loss of weight, and sometimes
a suffocating sensation, if the patient has a relatively massive infestation.

Because of the factors listed, the CENCOTAP believes it necessary to make known other aspects of parasitic hemoptysis, a disease which represents a true threat to the peasant of Ecuador. Individuals can contract the disease by consuming the insufficiently cooked meat or internal organs of swine.

Years back the ailment was identified in our environment and it was noted that it affects young and weak pigs being raised in open pastureland. Occasionally, a massive infestation leads to the death of suffering pigs.

The parasite known as Paragonimus westermani settles in the alveolar tissue of the lungs, generally in pairs. It is a trematode measuring approximately 15 mm. It resembles a coffee bean.

Symptoms in Hogs

The CENCOTAP has listed the symptoms observed with infestation by paragonimus as follows:

a. Diarrhea, sometimes blood-streaked.
b. Frequent coughing.
c. Difficulty in breathing.
d. Sometimes there is an increase in body temperature.
e. Swollen abdomen (due to the presence of liquid).
f. Peritonitis.

The affected hogs are apathetic, lack appetite, gradually lose weight, and have dry and lusterless bristles.

Characteristic Features

When a hog which has died of this parasitosis is autopsied, the following organic lesions are found:

a. Traces of hemorrhage on the intestinal walls.
b. Intestinal inflammation.
c. Peritonitis.
d. Large cysts are found in the lungs, resembling the symptoms of pseudo-tuberculosis.
Diagnosis of the Disease

Confirmation of the presence of this disease is made by means of analysis of parasites in the feces and bronchial secretions. Analysis of autopsy findings is also very important.

Control

With a view to safeguarding the health of animals and thus protecting the well-being of man, the consumer of meat, sometimes of doubtful origin, it is desirable for hog breeders to observe the following rules:

1. Control of the hosts in the pigsties and feeding areas.

2. Isolation of the animals evidencing a lag in growth, weakness or diarrhea.

3. Animal excrement should be deposited at sites distant from the feeding areas.

4. When the presence of this disease has been detected, the destruction of animal excrement is recommended, as it should not be used as organic fertilizer.

5. Feeding and watering facilities should be kept in excellent sanitary condition.

6. Swine should not be allowed to feed in swampy areas or those crossed by slow-running streams.

7. Finally, the CENCOTAP reports that the treatment of this disease in hogs is carried out on the basis of some compounds of emetine, and some erythrins such as Prontosil.
BRIEFS

TWO DEATHS IN CHOLERA OUTBREAK—Two people died and seven others have been admitted to the Bosuso Health Centre following an outbreak of cholera at Osiem, near Tafo. According to a spokesman for the centre, a team of medical personnel, led by Dr Bruce Konuah, senior medical officer in charge of the Tafo Government Hospital, has been rushed to the town. As an interim measure, Dr Konuah has placed ban on funeral celebrations, concert parties, dances and other public gatherings. He appealed to the people to boil their drinking water and keep their surroundings clean. Mrs Comfort Twumasi, health superintendent in charge of the centre, said since the outbreak on 14 August, this year, more than 200 patients were being treated daily.

[Excerpts] [Accra DAILY GRAPHIC in English 1 Sep 78 p 5]
INADEQUATE SEWAGE FACILITIES CREATE HEALTH PROBLEMS

Kuala Lumpur NEW SUNDAY TIMES in English 25 Jun 78 p 14

[Article by Zainah Anwar]

[Text]

THE inadequate sewage system in the country is partly to blame for cholera outbreaks and the current one has already claimed 32 lives.

Only 11.9 per cent of the urban population — in Kuala Lumpur and Penang — are using flush toilets connected to community waterborne sewage systems. And only 40 per cent of the rural population have proper latrines.

This means that sewage from the rest of the population goes untreated into rivers and inland waterways, thus contaminating these waters. It is estimated that sewage and domestic waste water constitute about 30 per cent of the total pollution of the country's rivers.

In Malaysia, where a large portion of the population still depends on rivers and irrigation canals not only for farming and fish breeding, but also for drinking, cooking, washing and bathing, the potential health hazard posed by exposure to the contaminated waters is serious.

All it needs is for one infected person to contaminate the waters used by others for an outbreak of water-borne diseases such as cholera or typhoid.

Few local authorities have any budget provision for sewerage development. The Pantai treatment plant, the only one in the country, treats wastes from only 200,000 residents in the city's central area.

Contamination

City Hall is now extending this service to include another 200,000 by 1981 when its sewerage project is completed.

According to a sewerage engineer, a central sewer system like the one in Penang is just as effective in preventing contamination if all the untreated wastes are discharged far and deep enough into the sea for dilution and dispersal before being washed back to the shores.

If the system is properly installed, whatever contamination that occurs on the fishes in the area will be within a safe level.

But scientific tests conducted by the Consumers Association of Penang have revealed that several types of popular local fish bought at three different markets contain excreta 11,000 times above the safety level set by the American Public Health Association.

The tests also revealed a high presence of "staphylococcus", a bacteria found in excreta which can cause diarrhoea, cramps and prostration.

A sewage system to remove a community's excreta and domestic waste water is just as important to the well-being of a community as the provision of water supply and electricity.

The sewerage engineer felt that a properly installed central sewer system would be the best and cheapest for coastal towns. Otherwise, a treatment plant is essential if contamination and pollu-
tion of our waters are to be avoided.

He said septic tanks used by 44.3 percent of the urban population are only effective if they are installed together with filter beds which percolate waste water into the ground.

**Costly**

"But most septic tanks are installed without filter beds," he said. "And although these tanks are supposed to be desludged every two years to clean out the solids settled at the bottom, very few house owners do it."

When the tanks are filled with sludge, he explained, what is flushed in flows out into storm drains immediately.

He said all housing estates should be made to install their own treatment plants before their building plans are passed. "But few local authorities are aware of the importance of proper sewage disposal. And many developers are reluctant to install a central sewer system because it is expensive."

"It would cost $800-$1,000 for one unit to be connected to a central system. If a developer has 1,000 units, the cost is about $1 million."

"So they use septic tanks which can cost as little as $200 per unit. And these tanks are not properly installed or maintained," he said.

**Master plan**

In a paper presented at the Environmental Pollution Control seminar recently, the Health Ministry's chief engineer, Mr. A. Sekerajasekaran, called for the immediate installation of sewage treatment systems in new development projects.

He said local authorities should then provide the staff and equipment needed to maintain these facilities once the developers have completed all phases of their projects.

But then most town councils do not have the people or equipment, or even a budget for such maintenance.

As an initial effort to ease this acute inadequacy, Mr. Sekerajasekaran said master plans for all the major urban areas must be prepared to provide national planning and public health agencies with useful data to incorporate with other aspects of socio-economic planning in maintaining public health standards and quality of life.

Under the Third Malaysia Plan, the Health Ministry will prepare preliminary reports for urban sanitation in 11 major towns in Peninsular Malaysia.

Under the Third Malaysia Plan too, $143.15 million has been allocated for proper urban sewage disposal. But this is clearly inadequate when Kuala Lumpur alone is spending $150 million for its sewage expansion project.
KUANTAN, Sun. — The cholera outbreak has reached its peak with 47 cases reported last week.

Parliamentary Secretary to the Health Ministry, Encik Jawan Empaling, said the situation was however well under control with 10 cases this week.

"But we should not be complacent. Instead, we should continue with preventive measures," he said.

So far, there are 90 confirmed cases, including two deaths, up to Aug. 31 since the first case was reported in Raub on May 5.

The number of cholera cases and carriers up to Aug. 31: Kuantan 42 confirmed cases (one death) and 41 carriers. Pekan 33 confirmed (one death) and 36 carriers. Kuala Lipis 10 confirmed and four carriers. Raub one confirmed cases Temerloh and Jerantut two confirmed cases each.

Six districts — Kuantan, Pekan, Lipis, Jerantut, Raub, Temerloh — were affected but worst hit were Kuantan, Pekan and Kuala Lipis.

In Kuantan, Tanjung Lumpur, which is situated on the mouth of the Kuantan River with a population of 2,265 and 510 houses, was the main problem area.

In Pekan, the outbreak centred around Kuala Pahang, a fishing village with 2,128 people.

Encik Jawan said the common factors in the infected areas were poor water supply and unsatisfactory sewerage disposal which spread through contaminated water.

The health officers had brought these matters up in the State and District Epidemic Control Committees and expect to receive active cooperation from all government agencies and the communities in order to improve environmental sanitation.
KUANTAN, Sun. — A 68-year-old woman died of cholera and nine new cases were detected in Kuantan district yesterday.

Yah binti Awang of Batu Lapan, Kuala Lumpur, Pekan died at the General Hospital yesterday.

She was admitted to the hospital on Aug. 15 when a health team detected a number of cases after a sudden outbreak of cholera in the Pekan district early this month.

So far three people, including Yah, have died of cholera in the state in 20 days. The first death was reported in Pekan on Aug. 6.

Yesterday seven confirmed cases, including three children aged between 2 and 12 years, were admitted to the General Hospital here.

Another two suspects, a two-year-old boy and a 58-year-old man were admitted this morning.

It was also reported that several people who turned up at the General Hospital and health department here for inoculation were asked to leave as the hospital have run out of vaccine.

In PENANG, the State Director of Medical and Health Services, Dr Haji Ahmad Shah, said today George Town is still a cholera-infected area, following a report of a carrier case on Friday.

He said the premises of the carrier at Kampong Malabar had been disinfected. So far, there have been 113 cholera cases and 42 carriers in Penang.

CSO: 5400
GASTROINTESTINAL ILLS RAMPANT—About 8 million inhabitants (approximately two-thirds) of the inhabitants of Mexico City are the victims of gastrointestinal ills brought about by the unhygienic handling of foodstuffs and by the violations of the health laws committed by hundreds of thousands of establishments that prepare and handle food products. A high percentage of the businesses and industries connected with the food business are operating irregularly and without proper licensing, a fact which, in addition to endangering the health of the consumers, is the root cause of serious on-the-job accidents for the workers, which in turn generates financial losses of approximately 80 billion pesos per year. [Text] [Mexico City EL SOL DE MEXICO in Spanish 10 Sep 78 p A-12]
Meningitis broke out over two weeks ago among the approximate 2,000 residents of the old Owambo Hostel in Katutura.

"Conditions were bad," commented Dr Oosthuizen, Director of Health SWA Administration, "because of the number of people from all over the country flocking into the hostel."

The matter was brought to the attention of the Municipal Department of Health whose prompt action put an end to the outbreak. A spokesman for this Department said no further outbreaks had been reported to date, but gastroenteritis could be expected with the warmer weather.

"All we could do was remove the garbage and try to clean up the area," he said.

The old Owambo hostel was bricked up for storage purposes. Apart from no cross ventilation, sanitary facilities are inadequate as the water installations have all been damaged or removed. There is no lighting in the area due to the removal of power cables.

The present situation was largely the result of the lifting of the influx control measures last year, according to Mr J Kamberipa, a member of the Katutura Advisory Board. Initially 391 Blacks moved into the old Hostel after the outbreak of violence in the Single Quarters earlier this year.

Unemployed Blacks flocking to Windhoek in search of work, together with a number of women and children, make up the total of 2,000.

The exact number of unemployed in Katutura is not certain. Although the recorded number of unemployed has escalated from about 800 prior to the lifting of influx control to the present figure of approximately 2,000, a spokesman for the Labour Bureau pointed out there is no way of ascertaining whether all these people are still resident in the Black town.
"The population flow through Katutura is very rapid. Many of these people go back to Ovamboland, or wherever they came from. With the abolition of influx control we have no way of establishing their whereabouts," he said.

Under influx control he explained, workers from other regions were brought in by their registered employers and any subsequent movement had to be authorised.

"There are about 500 people outside the office today looking for work—and they are not yet on our records," said the spokesman.

Although the Police Chief, Major General Vic Verster was not available for comment, as early as February this year he cautioned of an increased crime rate due to the large number of unemployed accumulating in Windhoek.

"We are coping," he was quoted as saying, after calling on residents to help combat incidents of petty crime and housebreaking.

The City Council has also been working on the problem. Also in February the Town Clerk Mr Attie Arnold, said a Management Committee delegation was to discuss the matter of the unemployed with the Administrator General.

At last week's meeting of the Katutura Advisory Board it was recommended that the old quarters be closed. Registered residents, said the Board, should be given the option of returning to the Single Quarters or finding alternative accommodation.

The Board recommended that unregistered residents, who constitute the bulk of those squatting in the area, be given 14 days' notice of the closure of the area. Those squatters that did not move elsewhere voluntarily should be forcibly removed, recommended the Board.

"It's a very worrying situation," commented Mayor van Taak. "I intend to bring the matter to the notice of the City Council. It doesn’t help to move a problem from one point to another—it remains a problem. A very grave problem."
MEASLES OUTBREAK--Katmandu, 3 Sep (AFP)--At least 39 persons including 26 children have died of measles and amoebic dysentery at Bajura district about 290 kilometres (180 miles) south west of Kathmandu, it was officially reported here today. The report added that among the 39 killed 13 were victims of amoebic dysentery. The local administration is reported to have failed so far to supply necessary medicines to control these diseases. [Text] [Hong Kong AFP In English 1402 GMT 3 Sep 78 BK]
A substantial increase in the number of people with scabies has been noted in some of Salisbury's townships, a City Health Department official said last week.

"There has been an increased incidence of the disease in the past few months," he said, adding that the increased incidence was "probably a side effect of the influx of refugees into the Salisbury area."

"Scabies is a very common skin disease. It is not notifiable, so there are a lot of cases we do not get to hear about, but it is quite common in the rural areas. "There is nothing new about this incidence of scabies (in Salisbury). What is new is the number of cases," the official said.

The disease was transmitted through physical contact and "it was more common in the cold weather when people tended to huddle together around fires and suchlike."

The coming of warm weather would normally mean a reduction in the incidence of the disease but in Salisbury this year the number of cases was higher than usual.

The disease was not dangerous in itself but could lead to complications. For instance, a child scratching itself because of scabies could open the skin to other diseases.

The official advised personal hygiene as a preventive measure and she also advised victims of the disease to get treatment as early as possible.

"We are treating these people with scabies when they come to the clinics and we are trying to educate them in the prevention of this disease," she said. "But it is very difficult to treat people who cannot or do not bath themselves."

The city council's committee for community services is also concerned about the incidence of scabies. The committee has asked the City Medical Officer of Health, Dr. Tony Davis, to report "on the reasons for the numerous cases of scabies in some of the council's townships" and the progress made in reducing the incidence.
CHOLERA TESTS NEGATIVE—The Ministry of Health has published a statement denying reports of an outbreak of cholera in Tombo. According to the statement, published on 17 August, the ministry launched an investigation after an outbreak of diarrhoea but tests for cholera proved negative.

[Text] [London WEST AFRICA in English 4 Sep 78 p 1767]
CONTINUED SMALL POX VACCINATION JUSTIFIED

Johannesburg THE STAR in English 29 Aug 78 p 6

[Text]

The recent case of smallpox in Britain — the first in many years — supports the South Africa State Health Department's insistence on compulsory vaccination against this disease.

Last week a reader of The Star complained at being given a "jawing off" by a clinic nurse for not having had her baby vaccinated. She said she did not regard it as necessary as smallpox was dying out.

A senior official of the Health Department said today the fact remained that smallpox — although no new cases had been reported in South Africa in recent years — had not been eradicated yet. The World Health Organisation had not declared South Africa smallpox free.

STILL APPLIED

The law still applied — inoculation against three infections was compulsory in South Africa. They are polio, tuberculosis and smallpox.

The Star's London Bureau reports that health officials in Birmingham have confirmed that a woman in an isolation hospital at Solihull is suffering from smallpox. She is Mrs Janet Parker, a photographer.
NEW DYSENTERY STRAIN--A new type of bacillary dysentery is riding high in Sri Lanka. The director of health services, Dr. A. R. Jesudason, explained that this disease had first begun in the Jaffna District. According to him, the new germ termed by medical experts as "shigella dysenteriae i" is both food borne and water borne, some of the places affected are Mawanella, Huruluwewa Colony, Galenbindumuwewa, Kadugannawa and Galagedera areas. Most affected parts are estate areas where environmental sanitation is poor and there is soil pollution due to fecal matter. Dr Jesudason said death in these cases was due invariably to a toxin or poison released by this germ which affected the kidney. Dr De La Motte who is in charge of the eradication programme told newsmen yesterday that this outbreak had become evident in 1976. For the first half of this year, there were 7,800 cases giving an indication of the magnitude of the problem, he said. There was a report of mass outbreak in Mahiyangana a week ago. There were 36 cases admitted to the Mahiyangana peripheral unit and 3 deaths were reported. [Colombo SUN in English 25 Aug 78 p 1 BK]
INTESTINAL INFECTION SPREADING DUE TO LACK OF MEDICINE

Istanbul AKSAM in Turkish 31 Aug 78 pp 1,7

[Text] A gradual spread has been reported in the intestinal infections which appeared a week ago in eastern Anatolia and which continued with intensity. It is reported that three children have died in a village of Arpacay [district in Kars Province].

According to information obtained from the authorities by correspondents of the Turkish News Agency, the intestinal infections which appeared one week ago and which spread with intensity to the surrounding areas have begun to appear in the district and the villages.

Due to the lack of medicines to combat epidemic infectious diseases, the illness has progressed considerably and has leap-frogged to the villages. In Koc village of Arpacay [District], two as yet unidentified children have died of intestinal infection while one child has died of measles. Kars Health Director, Zeki Kurt indicated that the spread of the epidemic disease was due to the lack of medicines to combat it. He said that tight precautions had been taken in some villages and that the shortage of medicine was critical.

On the other hand, it was claimed that the two children who died of intestinal infection had actually contracted cholera and that the infections in the East were the same disease. The authorities, however, were hiding this.

CSO: 5400
CHOLERA IN DIYARBAKIR, PEOPLE CAUTIONED ABOUT HEALTH MATTERS

Istanbul AKSAM in Turkish 25 Jul 78 pp 1, 7

[Text] Diyarbakir (Turkish News Agency) -- Diyarbakir Mayor Mehdi Zana has announced that cholera is going around in Diyarbakir, that street vending of beverages and ice cream has been prohibited for this reason, and also that disposal of decayed fruit has begun.

Announcing at a press conference yesterday morning that three persons have died of cholera in Silvan District and that a large number of patients has been admitted to the infectious diseases unit at the Diyarbakir Medical Faculty Numune Hospital, Mehdi Zana said, "We informed the authorities earlier that this danger existed. Attention was not given to our concern at that time. Our claim has been borne out today by the patients in the hospital. We are claiming: A large cholera epidemic has begun in Diyarbakir. We invite all progressive, patriotic doctors to serve in Diyarbakir."

On the other hand, health directorate authorities said that there was no question of cholera, but admitted the existence of an intestinal infection epidemic. It was determined, meanwhile, that nine patients, including three women, now in the infectious diseases unit are being treated for acute intestinal infection.

Warning

Ankara -- Deputy Prime Minister and Undersecretary of Health and Social Assistance Minister Faruk Sukan has pointed out that human ignorance in dealing with nature plays an important role in the spread of epidemic disease. He called for the careful attention of the citizenry in this regard.

In a speech on the subject today, Sukan said:

"Bearing in mind the threat to the health of our citizens by certain seasonal diseases owing to the summer season and at this time when temperatures reach very high levels, I think it fitting and necessary to issue warnings and recommendations."
"People who neglect their health harm not just themselves, but all around them. For example, it is necessary that food handlers be in excellent health. Otherwise, they contaminate healthy people by means of the food.

"Contamination of drinking and use water -- even in small amounts -- with human and animal wastes and sewage residue and impurities indicates the presence in the water of the agents of typhoid, paratyphoid, dysentery, cholera, infantile paralysis, and infectious hepatitis. In this situation, it is possible for epidemic diseases to begin in a very short time.

"The same thing may be caused by all sorts of food and drink sold by street vendors of meat, water, and beverages who are totally without health controls. We must not forget that contagious diseases of the digestive system which break out in one sector of a city or community can quickly affect the entire community or even the country. In our way of life today, there is no such thing as epidemics confined to individual locations or even countries. Epidemic diseases spread, as it were, at the rate of speed of the fastest means of transportation.

"Therefore, from the standpoint both of individual health and of our nation's health and economy, it is necessary to alert our citizens to the following matters, especially during the summer and fall:

1. No water or beverage whose nature is not fully known or whose healthfulness is in doubt should be drunk or used.

2. There is always the possibility that food, water, and other beverages sold in the open may be contaminated with disease-causing agents. Eating and drinking them is dangerous.

3. It is extremely risky to swim at beaches, lakes, or streams into which drainage systems and sewers empty.

4. Eating fish and other seafoods taken from waters where sewers and septic systems drain is dangerous to health.

5. Hot springs and baths without well-maintained toilets, which have open sewers, and where the surrounding areas are fouled by human and animal wastes may also be sources of contagious disease.

6. Bearing in mind the importance of flies and other insects in the spread of contagious diseases, it is necessary that garbage cans be cleaned regularly and that garbage not be allowed to accumulate.
"7. In mild cases of diarrhea, citizens should go to a health institution for treatment, as this is a matter which must not be neglected for both personal and social considerations.

"Respectfully submitted to all our citizens with best wishes for their health and well-being."

8349
CSO: 5400
BRIEFS

CHOLERA REPORTED IN ANKARA—The Comprehensive Health Workers Association, in a statement made yesterday, alleged that a large number of citizens in Ankara have showed up at the city's hospitals with cholera and the association has called for the free distribution of preventative medicine. The association asserts that the people of Ankara must be protected in the event that there is a cholera epidemic. According to the association: "This disease, which has virtually disappeared in the developed countries and whose prevention and treatment is well known, has claimed the lives of many of our citizens. As in various other areas of the country, many citizens of Ankara have checked into city hospitals complaining of cholera. And it's been verified that patients have been admitted to Ankara University's Medical Faculty, the Social Security Organization, Ruzgarli and Numune hospitals for the treatment of cholera. Yet, this situation is being hidden from the public. Preventative measures must be taken without delay to assist people who are aware that they have contracted cholera but seek to treat it themselves and are thus in danger of death. The time has come to withdraw from discussions of the problem at an academic level. Cholera can be prevented by informing people about the illness, by distributing without remuneration medicine used in disinfecting drinking water, by providing water where it is needed, by chlorinizing the central water system and by giving more supervision to producers, refreshment sellers and children who sell water in the streets."

[Text] [Istanbul CUMHURIYET in Turkish 13 Aug 78 p 4]

CSO: 5400
The minister of Public Health has adopted important measures designed to resolve problems of nutrition detected in certain areas, according to an announcement made by the head of the ministry, Dr Antonio Canellas.

He said that such problems had arisen in the suburbs of Montevideo. "It is there that we are working with greatest intensity, there that we have opened new health centers or improved existing centers."

During an interview granted EL DIA, the minister stated that "the country's health level is very satisfactory" and gave assurances that diseases transmitted sexually have decreased "because the campaign has been very intensive, particularly at the educational and diagnostic levels."

Canellas said that the Public Health Ministry "has entered the stage of execution" and explained the scope of the work being done. He also emphasized the importance of the gradual equipping of the various hospitals.

The minister also indicated that there is a very "broad economic sector in which a family can be protected health-wise free of charge through Public Health organizations" and described the method for securing the I.D. card which authorizes such benefits.

Nutritional Control

"The nutritional program--which had never existed in the ministry--has permitted the detection of areas which most need the support of food supplements or education of mothers."

The state of the population's nutrition "is acceptable on the whole."
"However, we have encountered areas in which we are making efforts to solve the problems of several shortages."
In Montevideo?

"In Montevideo we have the problems of the suburbs. It is there that we are working with the greatest intensity, there that new health centers have opened; or we improved those in existence to give greater capabilities to these centers, which for cultural, social or economic reasons may be somewhat neglected."

Then the minister said: "It is important to us—as a health action—that the infant population in particular and pregnant women be well fed and monitored."

Health Level

"The country's health level is very satisfactory. We have eradicated some diseases, rabies, for example."

"We have contagious diseases, such as measles and other diseases of the epidemiological kind, under control, as the result of inoculations and campaigns which are conducted periodically."

"The sexually transmitted diseases have also decreased—these alarmed us at one point in time because their rates of incidence had increased appreciably—as the campaign was very intensive, particularly at the educational and diagnostic levels; and timely treatment was administered."

"The health level is good and we are thinking of complementing it by incorporation of an antirubella inoculation which will be immensely beneficial."

Upcoming Activities

The Public Health Ministry has entered the state of implementation in accordance with the tasking plan.

"There were 21 well-defined programs whose officials and respective personnel have been integrated. Work is being monitored from the central level with a schedule. They meet periodically to receive pertinent information."

Dr Canellas also announced upcoming activities: the inauguration of the Tala Hospital, expansions in Treinta y Tres (where equipment will also be delivered to permit its full operation, work on the completion of the Melo and the Maldonado Hospitals is underway.

"We are proceeding with a concern over finding the resources needed to complete the Durazno and Pereira Rossell Hospitals. In a related matter, the hospitals are being supplied with the equipment and instruments needed for their operation."
He brought out the fact that a number of health care centers in the interior now have laboratory equipment, some of which is very sophisticated, such as photocolorimeters, spectrophotometers, which will be enormously useful in diagnostic research. There are also X-ray machines and incubators.

Health Care I.D. Card

The issuance of a free health care card is traditional in the Ministry of Public Health.

This category includes all persons whose income does not exceed the minimum national wage (N$ 475).

However, the wage ceiling is increased 25 percent for each dependent of the head of household.

Health care is received at all centers, however, the required I.D. cards are not issued by all centers. This document is obtained in specifically designated offices and at departmental centers (interior).

"I admit that this causes some inconvenience for persons living some distance away, however, they can also obtain a card at auxiliary centers. It is difficult to install an office in every locality."

He emphasized: "Since there is a very broad economic sector in which a family's health can be protected free of charge through public health organizations, we are very strict with cases that are not in accord with reality."

The information supplied by the individual requesting the benefit of a free health care card must be well-documented. "We know of abuses which have occurred in the past."

"There are two other categories above the free category, which involve shared health care costs. That is, the participants have to pay part of the fees which the Public Health Ministry has set for each of its medical procedures."

'Mesotherapy' Possibilities Studied

Montevideo LA MANANA in Spanish 23 Jul 78 p 17

[Text] The Ministry of Public Health is studying documentation on a system which has won the approval of the French Social Security. The method is called mesotherapy, which treats a countless number of ailments at very low cost and eliminates high amounts of medication, with surprising results.

The scientific documentation was made available to LA MANANA by a reader--Derrambure--deputy director of the former French Benefit Association, who
was connected with the ministry, where he supplied the background information. This article introduces our readers to mesotherapy.

Mesotherapy, a system for the treatment of illnesses which practically eliminates the poisoning of the body through the ingestion of medical drugs, has the almost total support of the French Government. The relatively new system is described as being similar to acupuncture. Its worth has been shown in the treatment of back pains, cervical arthrosis, tired vertebrae, sciatica and ailments in which pain plays a principal role.

What Is Mesotherapy?

Mesotherapy consists in the subcutaneous injection of small amounts of various mixtures, depending on the treatment, but all with a procaine base.

This method was developed in Bray-et-Lu, a small town in Vexin, Normandy. Dr Michel Pistor had treated the asthmatic of an old, deaf ropemaker for a long period of time. He injected the man with small doses of procaine and other products for several days until the patient said: "That's funny. After your last treatment, I heard my watch ticking for the first time in 15 years."

Dr. Pistor recognized that he had come upon a quite interesting discovery and began to systematically apply the treatment to other patients. The results were excellent. More and more patients with painful ailments were cured.

It was shown that the technique brought better results if applied directly to the affected area.

The method's fame spread; and in a short time, people came from all over Bray-et-Lu for the treatment of an arthrosis, sciatica, lumbago or other ailments.

Today, Dr. Michel Pistor heads the Mesotherapy Society and has established a school. Four hundred doctors are using his method to cure the illnesses described and many others such as rhinopharyngitis, eczema and other ailments which were added later.

Multi-injector Used for Application

The treatment is administered by means of a multi-injector with discs which have six, eight and even ten sides. These are arranged in fours and each of their faces has small needles from 4 to 6 millimeters in length. The diameter of the discs varies from 4 to 8 centimeters.

The entire mechanism is attached to a syringe in which the liquid to be injected is deposited. The injection is made by placing the device against the affected area. With a slight pressure, the cylinders are turned about the area as the plunger of the syringe is depressed. The treatment takes only a few seconds and is completely painless for the patient.
System with State Protection

The system has spread throughout France; and patients are showing up for treatment, paying 33 francs for each injection. Subsequently they are reimbursed by Social Security in the amount of 80 percent of the cost of all injections.

Mesotherapists say that this system represents an astounding economy for society.

One example: back pains result in 3,000 hospitalizations annually, for long periods of time and at great cost for medication—anti-inflammation medicines and analgesics. Treatment with mesotherapy costs only 1.31 francs a session. The eradication of an ailment by means of mesotherapy takes four sessions.

French Social Security is quite pleased with this system which permits the reaching of clear conclusions, not only in terms of cost, but also in terms of cleansing the body of high doses of medicines and significant pollution of the blood.

Identification Card Red Tape

Montevideo LA MANANA in Spanish 26 Jul 78 p 9

[Text] Public Health authorities are studying a plan for updating and rationalizing the services which issue Health I.D. Cards that will, among other things, eliminate annoying delays, centralize costs, avoid duplicate examinations and develop a card with national validity. This information was released last night by Dr. Jose Saralegui, director of the Hygiene Division of the Public Health Ministry, which is responsible for supervising the issuance of Health I.D. Cards.

"At this time, as in every mass public service, there are certain operating difficulties. In the first place, account should be taken of the fact that formerly there were four autonomous services while now there is only one. An entire reorganization is contemplated in a plan under study which, when operational, we are confident will put an end to many of the inconveniences now present," Dr. Daralegui explained.

Recently, before the requirement to obtain a Health I.D. Card was extended to the entire active population of the country, objections were noted on the part of card users due basically to excessive delays in processing, both on the day the analyses are made and the day on which the individual is to pick up his card. Long (and impatient) "lines" formed in the renovated interior of the Durazno y Yi center which must handle some 600 persons daily, in two shifts, one in the morning and the other in the afternoon. Some 35 doctors are on duty in that center, along with administrative and technical personnel.
The procedure followed by an individual who wishes to obtain a card is as follows: payment (N$ 7.50—it is advisable to bring along change as at that very point the first delay can develop), file preparation (here is where the real "bottleneck" and the longest waits occur, as the preparation of forms is done manually) and then the examinations themselves which, without following any fixed order, consist of blood, urine, weight and height, oculist, dentist, X-rays (chest X-ray), blood pressure and the clinical examination by a doctor. Here the greatest delays or problems customarily present themselves, [particularly] when the X-ray equipment breaks down and forces the individual to return on another occasion or get his chest X-ray elsewhere.

Better Hour: 0800 Hours

"We have timed the average period required for completion of all the processing. The average time is 45 minutes," Dr Saralegui stated. "A little after 1000 hours during the morning shift and shortly after 1600 or 1630 hours during the afternoon shift, there is no longer anyone to be processed. What happens is that the public, which is a little reluctant to give up old ways of doing things, forms a "line" at 0600 hours or earlier. Since the center opens precisely at 0700 hours, they have an hour or more of unnecessary waiting. Then the processing begins. The best time to get here is around 0830 hours; then the processing is not so stretched out. Also, once the file is completed, the individual can proceed in whatever order he wishes with respect to the examinations. That means the card carrier is in a position to select the stops where he will have to wait the least amount of time. If he handles the situation with a little bit of skill, he will be finished in a short time."

There are other delay factors which are outside the direct responsibility of the service, for example, the repair of the X-ray machines when they malfunction. The laboratory activities, too, are not centralized; and it is necessary to ship specimens to the general laboratory of Public Health, our interviewee explained. Inevitably, some of these specimens undergo change in transit, which in addition is time-consuming. "It is these technical aspects which are beyond the direct control of the service," Dr Saralegui explained.

Reorganization and Rationalization

"At the present time, we are studying a plan for the rational integration of the Health I.D. Card, which we are confident will resolve most of the problems that are now present. In this regard, I am completely confident," Dr Saralegui said.

The Plan seeks to develop a Health I.D. Card that will be valid throughout the country at uniform cost nationwide. This is not the case at present.

There are also plans to develop an I.D. card with different kinds of validity on the basis of not only the type of work an individual does, but also
his age. At present, the I.D. card issued is valid for 2 years for ordinary kinds of work and for 1 year in the case of jobs which are classed as unhealthful; however, no consideration is given to the age of the examinee.

An effort will be made to unify the card issuing system to avoid duplication (at times triplication) of examinations (cards issued in other jurisdictions but which do not have general validity), which forces an individual who has another occupation to get a new card and undergo the same tests. In some cases, Public Health will take action—as at present with regard to the AFE State Railways Administration] or the ANCAP [National Fuels, Alcohol and Cement Administration], for example--and will authenticate examinations conducted by medical services of the kind mentioned, which offer all the guarantees.

"There is no doubt that the service must be reorganized, and we are doing that," Dr Saralegui concluded. "Once the plan is approved, we are confident that we will be able to issue a Health I.D. Card in 3 or 4 days. Within the framework of this general plan, there is also a study of forms which will facilitate processing as much as possible. However, the user can help by avoiding unnecessary delays."
DENTAL CARE RECEIVES NATIONAL ATTENTION

Dental School Services

Monetvideo LA MANANA in Spanish 9 Jul 78 p 18

[Text] The School of Dentistry has just received a gift of equipment from the United States, which is already being installed. This prompted LA MANANA to visit this educational center in the company of the dean, Dr Hugo Amorin, to determine what the new equipment will mean for the future of the school, the courses of study of this educational center and the services it provides to the people.

"We believe that the principal function of the university is to project itself into society. By this we mean to say that the gift we have just received is of great importance, as it will permit better practical study for our students and improved service for the patients we treat in these facilities." It was in this way that Dr Hugo Amorin, dean of the School of Dentistry, began his interview with LA MANANA, as we toured the school's facilities.

School Expanded

"The arrival of the equipment," he said, "forced us to think about expanding the school."

The gift consists of 13 pieces of reconditioned dental equipment, 10 X-ray machines, 13 dental chairs, sterilizers, cabinets and instruments, valued at $150,000. The equipment was supplied by the American Dentist for Foreign Service of New York, which paid the transportation and insurance costs through Caritas International.

"The place we are installing the equipment," continued Amorin, "was nothing more than a corridor. It was closed in; partitions were erected; and now we have practically completed work on a patient admission room and on another for emergency service, with a waiting room in between."
Nearly 70,000 Patients Treated Annually

As he pointed out the features of the facilities and explained the plans for expansion, Dr Amorin stated that "last year we provided emergency treatment for 18,000 patients and dental treatment, such as prosthetics, cavities, pyorrhea and dental-pediatry to 80,000."

He explained the way the dental chairs, lights and drilling equipment were to be installed; where the patients will be treated upon arrival; the sanitary facilities. He stopped proudly before one of the entrance doors to the new clinics: "even the carpentry was done by our own technicians."

The tour continued. On the various floors, he pointed out the different clinics filled with patients and students, the X-ray room and the areas where the newly-arrived equipment was temporarily stored.

The Career of Dentistry

After an extensive tour, in the dean's office the conversation turns to the opportunities offered the student by the school:

"The course is 5 years in length," Dr Amorin said, "which may be broken down on the basis of priorities. The first years provide the student with the basic knowledges of anatomy, physical and chemical structures which he will apply a great deal throughout his career. Next, he studies microbiology, theoretical information about viruses that is not, however, applied in a direct manner to a patient. He also studies physiology. During the third phase, he begins to learn techniques, however, before he uses them on patients, he is instructed on anatomical models how to make inlays, do extractions and other kinds of work. The mannequins simulate a patient and the oral cavity is an exact replica of what he will later encounter in real life."

The interview was interrupted from time to time as he searched in the silence of his office for the idea which would allow him to continue.

First Patients Seen

His account was fluid, as that of a man who knows what he is talking about or recalls his past: "However, there comes a time when he begins to see flesh and blood patients. At first, he witnesses simple procedures; then, backed up by his professor, he begins with an extraction. Now he enters the Surgical Clinic which covers the 3d, 4th and 5th years of the course."

It was then that we began to make sense out of the two, three and even four white smocks around a dental chair with a patient. Also the groups of three or four students around an empty chair.

"They are now observing the filling of cavities or clinical dentistry," Dr Amorin continued. "First they treat simple caries in teeth where
there are no nerves to be killed or teeth that are not deeply rooted. Then they become involved in more complex treatments until they learn to fill root canals. This is concurrent with other procedures where they see all kinds of treatments, including: pyorrhea, orthodontics—irregularities—and especially dental-pediatrics, that is, the treatment of children's teeth."

A Complex Organization

The arrival of a patient in the Dental School results in the preparation of a personal file with all the required information. Once "registered," the future patient is sent to a clinic where the admission service is performed. This involves a complete dental check after which the patient is "channeled" to the clinic which will be responsible for providing him with complete treatment.

Nearly 50,000 patients of this kind pass through the school each year and have their dental work done at very low cost. They pay the cost of materials only.

"Those who come here have insufficient financial resources to have all the work done by a private dentist."

When asked if the school was not becoming a competitor of its own graduates, Dr Amorin told us that "such a thing does not happen, as in the majority of cases the patients would have trouble getting the work done any other way. However," he continued, "once their mouths are in good shape, it is easier for them to get into the habit of going to the dentist for dental care."

Emergency Service

The school also has an emergency service which is open from 0800 hours to 2330 hours daily. This service treats patients who are in great pain and need emergency extractions or treatment. Last year 18,000 patients of this kind were treated.

A permanent study of the problems of physiological occlusion is among the activities engaged in by the school. That is, the study and modification of bad bites.

This kind of activity requires clinical and laboratory studies to determine the points to be corrected.

Projection into Society

Dr Amorin explained a specific point: "The ecology of health is included in the 1st, 4th and 5th years of the course; however, it would be ideal to have it in each of the 5 years. The goal of the course is to train
the human being who has to be behind every dentist so that he will not become a mere tradesman. This we attempt to do through ethics, philosophy and various subjects on human development. The student who has recently entered the school is also taught the best study methods for the use of books, bibliotechnical practices and other subjects."

"During the 4th and 5th years," Dr Amorin continued, "Health Personnel" are trained. That is: dentists responsible for preventive and corrective care of the masses. They are sent to schools and other places where they take charge of the health care of patients, becoming a living part of the problems which the latter may have in their surroundings. The head of this school is Doctor Robaina who was graduated from this very school."

However, Dr Amorin stated that service does not end there. He told us that "there is a Dental Assistants School where technicians are trained who will assist the dentist in the work of the clinic, permitting the latter to have the maximum amount of useful time at his work and leaving the minor tasks to the assistants."

When we considered the interview at an end, the Dean told us of the importance of the fluoridation of mass consumption water supplies in the tooth development stage: of children: "The problem of caries is diminished 60 to 70 percent."

Many other subjects were discussed. Some were covered in greater depth than others. When Dr Amorin accompanied LA MANANA to the exit hall, we witnessed the enthusiasm with which the students greeted their dean: it could be said that the greetings were delivered with something close to admiration.
The services offered to the people by the school at very low cost have a dual teaching and corrective function. The students are an active part of this process and are aware that they are complementing their studies by offering dental care to a large number of patients who have need of their services.

National Dental Health Program

Montevideo EL DIA in Spanish 28 Jul 78 p 6

The first National Dental Health Program will be launched today in the Ministry of Public Health.

The Ministry will hold a meeting of all dentists in the country who are employed by the Public Health Ministry.

The dentists will be briefed on plans to operate in accordance with an oral health policy which will permit the rapid incorporation of modern techniques of programming to resolve problems of oral pathologies in patients--admitted for treatment--and outpatients.

The authorities will see to it that the dentists participate in a national health network and will provide them with the basic skills of administration and organization to obtain greater productivity and better utilization of available resources.

Water Fluoridation Plan

Montevideo EL PAIS in Spanish 29 Jul 78 p 5

According to information released in connection with the First National Dental Health Program, 95 percent of Uruguayans are suffering from dental problems. One of the measures planned to help resolve such problems is the fluoridation of drinking water. In the near future, a plan to this effect will be sent up to the president.

The fluoridation of the drinking water consumed in Uruguay is one of the measures adopted at the policy level in the Ministry of Public Health. The head of this ministry, Dr Antonio Canellas, with the inauguration of the First National Dental Health Program, stated in reference to dental problems that the measure would result basically in a decrease in the dental ailments suffered by Uruguayans.

The eradication of tooth diseases will not be accomplished with the mere extraction of the teeth, he explained. It is necessary to engage in preventive activities which will contribute to the maintenance of dental health.
One of the measures which should be adopted is the fluoridation of water for the purpose of preserving dental health, principally in those cases in which the latter is not given sufficient attention, for reasons of age, ignorance, etc.

The question, which has been the subject of heated polemics, has been resolved in favor of fluoridation in the principal industrialized countries. Statistical data have shown a decrease in the number of dental ailments, once fluoride has been added to drinking water.

The Ministry of Public Health, when asked about the possible coordination which should be established with the OSE [State Board of Sanitation], in the event the measure is adopted, said that the necessary integration would be effected. This would be accomplished with account taken of the role the organization has always played in this sector, both as regards drinking water and service water.

A draft plan is being prepared after which the plan itself will be written, as is customary with this kind of measure.

Fluoride: It Causes No Harm

The negative effects which might be caused by an excessive use of fluoride—grayish spots on the teeth—do not appear if it is added in the amounts indicated. The taste and color of water do not change at all with the addition of the fluoride compound, since the properties of water do not change. The amounts recommended by American scientists Eheler and Steel are 1 (average) part of fluoride per million parts water. They say that less than 1.5 parts per million should be used. The amounts vary depending upon the fluoride content of the water to be fluoridated. In some American states, the method has been applied for some 30 years, with very good results.

The contribution of fluoride to the maintenance of dental health is much greater at an early age, that is, under 7 years.

The Program

The importance of this to dental health in our country increases upon examination of the figure being used in the First National Dental Health Program inaugurated yesterday in the Public Health Ministry. Some 95 percent of the population is suffering from dental problems, according to a statement by Dr Bertucci, director of the Dental Department of the Ministry of Public Health.

He added that 25 percent of the adults have complete prosthesis because of dental ailments which were not treated or were treated inadequately. And nine percent of cancers occur in the mouth.
The purpose of this meeting is to brief all dentists employed by the Public Health Ministry on plans to operate in accordance with an oral health policy which will permit the rapid incorporation of modern techniques of programming to resolve problems of mouth diseases of inpatients—admitted for treatment—and outpatients. Efforts will also be made to integrate the dentists into a national health network which will depend technically, logistically and administratively upon the Central Command. They will be provided with the basic skills of administration and organization to obtain greater productivity and better utilization of available resources.

The subjects considered are: I. General Ideas about Public Health; II. Methods for the Resolving of Public Health Problems; III. Health as an Enterprise. Economic Concept; and IV. Rational Bases of the Process.

Dental Authority Opposes Fluoridation

Montevideo EL PAIS in Spanish 30 Jul 78 pp 10, 18

[Text] The subject of fluoridation of water has awakened discussion in the scientific sectors of the world. The majority opinion is one of acceptance, including the World Health Organization which advises its generalized use. More than 100 million persons are drinking water which contains this substance. However, there are significant reactions against fluoride. Many countries have banned it, considering it a pathogen and feeling that its addition to water involves an infringement of the freedom of choice of individuals in a democratic society. EL PAIS interviewed Dr Meerhoff with a view to obtaining greater information about fluoride and its effects, considering its possible adoption in Uruguay.

"The fluoridation of water consumed by the public is one of the most flagrant attacks against the life and dignity of individuals who will be forced to drink one of the most terrible poisons now in existence," Dr Arnoldo Meerhoff told EL PAIS. He is considered one of the masters of ophthalmological surgery in Latin America.

"It Does Not Combat Caries"

The renowned Uruguayan doctor was asked about the proposed fluoridation which is under study for implementation in Uruguay, to control the high rates of oral pathologies recorded on a national scale which affect 95 percent of the population, according to information released by Public Health Ministry sources.

Dr Meerhoff, after stating that dental ailments are not effectively combated through pharmacological action ("The key is nutrition," he said.), asserted that fluoride has been banned in many countries because it is considered the carrier of many diseases.
"Dr Dean Burk, who for 25 years was chief of the National Cancer Institute, presented evidence to the U.S. Congress to the effect that 29,000 deaths annually from cancer in the United States are caused by fluoride," he emphasized.

Reaction in the United States

"Fluoride was used massively in the United States beginning in 1945 in a compulsory manner," continued his explanation. "Millions were poisoned. Today, 2,700 cities have stopped using fluoridation. In 1975, the states of Michigan, Nebraska, New York, California, Mississippi, Missouri, Kansas, Oregon, Florida and Pennsylvania rejected its use. Some 78 million persons said 'no' to the attack."

"The clamor was so great that President Ford signed a law on 16 December 1974 banning its addition to water for therapeutic purposes," Dr Meerhoff than said. After that he described the situation existing in many European countries:

Austria: Did not accept fluoridation.

Belgium: Installed a small plant which today is not operating.

Denmark: Banned by law.

Germany: Eliminated in 1971 after 18 years of use.

Greece: Not permitted.

The Netherlands: Suspected in 1976 after 23 years of use.

Italy: Fluoridation does not exist.


Sweden: Suspended in 1969 after 10 years of fluoridation. "The World Health Organization was asked to supply data concerning its therapeutic benefits. A reply is still being awaited."

Switzerland: In 1975, "the Department of Health ordered an end to fluoridation in Basel (the only city in which it was used) because of ineffectiveness."

"Protect Our Civilization"

"In October 1944—a year before compulsory fluoridation in the United States—the U.S. DENTAL REVIEW condemned the use of fluoride, stating that it causes problems with the bones, osteosclerosis, spondylosis and other ailments,"
Dr Meerhoff said. "Later it changed its mind. The results are evident, after 30 years of fluoridation in the United States. It is being rejected gradually because caries continue to increase, as they are caused basically by an exaggerated ingestion of carbohydrates to the detriment of natural foods."

"We have confidence in the Armed Forces of the nation and the national authorities," the Uruguayan doctor said finally. "Aware of the situation, they will show up very well the arguments advanced by the proponents of fluoridation. They will know how to evaluate these positions; and, with a thought to the physical and moral health of Uruguayans, they will oppose this measure which is an attack upon essential values of our civilization and our way of life."
A four-man team of French technicians arrived in Gaborone over the weekend, to start work on the Vaccine production Laboratory project at Broadhurst. The technicians come from Iffa-Merieux, a French company. The team led by Dr Favre. In an interview with reporters Dr Favre said the first phase of the project was likely to be completed sometime next month. The first part of Phase One entails studies of Botswana's strain of foot and mouth disease, to produce experimental Vaccine and to check the quality of the experimental vaccine on cattle.

The supervisor of the project explained that during Phase One they would also concentrate on production of the emergency vaccine and further start producing two-million mono-valent doses against a single virus.

In phase two he said the laboratory will produce five-million tri-doses each year for domestic use and for export purposes. In the past Botswana used to import foot and mouth disease vaccine from abroad (United Kingdom) and this will be the first time that the country will be producing locally and exporting chemicals.

A model laboratory which will be installed in Phase One is expected to arrive here tomorrow by a chartered plane from France.

The agreement for the building of the laboratory, was signed in Lyons, France in May this year, by the Deputy Permanent Secretary in the Ministry of Agriculture Mr M. Sekgoma and Dr Guy Malher, Manager of Iffa-Merieux, on behalf of the Government of Botswana and the Institute respectively.

The decision to set-up this laboratory here was taken after the outbreak of the disease last year in October. The European Economic Community suspended imports of beef from Botswana to its member states and this move affected this country economically.

The local Veterinary Department launched an intensive campaign following the outbreak to fight the disease throughout the country. Early this month the whole country was declared "free of foot and mouth disease."

After some negotiations between the Botswana Government and the EEC, the European market decided to accept meat from the southern part of the country conditionally.

Meanwhile the Government of Botswana is doing all it can in the diversification of our cattle industry market both abroad and locally.

The President Sir Seretse Khama was today opening a Tannery and Cannery at Lobatse.

The two factories built at over P1-million are expected to boost employment in the town by at least 100 people. They will also be welcomed by Batswana and those who wish us well as the most important steps towards the development of our cattle industry which started with exportation of raw products but now gradually turning to the finished products for both local consumption and export.
Laboratory Equipment

The model laboratory and some supplementary equipments for the setting up of a Vaccine Production Laboratory Project at the Broadhurst Extension of Gaborone has arrived.

The 12-ton model laboratory was transported from France to here by means of a chartered plane on Wednesday evening with some small equipments for the project. Another four-ton machine is expected to arrive shortly.

The arriving machinery was transported directly to the project building at Broadhurst yesterday. The model laboratory will be installed in Phase One of the Project.

A four-man-team of French technicians arrived in Gaborone over the weekend to start work on this project. The first phase of the project is likely to be completed sometime next month.

It entails studies of Botswana's strain of foot and mouth disease, to produce experimental vaccine and to check the quality of the experimental vaccine on cattle.

The cost of the laboratory have not yet been worked out, according to a source from the Ministry of Agriculture, but it will be just over P1 million. The model laboratory which arrived on Wednesday was still unpacked yesterday but the source has described it as "closed and sealed with laboratory equipments in it''.

The laboratory when complete will be one of the first ever major French investments in the country.
BRAZIL

BRIEFS

HOGS KILLED IN CEARA--The Agriculture Ministry of Ceara state has begun the killing of hogs in view of an outbreak of the African swine fever in the municipality of Cascavel. According to a report released by sanitary officials, more than 130 hogs have been killed and cremated. [Porto Alegre Radio Guaiba in Portuguese 0200 GMT 6 Sep 78 PY]

HOGS KILLED--In the district of (Jacutinga), Santa Catarina, 386 hogs were killed last week and 1,000 more will soon be killed in (Guaira) and (Galpao). These killings are intended to eradicate the focus of African swine fever discovered in that region of Santa Catarina 2 months ago. [Porto Alegre Radio Guaiba in Portuguese 0200 GMT 5 Sep 78 PY]

SWINE FEVER RESTITUTION--In the state of Rio Grande do Sul 105 pigs were killed during the period 16-20 August. The African swine virus eradication commission has paid 160,515 cruzeiros to the swine producers. [Porto Alegre Radio Guacha in Portuguese 1545 GMT 1 Sep 78 PY]

CSO: 5400
VETERINARY TEAM TOURS VILLAGES, TREATS CATTLE

Rangoon THE WORKING PEOPLE'S DAILY in English 21 Aug 78 p 1

[Text]

RANGOON, 10 Aug—A team of veterinarians led by assistant lecturer U Ko Ko Lay of Veterinary and Animal Husbandry Department toured villages in Kyangin and Einme Townships in Irrawaddy Division from 6 to 16 August and carried out preventive and curative measures against cattle diseases.

In Kyangin Township, veterinarians toured 78 villages and treated 1,472 head of cattle stricken with foot and mouth disease and attended to 73 head of sick cattle from 6 to 10 August.

The veterinary team visited 41 villages in Einme Township and gave treatment to 587 head of cattle against foot and mouth disease from 12 to 16 August.

The team also gave preventive inoculations to 885 head of cattle against anthrax and 647 head of cattle against haemorrhagic septicaemia while general treatment was given to 138 head cattle.

Township Party and Council functionaries concerned and representatives of Peasants Association at different levels rendered necessary assistance to the veterinary team members.

The team members also held educative talks on prevention of cattle diseases, animal health and livestock breeding.—NAB

CSO:  5400  47
BRIEFS

FOOT-AND-MOUTH DISEASE--The spread of foot-and-mouth disease in Kisii District has been contained and the quarantine withdrawn. According to a notice issued by veterinary officer Dr Dominic G. Wambugu, the movement of livestock and their products is now allowed. A quarantine was declared last December for Irianyi, Bosongo, Nyamira and Manga divisions. Dr Wambugu told livestock owners a rinderpest vaccination campaign would be carried out this month. The campaign had been delayed for fear of spreading the foot-and-mouth disease to unaffected areas. He urged farmers to take their livestock for vaccination when the campaign is launched. Meanwhile, Dr Wambugu has urged farmers to slaughter any animal attacked by East Coast fever. [Text] [Nairobi DAILY NATION in English 31 Aug 78 p 9]

RINDERPEST VACCINATION CAMPAIGN--Siaya District Livestock Officer Mr E. S. Khalisia has said a compulsory rinderpest vaccination campaign will start on October 4. He has warned all farmers whose cattle have not been vaccinated to take them for vaccination. A total of 113 inoculation centres have been opened. Mr Khalisia also urged cattle owners to use firewood for heating banding irons. Chiefs and sub-chiefs have been urged to intensify their publicity campaigns for vaccination.--KNA. [Text] [Nairobi DAILY NATION in English 31 Aug 78 p 9]
FEARS OF CATTLE DISEASE OUTBREAK IN ESTATE

Kuala Lumpur NEW STRAITS TIMES in English 31 Aug 78 p 13

SEREMBAN, Wed. — More than 30 families in the “C” Division of Labu Estate, 40 miles from here, fear an outbreak of a cattle disease following the discovery of three dead cows and four buffaloes in the area yesterday.

About 250 cattle in the surrounding area of over one square mile have been vaccinated and quarantined since the discovery of the dead animals.

A team of veterinary officials were at the estate yesterday afternoon and they took blood samples from the dead animals for laboratory tests.

They expressed the fear of an outbreak of haemorrhagic septicaemia (a form of blood poisoning bacteria).

Cattle-owners in the neighbouring areas have been warned not to allow their animals to stray into the area until the blood tests had been completed.

A Veterinary Department spokesman said today the tests, to establish if the animals had died of haemorrhagic septicaemia or normal poisoning, were expected to be completed in two days.

He added that they were, however, not taking any chances and had to quarantine the cattle.

The spokesman said if it was confirmed that there was an outbreak of the disease, quarantine would have to be carried out at district levels.

He said Negri Sembilan had not been affected by the disease which broke out in the northern States, especially among buffaloes, in recent years.
DETAILS ON ANTI-CRICKET COUNCIL MEETING--Cotonou--The work of the Board of Directors of the Joint Anti-Locust and Anti-Aviarian Organization [OCLALAV], which began on 17 July in Cotonou, came to an end Wednesday. During its sessions the Board, reporting on the Organization's three years of existence, studied its chronically difficult financial situation--difficult because of the non-payment by some member states that are behind in their assessments. It took a number of measures designed to improve the situation and adopted the budget for fiscal year 1979-1980, set at the sum of 529,886,000 CFA francs. Of the number of final resolutions adopted and read at the end of the sessions by Abdallahi Ould Soueid Ahmed, general manager of OCLALAV, within the framework of restructuring the anti-cricket fight in Africa it is proper to note the merger of OCLALAV and OICMA (International Anti-Migrating Cricket in Africa Organization) is anticipated for the extraordinary joint council of both organizations in January 1979 at Accra (Ghana). [Text] [Niamey LÈ SAHEL in French 21 Jul 78 p 1] 8946

CSO: 5400
EFFORTS SHOULD BE MADE TO COMBAT ANNUAL PEST ATTACKS

Rangoon THE WORKING PEOPLE'S DAILY in English 28 Aug 78 p 2

[Editorial: "Combatting the Pest Menace"]

[Text] The paddy cultivation work has gone over the half-way mark. This is time when plants are about to give out the most valuable part of their production.

However, this also happens to be the time when the plants are most prone to pest attacks. With the receding of floods and longer periods of sunshine, it is usually time for pests to start their destructive work.

There have been reports of paddy plants being attacked by leaf rollers in Hmawbi Township. Like the leaf rollers other pests like the nga-myaung-daung-peo (Spodoptera mauritia), laung-mee-poe (eel worms), etc. have a habit of attacking young paddy plants at this time of the year. Crabs and rodents also pose a problem.

Pest attacks, like floods, are almost an annual occurrence. Localised attacks are experienced each year.

The crops are doing well this year and to ensure success the Ministry of Agriculture and Forests has warned farmers to give special attention to protect their crops from pests.

With reports of locust plague in nations ranging from the Atlantic Coast of Africa to the Himalayas, attention has been riveted to the locust menace here as well. It is difficult for desert locusts to spread to Burma as a result of national barriers such as climatic and geographical conditions. But locusts of a different genus from that of the desert locusts are not unknown to Burma. Although they are less ravenous and destructive than the desert locusts, the locusts here are also capable of causing considerable damage to plants and crops if left unchecked.

Swarms of these locusts have been discovered in Putao Township of Kachin State, Myinmu Township of Sagaing Division, Rathedaung Township of Arakan
State and Zalun Township of Irrawaddy Division. This is not too extraordinary for such locusts have been known to exist in this country. However, it would do well for the farmers and all concerned to be on the lookout and to destroy these locusts for though they have not been known to pose too great a danger in this country, they can nevertheless cause damage to coconut palms, plantains, mango trees, sugarcane, sesame, groundnut and paddy if allowed to grow in number. Once they are detected, therefore, they should be eradicated by spraying them with pesticides by dousing their breeding places with gasoline and kerosene and setting them on fire, and by ploughing up their hatching places and applying pesticide powder.

The agriculture Corporation personnel, farmers and local authorities can do much in coordinated effort to combat pests. At a time when we are striving to fulfil production targets, we cannot afford pests to adversely affect production. We are sure that farmers, anti-pestilence teams and all concerned are now standing by to meet any contingency and safeguard crops from all kinds of pests.

CSO: 4420
HMAWBI, 25 Aug—Paddy plants on more than 500 acres in Satthadaw Village high yield paddy cultivation station area which are being attacked by leaf rollers were sprayed with pesticide by men of the No 1 Medical Battalion (Malaria Eradication), peasants and Agriculture Corporation employees today.

Paddy fields flooded

Nearly 9,000 acres of high yield paddy fields in Hmaawbi Township were inundated as a result of flash floods caused by torrential rains recently.

After the flood waters receded paddy plants on more than 500 acres at Nyaung Hnatin, Thandebin, Po Dawnagon, Abayu, Bwetkyee and Satthadaw village-tracts in Satthadaw Village high yield paddy cultivation station area, came under the attack of leaf rollers.

"The presence of the leaf rollers was immediately reported to the high yield paddy cultivation station by the farmers."

"Action was taken immediately and Party Unit Committee member U San Ya and Township People's Council Executive Committee member U Maung Maung Hlaing led men of the No 1 Medical Battalion (Malaria Eradication), peasants and Agriculture Corporation employees in spraying the affected paddy fields this morning.

Members of the spray teams also fed fertiliser to the affected plants after spraying them."
BURMA

FARMERS URGED TO USE PEST CONTROL METHODS

Rangoon THE WORKING PEOPLE'S DAILY in English 26 Aug 78 p 1

[Text]

RANGOON, 25 Aug—The Ministry of Agriculture and Forests has issued a call to the peasants regarding pest control work.

The Ministry of Agriculture and Forests, in its call, explains that foreign news despatches regarding desert locusts have been appearing in the news quite often since the beginning of 1978. It has been learned that Burma's neighbour countries India and Pakistan have been co-operating to counter the menace of desert locusts.

Though it is difficult for these desert locusts to fly to Burma due to natural obstacles such as weather and geographical conditions, the Agriculture Corporation of the Ministry of Agriculture and Forests issued a directive to the States, Divisions and Townships to be on the look out for locusts in order to be prepared if the situation arises.

As a result the Ministry learned about the presence of locusts which resemble desert locusts as soon as they were seen.

These locusts fell in Putao Township in Kachin State and Myinmu Township in Sagaing Division in June, Rathedaung Township in Arakan State in July, and Zalun Township, Irrawaddy Division in August.

These locusts fed on the leaves of palm trees, banana plants and mango trees. The insects also fell on some maize fields, sesame fields and sugar cane fields. It was learnt that each swarm comprised 5,000 to 10,000 insects. News of the insects and specimens were received immediately. Entomologists of the Agriculture Corporation studied the specimens and the destruction caused by these insects. At the same time entomologists visited the areas invaded by the locusts and carried out control and eradication work. Control work was effectively carried out at all places where the locusts invaded.

It was found that locusts which were found in these areas were not desert locusts which are highly destructive. Although the locusts which invaded Putao, Sagaing Division, Rathedaung and Zalun Townships resemble desert locusts their size and colouration as well as their destructive behaviour are different. Several of these locusts have been found in Burma in some years in the past.

The desert locust is bigger than the locust found at present. A mature desert locust measures three to four inches. Young desert locusts have black colouration with yellow and pink marks on the body. The grown-ups have bright yellow colouration with black spots on the front wings and thin lines in the eyes.

Desert locusts fly in swarms of crores and a flight is about 250 square miles. A flight of the desert locust of one square mile in size comprises as much as 160 million insects and weighs about 300 tons. These desert locusts prey not only on cultivated crops but also destroy everything green including bushes, grass and weeds.
The desert locust has a very high breeding rate. A female desert locust lays 40 to 120 eggs each time and lays eggs six to eight times during her lifetime of three to five months.

The desert locusts can fly at the rate of 50 to 60 miles per hour at a maximum altitude of over 7,000 feet. They make the flights in daytime and rest during the night.

The Ministry of Agriculture and Forests says that the locusts which invaded Putao, Sagaing Division, Rathedaung and Zalun Townships measure about two inches. Their wings are light green with yellow spots on them and their bodies pink with black stripes. A female lays 80 to 120 eggs each time and the newborn become mature between 16 to 36 days after breeding. These locusts are not only fewer in number as compared to the desert locusts but also have a lower flight rate and are not as destructive as the desert locusts. But they prey on coconut palms, banana plants, mango trees as well as sesame, groundnut, sugarcane and paddy nurseries. Though they are not as dangerous as the desert locusts, the destruction caused by them could increase if they are great in number thus they must be effectively controlled and eradicated.

Spraying must be carried out as soon as they are found with pesticides such as Endrin, and Aldrin solution and Aldrin powder. Their breeding grounds such as bushes and weeds must be destroyed by fire. The ground where they breed must be ploughed and sprinkled with Aldrin powder and the earth must be turned. These locusts breed on sandy and moist places.

**Rainfall**

The Ministry of Agriculture and Forests states that rainfall was regular during mid-monsoon except for low rainfall earlier due to late advent of the monsoon. Monsoon crops are satisfactory as the crops were cultivated in accordance with the weather. It is necessary to give special attention to take care of the crops till harvest. Special attention must be given to protect the crops against pests which is a natural disaster.

As the locust menace could arise especially this year the masses must be on the lookout at all times and must be prepared to fight them collectively by various means as soon as they come. Pesticides, fire and other suitable methods must be applied to control and wipe them out.

Man's intelligence and the power must be fully applied to effectively combat the pest menace and work done collectively to increase agricultural production, the Ministry of Agriculture and Forests urges in its call.—*NAB*
FUSARIUM BARK DISEASE THREATENING COFFEE CROP

Salisbury THE SUNDAY MAIL in English 10 Sep 78 p 5

[Article by Frederick Cleary: "Coffee Disease More of a Worry Than Terrorists for Chipinga Farmers"]

[Excerpts]

"WE HAVE been fighting this battle for years now," said the farmer. "We have got to win if we are to stay in business." Despite the gun at his side and he lives in Chipinga, one of the "hottest" war zones in the country, the farmer was not referring to the terrorist situation.

He was more concerned with fusarium bark disease, which is threatening the vast coffee estates in the Chipinga area.

Coffee is one of the most valuable products in the Rhodesian agricultural industry, with farmers currently getting $1500 a tonne, but it was fetching as much as $2500 a tonne a year ago.

Real menace

"If only we can conquer this fusarium disease," said Mr Mills during a tour of the Chipinga experiment station, where scientists are searching hopefully for a solution.

Finding its way into Rhodesia from Malawi many years ago, it has slowly developed into a real menace, eating into the bark of the bush and killing areas around it.

Short-term hopes are to find the right pesticides to combat it, while long-term research is being made into the genetic aspect.

Some coffee farmers are taking precautions by introducing or developing their tea crops — a far easier and sturdier crop to grow, which also pays off handsomely.

But coffee is still the real money-spinner, and one Salisbury African businessman who also farms in the Mount Darwin district took away a packet of 600 coffee seeds.