Annual report of the Public Health Department / Zanzibar Protectorate.

ZANZIBAR PROTECTORATE.

ANNUAL REPORT

ON THE

MEDICAL, SANITARY AND BIOLOGICAL DIVISIONS

FOR THE YEAR

1925.

ZANZIBAR:

PRINTED BY THE GOVERNMENT PRINTER.

1926

OFFICE OF THE DIRECTOR OF
MEDICAL AND SANITARY SERVICES.

Zanzibar, 25th March, 1926.

Sir,

I have the honour to submit, for the information of the British Resident and for transmission to the Right Honourable the Secretary of State the Medical Report on the Health and Sanitary condition of the Zanzibar Protectorate for the year 1925, together with the returns, etc., appended thereto.

I have also the honour to submit the Annual Report of the Veterinary Division.

I have the honour to be,

Sir,

Your obedient servant,

B. SPEARMAN,

Acting Director of Medical and Sanitary Services,

Zanzibar Protectorate.

The Honourable,

The Chief Secretary to the Government,

Zanzibar Protectorate.

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ZANZIBAR PROTECTORATE.

Medical Report 1925.

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age 3. The work of the town was performed by one Medical Officer only, until the arrival of the Surgical Specialist in September. During the period the attendances fell off considerably as one man could not do the work but they soon increased when the Surgical Specialist took over duties.

48.963 with 127 deaths attended Hospitals and dispensaries during the year against 40.247 with 123 deaths in 1924.

Additional dispensaries were opened during the year. These were under the charge of a dispenser whose work was supervised by the Medical Officer visiting the dispensaries weekly. It is hoped to open additional ones in the near future.

Page 5. Malaria.

3321 cases with 7 deaths were recorded against 3004 with 3 deaths in 1924.

Page 6. The economic Biologist made a study of Malaria during the year, nearly 100% of children under 2 years of age are considered to be infected.

Blackwater Fever.

3 cases with 1 death against 4 cases 2 deaths in 1924.

Page 7. Dengue Fever.

A severe epidemic occurred 447 cases (32 being Europeans) were treated at the Hospital.

Page 8. Filariasis.

This is widespread. 33% of night bloods examined were infected. Elephantiasis, Lymphangitis, etc. are common.

Page 9.

Enteric Fever.

3 cases occurred no deaths.

Page 9.

9. Smallpox.

Only 3 cases occurred.

Tuberculosis.

132 cases were reported against 167 in 1924.

Page 11. No European death was recorded.

Vital statistics.

There was an excess of deaths over births of 199. Registration is compulsory but unreliable.

Page 12. Sanitation.

A land drainage decree was passed, providing for drainage of lands to reduce mosquito-breeding.

Vaccination

15.847 persons were vaccinated.

Page 13. Hookworm.

Propaganda has been carried on. Model latrines have been provided.

Page 14. The sanitation suffered from the absence on leave of the Sanitary Superintendent.

Page 14. The two most urgent sanitary needs are efficient sewage disposal, and removal of building in congested areas.

Page 15. 2 additional sanitary inspectors are necessary. The Committee will wish to recommend the appointment of the same.

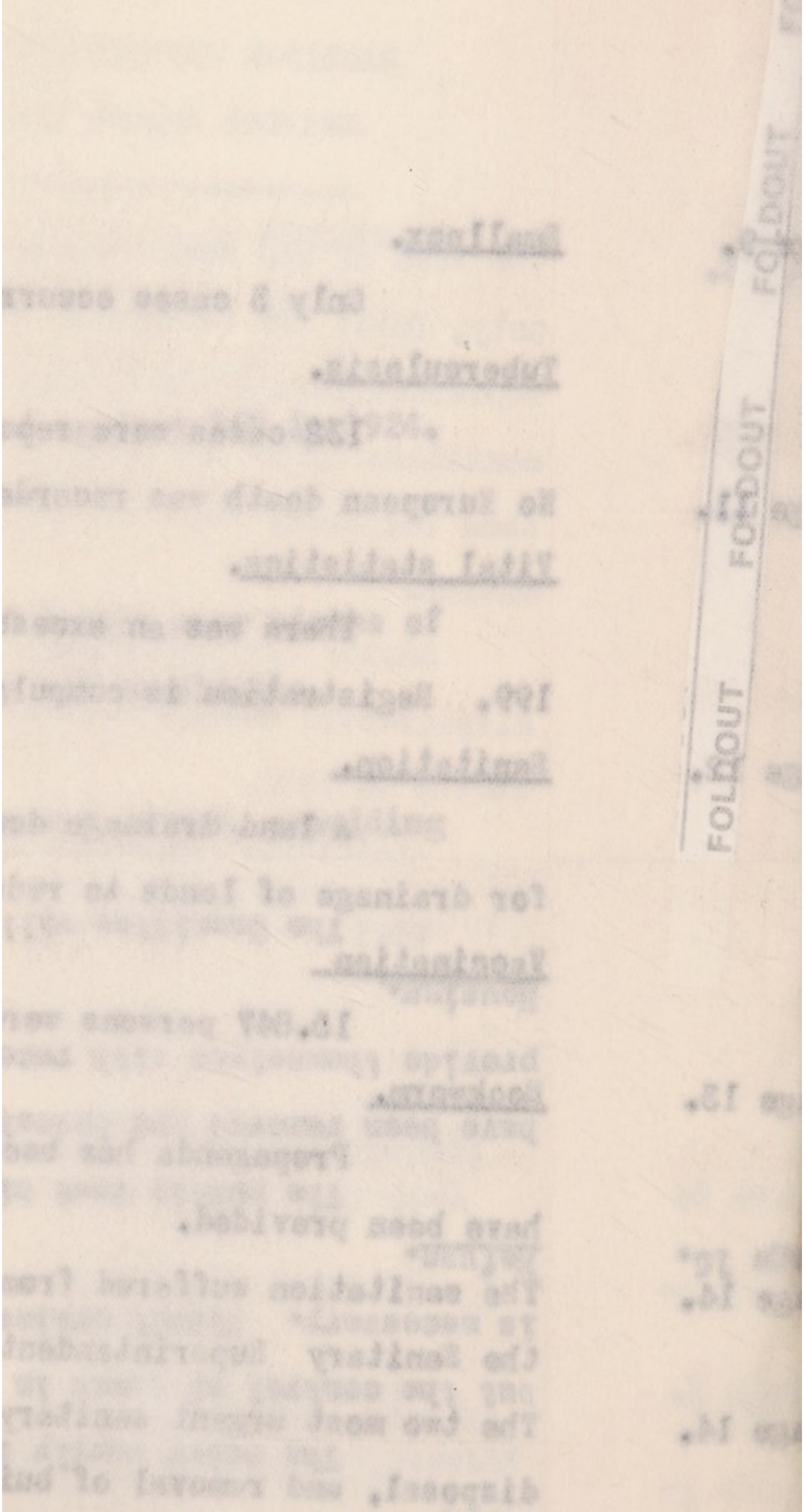
The water supply is reported to be satisfactory, but the control of lands in the vicinity of the springs is necessary. Street drains are required.

Page 16. Refuse.

The public dust bins were so abused that they have been removed and householders have been notified to provide themselves with receptacles.

Housing.

The Committee will be pleased to note that


FOLDOUT
FOLDOUT
FOLDOUT

a draft building decree will be enacted which will strengthen the hands of the Senior Sanitary Officer. Models of approved types of huts have been built.

ge 17. Markets.

The dust nuisance is bad, some form of water-cart tarring or oiling should be provided around the markets.

ge 24. School buildings.

Water flush system has been introduced into the schools.

ge 24. Laboratory.

An Assistant Sanitary Officer is necessary to enable the Senior Sanitary Officer to devote more time to laboratory work.

ge 30. Dental Service.

A Dental Surgeon visits from Tanganyika for 4 months in the year as they have 2 Government Dental Surgeons there.

ge 31. Recommendations.

The Committee will wish to endorse the recommendations when funds are available especially. (1) A.B. and E. also the provision of a larger Quarantine Station, a Tuberculosis settlement, and a motor refuse waggon.

ge 35. Financial.

Expenditure medical division £10.16.3, Sanitary and Biological division £16.872.

ge 61. 29 cases of Elephantiasis came for treatment at Chake Chake. A Horsfall incinerator was erected, it is hoped it will mitigate the fly nuisance.

age 70. Leper Settlement.

The work of building a permanent Leper Settlement is progressing satisfactorily, about 78% of the lepers attend Miss Philpot for treatment, she is to be congratulated on the work she has done.

Page 72. Appendix III.

A complete malaria survey is in preparation. The present report will be read with interest. The infection from Malaria and Filaria is high.

Page 81. Paris Green was used with success. It is to be hoped that the recommendations of the Economic Biologist will be carried out.

(Initld.) G.J.R.

14.12.26.

ZANZIBAR PROTECTORATE.

REPORT ON THE MEDICAL, SANITARY AND BIOLOGICAL DIVISIONS.

FOR THE YEAR 1925.

SECTION I.

ADMINISTRATION.

STAFF.

The establishment for 1925 as sanctioned in the estimates was as follows:—

EUROPEANS.

One Director of Medical and Sanitary Services
One Surgical Specialist
Six Medical Officers
One Senior Sanitation Officer
One Port Medical Officer
One Economic Biologist
One Sanitary Superintendent
One Matron
Six Nursing Sisters

ASIATICS.

One Chief Sanitary Inspector
Seven Sub-Assistant Surgeons
Six Dispensers
Twenty-five Sanitary Inspectors
One Vaccinator
One Chief Clerk
One Cashier
Six Clerks
One Storekeeper
One Assistant Storekeeper
One Senior Laboratory Assistant
One Laboratory Assistant
One Inspector of Dead
Two Sanitary Overseers
One Engineer and Foreman

NATIVES.

One Dispenser
One Assistant Dispenser
Eighteen Apprentice Dispensers
Hospital and Dispensary Attendants
Infectious Disease Hospital Attendants
Vaccinators
Menial Staff

APPOINTMENTS.

EUROPEANS.

Dr. O. H. Watkins-Pitchford, Medical Officer, from 19th February, 1925.

Dr. S. M. Vassallo, Resident Surgical Officer, from 22nd September, 1925.

Dr. W. H. Smith, Port Medical Officer, from 30th December, 1925.

ASIATICS.

Sub-Assistant Surgeon, Dinanath Koura, from 22nd June, 1925.

ACTING APPOINTMENTS.

Dr. B. Spearman, Senior Sanitation Officer as Director of Medical and Sanitary Services, from 13th July, 1925, to end of year.

Dr. J. M. Semple, Medical Officer, as Senior Sanitation Officer from 15th July to end of year.

RETIREMENTS.

ASIATICS.

Mr. Vrijlal M. Pandit, on 30th October, 1925.

Mr. Bhicoo Arjun, on 6th December, 1925.

DEATHS.

Laboratory Assistant, Ramji Das, 18th February, 1925.

LEAVE.

Dr. J. A. Taylor, Director of Medical and Sanitary Services, from 12th July to end of year.

Dr. W. A. Young, Medical Officer, from 9th June to end of year.

Mr. P. Cairns, Sanitary Superintendent, from 5th August to end of year.

Miss M. Gittins, Nursing Sister, from 1st January to 4th September, 1925.

Miss G. M. Rainey, Nursing Sister, from 18th May to 20th November, 1925.

Miss I. Pegg, Nursing Sister, from 8th October to end of year.

Miss A. S. Milne, Nursing Sister, from 25th November to end of year.

SECTION II.

PUBLIC HEALTH.

A. General Remarks.

Until the arrival of the Surgical Specialist, Dr. Vassallo, in September, the work of the Native and European Hospitals in Zanzibar Town was performed by one Medical Officer only (Dr. Young from January to May, and Dr. Scott from May till September). This work includes visiting patients when necessary in their own homes. It is quite impossible for one officer to do this work satisfactorily single handed, and a diminution in the work done at the Hospital was inevitable. With the arrival of the Surgical Specialist at the end of September the attendance very soon began to increase.

The total number of cases treated at all Government Hospitals and Dispensaries was 48,963 with 127 deaths as compared with 40,247 cases with 123 deaths in 1924 and 38,156 cases with 148 deaths in 1923.

District Dispensaries.

During 1925, District Dispensaries were in operation at the following places in the Island of Zanzibar:—

1. Selem
2. Mahonda
3. Mbiji
4. Chwaka
5. Mangapwani
6. Mwera
7. Machui
8. Kizimkazi

In the Island of Pemba two were opened, as follows:—

1. Kengeja
2. Jambangome

The average number of cases treated monthly at each dispensary has been about 150 new cases and 300 repetition cases.

The Dispensaries at Selem, Mbiji, Kizimkazi and Kengeja have been specially built for the purpose. At Mahonda, Mangapwani, Machui, Chwaka and Jambangome the work is carried on in existing buildings acquired and altered to serve as Dispensaries. Each consists of two apartments, one for the treatment of out-patients, and the other for accommodating occasional in-patients.

Each Dispensary is managed by a Native Dispenser who has a house beside the Dispensary. All the Dispensers have a sufficient knowledge of English to keep a register of the names of patients with their diseases and treatment.

Each Dispensary is supplied with stock mixtures, etc., ready for dispensing and labelled with directions for their use,

Before being posted to take charge of a District Dispensary, each Dispenser undergoes a term of training in his duties at the Central District Dispensary and Native Hospital at Zanzibar, and generally is sent for a few months to assist at one of the existing Dispensaries. Their education is furthered by the issue of pamphlets on special subjects pertaining to their duties, written in simple language (English for some of the boys, Swahili for others), and by instructions given by the Medical Officer who visits most of the Dispensaries weekly.

Considerable pains are taken to teach the Dispensers the essentials in the recognition, treatment and prevention of the two prevalent diseases of these islands, viz. Malaria and Ankylostomiasis.

There is no doubt that these dispensaries are appreciated by the natives and fill a real need. It is hoped that it will be found possible in the near future to open similar dispensaries in other districts.

Table A.

The following table shows by Stations the total number of cases, with deaths, treated at Government Hospitals and Dispensaries during the years 1924 and 1925.

Stations.	1924.		1925.	
Zanzibar Island.	Cases.	Deaths.	Cases.	Deaths.
Zanzibar ...	13,841	65	16,544	76
Selem ...	2,046	—	1,660	—
Mkokotoni ...	2,928	2	2,881	1
Mwera ...	1,174	—	1,263	—
Chwaka ...	1,237	—	1,425	—
Machui ...	1,228	—	1,740	—
Mahonda ...	546	—	1,446	—
Mbiji ...	1,480	—	2,872	—
Kizimkazi ...	—	—	673	—
Mangapwani ...	—	—	1,756	—
Pemba Island.				
Weti ...	3,905	23	3,464	15
Chake Chake ...	7,479	30	8,049	30
Mkoani ...	4,331	3	3,355	1
Kengeja ...	—	—	1,557	—
Jambangome ...	—	—	278	—
	40,247	123	48,963	123

1. General Diseases.

During the year, 490 cases of Anæmia and 548 cases of Debility, usually the results of Ankylostomiasis, were treated. Ten cases of Debility ended fatally. In Zanzibar Township 293 deaths were registered as due to Debility and 35 as due to Anæmia. Two cases of Diabetes, with no death, were treated as compared with six cases with one death in 1924. Two deaths from this disease were registered in Zanzibar during 1925.

2. Communicable Diseases.

(a) Mosquito or Insect-Borne.

Malaria.—During the past year 3,321 cases with seven deaths were recorded as compared with 3,004 cases with three deaths in 1924 and 3,072 cases with one death in 1923. In Zanzibar Town 226 deaths were registered as due to this disease as against 155 in 1924.

The cases treated last year were diagnosed microscopically and clinically as follows:—

Benign Tertian	...	1,240
Sub-Tertian	...	1,956
Chronic	...	125

Table B.

The following table shows the number of cases of malaria treated at each station during 1923, 1924 and 1925:—

Stations.		1923.	1924.	1925.
Zanzibar Island.				
Zanzibar	...	1,301	1,340	1,170
Selem	...	104	84	126
Mkokotoni	...	86	266	198
Mwera	...	11	28	130
Machui	...	72	84	142
Chwaka	...	10	73	10
Mahonda	...	—	16	108
Mbiji	...	—	46	—
Mangapwani	...	—	—	62
Kizimkazi	...	—	—	36
Pemba Island.				
Weti	...	439	256	268
Chake Chake	...	699	558	707
Mkoani	...	350	253	310
Kengeja	...	—	—	45
Jambangome	...	—	—	9
		3,072	3,004	3,321

Wherever possible the diagnosis of Malaria is not made without a microscopical examination, thick films being taken for diagnosis and thin films for classification.

The Economic Biologist has made an intensive study of Malaria throughout the year. A reference to his report (Appendix III) will give a true idea of the widespread nature of the disease throughout the Island of Zanzibar as he has examined groups of children in practically every part of the Island. An examination of the blood films thick and thin taken from native children shows that 65.4% of these children harboured malarial parasites. The total number examined was 1,362 of an average age of 6—7 years. Had their average age not exceeded two years it is reasonable to suppose that the rate of infection would have been 100%. Although the children were not examined medically the great majority appeared to be suffering from no constitutional disturbance.

From the above, however, it must not be concluded that Malaria is not a disease and death-producing factor among the native population. The natives, especially the elders, insist that all get fever from time to time, and that the frequency and severity of the attacks are variable, and worse, as is only to be expected, after the rains. The children, especially the youngest, suffer most severely and frequently have convulsions and die. The natives in general are learning the value of Quinine and frequently make requests for it. With the opening of the District Dispensaries increased opportunities are afforded the natives of obtaining this and other medicines. To open more dispensaries, especially in the large centres, like Uzini and Makunduchi, appears to be therefore, a very necessary measure.

Black Water Fever.—Three cases occurred with one death as compared to four cases with two deaths in 1924.

Nationality:—All were Asiatics (British Indians). Sex:—all males, Age:—respectively 23, 35 and 60. None had had previous attacks.

Locality, Predisposing and Exciting Causes:—Two were light-house keepers at Mwana Mwana and Kigomacha. These places are intensely malarial, and the Kigomacha case, which ended fatally, is said not to have been free from fever for two years.

Seasonal Incidence:—The cases occurred in March, October and November respectively.

TABLE C.

The following table shows the monthly incidence of Malaria and Blackwater Fever cases:—

	No. of Cases of Malaria treated.	Blackwater Fever Cases.
January	293	—
February	350	—
March	308	1
April	207	—
May	301	—
June	312	—
July	231	—
August	224	—
September	215	—
October	295	1
November	246	1
December	333	—
Total Cases	3,315	3

Dengue Fever.—A somewhat severe epidemic occurred during April, May and June. The Total number of cases treated at the Government Hospital during the year was 447. Of these 32 were Europeans.

The monthly incidence is shown below:—

January	—
February	—
March	—
April	118
May	285
June	36
July	4
August	1
September	2
October	1
November	—
December	—
	447

The cases were severe with sudden onset, typical rashes and joint pains. Relapses were frequent. Distressing sequelae were marked debility and persistent rheumatic pains, which were felt for months after, and in some cases were almost crippling in their severity.

The epidemic was wide-spread along the East African coast, but Pemba largely escaped.

Undefined Fever.—During the year 563 cases were treated as compared with 338 cases in 1924 and 557 in 1923. Undoubtedly most of these were cases of atypical Dengue, and the remainder either Influenza or Malaria, or possibly Sandfly Fever.

Filariasis.—Is widely spread throughout the town and districts. According to the report of the Economic Biologist (Appendix III) 20% of the Culices dissected are infected with Mf. bancrofti. Of the total number of night bloods examined (1015) over 33% or one-third of the total were infected. It is not therefore surprising that elephantiasis, filarial lymphangitis, abscesses, orchitis and hydrocele are common diseases throughout the Protectorate. The various manifestations of filarial infection are however more prevalent in the towns than in the country districts. This of course is due to the far greater number of breeding places—cesspools, drains etc. that are found in the town as compared to the country. As has been mentioned in previous reports, the culex problem is essentially a drainage problem, and whilst the number of culices can be greatly diminished by systematic oiling of cesspools etc. and constant vigilance, their complete elimination or even suppression to negligible quantities under present conditions cannot be hoped for.

(b) Infectious Diseases.

TABLE D.

The subjoined table gives the number of the more important epidemic diseases notified during the past and two previous years.

	1923.		1924.		1925.	
Diseases.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Beri Beri	3	1	3	1	3	—
Cerebro-Spinal Meningitis	2	1	—	—	2	1
Disentery	24	—	19	1	74	3
Enteric Fever	6	—	—	—	3	—
Gonorrhoea	797	—	944	—	989	—
Influenza	290	—	138	4	359	—
Leprosy	31	—	41	—	14*	—
Pneumonia	101	11	39	12	77	9
Small-Pox	236	60	10	1	3	—
Syphilis	263	—	239	—	250	—
Tetanus	—	—	1	1	8	2
Tuberculosis	90	10	132	10	130	8
Yaws	209	—	429	—	492	1

*13 removed to Leper Settlement and one repatriated to India.

It will be noted that influenza and its allied complaint pneumonia show a marked increase in incidence rate but a decrease in mortality rate.

There is also a great diminution in the number of lepers reported.

TABLE E.

The following table shows the number of cases of Small-pox in Zanzibar and Pemba during the last four years.

	1922		1923		1924		1925	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Zanzibar Island	167	54	203	56	9	1	3	—
Pemba Island	10	—	33	4	—	—	—	—
	177	54	236	60	9	1	3	—

TABLE F.

The following table shows the number of deaths reported from Tuberculosis in Zanzibar Town during the past four years.

	Reported by Qualified. Practitioners.	Reported by Unqualified. Practitioners.	Total.
1922	22	141	165
1923	30	155	185
1924	30	137	167
1925	29	103	132

(c) Helminthic Diseases.

The following table shows the number of cases treated as compared with the two previous years:—

TABLE G.

	1923.	1924.	1925.
Bilharzia	130	114	138
Ascaris	50	32	30
Filaria	274	185	109
Ankylostomiasis	2,511	3,172	3,747
S. Intestinalis	12	10	—
Taenia Saginata	—	—	5
Other Diseases	28	8	2
	3,005	3,521	4,031

3. Local Diseases.

The principal diseases recorded under this heading were as follows:—

Neuralgia	727	Hepatic Congestion	282
Conjunctivitis	800	Ascites	8
Cataract	53	Splenitis	180
Coryza	206	Urethritis	59
Bronchitis	3,688	Hydrocele	347
Asthma	140	Orchitis	290
Dental Caries	1,762	Myalgia	631
Appendicitis	4	Ulcers	7,116
Hernia	184	Scabies	1,661
Constipation	4,009		

B. European Officials.

During the year 180 cases of illness were recorded among the European Officials, and for 68 of these the patients were placed off duty.

The principal causes of illness were:—

Dysentery	1	Tonsillitis	12
Influenza	14	Respiratory Diseases	6
Malaria	10	Digestive Diseases	35
Undefined Fever	1	Injuries	11
Debility	4	Dengue	17
Pharyngitis	10		

Table H.

Table showing the Sick, Invaliding and Death Rates of European Officials for 1923, 1924 and 1925.

	1923.	1924.	1925.
Total number of official residents	112	116	128
Average number resident	76	74	84.5
Total number on sick list	123	110	78
Total number of days on sick list	487	544	467
Average daily number on sick list	1.33	1.49	1.28
Percentage of sick to average number of resident	1.75	2.00	1.51
Average number of days on sick list for each patient	3.96	4.95	5.99
Average sick time to each resident	6.41	7.85	5.52
Total number invalided	5.00	1.00	5.00
Percentage of invalidings to total number resident	4.46	0.86	6.40
Percentage of invalidings to average number resident	6.58	1.35	4.23
Total deaths	3.00	1.00	0.00
Percentage of deaths to total residents	2.68	0.86	0.00
Percentage to average number resident	3.95	1.35	0.00

Medical Boards.—Five Medical Boards were held during the year, and five officers were invalided for the following conditions, Cholecystitis, Malaria (2), Hæmoptysis, Appendicitis. No officers were permanently invalided from the service.

C. General European Population.

The total number of Europeans (Officials and non-Officials) treated at Government Hospitals and Dispensaries was 330 with no deaths as compared with 366 with one death in 1924 and 569 with 3 deaths in 1923.

The principal causes of illness were:—

Dengue	32	Respiratory Diseases	13
Dysentery	1	Digestive Diseases	10
Influenza	17	Myalgia	5
Malaria	25	Skin Diseases	28
Tuberculosis	3	Undefined Fever	6
Coryza	24		

Deaths—No death of European was recorded last year.

Births—Four births occurred during the year.

D. General Native Population.

Vital Statistics.

There is little to add to the remarks under this heading in the 1924 report, and it is unsatisfactory to note that the deaths registered throughout the whole Protectorate still exceed the births. Reference to Table III page 37 will show that the excess of deaths over births for last year was 199 as compared with 196 in 1924 and 1554 in 1923.

In Zanzibar Island the deaths last year exceeded the births by 955 in Zanzibar Town and by 78 in the Districts, making a total of 1033. In 1924 the deaths in the Town exceeded the births by 542 whereas in the Districts the births exceeded the deaths by 344. The small number of births registered in the Town is partly due to the fact that it is the custom of native women to go into the districts for their confinements.

In Pemba Island the births last year exceeded the deaths by 834 as compared with an excess of only 2 in 1924.

The Registration of births and deaths is compulsory, but cannot be considered very reliable.

SECTION III.

SANITATION.

A. General Review of Work Done.

1. *Administration.*

(1) *Staff.*—Dr. B. Spearman, Senior Sanitation Officer, until July, 13th.

Dr. J. M. Semple, Acting Senior Sanitation Officer, from July 13th to December 31st.

(2) *Legislation.*—The Land Drainage Decree, 1925. A Decree to provide for the draining of lands with a view to the reduction of mosquito-breeding areas.

2. *Preventive Measures.*

(1) Mosquito and Insect-Borne Diseases—Anti-malarial and anti-mosquito work was carried out by the Economic Biologist throughout the year and an account of the work done is given in his report.

(2) Infectious or Epidemic Diseases.

Small-Pox. A total of 3 cases (all males) occurred during the year with no deaths. Two of these were removed from ships and one was a mild case from the Mkokotoni District. No cases occurred in Tumbatu Island or Pemba.

Vaccination.—This has been continued without intermission throughout the year. In Zanzibar Island 10,887, and in Pemba Island 4,960 persons were vaccinated during the year, making a total of 15,847 for the whole Protectorate.

Owing to the prevalence of small-pox in Bombay and to the fact that four ships from that port arrived with small-pox on board, a large proportion of the passengers arriving by the Bombay—Durban boats had to be vaccinated.

An epidemic of small-pox occurred in Mombasa during the early part of the year and all passengers from that port not carrying proof of successful vaccination were vaccinated, as were also those persons proceeding from here to Mombasa.

All this work involved the use of a large amount of vaccine and fully occupied the time of the vaccinating staff, who had to neglect the town and district vaccinations to a certain extent during the period of the Mombasa epidemic and while the Quarantine Island was occupied.

Lymph is obtained from Bombay and Dar-es-Salaam. 20,000 doses came from the former and 1,000 from the latter during 1925. The results from both varieties of lymph have been quite satisfactory

as far as could be ascertained. On account of the large numbers presenting themselves at the Health Office for vaccination it is hard to ensure that the lymph is not wiped off by the patient before it has had time to dry, and many of those vaccinated are not seen again in any case.

TABLE J.

Table showing the number of persons vaccinated during the year 1925.

1. IN ZANZIBAR ISLAND.

Month	Town	Steamers	Dhows	Mkokotoni	Total
January	263	500	383	1,521	2,667
February	197	278	228	1,157	1,860
March	348	203	145	—	696
April	206	67	58	—	331
May	267	37	49	—	353
June	485	31	52	—	568
July	1,088	28	17	—	1,133
August	1,430	28	13	—	1,471
September	455	33	19	—	507
October	417	16	72	—	505
November	360	22	76	—	458
December	215	23	100	—	338
Total	5,731	1,266	1,212	2,678	10,887

2. IN PEMBA ISLAND.

Chake Chake District	...	1,615
Weti District	...	3,048
Mkoani District	...	297

Amoebic Dysentery.—Entamoeba Histolytica was found in 14.6% of suspected cases and in 0.6% of the total number of stools examined.

(3) *Helminthic Diseases.*

Ankylostomiasis.—Propaganda concerning this disease has been disseminated from the District Dispensaries.

Model latrines with cement tops have been built at the Government's expense at the houses of the Masheha of the more important villages. It is hoped by this means to stimulate the building of cement latrine tops among the general native population. The use of these cement tops on the native latrines is a most important factor in the elimination of Ankylostomiasis and it is gratifying to record that during the past year no less than sixteen latrines of the approved pattern have been built by private enterprise throughout the Island of Zanzibar.

Other Helminthic Diseases.—Ascariasis continues to be, after ankylostomiasis, the most common of the helminthic diseases and accounts for over 6% of these.

3. General Measures.

(a) *General Sanitation.*

The work of this Department suffered considerably during the latter third of the year owing to the absence on leave of the Sanitary Superintendent and to the fact that there was no one to take his place.

It has still only been possible, owing to shortage of staff, to deal with the more glaring nuisances, and the general conditions under which the majority of the Town's inhabitants live continue to be most unsatisfactory.

These people, the majority of whom are of the lowest castes, have little appreciation of the value of sunlight and fresh air, and even if they desired to avail themselves of these they would find that they were confronted with two very great difficulties, the first being due to the lay-out of the Town with its high buildings and narrow, tortuous streets, streets into which the direct rays of the sun seldom penetrate and in which the air is seldom changed but remains in its vitiated state from year's end to year's end. And the second to restricted building area and consequent high rents whereby whole families are forced to live in one ill-lighted and worse-ventilated room. While public opinion tolerates such a condition of affairs the efforts of this department to improve the physical conditions under which the majority of the population live will continue to be met with indifference, misunderstanding, or opposition. But that this department is really anxious to improve their lot is being realised gradually by some of the real sufferers who are more and more frequently drawing our attention to the insanitary evils which they have to bear.

It is gratifying to record that in the majority of cases—with the help of a sympathetic magistracy—a very material improvement has been effected in the dwellings of the complainants. But much remains to be done and the two crying needs of this Town still remain, an efficient system of sewage disposal and efficient street ventilation. Until the streets are ventilated no amount of windows can improve the ventilation of the houses. As a means to this end all applications to increase the height of houses have been objected to by this department, as have also applications to build on vacant plots in the centre of the town. Such few vacant plots, and plots occupied by one storeyed buildings, as are scattered about the town are its only "breathing spaces" and should be rigorously preserved and when possible the number should be increased.

A bacteriological analysis of the air in different parts of the town was begun during the latter part of the year, but owing to the heavy and continuous rains the work had to be temporarily abandoned and sufficient data has not been obtained on which to make a report.

The question of insanitary earth-floored camel sheds has been dealt with and a ruling obtained that all camel sheds in the township must have properly drained cement floors.

The average number of inspectors available for district work has been four, which is quite insufficient for the carrying out of a proper house to house inspection. Two other Sanitary Inspectors were employed, one in the Magistrate's Court to deal with prosecutions for failure to comply with notices, and one in the Milk Depot.

It is much to be regretted that the unsatisfactory system of only dealing with the most urgent nuisances has had to be continued throughout the past year. This is unavoidable until the personnel of the outdoor staff is of adequate size and sufficient experience.

(*b*) *Water Supply.*

The water supply continues to be satisfactory and much above the average for a city on this coast.

But a focus of possible serious contamination exists at the springs and a word of warning is necessary that the purity of Zanzibar water cannot be maintained by repute alone but that money and labour are emphatically necessary.

The question of control of undergrowth and draining off of surface water in the vicinity of the springs requires the greatest care and attention in view of the vital importance of a pure water supply.

During the years 23 samples of water taken at Bububu were examined bacteriologically of which 6 samples showed B. coli in 50 c.c., one sample showed B. coli in 25 c.c., and one sample in 2 c.c.

(*c*) *Drainage.*

Little improvement, beyond maintenance, has been effected and the drainage of the town in general continues to be carried out ineffectually by an intricate system of cesspools and sewers.

Most of the rain water drains have long since lost whatever continuity of grading they once possessed and now run in switchback fashion, the hollows continuing to hold water long after rain has ceased thereby affording excellent breeding places for mosquitoes. It is of course impossible to deal with these collections of water except by re-laying the drains.

The bazaar house privy described in previous reports continues to flourish but the masonry pipes so beloved of the indigenous population are being slowly but surely replaced by cast iron pipes and efficient reinforced cement concrete covers are insisted upon for the cesspools and choopits.

(d) *Removal of Refuse.*

This continues to be carried out as described in the 1923 report.

In the Ngambo area it is impossible to take the carts of refuse as far as the incinerator and it has been the practice to dump the refuse on some low-lying land at Mosque Simba. This is causing such a nuisance now that steps must be taken to dispose of refuse elsewhere. As this would again give rise to nuisances the only alternative is a motor refuse waggon which could travel along the roads skirting and traversing Ngambo and into which the contents of refuse carts could be transferred for transport to the incinerator.

As mentioned in previous reports, public dustbins have been found to be so abused that they have now all been removed and householders served with notices to supply their own. This measure met with a certain amount of opposition, but was supported by the legal authorities and the population have begun to realise that it is cheaper in the long run to supply themselves with dustbins when required to do so than to wait until they are summoned.

(e) *Housing.*

There has been no improvement in the congestion in the town of Zanzibar and tuberculosis continues to take its avoidable toll of human lives.

In spite of the very obvious overcrowding not only of individuals in houses but of houses to the acre, and in spite of the great height of the buildings and the extreme narrowness of the streets, it is very difficult to prove in a court of law that increasing the height of buildings and erecting new buildings on open spaces are acts which increase the existing evil and are detrimental to the public health.

The powers of the Senior Sanitation Officer under the present building decree continue as heretofore to be vague and unsatisfactory, but a draft building Decree was submitted by the Sanitary Advisory Board to the Government on March 31st, which, when promulgated, will rectify this. The other matters considered by the Sanitary Advisory Board were offensive trades, trade licenses, and control of hawkers of foodstuffs. All these questions were discussed and eventually dropped, the question of controlling hawkers alone progressing as far as the submission of draft rules to the Advisory Council. However the Council were not prepared to recommend the adoption of these measures and the matter remains in abeyance.

This department's endeavours to make the native build huts of a reasonably sanitary type is still without legal support and though all applications to the Public Works Department for permits to build huts are submitted to the Senior Sanitation Officer the fact that he records his disapproval of the projected hut cannot prevent the applicant building it, nor does his disapproval give the Public Works Department authority to refuse a permit. However, a certain amount of good has been effected by persuasion and huts of an approved type are being built on a site near the Polo ground.

(f) Police Lines.

The building of new lines was practically completed this year, and the two new "smoke latrines" mentioned in the 1924 report together with another similar one were completed by December 31st, but were not in use before the end of the year.

(g) Slaughter House.

The slaughter house has been found to be satisfactory in every respect throughout the year.

Ante-mortem inspection of cattle, and meat inspection are carried out as before by the Veterinary Officer, in whose report particulars will be found.

The method of carriage of meat from the slaughter house to the market continues to be primitive and far from satisfactory, but without suitable legislation this cannot be remedied.

(h) Markets.

Regular inspection has been continued during the year. A passage way was made behind the meatstalls to enable the butchers to stand behind their stalls when selling meat and lockers were provided under the stalls for the storage of knives, scales, etc.

The dust nuisance is worse than ever, and dust probably laden with Tubercle Bacilli finds its way on to every article of food in the market.

Milk continued to be sold in the Estella market, and particulars will be found in Section 3 (j).

(i) Foodstuffs.

Table IV No. 19, gives the quantities of foodstuffs examined and condemned. Excluding meat, the total number of items examined by the Senior Sanitation Officer during the year was 3108 of which 959 were condemned.

(j) Cowsheds and Dairies.

The model cowsheds at Mji Mpia were fully occupied throughout the year and the regular dipping of cattle was carried out without any further objections on the part of the owners.

Six new sheds were built, but as there is some difficulty about draining them they are not yet available for occupation. As an experiment, to ascertain the practicability of utilising the natural absorbent properties of the ground, one new shed has been occupied and the waste water and urine are being allowed to flow over the ground round the shed, but as the experiment has only lasted for a week so far, no conclusions can be drawn this year.

The sale of milk by the Health Office has proved a great success but the majority of customers are Europeans and the richer Arabs and Indians. The poorer inhabitants say that they cannot afford the time, or the time of a boy, to fetch milk from the market, and consequently this class continues to buy milk from itinerant vendors over whom there is very little control.

The work of the milk depot has been carried out during the year by the members of the Health Office Staff, the whole time of one Sanitary Inspector being taken up with the work.

4. Poor Asylum.

This is under the care of the Roman Catholic Mission and two Sisters are on duty there daily. It serves a very useful need in caring for a large number of incurable cases. The Natives of the surrounding district are treated there by the sisters in considerable numbers daily for all varieties of diseases and accidents. Visits are paid at least once a week by a Medical Officer and once a week by a Sub-Assistant Surgeon.

The following table gives the number of in-patients treated during the year and shows an increase of 101 admissions over the year 1924.

Table K.

Particulars.	Males.	Females.	Total
Remaining on 1st January, 1925	... 54	38	92
Admitted during the year	... 353	71	424
Died during the year	... 69	35	104
Discharged during the year	... 258	30	288
Discharged at own request	... 12	5	17
Remaining at the end of the year	... 68	39	107

5. Leper Settlements.

Table L.

The following table shows the number of lepers of each sex segregated in the different settlements at the end of 1924 and 1925.

Settlement.	1924.			1925.		
	Males.	Females.	Total.	Males.	Females.	Total.
Funzi	37	36	73	51	39	90
Nduni	15	9	24	12	7	19
Pujini	22	22	44	20	20	40
Kengeja	12	12	24	8	12	20
Fufuni	4	2	6	3	—	3
Total	90	81	171	94	78	172

During the year, 14 new cases were discovered in Zanzibar Island and 12 in Pemba. Of these 25 were sent to Funzi and one, an Indian, was repatriated.

The following table compares particulars of Funzi Settlement with the previous year:—

Funzi Leper Settlement.

TABLE M.

	1924.			1925.		
	M.	F.	Total.	M.	F.	Total.
Remaining on 1st January	27	37	64	37	36	73
Admitted during the year	23	10	33	18	7	25
Died during the year	10	5	15	4	2	6
Discharged during the year	—	—	—	—	1	1
Escaped during the year	4	5	9	—	1	1
Remaining on 31st December	37	36	73	51	39	90

6. PORT QUARANTINE SERVICE.

There was an increase over the previous two years in the number of steamers arriving in this port.

Three mail steamers from Bombay arrived in quarantine during the year having developed small-pox on board before reaching Mombasa.

The epidemic of small-pox which started in Mombasa in December, 1924, continued until late in 1925, necessitating great vigilance here and involving the vaccination of 1,406 passengers landing from that port.

The Quarantine Station on two of the three occasions on which it was used, was occupied by as many as six and seven hundred persons.

The amount of work that such numbers entail puts a very severe strain upon the resources of the Public Health Division since a complete staff for quarantine purposes cannot be kept idling throughout the year for the sake of four or five weeks' work. Consequently only

a skeleton quarantine staff is kept and individuals are taken off routine work to make the quarantine staff up to strength when required. While the Quarantine station is occupied, therefore, some of the ordinary Public Health work has of necessity to be neglected.

A much needed baggage store for heavy luggage has been sanctioned for the Quarantine station and work is to be begun on it early next year.

Though the accommodation as far as building is concerned is quite good, considerable difficulty is experienced in making the best use of it since the preferences and prejudices of the various races and castes of which the quarantined passengers are composed complicate the allocation of quarters to an almost unbelieveable degree.

TABLE N.

Return of Persons Quarantined in 1925.

	Admitted	TOTAL	Discharged	Died	Remaining	Largest No. on one day	No. of days station occupied	Remarks.
March	449	449	449	...	...	449	12 days	s.s. "Khandalla"
"	707	707	707	...	...	707	12 days	s.s. "Karoa"
May	609	609	609	...	...	609	10 days	s.s. "Khandalla"
Total	1,765	1,765	1,765	...	...			

TABLE O.

Port Sanitation Return 1925.

	Arrivals.			Ships quarantined.	Ships claytonised.	Passengers landed.	Passengers under surveillance.	Number of persons vaccinated.	Persons placed in quarantine.
	British.	Foreign.	Total.						
Steamers—									
January ..	22	13	35	..	..	1,836	..	..	..
February ..	26	8	34	..	..	1,900	..	..	..
March ..	20	12	32	2	2	2,626	..	854	1,156
April ..	24	9	33	..	..	1,817	..	..	..
May ..	28	12	40	1	2	2,037	2	552	609
June ..	25	13	38	..	..	1,355	..	..	..
July ..	27	11	38	..	..	1,243	..	..	..
August ..	34	13	47	..	..	1,834	..	..	..
September ..	27	10	37	..	..	1,405	..	..	..
October ..	28	14	42	..	..	1,889	..	..	..
November ..	25	14	39	..	..	1,978	..	..	..
December ..	25	10	35	..	..	1,662	..	..	..
Men-of-War ..	3	5	8	..	..	..	..	..	..
Total ..	314	144	458	3	4	21,632	2	1,406	1,765
Total for 1924 ..	258	123	381	4	4	20,403	4	739	1,921

TABLE O—*Continued.*

Port Sanitation Return 1925.

	Arrivals.			Dhows quarantined.	Dhows claytonised.	Passengers under surveillance.	Number of persons vaccinated.	Persons placed in quarantine.	Passengers landed.
	British.	Foreign.	Total.						
Dhows—									
January ..	90	28	118	2	2	..	383	31	768
February ..	92	90	182	..	..	..	228	..	1,132
March ..	114	113	227	1	..	..	145	7	1,011
April ..	80	23	103	..	..	..	58	..	506
May ..	80	7	87	..	..	..	49	..	297
June ..	94	6	100	..	..	..	52	..	245
July ..	86	4	90	..	..	..	17	..	366
August ..	101	7	108	..	..	..	13	..	412
September ..	99	8	107	..	..	..	19	..	571
October ..	107	4	111	..	..	..	72	..	552
November ..	87	9	96	..	..	..	76	..	422
December ..	100	19	119	..	..	..	100	..	579
Total ..	1,130	318	1,448	3	2	..	1,212	38	6,861
Total for 1924 ..	1,359	259	1,618	..	..	..	4,685	..	7,411

7. School Medical Service.

The new school clinic was opened in February and the dispensary in July. The dispensary at the Government Primary School was closed in November and all children are now seen at the new clinic and dispensary which is in the grounds of the Government School.

There is a wide field of work among these school children, but it is impossible for one man to give the work the attention it deserves and at the same time carry out the many and varied duties of Senior Sanitation Officer. As mentioned in last year's report the most suitable, efficient, and economical way of carrying out the work of the school clinic is undoubtedly by the employment of a woman Medical Officer who could also undertake ante-natal and child-welfare work which at present cannot be done.

The total number of children examined at the clinic during 1925 was 891, an increase of 626 over the previous year.

The great majority of boys examined in the clinic during the year were Indians, the increase of this race over last year's figure being due largely to the inclusion of the Sir Euan Smith Madressa.

Taking the most important defects the percentages for the various races were as follows:

	Arabs	Swahilis and Others.	Indians.
Lack of cleanliness	21%	29%	44%
Defective teeth	30%	23%	17%
Enlarged tonsils	6%	7%	3%
Defective vision	14%	10%	17%
Enlarged spleen	24%	20%	2%
Parasitaemia	18%	8%	6%

A sub-Assistant Surgeon attends twice daily at the Dispensary and assists in the treatment of minor ailments and injuries.

The following table shows the defects discovered at the routine examinations of all school children.

Table P.

	Arabs.	Swahilis.	Others.	Indians.
No. Examined ...	180	160	81	470
Nutrition defective ...	15	16	6	109
Lack of Cleanliness ...	16	23	18	193
Skin Diseases ...	22	20	10	14
Nose and Throat Defects...	—	1	—	—
Teeth Defective ...	55	39	17	81
Tonsils enlarged ...	11	15	2	12
External Eye-Disease ...	—	—	1	5
Vision-Defective ...	26	13	12	80
Rickets ...	2	—	2	11
Deformities ...	2		—	9
Lymphatic glands enlarged	20	48	7	14
Spleen enlarged ...	43	25	22	8
Blood. M. P. present ...	33	12	7	29
Other disease or defect ...	8	10	6	16
Vaccinations ...	15	38	1	41

TABLE Q.

Showing the ailments treated at the Government School Dispensary:—

Adenitis	20	Ulcers	194
Boils	45	Minor Diseases	354
Bronchial Catarrh	164	Ankylostomiasis	7
Burns	2	Anaemia	9
Contusions	169	Debility	30
Constipation	52	Dental Caries	71
Fever (Malaria)	98	Gonorrhoea	6
Jiggers	64	Hypermetropia	1
Orchitis	9	Influenza	36
Rheumatism	9	Otorrhoea	4
Ringworm	7	Stomatitis	5
Scabies	69	Tonsillitis	21
Whitlow	18	Undefined Fever	120
Sprains	63		
		Total	1,647

SCHOOL BUILDINGS.

All the Government school classes were removed to the new school buildings during the year.

The latrines, as originally constructed, consisted simply of one large pit with direct discharge, but were found unsatisfactory owing to the smell and flies. Various methods of covering the openings in the cement top were tried but without success. Sandbags became filthy and wooden covers were not replaced properly. This type of latrine was therefore given up, and a water flushed system with discharge into the creek introduced. Up to date this has worked satisfactorily and is an immense improvement on the old system.

The Ismaili Khojas' School was again inspected this year by the Director of Education and the Senior Sanitation Officer but the question of new school buildings is still under discussion.

BACTERIOLOGICAL AND PUBLIC HEALTH LABORATORIES.

The work done in the Laboratory during the year was, on the whole, rather more than that done during the previous year but the total number of examinations made is less than that of last year.

This fall in the total is due to a decrease in two classes of work done, namely rat examination and chemical analyses. The former owing partially to shortage of traps and partially to pressure of other work, and the latter owing to the fact that during the later months of the year all chemical analyses were carried out by the Government Chemist.

The Laboratory is in charge of an Asiatic assistant who refers to the Senior Sanitation Officer in cases of doubt. As mentioned in last year's report the appointment of a second Sanitation Officer will enable a Sanitation Officer to devote more time to laboratory work.

TABLE R.

Bacteriological Laboratory Return for the year 1925.

BLOOD.

Total:—2403.*	Positive.	Negative.
Spirochæta obermeyeri ...	1	0
Filaria	12	5
Differential Counts ...	27	0
Arneth Counts	2	0
Red Cells Enumeration ...	8	0
White Cells ,, ...	4	0
Widal's Test	2	6
Wasserman's	30	18
Pernicious Anæmia ...	1	1

	Undefined	S. T.	B. T.	Q	Neg.
Malaria	201	130	118	5	1833

SPUTUM.

Total:—198.	Positive.	Negative.
Tubercle Bacilli ...	46	179
Pneumococci ...	11	3
Micrococci catarrhalis ...	3	0
Cultural Examination for T. B.	0	1
Spirochæta bronchialis ...	8	1

Fæces. Total:—1,257.	Pos.	Neg.
Amœbæ) E. histolytica 8) A. coli 3	11	44
Ankylostoma	804	287
Ascaris	85	1
Tænia	7	1
Bilharzia	8	3
Cultural Examination for Typhoid	1	6
Giardia Intestinalis ...	5	0

URINE.

Total:—191.	Positive.	Negative.
Sugar	8	6
Albumin	3	4
Casts	7	2
Bilharzia	25	21
Gonococci	28	35
Diazo Reaction ...	1	0
General Examination ...	138	0
Filaria	1	0
B. pyocyaneus ...	1	0
Blackwater fever ...	11	0
Spermatozoa ...	1	3
Tubercle Bacilli ...	0	1

Nasal Secretions. Total:—38.	Pos.	Neg.
Leprosy	11	27

*This number includes the routine examination of School Children 830, out of which number 81 were Positive but Undefined Parasites and 749 were Negative.

TABLE R—*Continued.*

Bacteriological Laboratory Return for the year 1925.

RAT EXAMINATION.			VACCINES.		CHEMICAL.	
Total:—3031.	Pos.	Neg.	Total:—14.	Number.	Total:—309.	Number.
B. pestis	...	3031	Staphylococci	1	Fresh Milk	46
Miscellaneous. 17.	Pos.	Neg.	Gonococci	1	Condensed Milk ...	21
			C. coli	1	Foodstuffs	0
			Micrococci catarrhalis ...	1	Beverages	7
			Others	10	Tinned Provisions ...	1
Ascitic fluid for Lymphocytes and Polymorphonuclear Leucocytes	1	0 2			Mineral Water	57
Throat Swabs for B. diphtheria ...	0				Legal Cases	46
Smears from a Testicle Tumour for T. B.	0	1 0			Water	38
Vaginal Smear for Pus ...	1	0	Pathological Examination of Tissues Total 8.	Malignant. / Simple.	Drugs	92
Scraping from ear for B. acne ...	1	0			Other Examination ...	1
„ „ eyes for Gonococci	1	0			(Stomach of a dog for Strychnine poisoning.)	
Pus for Micrococci	1	2				
Smears from Ulcer for S. pallida	0					
Vaginal discharge for Human Spermatazoa	0	2		4 / 4		
Pus from eyes for General Examination	1	0 1				
Hair Root for Tænia ...	0					
Scraping from a Ringworm for Tænia	1	0				
Cerebro Spinal fluid for Meningococci	0	2				

9. Control of Opium.

The controlled issue of opium to registered habitués in Zanzibar shows a decrease from 133 in 1924 to 124 at the end 1925, and the average monthly consumption of opium has decreased from 2 lbs. 12 ozs. to 2 lbs. 6 ozs. 96 grs. in the same period of time.

With very few exceptions the habitués are old or elderly individuals, and in practice it has been found that the consumption of opium in the amounts allowed is not harmful. On the contrary it brings comfort to them in their old age and mitigates their sufferings from the chronic and distressing diseases common to their time of life.

These people are all natives of Africa or India accustomed from their early days to the consumption of opium and to whom the withdrawal or even the diminution of the amount consumed would be a very great hardship and an act of inhumanity for which few would care to take the responsibility, nor would such treatment increase the usefulness of these people as citizens.

It should also be remembered that they are not Europeans and that the effects of opium on them should not be judged by its effects on Europeans.

Unnecessary and excessive severity in dealing with these habitués, whether for political or other reasons, will only increase the amount of the illicit traffic in opium, and bring ill-merited misery in their declining years to a very small section of the population.

Table S.

The following table shows the caste, race, community, or religion and the sex of those on the register, at the close of 1925 compared with 1924.

Caste, race, community, or religion.	Males.	Females.	1925. Total.	1924. Total.
Ismaili Khoja	7	21	28	30
Suni-Mohamedans	22	8	30	30
Ithnasheri Khoja	5	4	9	9
Hindu	3	—	3	4
Baluchi	2	—	2	2
Swahili	32	2	34	37
Arab	14	—	14	16
Persian	1	—	1	1
Shihiri	1	—	1	1
Comoro	2	—	2	3
	89	35	124	133

B. Measures taken to Spread the Knowledge of Hygiene and Sanitation.

See report of Economic Biologist where full details are given.

C Recommendations for future Work.

These are included under general recommendations (v. page 31).

SECTION IV.

HOSPITALS AND DISPENSARIES.

Reference to the total number of out-and in-patients treated has already been made under Section II.

In-patients.

European Hospital, Zanzibar.—Sixty-eight cases with no death were treated in this hospital during the year as compared with 72 cases with one death in 1924 and 83 cases with two deaths in 1923.

Asiatic and Native Hospitals.—In all hospitals throughout the Protectorate 2,966 cases were treated as compared with 2,483 in 1924 and 2,674 in 1923.

TABLE T.

	1923.		1924.		1925.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Zanzibar	1,506	57	1,118	65	1,572	76
Mkokotoni	54	2	74	2	95	1
Selem	14	—	31	—	39	—
Weti	516	8	490	23	490	15
Chake Chake	453	17	622	30	622	30
Mkoani	131	1	148	3	148	1
Total	2,674	85	2,483	123	2,966	123

Operations.

During the year 347 major operations were performed at the Zanzibar Hospitals. At Weti 200 and at Chake Chake 105 operations were performed under anaesthetic. The numbers for 1924 were 188, 174 and 51 respectively.

BUILDINGS.

Statement of work carried out during, 1925.

ZANZIBAR.	Rs.	cts.
Administrative Office, alterations and improvements ...	509	89
European Hospital, alterations and improvements ...	515	02
Native Hospital, alterations and improvements ...	3,346	21
Lunatic Asylum, repairs ...	313	59
WALEZO.		
Poor House, construction of latrines and water tank ...	919	97

		Rs	cts.
CHAKE CHAKE.			
Refuse Destructor, improvements	...	553	61
Hospital, repairs	...	68	20
WETI.			
Hospital and Dispenser's Quarters, repairs and improvements	...	1,044	16
FUNZI ISLAND.			
Houses for Lepers, erection	...	36,448	44
DISTRICTS.			
Latrines, construction	...	968	70
Dispensaries, erection	...	9,067	84
Refuse Destructors, construction of drying platforms	...	1,036	43
Total Rs.	...	54,792	43

SECTION V.

ZIWANI POLICE LINES.

The resident strength of the Police at the end of 1925 was 335, with Women 234 and Children 133. During the year 1925, 2,092 cases of illness were treated and 125 admitted to the Hospital with an average of 10.7 days for each patient.

The principal causes of illness were Malaria, Respiratory and Digestive diseases. Two deaths occurred in the Lines during the year, both children; one died of Tetany and the other of Broncho-Pneumonia.

CENTRAL PRISON KILIMANI.

At the end of 1924 there were 150 Prisoners remaining in the Central Prison Zanzibar. During the year 1925, 861 were admitted, 852 discharged, and four died, leaving 155 prisoners at the end of the year. The daily average number of prisoners was 161.

The four deaths were due to Cerebral Malaria, Chronic Malaria, Undefined Fever and Strangulated Hernia.

The total number of cases of illness treated during the year was 750 of which 220 were admitted to the Hospital, the average daily number in Hospital being 7.8.

The principal causes of illness were Malaria, Ankylostomiasis, Digestive and Respiratory diseases and Chronic Ulcers.

LUNATIC ASYLUM.

	M.	F.	Total.
Patients remaining 31st December, 1924	18	8	26
,, admitted during 1925	17	7	24
,, discharged during 1925	16	4	20
,, died during 1925	7	4	11
,, remaining 31st December, 1925	12	7	19

Twenty-seven were treated in Hospital with an average of 2.3 days for each patient. The principal causes of illness were Digestive and Respiratory Deseases.

The causes of death were recorded as:—

Cerebral Syphilis	1	G. P. I.	1
Acute Insanity and Exhaustion	1	Dementia and Exhaustion	4
Debility	3	Enteritis	1

Four had terminal Diarrhoea.

SECTION VI.

EXTRA—DEPARTMENTAL.

(*a*) Registration of Medical Practitioners and Dentists.

The Board met on eight occasions and the following were added to the Register during the year.

Registered Medical Practitioners ...	6
Licensed Medical Practitioners ...	5
Registered Dentists	2

Four registered and one licensed medical practitioners are in the Government Service and the remainder in private practice.

Both Dentists are in Government Service.

(*b*) Zanzibar Maternity Association.

This is a charitable institution to which the Government contributes largely. It is controlled by a Committee of which the Director of Medical and Sanitary Services is the President.

The Annual Report of the Society is appended (Appendix IV, p.86).

The Maternity Home at Ngambo, generously presented by the Wakf Commissioners, was opened in the month of December. This home should be of the greatest use and benefit to the natives, especially if, as is intended, the maternity wards are used in connection with an ante-and post-natal and child-welfare clinic.

DENTAL SERVICE.

A second Dentist was appointed in the Tanganyika Government Service during the year. It was arranged that he should give four month's service to the Zanzibar Government yearly.

The Officer appointed—Captain A. S. Newton—arrived in East Africa, in the latter part of the year. He came to Zanzibar on December 17th and remained till the end of the year.

Formerly the Tanganyika Government Dentist used to visit Zanzibar for short periods as his work allowed, or Zanzibar officials requiring dental treatment went to Dar-es-Salaam for the purpose. It is a great boon to the population of Zanzibar—official and non-official— to be able to avail themselves of a regular dental service.

The attached table shows the work done amongst officials on his first visit which was of two weeks duration.

Gum Treatment and Dressings.	Extractions with local Anaesthetic.	Scalings.	Fillings.	Fillings with Root Treatment.
14	3	15	25	3

SECTION VII.

RECOMMENDATIONS FOR 1926.

1. *Increase of Staff.*—

(*a*) A Memorandum has been submitted separately pointing out the advisability of appointing a *Deputy Director of Medical and Sanitary Services.*

(*b*) *Lady Medical Officer.*—With the opening of the New School Clinic and the Maternity Home and Clinic there is ample opportunity to develop ante-natal, post-natal and child welfare work and all branches of social hygiene. But since Zanzibar is a Muhammadan country with the purdah system an important social factor in the lives of Arabs and Indians, no real progress can be made along these lines without the services of a lady doctor. A man is not given the opportunity to make his influence felt.

(*c*) An additional *Medical Officer* is required in Pemba.

(*d*) *Clerical Staff.*—The amalgamation of the two Departments and the increase in the Medical Staff and in the volume of work done render an increase in the clerical staff imperative. Proposals will be submitted with regard to this elsewhere.

(*e*) An additional European or Indian trained *Sanitary Inspector* is required as stated in last year's report.

2. *Mental Hospital.*—

The site is still under consideration.

3. *District Dispensaries.*—

Work should be continued from year to year until these Dispensaries are completed. It may be here remarked that the villagers at Mzini and Ungujakuu particularly have repeatedly expressed their desire for these Dispensaries.

4. *Administration Offices and Out-patients Block.*—

Alterations of a temporary nature to meet a pressing emergency have been carried out. The work should be properly completed both at the old Principal Medical Officer's office, and the Health Office.

(*a*) The old office of the Principal Medical Officer should be altered as suggested in last year's report (Annual Report for 1924, para 4, page 43).

(*b*) Accommodation for new offices should be provided by an extension in the Health Office Buildings as recommended in the Annual Report for 1924 (*vide* para 5, p. 38).

The present accommodation, not only for the European Officers, but also for the clerical staff is much too small. It has been necessary to use part of the museum as an office for the Economic Biologist, thereby depriving the museum of a great part of its value and also cramping the Biologist's laboratory space. The value of this museum and laboratory has already been referred to in recent reports and more especially in the Memorandum on Central Laboratories in Eastern Africa, and, as mentioned therein, newly joined medical officers find them of great practical value. Indeed all such officers should, if possible, have a thorough grounding in these Laboratories before taking up their duties in out-stations. Adequate accommodation in both offices and laboratory is therefore an urgent necessity.

5. *Quarantine Station.*—

(*a*) *Accommodation.*—The additional accommodation, referred to in last year's report as urgently required, should be erected at the earliest opportunity. There is very considerable overcrowding with a large quarantine.

6. *Mosquito and Insect-Borne Diseases.*

Recommendations for the coming year are detailed in the report of the Economic Biologist.

7. *Infectious Diseases.*—

(*a*) *Leprosy.*—The requirements for the treatment and suppression of leprosy were thoroughly gone into in last year's report. These recommendations and requirements still hold good and should be dealt with as time and circumstances allow.

(*b*) *Tuberculosis.*—Hospital Accommodation. Other than the general wards of the native hospital and Walezo Poor Institute there is no place where phthisical patients can be cared for. Consequently they remain in their own houses, usually ill-ventilated and over-crowded, where they act as active foci of infection. In view of the wide spread and increasing mortality due to this disease, it is essential that some institute should be provided where these unfortunate people could live in comfort and isolation from their neighbours. It must be remembered that tuberculosis is more infectious and wide-spread than leprosy and a much more frequent cause of mortality. Improvement in housing conditions and town planning must be carried out from year to year.

8. *Helminthic Diseases.*—

(*a*) *Ankylostomiasis.*—A continuation and development of the measures recommended elsewhere is necessary.

(*b*) *Bilharzia.*—Investigations should be undertaken as soon as possible.

9. *Water Supply.*—

Last year's recommendations still hold good.

10. *Milk Supply.*—

The remarks in last year's report under this heading still hold good.

11. *Native Dwellings.*—

(*a*) The acquisition and demolition of the dilapidated and inflammable huts mentioned under the same heading in last year's report should be undertaken in the coming year.

(*b*) The present type of model hut is somewhat large and expensive. A smaller and less expensive type capable of extension should be designed.

(*c*) *Improved type of latrine.*—The work of supplying these to native officials and village headmen should be continued.

12. *Public Latrines.*—

The erection of these both in Chake Chake and Zanzibar should be continued.

13. *Goat Lairies.*—

These, especially for slaughter goats, are urgently required.

14. *Hygiene and Sanitation Propaganda.*—

This work should be carried on and extended on the lines laid down in the last year's report.

15. *Travelling Facilities to Highlands of Kenya and Tanganyika Territory.*—

I desire to endorse the opinion expressed in last year's report.

16. *Refuse Dispasal.*—

Owing to the increasing size of the native town (Ngambo) the disposal of refuse becomes a more difficult problem every year. Especially is this the case as it is impossible to continue dumping this rubbish as has been done in the past. A motor refuse waggon, as suggested by the Acting Senior Sanitation Officer in his report (para 2, page 16) is necessary to deal with this rubbish.

17. *Roads.*—

Tarring or oiling the roads is necessary to prevent the dust nuisance (*vide* para 6, page 17 of Acting Senior Sanitation officer's report).

B. SPEARMAN,

Acting Director of Medical and Sanitary Services.

TABLE I.

Return showing the European and Principal Members of the Medical Department.

(*a*) European Staff.

Name	Rank of Appointment.	Where Stationed on 31st Dec., 1925.	Remarks.
J. A. Taylor ..	Director of Medical and Sanitary Services	On leave ..	
B. Spearman ..	Senior Sanitation Officer..	Zanzibar ..	Acting D. M. S. S.
S. M. Vassallo ..	Surgical Specialist ..	,, ..	
D. S. Scott ..	Medical Officer ..	,, ..	
P. L. L. Craig ..	,, ,, ..	,, ..	
J. M. Semple ..	,, ,, ..	,, ..	Acting S. S. O.
W. A. Young ..	,, ,, ..	On leave ..	
T. A. Austin ..	,, ,,	Weti ..	
O. H. Watkins-Pitchford	,, ,, ..	Chake ..	
W. H. Smith ..	,, ,, ..	Zanzibar ..	Port Medical Officer.
Miss A. E. Chambers ..	Matron ..	,, ..	
,, M. Gittins ..	Nursing Sister ..	,, ..	
,, G. M. Rainey ..	,, ,, ..	,, ..	
,, T. Grant ..	,, ,, ..	,, ..	
,, V. I. Dargan ..	,, ,, ..	Weti ..	
,, I. Pegg ..	,, ,, ..	On leave ..	
,, A. S. Milne ..	,, ,, ..	,, ..	
P. Cairns ..	Sanitary Superintendent..	,, ..	
W. M. Aders ..	Economic Biologist ..	Zanzibar ..	

(*b*) Return showing the Principal Members of the Subordinate Staff.

Name.	Rank.	Where Stationed on 31st Dec., 1925.	Remarks.
K. V. Joshi ..	Sub-Assistant Surgeon ..	Zanzibar ..	
C. D. Rana ..	,, ,, ..	Mkokotoni	
M. L. Mehta ..	,, ,, ..	Mkoani ..	
M. V. Vaidya ..	,, ,, ..	Ziwani ..	
S. Livingstone ..	Dispenser ..	Zanzibar ..	
J. F. de Cruz ..	,, ..	Weti ..	
C. Almeida ..	,, ..	Zanzibar ..	
I. B. Martin ..	Chief Clerk ..	On leave ..	
S. R. Fernandes ..	Clerk ..	Chake ..	
F. de Souza ..	Chief Sanitary Inspector ..	Zanzibar ..	
F. P. Paul ..	Sub-assistant Surgeon ..	,, ..	
Dinanath Koura ..	,, ,, ..	,, ..	
A. J. Ravat ..	Head Vaccinator ..	,, ..	
R. B. de Souza ..	Inspector ..	On leave ..	
Jadowji K. Gohel ..	,, ..	Chake ..	
J. M. Noronha ..	Cashier ..	Zanzibar ..	
A. G. Kark ..	Laboratory Assistant ..	,, ..	

TABLE II.

FINANCIAL.

	Estimates.	Actual Expenditure or Revenue.
I. PERSONAL EMOLUMENTS.	£. s. d.	£. s. d.
1. *Administrative.*		
Director of Medical and Sanitary Services, Medical Storekeeper, Clerical Staff, Messengers, House and Pemba Allowances ...	1,816 0 0	1,816 0 0
2. *Medical Division.*		
Surgical Specialist, Medical Officers, Nurses, Sub-Assistant Surgeons, Dispensers, Native Attendants (Hospitals, Asylum, etc.), Anaesthetic and House Allowances ...	11,063 0 0	11,000 0 0
3. *Sanitation and Biological Divisions.*		
Senior Sanitation Officer, Sanitary Superintendent, Economic Biologist, Allowance to Missionary Lady Assistant at Leper Settlement, Laboratory Assistant, Sub-Assistant Surgeons, Sanitary Inspectors, Vaccinators, Mosquito Inspectors, Clerical Staff, Storekeeper, Caretakers, Native Attendants, Scavengers, House and Acting Allowances ...	15,088 0 0	12,507 0 0
Total £	27,967 0 0	25,323 0 0
II. OTHER CHARGES.		
Medical Divisions.		
Medical and Surgical Stores, Incidental and Travelling Expenses, Maintenance of Hospital and Dispensaries, Electric Lighting and Passages	5,009 0 0	4,938 19 6
Sanitation and Biological Divisions.		
Incidental Expenses, Stores, Laboratory, Maintenance of Swamps and Drainages, Passages, Purchase of Opium, Maintenance of Patients in Infectious Diseases Hospital, Travelling Expenses, Clothing for Attendants, Maintenance of Biological Division ...	5,927 0 0	4,365 14 7
Total £	10,936 0 0	9,304 14 1
III. SPECIAL EXPENDITURE.		
Instruments and Appliances, Furniture, Cinema Films, Microscopes, Magic Lantern and Slides, Motor Cycle, Typewriters, Purchase of Milk Utensils, Tropical Medicine Course for Medical Officers ...	784 0 0	409 5 6
IV. REVENUE.		
Hospital and Dispensary Fees ...	800 0 0	689 4 0

Table III.

(1) Native Population of Zanzibar and Pemba—Census, 1924.

Zanzibar.				
Zanzibar Town	12,696	10,777	3,026	26,499
Northern District	12,892	12,707	10,004	35,603
Southern District	20,462	21,939	10,513	52,914
Total	46,050	45,423	23,543	115,016
Pemba.				
Chake Chake	11,072	10,715	8,954	30,741
Weti	13,072	12,575	9,182	34,829
Mkoani	8,061	7,611	6,407	22,079
Total	32,205	30,901	24,543	87,649
Grand Total	78,255	76,324	48,068	202,665

Total Population of the Protectorate.

Zanzibar Island.		
Native Population based on Census, 1924 ...	115,016	
Non-Native Population based on Census, 1921 ...	13,083	
		128,099
Pemba Island.		
Native Population based on Census, 1924, ...	87,649	
Non-Native Population based on Census, 1921 ...	1,042	
		88,691
Total Population		216,790

(2) Births Registered in the Island of Zanzibar, 1921—1925.

	1921	1922	1923	1924	1925
Town Area ...	479	481	413	501	424
Mkokotoni District ...	986	1,090	785	1,064	1,073
Mwera District ...	513	459	282	301	350
Chwaka District ...	613	628	555	768	499
Total ...	2,591	2,658	2,035	2,634	2,346

(3) Deaths Registered in the Island of Zanzibar, 1921—1925.

	1921	1922	1923	1924	1925
Town Area ...	1,076	1,262	1,258	1,043	1,379
Mkokotoni District ...	839	888	1,009	749	854
Mwera District ...	780	803	705	476	746
Chwaka District ...	512	504	482	564	400
Total ...	3,261	3,457	3,454	2,832	3,379

TABLE III.—(*Continued.*)

(4) COMPARATIVE STATEMENT OF BIRTHS AND DEATHS REGISTERED IN THE ISLAND OF ZANZIBAR, 1921—1925.

	1921	1922	1923	1924	1925
Town Area					
Births ...	479	481	413	501	424
Deaths ...	1,076	1,262	1,258	1,043	1,379
District					
Births ...	2,112	2,177	1,622	2,133	1,922
Deaths ...	2,185	2,195	2,196	1,789	2,000
Total					
Births ...	2,591	2,658	2,035	2,634	2,346
Deaths ...	3,261	3,457	3,454	2,832	3,379

(5) COMPARATIVE STATEMENT OF BIRTHS AND DEATHS REGISTERED IN THE ISLAND OF PEMBA, 1921—1925.

District	1921	1922	1923	1924	1925
Chake Chake					
Births ...	640	625	485	565	860
Deaths ...	533	328	366	476	446
Weti					
Births ...	689	467	350	376	419
Deaths ...	554	491	621	461	441
Mkoani					
Births ...	342	575	319	340	749
Deaths ...	271	397	302	342	307
Total					
Births ...	1,671	1,667	1,154	1,281	2,028
Deaths ...	1,358	1,216	1,289	1,279	1,194

(6) COMPARATIVE STATEMENT OF BIRTHS AND DEATHS REGISTERED IN THE ZANZIBAR PROTECTORATE, 1921—1925.

	1921	1922	1923	1924	1925
Zanzibar Island					
Births ...	2,591	2,658	2,035	2,634	2,346
Deaths ...	3,261	3,457	3,454	2,832	3,379
Pemba Island					
Births ...	1,671	1,667	1,154	1,281	2,028
Deaths ...	1,358	1,216	1,289	1,279	1,194
Total					
Births ...	4,262	4,325	3,189	3,915	4,374
Deaths ...	4,619	4,673	4,743	4,111	4,573
Excess of deaths over births ...	357	348	1,554	196	199

TABLE III.—(*Continued.*)

(7) BIRTHS—ZANZIBAR TOWNSHIP.

(*a*) The total number of births registered in the Town of Zanzibar during the year 1925, was as follows:—

Births registered	...	424
Still-born	...	42
		466

(*b*) Caste, race, community, or religion of parents:—

Swahili	...	26	Hindu	...	68
Mnyassa	...	1	Parsee	...	1
Mnyamwezi	...	2	Afgan	...	1
Yao	...	1	Baluchi	...	1
Shihiri	...	8	Goan	...	32
Arab	...	43	Chinese	...	1
Comorian	...	12	Persian	...	1
Ismaili	...	56	European	...	5
Ithnashiri	...	73	Other African	...	3
Memon	...	11	Other Indian	...	31
Bohora	...	44			
			Total	...	424

(*c*) Caste, race, community, or religion of parents of still-born:—

Swahili	...	10	Memon	...	1
Shihiri	...	1	Bohora	...	2
Arab	...	3	Hindu	...	6
Comorian	...	4	Goan	...	2
Ismaili	...	3	Other Indian	...	6
Ithnashiri	...	4			
			Total	...	42

(8) DEATHS—ZANZIBAR TOWNSHIP.

(*a*) The total number of deaths registered in the Town of Zanzibar during the year 1925, was as follows:—

Males	...	715
Females	...	664
		1,379

(*b*) Caste, race, community, or religion of the deceased:—

Swahili	...	725	Ismaili	...	76
Mnyassa	...	20	Ithnashiri	...	59
Mnyamwezi	...	21	Memon	...	40
Yao	...	11	Bohora	...	40
Mkikuyu	...	4	Hindu	...	48
Manyama	...	2	Parsee	...	2
Zaramu	...	7	Baluchi	...	10
Shihiri	...	60	Goan	...	5
Arab	...	79	Chinese	...	1
Comorian	...	86	Other Indian	...	50
Seychellian	...	1	Other African	...	47
Madagascarian	...	1	Unknown	...	3
			Total		1,379

TABLE III.—(*Continued.*)

(c) Return of Causes of Deaths in Zanzibar Town during 1925

Diseases	Reported by		Total.
	Qualified Practitioners.	Unqualified Persons.	
INFECTIVE DISEASES.			
Dengue	4	...	4
Dysentery	4	19	23
Influenza	3	1	4
Malaria	28	178	206
Chronic Malaria	11	9	20
Black-Water	2	...	2
Pneumonia	24	3	27
Septicæmia	12	1	13
Syphilis	6	12	18
Tetanus	3	...	3
Tuberculosis	29	103	132
GENERAL DISEASES.			
Anæmia	1	33	34
Anæmia-Pernicious ...	1	...	1
Diabetes	2	...	2
Rickets	1	...	1
Debility	19	268	287
Infantile-Debility	...	6	6
Rheumatism	...	81	81
LOCAL DISEASES.			
Diseases of the Nervous System.			
Sub-Section 1.			
Meningitis	2	...	2
Encephalitis	1	...	1
Congestion of Brain ...	15	27	42
Other Diseases	2	...	2
Sub-Section 2.			
Apoplexy	2	1	3
Paralysis	3	38	41
Epilepsy	...	3	3
Sub-Section 3.			
Mental Diseases.			
Idiocy	...	1	1
Carried forward ...	175	784	959

TABLE III.—(*Continued.*)

(*c*) Return of Causes of Deaths in Zanzibar Town during 1925.—(*Continued.*)

Diseases.	Reported by		Total.
	Qualified Practitioners.	Unqualified Persons.	
Brought forward ...	175	784	959
LOCAL DISEASES—(*continued*).			
Diseases of the Circulatory System.			
Endocarditis	6	...	6
Valvulal	36	6	42
Arterial Sclerosis	2	...	2
Diseases of the Respiratory System.			
Laryngitis	1	...	1
Bronchitis	15	98	113
Broncho-Pneumonia ...	16	11	27
Gangrene	3	...	3
Asthma	3	5	8
Pleurisy	...	1	1
Diseases of the Digestive System.			
Stomatitis	1	...	1
Caries of Teeth	1	..	1
Gastritis	5	...	5
Dypepsia	...	2	2
Colitis	4	...	4
Ulceration of Intestines ...	1	...	1
Hernia	8	4	12
Diarrhœa	5	79	84
Constipation	1	1	2
Jaundice	2	1	3
Peritonitis	1	...	1
Ascites	...	11	11
Other Diseases	2	...	2
Diseases of the Urinary System.			
Nephritis	...	5	5
Nephritis Chronic ...	...	2	2
Carried forward ...	288	1010	1298

TABLE III.—(*Continued.*)

(*c*) Return of Causes of Deaths in Zanzibar Town during 1925.—(*Continued.*)

Diseases.	Reported by		Total.
	Qualified Practitioners.	Unqualified Persons.	
Brought forward ...	288	1010	1298
LOCAL DISEASES—*(continued).*			
Male Organs.			
Orchitis	1	...	1
Other Diseases	1	...	1
Female Organs.			
Delayed Labour	2	...	2
Postpartum Haemorrhage ...	1	...	1
Premature Birth	4	...	4
Puerperal Septicæmia ...	4	2	6
Disease of the Skin.			
Ulcers	...	6	6
Injuries Local	7	...	7
Tumours-Malignant ...	4	2	6
Malformations	1	...	1
Filariasis	1	2	3
Ankylostomiasis	23	17	40
Unknown	1	...	1
Other Diseases	2	...	2
Total ...	340	1039	1379

Table IV.

Summary of Routine Sanitary Work done during the year in the Town of Zanzibar, for the year ending 31st December, 1925.

	Approximate Area.	Number of proclaimed open spaces.
1924	1,400 Acres	One
1925	1,400 Acres	One

2.—Population.

	No. of Natives Approximately.	No. of Asiatics Approximately.	No. of Europeans Approximately.	Total Approximately.
1924	26,499	11,964	250	38,713
1925	27.143	12,607	250	40,000

3.—Housing.

	Total No of Houses.	No. occupied by Europeans.	No. occupied by Natives and Asiatics.	No. of Huts
1924	3,307	79*	3,229	7,530
1925	3.330	135	3,195	7,862

* Flats and houses occupied by two or more families computed as only one house.

4.—Mosquito Protection of Houses.

	1924	1925
No. of European houses wholly mosquito-protected ...	2	2
No. of European houses with mosquito room ...	Nil	Nil
No. rendered during the year wholly mosquito-protected ...	,,	,,
No. rendered during the year partially mosquito-protected ...	,,	,,

5.—Erection of New Buildings during the Year.

	1924	1925
No. of public buildings erected with sanction as to site, construction and relation to other buildings ...	1	2
No. of houses erected with sanction as to site, construction and relation to other buildings ...	27	23
No. of huts erected with sanction as to site, construction and relation to other buildings ...	Nil	332
No. of houses built without sanction ...	27	Nil
No. of huts built without sanction ...	334	,,

TABLE IV.—(*Continued.*)

Summary of Routine Sanitary Work done during the year in the Town of Zanzibar, for the year ending 31st December, 1925.

ACTION TAKEN.

	Number of Prosecutions.		Number Demolished.	
	Huts.	Houses.	Huts.	Houses.
1924	Nil	17	3	15
1925	Nil	6	5	1

6.—MARKETS.

	Total Number.	Number paved and drained.	Number unpaved.
1924	4	4	...
1925	3	3	...

7.—SLAUGHTER-HOUSES.

	Total Number.	Number paved and drained.	Number unpaved.
1924	1	1	...
1925	1	1	...

8.—LATRINES.

	For Males.				For Females.			
	No.		No. of Seats.		No.		No. of Seats.	
	1924	1925	1924	1925	1924	1925	1924	1925
No. of public latrines :— ..	2	2	10	10	2	2	6	6
No. of new public latrines erected during the year ..	..	..	..	..	..	..	..	..
No. of public latrines demolished during the year ..	..	..	..	..	..	..	..	..

TABLE IV.—(*Continued.*)

Summary of Routine Sanitary Work done during the year in the Town of Zanzibar, for the year ending 31st December, 1925.

	1924	1925
No. of private latrines ...	30	30
Average number of pails of night-soil daily removed...	30	30
Average number of soiled pails removed and clean pails substituted ...	30	30
No. of night-soil men employed to clean latrines and to remove excreta ...	4	4
No. of cesspools (Approximately)...	5,300	5,456
No. of new cesspools constructed during the year ...	167	35
No. of old cesspools abolished ...	11	8
No. of cesspools cleaned ...	381	362
No. of cesspits ,, ...	23	87

9.—REMOVAL OF REFUSE.

	1924	1925
No. of dustbins (Public) ...	37	5
No. of dustines (Private) ...	437	750
No. of carts at work daily to remove refuse from the streets, yards and premises ...	46	46
Amount of refuse removed daily (Cartloads) ...	118	151
No of men employed for removing refuse ...	191	191

10.—MODE OF DISPOSAL OF EXCRETA, REFUSE AND OFFAL.

	Daily average No. of pails of excreta.		Daily average No. of cartloads of refuse.		Daily average No. of cartloads of slaughter house and market offal.	
	1924	1925	1924	1925	1924	1925
Buried or trenched ...	...	...	12	7	...	...
Burnt	...	...	106	144	2	2
Thrown into sea ...	30	30	...	...	...	...
Otherwise dealt with	...	...	...	...	...	...

11.—AVERAGE DAILY NO. OF CARTLOADS OF CANS, BOTTLES, BROKEN CROCKERY AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM STREETS HOUSES, HUTS AND COMPOUNDS.

1924	Cartloads.	16
1925	,,	20

TABLE IV.—(*Continued.*)

Summary of Routine Sanitary Work done during the year in the Town of Zanzibar, for the year ending 31st December, 1925.

12.—WATER SUPPLY.

	1924	1925
PIPE-BORNE WATER:—		
Source (river, lake or spring)	Spring	Spring
No. of linear yards	17,493	25,340
No. of standpipes along roads	34	46
No. of standpipes in compounds and houses ...	351	401
WELLS:—		
Public—		
Number	6	6
No. with pumps protected against surface water and mosquito-protected ...	...	...
Private—		
Number	89	88
No. with pumps protected against surface water and mosquito-protected ...	8	8
TANKS:—		
Public—		
No. underground	...	...
No. mosquito-protected and served by pumps	...	...
No. above ground...	2	2
No. mosquito-protected	2	2
No. of 400 gallons capacity or less ...	...	...
No. above 400 gallons	2	2
Private—		
No. underground	5	5
No. mosquito-protected	5	5
No. above ground	399	405
No. mosquito-protected	149	155
No. of 400 gallons capacity or less ...	343	349
No. above 400 gallons	56	56
NATURE OF TANKS:—		
Wood	...	...
Iron	149	155
Concrete	250	255
BARRELS:—		
Number	2,869	2,890
No. mosquito-protected	1,148	1,169
No. unprotected	1,721	1,721

TABLE IV.—(*Continued.*)

Summary of Routine Sanitary Work done during the year in the Town of Zanzibar, for the year ending 31st December, 1925.

13.—DRAINAGE.

	Public.		Private.	
	1924	1925	1924	1925
MASONRY DRAINS:—				
Linear yards of masonry drains ...	No record	No record	No record	No record
Linear yards repaired during the year ...	1,700	2,250	120	315
Linear yards of new drains constructed during the year ...	342	1,400	812	1,307
EARTH DRAINS OR DITCHES:—				
Linear yards of earth drains or ditches ...	5,280	5,630	...	...
No. of linear yards of ditches cleansed and graded ...	14,560	15,910	...	...
No. of linear yards of ditches dug ...	...	350	...	...
Average frequency of clearing ditches of grass ...	4 times per year	4 times per year	...	...

14.—CLEARANCE OF UNDERGROWTH, LONG GRASS AND JUNGLE.

	1924	1925
No. of square yards of weeds, grass and vegetation cut and removed ...	77,440	79,206
Average frequency of clearance of rank vegetation on same area ...	4 times per year	4 times per year

TABLE IV.—*(Continued.)*

Summary of Routine Sanitary Work done during the year in the Town of Zanzibar, for the year ending 31st December, 1925.

15.—EXCAVATIONS AND LOW-LYING LAND.

	1924	1925
No. of pools and excavations ...	Numerous	Numerous
No. of excavations filled up ...	6	...
Amount of low-lying and marsh land raised and drained ...	12 acres	3 acres
No. of pools, marshes, etc., fish stocked ...	...	...
No. of cubic yards of material used for filling up pools and excavations ...	1,320	...
No. of persons fined for making new excavations	...	...
Average number of men daily employed in filling up pools, etc. ...	3	3

16.—OILING.

	1924	1925
No. of pools and excavations oiled ...	Numerous	Numerous
No. of tanks and barrels oiled ...	do.	do.
No. of cesspools oiled weekly ...	536	562
Average number of men daily employed for oiling drains, pools and water-tanks or barrels ...	2	2

TABLE IV.—(*Continued.*)

Summary of Routine Sanitary Work done during the year in the Town of Zanzibar, for the year ending 31st December, 1925.

17.—INSPECTIONS AND PROSECUTIONS.

	1924.	1925.
No. of Sanitary Inspectors employed ...	4	5
Visits to private houses ...	2,817	34,12
,, eating houses ...	698	742
,, hotels and bars ...	410	615
,, lodging houses ...	1,036	1,110
,, aerated water factories ...	240	254
,, bake houses ...	334	330
,, cowsheds ...	1,168	1,210
,, foodstalls ...	1,262	1,300
,, godowns ...	1,209	1,256
,, markets ...	668	685
No. of notices served to remove insanitary conditions. ...	1,984	1,822
No. of notices outstanding ...	4	46
No. of nuisances abated ...	5,045	6,115
No. of prosecutions instituted for not removing insanitary conditions ...	60	64
No. of convictions obtained for not removing insanitary conditions ...	49	52
No. of Mosquito Inspectors employed ...	7	12
No. of premises where mosquito larvæ found ...	556	429
No. of mosquito notices served ...	556	194
No. of mosquito notices outstanding ...	...	...
No. of mosquito nuisances abated ...	556	429
No. of prosecutions instituted for having mosquito larvæ on premises ..	8	...
No. of convictions obtained for not removing facilities for the breeding of mosquitoes ...	6	...
No. of houses cleaned out and disinfected ...	18	2
No. of drains cleaned out and disinfected ...	5,813	2,215
Average frequency of cleansing public latrines and urinals ...	Twice daily	Twice daily
No. of wells closed ...	2	1
No. of ruins cleaned out ...	147	138
No. of cement concrete covers fitted to cesspools	680	465
No. of cattle troughs cleansed weekly ...	4	4
Lepers sent to Pemba ...	9	14
Burials (Paupers) ...	81	146

18.—RAT DESTRUCTION.

	1924.	1925.
Rats trapped ...	11,945	9,183
Rats purchased ...	4,486	4,251
No. of trappers employed ...	7	7

TABLE IV.—(*Continued.*)

Summary of Routine Sanitary Work done during the year in the Town of Zanzibar, for the year ending 31st December, 1925.

CLASSIFICATION OF RATS.

	Rattus Rattus.	Mus Norvegicus.	Pachyura Cærulea.	Mus Muscalus.	Cricetomys gambianus.	Unclassified.
1924	8,850	2,583	911	620	394	3,115
1925	11,105	1,059	1,027	93	150	..

19.—FOOD INSPECTION.

	1924.	1925.
Samples Taken:—		
Aerated Water ...	44	65
Milk ...	39	42
Water ...	47	57
FOODSTUFFS EXAMINED.		
Aerated Water (Bottles) .	1,848	388
Sacks Onions ...	203	150
Cases of Chocolates ...	14	...
Sack Dates ...	1	...
Sacks Cerials ...	67	...
„ Rice ...	663	261
„ Matama ...	30	...
„ Moong ...	36	10
„ Ginger ...	2	...
„ Cassia ...	2	...
„ Almonds ...	2	...
„ Potatoes ...	101	10
Bottles Pickles ...	96	...
„ Grape Juice ...	35	...
Barrels Grape ...	...	15
Tins Provisions ...	338	39
Sacks Flour ...	...	1,334
„ Grains ...	...	6
Tins Condensed Milk ...	...	95
Cases Tobacco ...	...	12
„ Cocoa ...	...	788
FOODSTUFFS CONDEMNED.		
Aerated Water (Bottles) ...	1,848	388
Sacks Onions ...	200	150
Cases of Chocolates ...	14	...
Sack Dates ...	1	...
Sacks Rice ...	663	261
„ Matama ...	30	...
„ Moong ...	28	...
„ Ginger ...	2	...
„ Cassia ...	2	...
„ Almonds ...	2	...
„ Potatoes ...	101	10
Bottles Pickles ...	96	...
„ Grape Juice ...	35	...
Barrels Grapes ...	...	10
Tins Provisions ...	338	39
Sacks Grains ...	...	6
Tins Condensed Milk ...	...	95

TABLE V.

Monthly Rainfall, Zanzibar Town, 1916—1925.

	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	Average for 10 years
January ...	1·63	2·20	2·33	2·02	0·00	1·39	0·00	3·99	2·74	7·56	2·39
February ...	3·50	4·29	1·36	1·07	0·08	2·48	0·00	0·98	8·23	2·89	2·49
March ...	2·29	4·46	4·37	7·27	1·19	4·77	3·84	3·51	5·64	6·52	4·39
April ...	33·35	16·49	11·55	8·85	8·47	17·00	2·10	22 06	15·65	5·68	14·12
May ...	4·35	10·63	9·66	2·81	15·09	4·58	13·00	1·68	3·34	2·44	6·76
June ...	1·38	4·20	6·27	0·20	0·77	0·37	3·99	1·32	2·61	2·45	2·36
July ...	0·38	1·23	4·86	3·00	0·13	1·62	1·68	2·39	1·33	1·48	1·81
August ...	2·11	2·05	0·60	1·63	1·41	0·59	1·33	3 93	0·19	2·43	1·63
September ...	2·81	2·01	0·76	1·46	1·63	0·32	1·37	0·64	3·38	1·58	1·60
October ...	5·83	2·27	5·77	3·21	5·88	5·39	4·97	1·30	1·19	8·69	1·45
November ...	2·94	6·79	2·18	11·81	1·76	9·41	14·36	8·43	3·20	11·09	7·20
December ...	2·92	0·44	6·79	4·65	7·62	1·79	7·41	7·12	5·55	12·87	5·72
Total ...	63·49	57·06	56·50	47·98	44·03	49·71	54·05	57·35	53·05	65·68	54·92

TABLE V.—(*Continued.*)

Meteorological Observations, Zanzibar Town and Banani, Pemba, 1925.

	Zanzibar Town.						Banani, Pemba.				
			Temperature					Temperature			
	Rainfall	Relative Humidity	Mean Maximum	Mean Minimum	Absolute Maximum	Absolute Minimum	Rainfall	Mean Maximum	Mean Minimum	Absolute Maximum	Absolute Minimum
January ..	7·56	76	85·1	77·5	88·2	71·3	7·71	86·6	78·1	89·0	72·0
February .	2·89	76	85·5	78·3	89·0	75·2	5·71	87·1	78·1	89·5	75·5
March ..	6·52	76	87·2	79·3	89·8	76·0	3·44	88·3	79·1	90·5	77·0
April ..	5·68	80	86·9	78·7	89·8	75·2	10 65	89 8	79·3	92·0	77·0
May ..	2·44	76	85·7	77·3	88·6	75·2	7·79	86·1	77·2	89·0	75·0
June ..	2·45	76	84·1	75·5	86·0	72·9	2·93	85·2	76·6	88 0	74·0
July ..	1·48	77	82·2	73·9	84·5	72·0	4·94	83·4	74·7	85·0	73·0
August ..	2·43	75	82·4	73·6	84·0	71·5	1·68	83·7	74·4	86·0	72·0
September ..	1·58	75	83·5	74·1	86·2	72·8	1·21	85·4	74·6	88·0	73·0
Octobor ..	8·69	75	84·5	76·3	87·6	74·0	5·70	86·5	76·5	89·0	73·0
November ..	11·09	78	85·5	78·2	88·8	75·8	5·62	87·1	78·2	90·0	75·5
December ..	12·87	75	86·4	79·4	88·8	73·4	6·28	88·0	79·3	91·0	76·0

TABLE VI. (*a*).

(1) Return of Diseases and Deaths (In and Out-patients) for the year 1925.

(Non-Europeans Only).

Diseases.	Out-patients.	In-patients.	
	Total Cases Treated.	Admissions.	Deaths.
INFECTIVE DISEASES.			
Beri-Beri	3	3	..
Cerebro-Spinal Fever	1	..	..
Chicken Pox	5	1	..
Dengue	415	122	1
Dysentery	73	32	3
Enteric	3	3	..
Erysipelas	6	..	..
Gonorrhœa	989	20	..
Influenza	342	37	..
Leprosy	3	3	..
Malaria—(*a*) Benign Tertian ..	1,216	253	7
(*b*) Sub-Tertian ..	1,950	45	..
(*c*) Chronic	124	41	1
(*d*) Blackwater Fever ..	6	3	1
Measles	1	..	..
Pneumonia	74	69	9
Small Pox ..	3	3	..
Septicæmia	10	5	4
Syphilis—(*a*) Primary	116	9	..
(*b*) Secondary	102	3	..
(*c*) Tertiary	30	4	..
(*d*) Inherited	2	..	..
Tetanus	8	3	2
Tuberculosis	127	48	8
Whooping Cough	167	..	..
Yaws	492	15	1
Mumps	19	1	..
Undefined Fever	557	103	1
Other Deseases	..	..	..
INTOXICATIONS.			
Alcoholism	2	2	..
GENERAL DISEASES.			
Anæmia	490	3	..
Diabetes	2	..	..
Purpura	1	..	..
Rickets	1	..	..
Debility	538	58	10
Rheumatism (Chronic)	922	17	..
Other Diseases	158	..	..
LOCAL DISEASES.			
Diseases of the Nervous System.			
Neuritis	12	4	..
Meningitis	2	2	1
Congestion of Brain	1	1	1
Paralysis	11	11	3
Epilepsy	7	6	..
Neuralgia	724	1	..
Hysteria	3	2	..
Neurasthenia	1	1	..
Carried forward ..	9,719	934	53

TABLE VI. (*a*).—(*Continued.*)

(1) Return of Diseases and Deaths (In and Out-patients) for the year 1925.

(Non-Europeans Only).

Diseases.	Out-patients.	In-patients.	
	Total Cases Treated.	Admissions.	Deaths.
Brought forward ..	9,719	934	53
LOCAL DISEASES—*(Continued).*			
Diseases of the Nervous System.			
Headache	181	..	..
Other Diseases	29	10	3
Mental Diseases.			
Mania	1	..	..
Melancholia	1	..	..
Dementia	1	1	..
Other Diseases	1	2	..
Diseases of the Eye.			
Iritis	15	..	..
Blepharitis	16	..	..
Conjunctivitis	799	17	..
Keratitis	77	7	..
Ulceration of Cornea	20	2	..
Cataract	53	4	..
Other Diseases	170	5	..
Diseases of the Ear.			
Inflammation	135	..	..
Other Diseases	466	4	..
Diseases of the Nose.			
Coryza	182	6	..
Other Diseases	69	3	..
Diseases of the Circulatory System.			
Myocarditis	1	1	..
Valvular Mitral	15	6	2
Other Diseases	33	5	1
Diseases of the Repiratory System.			
Laryngitis	13	..	..
Bronchitis	3,679	52	1
Broncho-Pneumonia	78	10	2
Pleurisy	27	9	..
Asthma	138	13	..
Empyema	14	..	..
Other Diseases	456	6	..
Diseases of the Digestive System.			
Stomatitis	70	1	..
Caries of Teeth	1,761	1	..
Glossitis	8	..	..
Pharyngitis	193	..	..
Tonsilitis	243	6	..
Gastritis	42	3	..
Dyspepsia	327	3	..
Enteritis	5	1	..
Appendicitis	3	..	..
Colitis	15	10	1
Sprue	40	..	..
Hernia	184	132	12
Diarrhœa	673	42	1
Constipation	4,000	16	..
Colic	897	15	..
Hæmorrhoids	42	15	..
Hepatitis (Acute)	59	10	..
Carried forward ..	24,951	1,352	76

TABLE VI. (*a*).—(*Continued.*)

(1) Return of Diseases and Deaths (In and Out-patients) for the year 1925.

(Non-Europeans Only).

Diseases.	Out-patients.	In-patients.	
	Total Cases Treated.	Admissions.	Deaths.
Brought forward ..	24,951	1,352	76
LOCAL DISEASES—(*Continued*).			
Diseases of the Digestive System.			
Hepatic Congestion	275	2	..
Cirrhosis (Hepatic)	2	2	2
Jaundice	11	6	1
Peritonitis	5	5	1
Ascites	8	6	..
Fistula in Ano	18	3	..
Other Diseases	271	11	1
Diseases of the Lymphatic System.			
Splenitis	180	2	..
Inflammation of Lymphatic Glands ..	148	38	1
Lymphangitis	68	5	..
Other Diseases	16	2	..
Diseases of the Urinary System.			
Nephritis (Acute)	4	2	..
,, (Chronic)	6	4	..
Pyelitis	4	..	..
Cystitis	40	11	..
Glycosuria	7	1	..
Cystocele	69	1	..
Chyluria	1	..	..
Retention of Urine	11	10	..
Other Diseases	33	4	1
Diseases of the Generative System.			
Male Organs—			
Urethritis (Acute)	55	1	..
,, (Chronic)	4	..	..
Stricture	18	6	1
Condylomata	1	1	..
Balanitis	2	1	..
Soft Chancre	178	7	..
Hydrocele	347	136	1
Phimosis	100	22	..
Orchitis	290	41	..
Haematocele	3	3	..
Epididymitis	19	3	..
Other Diseases	52	28	3
Female Organs—			
Vaginitis	2	..	..
Amenorrhœa	3	..	..
Dysmenorrhœa	8	..	..
Menorrhagia	9	3	1
Leucorrhœa	2	..	..
Abortion	2	..	..
Mastitis	3	..	..
Abscess of Breast	2	..	..
Other Diseases	33	18	2
Carried forward ..	27,261	1,737	91

TABLE VI. (*a*).—(*Continued.*)

(1) Return of Diseases and Deaths (In and Out-patients) for the year 1925.

(Non-Europeans Only).

Diseases.	Out-patients.	In-patients.	
	Total Cases Treated.	Admissions.	Deaths.
Brought forward ..	27,261	1,737	91
LOCAL DISEASES—*(Continued).*			
Diseases of the Organs of Locomotion.			
Osteitis	20	1	..
Arthritis	118	17	1
Synovitis	66	10	..
Bursitis	12	2	..
Ganglion	7	7	..
Myalgia	626	12	..
Fracture	27	17	1
Other Diseases	174	11	..
Diseases of the Connective Tissue.			
Cellulitis	182	25	..
Abscess	567	106	1
Elephantiasis	95	42	1
Other Diseases	37	..	..
Deseases of the Skin.			
Urticaria	15	2	..
Eczema	305	14	..
Boil	289	5	..
Carbuncle	2	..	..
Herpes	11	1	..
Psoriasis	5	..	..
Dermatitis	41	..	..
Tinea	195	2	..
Tinea Cruris	4	..	..
Scabies	1,833	3	..
Prickly Heat	6	..	..
Impetigo	6	..	..
Ulcers	7,116	313	3
Warts	47	..	..
Other Diseases	403	9	3
Injuries-General	45	5	..
do. Local	4,856	273	3
Burns	21	9	2
Tumours Simple	41	17	1
do. Malignant	13	13	..
Other Diseasses	4	4	..
Parasites-Animal			
Trematoda			
Bilharzia	138	12	1
Cestoda—			
Tænia Saginata	3	3	..
Nematoda—			
Ascaris	30	7	..
Filariasis	109	18	1
Ankylostomiasis	3,746	179	17
Other Diseases	2	..	..
Insecta—			
Jiggers	171	1	..
Total ..	48,609	2,877	126
Parturition	20	20	1

TABLE VI. (*a*).—(*Continued.*)

(2) Return of Diseases and Deaths (In and Out-patients) for the year 1925.

(Europeans only).

Diseases.	Out-patients.	In-patients.				
	Total Cases Treated.	Remaining in Hospital at end of 1924	Year 1925.		Total.	Remaining in Hospital at end of 1925
			Admissions.	Deaths.		
INFECTIVE DISEASES.						
Dengue	32	..	20	..	20	..
Dysentery Amœbic ..	1	..	1	..	1	..
Influenza	17	1	4	..	5	..
Malaria—(*a*) Benign Tertian	18	..	10	..	10	1
(*b*) Sub-Tertian ..	6	..	6	..	6	..
(*c*) Chronic Malaria	1	..	..	..	..	..
Pneumonia	3	..	2	..	2	1
Rheumatism	1	..	..	..	..	..
Tuberculoss	3	..	1	..	1	..
Undefined Fever ..	6	..	1	..	1	..
GENERAL DISEASES.						
Debility	10	..	..	..	..	..
LOCAL DISEASES.						
Diseases of the Nervous System.						
Neuralgia	3	..	..	..	..	..
Diseases of the Eye						
Conjunctivitis ..	1	..	..	..	..	..
Other Diseases ..	7	..	..	..	..	..
Diseases of the Ear						
Other Diseases ..	14	..	1	..	1	..
Diseases of the Nose						
Coryza	24	..	..	..	..	..
Other Diseases ..	1	..	..	..	..	..
Diseases of the Respiratory System.						
Bronchitis	9	..	1	..	1	..
Pleurisy	1	..	..	..	..	..
Asthma	2	..	1	..	1	..
Other Diseases ..	1	..	..	..	..	..
Diseases of the Digestive System.						
Gingivitis	3	..	..	..	..	..
Caries Teeth	1	..	..	..	..	..
Dentition	4	..	..	..	..	..
Tonsillitis	14	..	..	..	..	..
Pharyngitis	13	..	1	..	1	..
Gastritis	6	..	..	..	..	..
Dyspepsia	14	..	..	..	..	..
Enteritis	2	..	1	..	1	..
Appendicitis	1	..	..	..	..	..
Diarrhoea	14	..	..	..	..	..
Constipation	9	..	..	..	..	..
Colic	2	..	1	..	1	..
Hæmorrhoids	1	..	..	..	..	..
Carried forward ..	245	1	51	..	52	2

TABLE VI. (*a*).—(*Continued.*)

(2) Return of Diseases and Deaths (In and Out-patients) for the year 1925.

(Europeans only).

Diseases.	Out-patients.	In-patients.				
	Total Cases Treated.	Remaining in Hospital at end of 1924	Year 1925. Admissions.	Year 1925. Deaths.	Total.	Remaining in Hospital at end of 1925
Brought forward ..	215	1	51	..	52	2
LOCAL DISEASES—*(Contd.)*						
Diseases of the Digestive System.						
Hepatitis	5	..	1	..	1	..
Cholecystitis	1	..	..	..	..	..
Hepatic Congestion ..	7	..	1	..	1	..
Jaundice	1	..	1	..	1	..
Other Diseases ..	2	..	1	..	1	..
Diseases of the Lymphatic System.						
Lymphangitis	2	..	1	..	1	..
Diseases of the Generative System.						
Female Organs—						
Menorrhagia	1	..	1	..	1	..
Dysmenorrhœa ..	3	..	..	..	..	..
Diseases of the Organs of Locomotion.						
Synovitis	2	..	1	..	1	..
Myalgia	5	..	..	..	..	..
Diseases of the Connective Tissue.						
Abscess	1	..	1	..	1	..
Other Diseases ..	2	..	2	..	2	..
Diseases of the Skin.						
Alopecia	1	..	..	..	..	..
Eczema	3	..	..	..	..	..
Boils	8	..	..	..	..	..
Tinea Crucis	7	..	..	..	..	..
Prickly Heat	1	..	..	..	..	..
Urticaria .. .	1	..	..	..	..	..
Other Diseases ..	3	..	..	..	..	..
Dermatitis	4	..	..	..	..	..
Injuries—Local ..	18	..	3	..	3	..
Tumours, Simple ..	3	..	..	..	..	..
Parasites—Animal Cestoda						
Tænia Saginata ..	2	..	..	..	..	..
Nematoda—						
Ankylostomiasis ..	1	..	..	..	..	..
Insecta—						
Other Diseases ..	1	..	..	..	..	..
Total ..	330	1	64	..	65	2
Parturition	4	..	4	..	4	..

GULIONI INFECTIOUS DISEASES HOSPITAL.

The following table shows the admissions to the Hospital during the year 1925.

	Remaining from 1924.	Admitted during 1925.	Total.	Died.	Discharged.	Remaining for 1926.	
Small Pox	...	3	3	...	3	...	
Measles	...	2	2	...	2	...	
Chicken Pox	...	5	5	...	5	...	
Influenza	...	1	1	1	...	...	
Undefined Fever	...	1	1	...	1	...	
Leprosy	...	17	17	...	14*	1	13 sent to Funzi, Island. 1 sent to India.
Suspected Leprosy	...	5	5	...	5	...	
Total	...	34	34	1	30	1	
Contacts:—							
Small Pox	...	1	1	...	1	...	
Measles	...	10	10	...	10	...	
Total	...	11	11	...	11	...	
Grand Total	...	45	45	1	41*	1	*2 lepers escaped.

APPENDICES.

I. Annual Medical and Sanitary Report for Chake Chake and Mkoani.

II. Annual Medical and Sanitary Report for Weti.

III. Annual Report of Biological Division.

IV Annual Report of Zanzibar Maternity Association.

APPENDIX I.

ANNUAL MEDICAL AND SANITARY REPORT FOR CHAKE CHAKE AND MKOANI, 1925.

SECTION I.—ADMINISTRATION.

CHAKE CHAKE.

Medical Division.

Staff.—The Staff consists of one Medical Officer, one Nursing Sister, one Asiatic Dispenser, one Asiatic Clerk and various Native Attendants.

Three different Medical Officers were stationed at Chake Chake during the year. A Nursing Sister was in Chake Chake for the first twenty-nine days of the year only.

Sanitation Division.—The Medical Officer also performed the duties of Medical Officer of Health during the year.

Staff.—The staff consists of one Asiatic Sanitary Inspector, on Mosquito Inspector, two Mosquito boys, one poor attendant (acting Leper attendant), one office boy, twelve sweepers, six special gang boys, one donkey boy and one headman.

Financial.

	Rs.	cts.
Hospital and Dispensary fees	946	02
Sanitary fees	575	50
Total Rs.	1,521	52

SECTION II.—PUBLIC HEALTH.

General Remarks.—There was nothing of outstanding importance during the year in regard to the Public Health. The diseases of first rank importance numerically were, Ulcers, Ankylostomiasis and Malaria in the order named.

New cases totalled 8,049. Repetition cases totalled 19,088.

A. Remarks and Statistics Concerning the Diseases Treated During the Year.

1. *Mosquito-borne diseases.*

Malaria.—During the year 681 cases of Malaria were treated. The great majority were diagnosed clinically although blood examination was done in doubtful cases. Chronic Malaria with Splenitis in natives.

Blackwater Fever.—Only one case of Blackwater Fever occurred in Chake Chake during the year. This case was in an Indian and recovery took place.

Dengue Fever.—The Dengue epidemic which occurred in Zanzibar about the middle of the year failed to reach Chake Chake and no cases of that disease were reported here.

Filariasis.—Including Elephantiasis, Lymphangitis, Chyluria, Filarial Abscess, etc., are probably of less frequent occurrence than formerly. Twenty-nine cases of Elephantiasis came up for treatment of which fourteen were admitted. Only five operations for Elephantiasis Scroti were performed.

2. *Infectious or Epidemic Diseases.*

Dysentery.—A type of Bacillary Dysentery occurred in a small epidemic towards the end of the year. It was characterised by the passage of small quantities of blood and mucous and was easily amenable to saline treatment in most cases. This dysentery coincided with the advent of numerous flies and its spread was almost certainly due to these vectors. A few cases which did not apply for treatment till late did not respond to treatment and four deaths occurred. No amoebae were discovered in the stools. One case of true amoebic dysentry occurred in an Asiatic. It cleared up remarkably quickly under a course of emetine injections supplemented by Emetine-iodide by the mouth.

Yaws.—Cases continue to come up for injections. The disease does not seem to cause great inconvenience or suffering and is seen chiefly in children. 348 injections of Sodium-Potassium-Bismuth Tartrate were given during the year and no ill effects were noted from the use of this drug.

Gonorrhoea.—The majority of natives suffer from this disease sooner or later but only a few come up for treatment, women, rarely if ever, apply for treatment and hence there is little hope of substantially reducing the number of cases. Stricture and conjunctivitis are all too frequent and intractable.

Syphilis.—In a definitely diagnosable form was not seen frequently though it is probably a concomitant in many cases of ulcer and other conditions.

Tuberculosis.—This disease in its pulmonary form is most unwelcome in so much as the treatment available is almost nil. Good nursing, hygienic conditions, and isolation are not available at Chake Chake hospital under the present conditions. The patients are either admitted and put in the ward with non-tuberculous cases, or they are allowed to go free. Both procedures conduce to the spread of the disease. It would seem that measures for the prevention of the spread of tuberculosis in this island are as necessary as similar measures directed against leprosy.

Leprosy.—Cases of leprosy are but rarely seen at hospital. Sufferers from this disease do not as a rule present themselves for treatment.

Pneumonia.—Fourteen cases were admitted during the year and all but one recovered.

Puerperal Fever.—Cases of this disease are rarely seen but doubtless occur without medical aid being sought.

Eclampsia.—Two cases occurred in Chake Chake during the year, one in an Indian and one in an Arab. Both occurred in the seventh month and were not seen until the fits were well established. They were admitted and eliminative treatment was given and was successful in one case though the other died. In neither case was a living child obtained.

Rheumatism is an elastic word and although true Rheumatic Fever does not seem to occur in these parts the term covers a multitude of obscure joint pains and myalgic conditions which respond to salicylates.

Erysipelas.—Five cases occurred, none were fatal.

Whooping Cough.—A number of cases occurred towards the end of the year, several were complicated by haemorrhages, subconjunctival and elsewhere.

One case of Enteric and one of Mumps were noted. No cases of Smallpox, Chickenpox. Measles or Cerebro-Spinal Fever occurred.

3. *Helminthic Diseases.*

Ankylostomiasis.—1,470 cases were treated during the year which number includes 75 admissions with 6 deaths. These deaths represent cases carried into hospital in extremis. In the treatment of the disease Carbon Tetrachloride and Oil of Chenopodium were used at different periods of the year. In my experience Carbon Tetrachloride is not so efficacious as Oil of Chenopodium. The latter drug was used during the last five months of the year. In the case of Carbon Tetrachloride it was found necessary for patients to take many doses at weekly intervals before a cure was effected whereas one dose of Oil of Chenopodium usually sufficed to bring about a cure. In bad cases two doses of the oil at intervals of two or three weeks were found necessary. Oil of Chenopodium is apparently more rapid and certain in its action than Carbon Tetrachloride. No ill effects were obsedved from the use of either drug.

Bilharzia.—72 cases were treated, all were urinary infections and all but a few were treated by rectal injections of Tartar Emetic, under which treatment symptoms cleared up rapidly.

4. *Other Diseases.*

Diseases of the Nervous System were not in great evidence neither was cardiac disease, the explanation probably lying in the fact that neither syphilis nor acute rheumatism are of frequent occurrence.

Diseases of the Respiratory System were far more common totalling over 600 in the year, of which the great majority were cases of simple cough.

Of diseases of the Digestive System, Constipation and Colic were very prevalent. Caries of Teeth was also a common complaint.

226 cases were treated, extraction being performed in the great majority of cases.

Hernia and Hydrocele, especially the latter were common and sought surgical relief.

Abscesses were numerous and ulcers totalled 1,514 during the year as against 2,188 in the previous year, a remarkable decrease considering that altogether more cases were treated in 1925 than in 1924.

B. Officials.

(*a*) *European.*—Among the few European residents in the Chake Chake and Mkoani areas (average number about nine), there have been one case of Dysentery, one case of Malaria, and one of acute Amoebic Hepatitis. The general health of the Europeans has been fair.

(*b*) *Asiatics.*—The chief cause of disability among the Asiatic Officials was undoubtedly Malaria. It is difficult to ensure that prophylactic quinine is taken regularly.

C. General Native Population.

The population of Chake Chake district is given as 30,741. Births for the years numbered 868 and Deaths 450, the figures are not however a true state of affairs.

School Children.—120 sick forms were issued to school children during the year, and Malaria was the chief complaint. Towards the end of the year an arrangement was made with the Education Department whereby each pupil underwent a complete medical examination and details were to be kept on a special form. This scheme has already been started but owing to the pressure of other work is not yet completed. Of the few cases already examined two are suffering from myopia in a marked degree. It is hoped that help or advice may be given to such like cases through this scheme.

SECTION III.—SANITATION.

1. *Preventive Measures.*

(*a*) *Mosquito or Insect-Borne Diseases.*—Anopheline mosquitoes are not numerous in European houses but are to be found in small numbers in the hospital wards and in the prison. Other mosquitoes are numerous in some houses but few in others. 7,166 houses were inspected during the year and 57 mosquito nuisance found.

Oiling of tanks and cesspits was carried out regularly every week.

Swamp drainage.—The swampy creeks on the west of the town were kept cleared and the water confined to definite channels. Cement drains over this areas would save much labour and reduce the number of mosquitoes in the town and in the European bungalows.

Clearance of bush.—Approximately 63,000 square yards of bush and undergrowth were cleared during the year.

(*b*) *Epidemic Diseases.*—The only epidemic disease besides Smallpox against which preventive measures were necessary was Dysentery. To prevent the spread of this disease by flies the five main refuse dumps were cleaned up, all burnable refuse was set fire to, and the surrounding earth in which the flies were seen to be breeding in hundreds was sprayed with Cooper's Dip and other poisonous solutions.

Vaccinations.—One thousand six hundred and fifty-four Vaccinations were performed at Chake Chake during the year.

2. *General Sanitary Measures.*

Disposal of Refuse.—After the arrival of a Horsfall Incinerator late in the year, the refuse was burnt completely and the dumps dispensed with. It is hoped this will mitigate the fly nuisance.

Water Supply.—Work is still in progress with the object of obtaining a new water supply, satisfactory both as regards quality and quantity. The present supply is contaminated and inadequate.

Leper Settlements.—The average number of Lepers at the Pujini Settlement was 42 and at the Kengeja Settlement 21. The state of the lepers in these settlements is unsatisfactory and their removal to Funzi at an early date will be to their advantage.

Milk Supply.—Two surprise inspections were made and samples tested for Specific Gravity and cleanliness. Warnings were given to offenders.

Market.—The market was inspected periodically and cleanliness enforced.

Pariah Dogs.—Two hundred and thirty dogs were poisoned at Chake Chake and 52 at Mkoani during the year.

SECTION IV.—HOSPITAL AND DISPENSARIES.

At Chake Chake hospital there were 8,049 new cases and 19,088 repetitions. The number of in-patients was 529.

Major operations numbered 85 and minor operations with an anaesthetic numbered 20. Numerous small operations were done in the examination room.

The general work of the hospital staff has been satisfactory but the absence of a Nursing Sister to look after in-patients has been felt.

Dispensaries. Kengeja.—New quarters were provided at Kengeja at the end of the year for the dispensary and for the native dispenser. The annual Sick Return from this dispensary shows that 2,983 cases were dealt with.

Jambagome.—A new dispensary was opened at Jambagome towards the end of the year. During the months of November and December 634 cases were dealt with.

Stambuli.—Work is progressing with regard to the construction of a district dispensary at Stambuli.

SECTION V.—POLICE AND PRISONERS.

Police.—One hundred and eighty-two Police were treated as out-patients, and six were admitted. The health of the police on the whole has been satisfactory.

Prison and Prisoners.—One hundred and forty-seven Prisoners were treated as out-patients and seven as in-patients. There has been no epidemic disease among the prisoners and their general health has been satisfactory. The Prison was inspected by the Medical Officer every week and was found to be in a satisfactory condition. Prisoners were instructed to keep the number of mosquitoes down in the cells by swatting.

Prophylactic Quinine.—Two thousand eight hundred and thirty-eight doses were given during the year to Police, Prisoners and school children.

MKOANI.

The administrative staff at Mkoani Hospital during the year consisted of one Asiatic Sub-Assistant Surgeon, two Hospital Boys and one Cook.

New cases treated totalled 3,355 and repetitions totalled 3,438. 138 cases were admitted of which one died in hospital.

The chief diseases dealt with in their order of frequency were, Ulcers 561, Bronchitis 372, Constipation 345, Injuries 337, and Malaria 325. It is probable that under Bronchitis must be included all cases of simple cough for Bronchitis proper is not a common disease of this island. Ankylostomiasis only accounts for 44 cases during the year, this is explained more on the assumption or faulty diagnosis than that Mkoani enjoys a special immunity from a disease so prevalent in all other parts for the island. The majority of cases diagnosed as Anaemia and Debility were doubtless due to the Ankylostome.

Sanitation.—In spite of a visit from the Medical Officer every month the Sanitation Department at Mkoani leaves much to be desired. A Sanitary Inspector stationed at Mkoani would certainly improve matters.

Staff.—The Staff consists of one Asiatic Sub-Assistant Surgeon, one Headman, one Special Gangman and five Sweepers. The Sub-Assistant Surgeon performs the extra duties of supervising the Sanitation Department. Of the five Sweepers, two are stationed at Jambagome. Kengeja a comparatively important place has no sweepers.

It would appear that the Medical and Sanitary Services in the Mkoani district are non-commensurate with the relative importance of a progressive part of the island.

H. O. WATKINS-PITCHFORD.

APPENDIX II.

ANNUAL MEDICAL AND SANITARY REPORT FOR WETI, 1925.

SECTION I.—ADMINISTRATION.

Medical Division.

Staff.—The Staff consists of one Medical Officer, one Nursing Sister, one Asiatic Dispenser, one Asiatic Clerk and eight Native Hospital attendants.

Dr. D. S. Scott was in charge from 1st January until 26th May, and Dr. T. A. Austin from 27th May until the end of year.

Sanitation Division.

Staff.—The Medical Officer also acted as Medical Officer of Health and was assisted by an Asiatic Sanitary Inspector.

SECTION II.—PUBLIC HEALTH.

During the year 3,472 new cases and 5,202 repetition cases received treatment. 352 patients were admitted to Hospital.

The principal causes of illness were:—

1. *General Diseases.*

Dental Caries is very prevalent. Propaganda on the subject should be instituted—perhaps in the Government Schools to begin with—in the hope of preserving the teeth of the rising generation.

Local Injuries.—The majority of these consist of minor cuts and abrasions of the feet, such as one would expect to find, when it is recollected that very few of the native population can afford shoes or sandals. A number of serious incised wounds were treated, as fighting with knives is still not uncommon in Pemba.

Duodenal Ulcer.—This condition is not frequently met with in the Protectorate. The patient, an elderly female native, submitted herself for operation and the diagnosis was confirmed. A posterior Gastro-enterostomy was performed and the patient left hospital on the eighteenth day.

Bronchitis.—This includes Acute and Chronic Bronchitis and cases of Bronchial Catarrh.

II. *Communicable Diseases.*

Malaria.—During the year 268 cases of Malaria and three cases of Black-water Fever were treated. I found Sternberg's Mixture with the addition of Acid Hydrocyanic dil. mii to each dose, of considerable service in relieving the vomiting so frequently met with in these diseases.

Ankylostomiasis.—Three hundred and sixty-five patients attended for treatment. Oil of Chenopodium was the drug used and no ill effects were observed or reported. I found, by repeated stool examination, that the majority of cases required five doses of Oil of Chenopodium at weekly intervals to free the stools from ova.

The larvæ of Strongyloides were frequently seen in stools containing hook-worm ova.

Bilharziasis.—Only fourteen cases treated during 1925. Intravenous injections of Tartar Emetic were given, but as the hæmaturia disappeared after one or two injections, very few patients attended for the full course necessary for complete cure.

Dysentery.—Forty-four cases of Diarrhoea and fourteen cases of Dysentery received treatment. Several of the Dysentery patients were admitted to hospital in a collapsed state but all recovered on saline and salol. One case when convalescent developed joint effusions, the knees and ankles being affected.

III. *European Officials.*

Three officials suffered from Chronic Malaria, one was admitted to hospital and two were treated in Quarters. No fresh cases occurred during the year. The general health was good.

IV. *Asiatic Officials.*

One official had a mild attack of Catarrhal Appendicitis. As he was due for leave to India and no necessity for surgical interference arose, the case was treated medically. No other cases of importance occurred. The general health was satisfactory.

V. *General European Population.*

Eleven Europeans. One non-official was invalided home.

VI. *General Native Population.*

Population (1925)	...	34,829
Total births registered during the year	...	422
Total deaths registered during the year	...	421

SECTION III.—SANITATION.

I. Preventive Measures.

(*a*) *Mosquito or Insect-borne Diseases.*

Old swamp and street drains (unconcreted) were cleaned and oiled weekly, and new drains cut where and when necessary to remove surface water. Two swamps have been surveyed and levels taken with a view to laying agricultural drains during the coming year.

House to house inspection has been carried out by the Mosquito Inspector. The larvæ of Stegomyia were frequently found as householders dislike emptying water vessels unless compelled to. Sullage pits and tanks were oiled weekly.

Prophylactic Quinine. A weekly dose of Quinine was given to School Children, Police and Prisoners, totalling 2,601 doses.

(*b*) *Epidemic Diseases.*

No cases of Small-Pox occurred in Weti during the year. Vaccinations numbered 3,047. Nine cases of Dengue and one case of Measles occurred during May.

Dysentery.—The majority of the cases reported came from the camp on Kokota Island, erected for the labourers working at the Funzi Leper Settlement. The camp when inspected was in perfect order and it is difficult to account for the out-break.

II. General Sanitary Measures.

Rubbish Disposal.—The drying-shed erected during the year is a valuable addition to the Incinerator. Empty tins were perforated and dumped in the sea.

Subsoil and Surface Drainage.—Very little has so far been done for Weti in the shape of permanent drainage but a scheme has been drawn up for 1926. The two swamps already surveyed will be drained by agricultural drain discharging into a central open concrete channel, the latter being linked up with the street and stand pipe overflow drains.

Market.—A new market solely for the sale of fish and meat was opened, the original market being retained for vegetables and fruit. This relieved the congestion and permitted the removal of the "over flow stalls", consisting of wooden tables of doubtful cleanliness. Fly plates were made daily at the Health Office and placed on the market tables. They were a poor substitute for fly papers but certainly assisted in reducing the number of flies.

Table I.

Summary of Routine Sanitary work done during the year.

No. of houses inspected	...	9,395
No. of houses where mosquito larvæ were found	...	325
No. of general nuisances found	...	22
Amount of refuse removed (cart loads)	...	6,600
No. of dogs poisoned and buried	...	455
No. of vaccinations	...	3,047
No. of square yards of bush cleaned	...	15,284

SECTION IV.

Hospital.—The In-patents numbered 399 with 15 deaths as compared with 300 and 22 deaths in 1924. The number of deaths would be still further reduced if serious cases were brought in before they became moribund. Although there has been a decrease in the number of minor cases attending hospital, it is satisfactory to record an

increase in the number of operations, from 175 in 1924 to 200 during 1925. It is obvious that confidence in the hospital for surgical treatment is well established. Apart from the above figures, this is indicated by the number of patients coming from a remote district, after the return thereto of a recently discharged case.

The following operations were performed under local or general anæsthesia during the year.

Radical Cure of Hydrocele (single)	...	34
Radical Cure of Hydrocele (double)	...	20
Circumcision	...	27
Radical Cure of Inguinal Hernia (single)	...	19
Radical Cure of Inguinal Hernia and Hydrocele		5
Radical Cure of Inguinal Hernia (double)	...	3
Amputation of Scrotum (for Elephantiasis)	...	7
Dental Caries	...	2
Haematoma of Scrotum	...	3
Abscess	...	16
Suture of Wounds	...	24
Amputations	...	5
Laparotomy (General Peritonitis)	...	1
Adenectomy	...	2
Ganglion	...	4
Castration	...	2
Cellulitis	...	1
Paracentesis of Cornea	...	1
Radical Cure of I. R. Fistula	...	1
Gastro Enterostomy	...	1
Reduction of Dislocated Hip Joint	...	1
Tendon Suture	...	1
External Urethrotomy (Wheelhouse)	...	1
Excision of Sinus	...	1
Chalazion	...	1
Removal of Simple Tumours	...	14
Supra-pubic aspiration of bladder	...	2
Catheterization of bladder	...	1
Total	...	200

SECTION V.

Native Dispensaries.

The District Dispensary at Matangatwani has been completed; at Tumbe and Mzambaraoni, the work of erecting is proceeding satisfactorily. These three Dispensaries will tap populous districts and add to the number of serious medical and surgical cases treated at Weti, although many minor cases will probably be diverted from the hospital.

A native dispenser was sent to Kokota to treat the injuries and minor ailments which occurred from time to time amongst the labourers working on Funzi Island.

SECTION VI.

Weti Prison.

Annual Return of Prisoners.

Total number of Prisoners remaining on 1st January, 1925	... 16
Number admitted during the year	... 217
Average daily number in Gaol	... 17.23
Total number treated (including In and Out-patients)	... 96
Total number admitted to hospital	... 11
Total number of days in hospital	... 138
Total number of deaths	nil.

The general health of the prisoners was good, although about 90% were suffering from ankylostomiasis when admitted to Gaol.

The diet was satisfactory, no food deficiency diseases occurred. The prison was inspected weekly.

Funzi Leper Settlement.

The work of erecting the permanent buildings is proceeding satisfactorily and should be completed shortly. The scheme has been commented on favourably by the patients, and almost all are anxious, to leave their present houses. It is to be regretted that accommodation has been provided for only 120, as this is not sufficient to permit the transfer of all the lepers from the other settlements. A number of the temporary buildings are badly in need of repair and their up-keep will be a constant source of expense.

The general health of the patients has improved considerably and their outlook on life is more cheerful. About 75% have been attending Miss Philpot regularly for treatment, but it has not been possible to discharge any patients as cured. A small quantity of E. C. C. O. was received and given a trial; it caused very little reaction and practically no pain at the site of injection. A further supply has been ordered and if satisfactory in one or two selected cases, its use might be extended to all.

The following table compares particulars concerning Funzi Settlement with those of the previous year.

Table A.

	1925.			1924.		
	Males.	Females.	Total.	Males.	Females.	Total.
Remaining on 1st January ...	31	36	73	27	37	64
Admitted during the year ...	18	7	25	23	10	33
Died during the ...	4	2	6	10	5	15
Discharged ...	—	1	1	—	—	—
Escaped ...	—		1	4	5	9
Remaining on 31st December ...	57	39	90	37	36	73

The one female discharged was a non leper who had voluntarily gone into isolation on Funzi with her husband. On his death, she expressed the desire to leave, and as there were no signs of infection, she was given the necessary permission.

Milch goats and fishing canoes have been provided. Seeds, banana plants and mohago root were distributed and planted. Gardening provides an interest in life for the patients and the produce augments their food supply.

In July a new ration scheme was drawn up and since that date has been in operation.

TABLE B.

Article.	Amount per day.	Amount per week.	When despatched.
Money			Rs. 1 1st of month.
K. Oil	¾ oz. per house	5¼ oz. per house	Fortnightly.
Bread	3/7 loaf per day per head	3 loaves per head	Twice weekly.
Sugar	1½ oz. per day per head	10½ ozs. per head	Fortnightly.
Oil	3/7 ozs. per day per head	3 ozs. per head	Fortnightly.
Kunge	½ lb. per day per head	3½ lbs. per head	Fortnightly.
Choroko	½ lb. per day per head	3½ lbs. per head	Fortnightly.
Soap	—	—	½ bar monthly.
Salt	½ oz. per day per head	3½ ozs. per head	Fortnightly.
Cocoanut	—	—	8 monthly sent 1st × 15.
Rice	1 lb. per head per head	7 lbs. per week	Fortnightly.
Shark	—	—	4 annas per month for fish.

Miss Philpot now visits the Island, five times weekly; to her visits and attention, much credit must be given for the improvement that has taken place in the health and out-look of the patients.

T. A. AUSTIN,
Medical Officer.

APPENDIX III.

ANNUAL REPORT OF BIOLOGICAL DIVISION FOR 1925.

Staff.—Comprises the Economic Biologist and five Native Attendants.

Malaria.—A complete Malaria survey of the Protectorate is still in preparation. As mentioned in my Report for 1924, the results of these investigations will be published elsewhere.

The following *résumé* comprises the chief data obtained:—

Total number African children examined	...	1,362
Parasite rate	...	891 = 65.4%
Gametocyte rate	...	176 = 12.1%

Species of Parasite found were:—

Benign Tertian	...	521 = 38.2%
Subtertian	...	222 = 17 %
Quartan	...	73 = 5.3%
Benign Tertian Gametocytes	...	106 = 7.7%
Subtertian Gametocytes	...	38 = 2.8%
Quartan Gametocytes	...	32 = 2.3%

In all cases thick and thin films were examined. Parasites in small numbers were often found in thick films only, these are returned in the total parasite rate (891), but classified in all doubtful cases as undefined. The average age of the children examined was approximately five years.

Total number of African adults examined	...	429
Parasite rate	...	87 = 18.8%

The majority of these showed very few parasites in thick films. Most of them are returned as undefined. Crescents were detected on six occasions, Benign and Quartan Gametocytes were not observed.

The blood films examined were drawn from the following localities:—Mwera, Mwera Arab School, Dunga, Chwaka, Mkokotoni, Donge, Ziwani Lines, Bweleo, Kombeni, Unguja Ukuu, Kizimkazi, Tungu, Bububu, Mfenessini, Fumba, Demani, Saateni, Tumbatu Island, Mangapwani, Mtende, Mkunduchi, Vikokotoni, Kisiwandui, Mkamasini, Mchangani, Mlandege, Mwembeladu, Gongoni and Kikwajuni, these last eight places are in the African part of Zanzibar Town; Ras Nungwe.

These districts represent topographically different conditions, some are well watered by perennial streams with a heavy rainfall, others in dry areas with a correspondingly low rainfall. There is no marked difference between the dry and wet zones, all communities of children examined showed a marked parasitæmia.

Young children from one to two years old always showed a high parasite rate with numerous gametocytes. From six to ten years old the infectivity was much lessened with a great decrease in the number of gametocytes.

From these findings it will be seen that Malaria is general among the native population. All three species of the plasmodium are prevalent, Benign Tertian being the commonest form.

The Anophelines in Relation to Malaria.—Engorged females were captured in various localities and dissected to ascertain the sporozoit and oocyst rate. Adults from the following places have been examined:—Mwera Police Lines and Jail; Bububu Police Lines and Indian Houses; The Central Prison; Ziwani Lines; Mahonda Police Lines; Mkokotoni Police Lines; Zanzibar Town.

The results of these dissections are tabulated as follows:—

Total number of Anophelines dissected	... 2,724
Total number of Anophelines infected (Sporozoits and Oocysts)	... 205 = 7.5%
Total number of A. costalis dissected	... 1,659
Total number of A. costalis infected	... 127 = 7 %
Total number of A. funestus dissected	... 1,065
Total number of A. funestus infected	... 78 = 7.3%

Five Anophelines are known to occur in the Protectorate, namely, A. costalis, funestus, mauritianus, squamosus and longpalpis.

Both A. costalis and funestus show a high rate of "Natural Infectability".

Experiments have not been undertaken to test the "Experimental Inefectability" rate of A. costalis and A. funestus to all three species of the Plasmodium owing to the impossibility of obtaining cases showing good gametocyte infection.

Filariasis.—Blood films taken at night have been examined for the incidence of Microfilaria bancrofti. The following figures have been obtained.

African adults. Total number examined (Night blood 9 p.m. to 10 p.m.)	... 595
Infected	... 199 = 33.4%

The natives were from different districts of the Protectorate. At the same time Culex fatigans adults engorged with blood were captured in various houses scattered throughout the town and dissected on the twelfth day to ascertain the natural infectibility rate for Microfilaræ with the following results:—

Number examined	... 1,015
Number infected (proboscis)	... 203 = 20 %

While dissecting A. costalis and funestus in relation to the "Malaria Survey" many of both species were noticed to be infected with Microfilaria bancrofti. Further work will be undertaken to ascertain the infectibility rate of these two species in comparison with Culex fatigans.

Anti-Mosquito Measures.—The Biological Division continued to take charge of all work in connection with the suppression of mosquitoes. The city was divided into nine districts to facilitate house-to-house inspection. Each district is in charge of an Inspector who is accompanied by a boy to help him in his work. The total number of houses inspected weekly in the town was 2,554. On an average 47 houses were visited by one inspector daily. Tables No. 1 and 2 appended at the end of this report show the results of the working of the Brigade.

TABLE No. 3.

SECTION 1.—ADMINISTRATION.

A. *Staff.*

The Mosquito Brigade of the Protectorate consists of:—

Inspectors 4th grade	4
Apprentices	8
Headman cesspool gang	1
Mosquito Brigade Boys	21
Headman Swamp Drainage	1
Boys for Swamp Drainage	14

B. *Financial.*

	Rs.	cts.
Personal Emoluments	15,567	04
Clothing	373	39
Oil	1,928	94
Incidental	100	(approximately).
Total Rs.	17,969	37

TABLE No. 4.

Comparative table showing collections of mosquito larvae found in the township:—

	1923.	1924.	1925.
Anopheles	75	4	9
Culex	67	87	66
Stegomyia	187	384	468

TABLE No. 5.

Comparative table showing collections of mosquito larvae found in Ngambo district (African Town).

	1923.	1924.	1925.
Anopheles	4	5	4
Culex	1,271	157	12
Stegomyia	2,035	753	676

TABLE No. 6.

The breeding places of Anophelines in the township and Ngambo (African Town) were as follows:—

1. In coral rock pools, above high water mark on beach facing Ismaili Khoja Cemetery January 19th.
2. In drain at Malindi Jongeani February 7th.
3. In cattle trough at Mnazimoja April 11th.
4. On the road near Mkunazini Mission December 7th.

Ngambo A. and B. Districts.

1. Mwembetanga swamp January 2nd.
2. Mwembetanga swamp January 7th.
3. Recreation Park January 12th.
4. In the tank of the mosque at Kisiwani March 24th.

Ngambo C. District.

1. In a well near Makadara Mosque January 14th.
2. In holes near Gulioni Customs January 24th.
3. In the drain at Mwembeladu March 17th.
4. In a well at Makadara November 25th.
5. Makadara Swamp December 23rd.

TABLE No. 7.

The following mosquito adults were caught in the township

	1924.	1925.
Anopheles	11	182
Culex	2,483	2,737
Stegomyia	266	180

The marked increase in number of Adult Anophelines is due to the fact that a number of houses on the periphery of the township were examined weekly; in 1924 all adults caught were from the center of the town area.

The breeding places of Anophelinae both in the town and Ngambo districts were of a very varied character. Small adventitious pools, swamps, etc., formed during the rains were most prolific nurseries.

On one occasion only were larvae found in large cemented tanks, in 1924 five times. As stated in my previous report these nuisances will not cease until a piped water supply is laid on to all mosques.

In one instance Anophelinae larvae were found in small depressions in coral rock just above high water mark, a most unusual situation. The depressions in question were filled in with rubble and cemented over.

	1924.	1925.
Number of Notices served	360	121
Number of Prosecutions instituted	8	Nil.
Number of Convictions	7	Nil.

It should be noted in all tables "Anopheles" refers to Anopheles costalis, "Culex" to Culex fatigans, "Stegomyia" to Aedes argenteus. Several other species of Culicines were captured in the town, notably Culex tigripes and Toxorhynchites brevipalpis. These last two species might be looked upon as allies considering their cannibalistic habits towards their brother larvae. In one district, namely Gulioni, numbers of Ochlerotatus pembaensis were caught, adults were voracious blood suckers during the day; their larvae were found in great numbers in crab holes in a tidal inlet. No satisfactory measures have been found to stop the digging propensities of these large Crustacea. Various poisons have been tried with little effect. Cyanogas Calcium Cyanide will be tried as soon as the chemical arrives; favourable reports have been received as to its efficacy against land crabs.

Culex fatigans is the most dominant mosquito in the town, although larval findings point to Stegomyia faciata. The adult index shows a marked preponderance of C. fatigans (see Table No. 7). Considering that Culex fatigans breed chiefly in sullage pits, cesspits, and drains, the possibility of eradicating this species of mosquito is well nigh impossible until an up-to-date sewerage system is laid in the town.

TABLE No. 8.

Sullage and cesspits oiled weekly in 1925:—

1924.		1925.	
January	400	January	695
February	403	February	711
March	407	March	712
April	410	April	716
May	434	May	720
June	459	June	723
July	461	July	373
August	483	August	380
September	500	September	388
October	507	October	402
November	522	November	406
December	536	December	402
Total	5,522	Total	6,628

These pits are covered with large, circular reinforced concrete covers easily lifted, giving the oiler free access. There are still in various quarters of the Town, more especially in the African zone, many sullage and cesspits with no covers. These are practically inaccessible and impossible to oil efficaciously. Attempts are being made to devise a cesspit for the natives which will be mosquito proof.

During the year under review definite evidence has been obtained that cesspits, especially those owned by Africans are heavily infested with Culex larvae. This can be accounted for by the habits of the natives who use the cesspit as a receptacle for bath waste. In the African town most cesspits are in a very liquid condition forming ideal breeding grounds for C. fatigans.

The Sanitary Superintendent has designed a good wooden plug to fit the approved type of cesspit cover. A number of them are already in use. He has also constructed a water seal trap to fit underneath the cesspit cover for native latrines.

Much clearing of bush in private gardens, public squares, etc. has been carried out conjointly by the Public Health and Agricultural Departments. I strongly urge that this work should be continued and that all gardens, as far as possible, should be cleaned of dense bush and thick shrubbery. Such conditions can be replaced by ornamental flower beds, grass lawns and suitable shade trees with good top canopy.

Personnel of the Mosquito Brigade.—The African apprentices, who are being trained as Mosquito Inspectors, have shown aptitude for the work. Their rate of pay, service conditions, etc., were stated in my report for 1924.

Certain alterations have been made in the working of the Brigade. Each house in the town is inspected once every week. It has been the aim of the Inspectors to impress on the Public their day of inspection Householders have been told on what day and at what time the Inspectors will arrive and have been asked that all vessels containing water should be overturned and dry, or oiled at the time of the Inspector's visit. Further on arrival in a house, if the householders have not emptied water containers or made use of oil, the Inspector before searching for larvae demands that this should be done at once in his presence. On meeting with refusal he examines all water containers and if larvae are present at once institutes proceedings against the offender. By this method the Public are given a chance, and a case brought into court after such procedure has taken place, generally meets with success.

The African apprentices have attended lectures, demonstrations, etc., in my office and most of them are now acquanted with routine work in combating Mosquitoes.

The African Quarter, Ngambo.—Good work has been carried out in this most difficult district. House-to-house inspection has been instituted among the maze of native huts. Two Inspectors are employed in this area to look after roughly 3,247 houses.

I have again impressed on the Inspectors the necessity for propaganda and for explaining the life history of the mosquito.

During my visits in this large quarter I was agreeably surprised to find that many householders understand the reason for the Inspector's weekly visit and could at a glance recognise larvae as a stage in the mosquitoes' life history.

Many unknown adventitious Anopheline breeding grounds discovered have been filled or oiled when necessary. There are still two large swamps in the Ngambo district which require permanent drainage measures. These will be taken in hand by the Public Works Department in 1926.

Table No. 2 shows the results of the year's work.

Propaganda, Lectures, Demonstrations, etc.—Lectures and demonstrations of the field work have been given to various groups of people. All were taken to Malarial centres and shown adult Anophelines in houses, their method of capture and recognition, the finding and diagnosing of various larvae. Practical preventive measures were shown such as oiling, bush clearing, digging of temporary drains, filling, looking for spoil-banks and rough canalising of streams. Groups of natives were assembled in the Health Office and living mosquitoes, both adults and larvae, were demonstrated, this was followed up by a short lantern lecture showing them work which had been carried out in other countries.

The Biological Division has a large collection of lantern slides, relating to Malaria and its prevention, Hookworm and other tropical maladies. The Rockefeller Cinema Films "Malaria" and "Unhooking the Hookworm" were purchased. The films were shown six times in the Royal Cinema Theatre and eight times in the Zanzibar Cinema in Zanzibar Town. Large numbers of Europeans, Indians and Natives attended. There is no doubt that such shows stimulate the interest of Natives in Public Health.

The films were also lent to the Governments of Tanganyika Territory and Kenya Colony. The Zanzibar Museum intends purchasing in the near future a small Cinema Projector, this instrument will be installed in one of the rooms of the Museum for demonstration purposes. The machine in question will be able to be stopped at any point thereby enabling the lecturer to explain to the Public the meaning of various portions of the film. Enquiries have been made from the Rockfeller Foundation as to the feasibility of having the headings and explanations of the films which appear on the screen in English being reproduced in Swahili.

According to information received there seems to be no difficulty, and as soon as the films return from Kenya Colony they will be sent to New York with the Swahili translations, and the next time they are shown in Zanzibar English and Swahili explanations will appear on the screen together.

A good magic lantern and portable magic lantern have been purchased for demonstrations.

The magic lantern has been in continual use in the Health Office for giving demonstrations to members of the Mosquito Brigade. The portable lantern lit by Calcium Carbide will enable demonstrations to be given in the outlying districts.

I am confident that such measures as outlined will in the end be of great value; patience and reiteration are required. It is also hoped

that short popular articles on mosquitoes and Malaria will be published from time to time in the local press. The Zanzibar Government pamphlet on Malaria, and *Afya*, published by the Tanganyika Territory Government, are widely read.

Leaflets in English, Swahili in Roman characters, Swahili in Arabic characters, Gujerati and Arabic distributed to all householders in the town; this measure was extremely popular with native inhabitants. It drew attention to the aim of the Mosquito Brigade and above all definitely stated the day and time of the Inspector's visit.

The English leaflet was worded as follows (translations were made into Swahili, Arabic and Gujerati):—

HEALTH OFFICE,
ZANZIBAR.

The attention of the Public is drawn to the following points:—

1. Mosquitoes are carriers of Malaria, Elephantiasis, and other fevers.

2. In the majority of cases the adult mosquitoes observed in a house are being bred on the premises and you will materially assist in ridding yourselves of these pests by seeing that, as far as possible, all vessels containing water, such as tubs, small tanks, tins, ant-guards under meat safes, etc., etc., are empty and dry at the time of the Inspector's visits and that all more permanent collections of water are kept properly covered or oiled at least once a week.

3. A Mosquito Inspector will visit you every ..... Please inform him whether you have been troubled by mosquitoes during the week and give him your assistance in his inspection by allowing him free access to all parts of your premises accompanied by yourself or a responsible servant.

4. Remember your inspection day (.....) and inform your servants.

5. Gardens should be carefully attended to and kept as free as possible from dense bush and under-growth.

6. There are certain plants which hold water and in which mosquitoes are capable of breeding, such plants will be pointed out to you by the Inspector.

Anti-Malarial Work.—The most important achievement in this direction during the year was permanent drainage work carried out in the Kiungani area.

One large concrete drain was laid along the side of the Kilimani hill; ten agricultural drains lead into the main concrete channel to control the large amount of seepage water which oozes from the hill side for a long time (often many months) after heavy rains.

A large area (about three acres) of tidal swamped ground was filled and drained by agricultural drains. Formerly the edge of this tidal inlet where fresh from the hill side mingled with the sea water, was a favourite breeding ground for A. costalis.

At the same time a small area of land at the base of the Kilimani hill was graded and tile drains inserted, leading into the main Ziwani drain. This land is now rented by an Indian market gardener and is producing a fair quantity of vegetables. It is most encouraging to note that land formerly swamped for many months of the year is now efficiently drained and producing a most useful commodity for the Public. The general food supply of Zanzibar, considering its close proximity to the equator is excellent. Meat of good quality, fish in abundance, a controlled milk supply, many varieties of cereals, legumes, fruits and efficient bakeries afford an excellent diet; the lack of green vegetables however especially in the dry season is acutely felt. The importation of European vegetables from the mainland has been tried and proved a failure owing to their heavy cost and their perishable nature. It is to be hoped that in the fututre these drained and reclaimed areas, many of which have excellent soil, will become market gardens. As proved by experience in Algeria areas once avoided as pestilential have become reasonably healthy ones of intense cultivation with scarce room for another blade of grass; and as has been picturesquely said, the way to exterminate Malaria is to improve well-being, and that good administration pre-eminently aids this.

It has been for some years past the policy of the Biological Divison to eliminate Malaria as far as possible from the foot of Kilimani hill to the old "Wireless Station" a distance of some two miles. There are three large ravines which will require permanent drainage measures.

When this work is completed and if the Government can acquire the whole or part of the drained area; a suitable site will be ready for European occupation.

Technical and financial details regarding the type of drains laid are published in the Annual Report of the Public Works Department.

The permanent anti-malarial measures in Zanzibar are carried out conjointly by the Public Works and Public Health Departments.

During the year Paris Green was used as a larvicide for the first time in large swamps containing weeds and grass. Dilution used was one part of Paris Green to ninety nine parts of road or saw-dust.

The results obtained were excellent.

Paris Green has great advantages over oiling for the following reasons:—

1. Easily portable.

2. Cheapness.

3. Does not require stirring or mixing to the extent oil does in flooded grassy areas.

Recommendations in Regard to Anti-Mosquito Work:—

1. A complete sewerage system to be installed as soon as possible. Until this is accomplished the control of Culex fatigans presents great difficulties.

2. The regrading and laying of storm and sullage water drains in the town, especially in the Indian bazaar and Malindi. C. fatigans larvae have been found on innumerable occasions in such sites.

3. Installation of piped water supply to all mosques; ablution tanks to be prohibited.

4. Prohibition of digging "Matutas" (furrow cultivation) a favourite haunt of Anopheline larvae in the town limits.

5. Creating wind-swept, sun-baked areas between permanent breeding grounds and the town, a valuable measure against Anophelines.

6. The continuation of permanent drainage works on the South road.

7. The acquisition of land where anti-malarial measures have been completed; for example areas at Kiungani.

8. That "invitation" traps be experimented with to control Culex fatigans and Stegomyia faciata; in other words to favour race suicide of mosquitoes.

9. That the planting of coconut trees in the town area be prohibited.

BIOLOGICAL LABORATORY.

Examinations.—Examinations to the number of 1,018 were made, the majority of which were blood films taken from native children in connection with work on the "Malaria Survey" of the Protectorate.

Other examinations included veterinary material comprising Trypanosoma and Piroplasma; a certain number of stools were submitted from the bacteriogical laboratory for confirmatory diagnosis as to species of Amoebae, various protozoal intestinal parasites and some helminthological material.

As soon as the various research problems undertaken by the Biological Division are completed it is hoped that all "*Zoological Material*" comprising Protozoa, Helminths, Molluscs, Insects, rats, etc., will be handed over to this laboratory for diagnosis.

Dr. Craig, Medical Officer in charge of Shamba Dispensaries, made considerable use of the Biological Laboratory. His investigations dealt with the infectivity of soils from native cesspits in regard to Ankylostome larvae. He was supplied with the necessary literature relating to modern Hookworm research and Baerman's apparatus for obtaining larvae from soils.

Anophelines to the number of 2,724 were dissected for the sporozooit rate, and 1,015 Culex fatigans for Microfilaria bancrofti.

General.—A few new specimens were added to the Health Office Museum. Many duplicates and spare material were sent to the "London School of Tropical Medicine".

The Biological Division is greatly indebted to the Director of the "London School of Tropical Medicine" who has on so many occasions

given most valuable advice as to modern literature, diagnosed doubtful specimens and donated material for our Museum which was unobtainable in Zanzibar. Such co-operation with a modern up-to-date institution staffed with experts, equipped with the latest literature and possessing large collections of type specimens relating to Tropical disease is a great boon to the isolated worker in the tropics, who has none of these facilities.

The recently opened Zanzibar Museum has now a small exhibit staged and arranged by the Senior Sanitation Officer and the Economic Biologist.

It is to be hoped that in the forthcoming year more space will be allotted to the Public Health Section; in fact if the collection is to be at all representative of Public Health and Tropical Medicine a separate building will be required. The major diseases of the Protectorate are shown in as simple a form as possible, so as to be intelligible to the native. One room has been set aside for lectures and demonstrations. A magic lantern has been provided, lantern slides dealing with tropical diseases and Public Health have been loaned by the Biological Division.

I have suggested to the Committee that they should purchase as soon as possible a small Cinema Projector and a large Epidiascope.

With such a range of instruments interesting lectures could be given on many subjects.

The Museum, when organised, will form a centre for teaching and demonstration purposes. Already both the Education and Public Health Departments have made use of the collections staged for teaching.

It is to be hoped that in the near future it may be possible to attach a small research laboratory to the Museum.

Valuable collections of scientific material such as series of Diptera, venomous animals, stained blood films and a large spirit collection of varied material is still housed in the Biological Division. This material is of great use for demonstrating to newly arrived Medical Officers some of the commoner problems of Tropical Medicine. The Economic Biologist has a library comprising two thousand volumes which he has placed at the disposal of the Biological Division. Nearly all important journals relating to biology and especially Medical Zoology are taken.

The literature relating to "Ankylostomiasis" has been much enriched during the year owing to valuable contributions from the "Rockefeller Foundation".

For the sake of reference a series of text books on ordinary scientific subjects has been purchased; these have proved most useful in preparing lectures.

A large collection of rats, trapped in various districts of both islands, was sent to the British Museum of Natural History for

identification. Our rodent fauna comprises the following species of rats:—

1. Rattus rattus rattus.
2. Rattus norvegicus. Two dark specimens were captured and proved to be melanitic forms of norvegicus.
3. Rattus rattus frugivorus.
4. Mus musculus gentilis.
5. Cricetomys gambianus.

The Insectivore Pachyura cærulea is often trapped in the town and harbours Xenapsylla cheopis.

The following fleas have been taken from the above mentioned rodents:—

1. Xenopsylla cheopis.
2. Xenopsylla astia.
3. Xenopsylla brasiliensis.
4. Xenopsylla crinita.
5. Echidnophaga gallinaceus.
6. Ctenocephalus felis.

I am indebted to Mr. Simes, Medical Entomologist, Kenya Colony, who kindly identified this series of fleas for me.

Future Work.—Future work will comprise:—

1. Completion of Malaria Survey.
2. Investigations *re* Monkey Malaria. Many of the small monkeys of the Protectorate are infected with Plasmodium kochi.
3. *Bilharziasis.*—Study of the Molluses in endemic areas as to their capability of acting as carriers of Schistosomum hæmatobium and mansoni. Some preliminary work has been done.
4. *Ankylostomiasis.*—Collection of adult worms for identification: Of the few examined only A. duodenale has been found. A. caninum and ceylonicum have been recorded from dogs but not from humans. Worm counts from at least 100 typical human cases should be made to show the degree of infestation. Examination of soils taken from earth topped privies, soil around outfall of drains on sea beach, etc., should be examined by Baerman's method for Ankylostome larvæ.
5. Investigations as to the prevalence of Xenopsylla astia and brasiliensis. Some preliminary work has been done.
6. *Filariasis.*—Comparison of Natural infectivility of Anopheles costalis and funestus to Culex fatigans as carriers of Microfilaria bancrofti. Capability of Stegomya faciata (Aedes argenteus) and Ochlerotatus pembaensis to act as intermediate hosts.

W. MANSFIELD-ADERS,

Table No. 1.

Breeding places of various kinds of mosquitoes in Town Districts during 1925.

Months.	Tanks. Cisterns, Drums, Barrels and Earthern Vessels.			Drains and Cesspools			Old tins and Bottles, etc.			Trees and Plants.			Boats and Dhows.			Swamps and Pools.			Holes in Trees, Grounds, Roads, etc.			Roof Gutterings.			Mosquito Traps.			Gully Traps.			Total.			Rainfall.
1925	*S	*C	*A	S	C	A	S	C	A	S	C	A	S	C	A	S	C	A	S	C	A	S	C	A	S	C	A	S	C	A	S	C	A	Inches.
January ...	12	1	0	1	1	0	7	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	5	1	0	0	3	0	25	7	1	7·56
February ...	14	1	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	2	0	0	0	0	24	5	1	2·89
March ...	9	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	12	0	0	6·52
April ...	10	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	1	0	0	32	0	1	5·68
May ...	23	1	0	0	0	0	6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	12	0	0	0	2	0	41	4	0	2·44
June ...	22	2	0	1	2	0	6	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	15	0	0	0	1	0	45	7	0	2·45
July ...	14	3	0	1	3	0	8	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	12	0	0	0	0	0	36	7	0	1·48
August ...	32	2	0	0	0	0	6	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	44	4	0	2·43
September...	36	5	0	0	3	0	14	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	52	10	0	1·58
October ...	37	3	0	0	0	0	7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	50	3	0	8·69
November...	31	9	0	0	3	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	16	0	0	0	0	0	48	14	0	11·09
December...	45	3	0	1	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	8	0	0	0	0	0	60	5	1	12·87
Total ...	285	30	1	4	16	1	66	3	0	2	0	0	1	5	0	0	0	0	2	3	2	1	0	0	107	3	0	1	6	0	469	66	4	65·68

*S—Stegomyia. *C—Culex *A—Anopheline.

Table No. 2.

Breeding places of various kinds of mosquitoes in N'gambo Districts during 1925.

Months	Tanks, Cisterns, Drums, Barrels and Earthern Vessels.			Drains and Cesspools			Old Tins, Broken Bottles, etc.			Trees and Plants			Boats and Dhows			Swamps and Pools			Holes in Trees, Grounds, Roads, etc.			Roof Guttering			Gully Traps.			Total			Rainfall.
1924	*S	*C	A*	S	C	A	S	C	A	S	C	A	S	C	A	S	C	A	S	C	A	S	C	A	S	C	A	S	C	A	Inches.
January ..	23	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	2	0	0	0	0	0	0	23	1	5	7·56
February ..	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	1	0	2·89
March ..	23	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	23	3	2	6·52
April ..	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0	5·68
May ..	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	2·44
June ..	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0	2·45
July ..	34	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	0	0	1·48
August ..	37	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	1	0	2·43
September ..	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	105	1	0	1·58
October ..	114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	114	2	0	8·69
November ..	147	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	147	2	1	11·09
December ..	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	96	1	1	12·87
Total ..	676	3	2	0	2	1	0	0	0	0	0	0	0	0	0	0	7	4	0	0	2	0	0	0	0	0	0	676	12	9	65·68

*Stegomyia. *Culex. *Anopheline.

APPENDIX IV.

SEVENTH ANNUAL REPORT OF THE ZANZIBAR MATERNITY ASSOCIATION.

For the Year ending 31st Decemeer, 1925.

The Association is again in a position to report steady progress during the year under review and at the same time to record the realization through the generosity of the Wakf Commissioners of a long cherished object, namely, the opening of a Maternity Home and Clinic for Arabs and Natives in the heart of the native quarter.

A reference to Appendix I shows that during the year under report the Association midwives attended 252 cases as compared with 253 in 1924. Of these cases 55 were Arab or African, which represents over 50% of Arab and African births in the Town and 67% of other communities. Of the 252 cases, 23 were treated free and 15 at reduced charges. The total number of visits paid by the staff was 6,364 as compared with 4,806 in 1924.

The staff of the midwives consisted of Mrs. N. Neuman, Miss B. J. Locket, Mrs. M. Arunki and Mrs. W. Castellas, and the Committee have pleasure in recording the excellent work done by them all. Since October the Association has lost the services of Mrs. Castellas who was compelled to retire on account of ill-health. Mrs. Castellas was trained locally by the Association, and has throughout rendered valuable service especially amongst the Arab and African communities. A pupil midwife has been in training since December 1924, and it is hoped that she will, in the middle of the year 1926, pass the necessary test and become a full member of the staff.

In December the construction of the Maternity Home and Clinic was completed by the Public Works Department at a cost of Rs. 39,592 towards which the Wakf Commissioners contributed Rs. 30,000, the balance of Rs. 9,592 being met from the funds of the Association. In this connection it may be mentioned that Messrs. Karimjee Jivanjee & Co. generously offered to furnish and equip the Home and this offer has been gratefully accepted. It is gratifying to note that an increasing number of patients are being admitted into the Home.

The upper portion of the building is used as Maternity Home and Clinic and quarters for the Midwife in charge. A Government dispensary has been opened on the ground floor under the supervision of the Midwife in charge and is patronised by a growing number of Arab and Native women and children. The men's side of the dispensary is being served by a native dispenser, and is visited daily by a Medical Officer of the Government.

The Association tenders its grateful thanks to the Government for an increase in the annual grant from Rs. 4,500 to Rs. 7,500.

All further details as to the activities of the Association and as to the cost of services will be found in the Appendices II to VII.

R. H. CROFTON,
Honorary Secretary.

APPENDIX I.

Births Attended by the Association Midwives in 1925.

Nationality.	Association Records. Male.	Female.	Premature and unknown.	Total.	Registered at the Health Office.
Arabs	16	7	4	27	46
Swahilis	7	11	—	18	36
Comorians	4	1	2	7	16
Shihiris	1	2	—	3	9
				55	107
Bohoras	18	30	6	54	46
Goans	9	10	—	19	34
Hindoos other than Bhattias	2	6	—	8	74
Bhattias	5	3	—	8	
Ithnasheri Khojas	34	40	16	90	77
Other Indian Mohamedans	7	5	2	14	30
Seychellians	1	—	1	2	2
Chinese	1	—	—	1	1
Greeks	—	1	—	1	1
Total	105	116	31	252	372

16

Number of Visits paid by the Association Midwives in 1925.

Maternity Visits	...	3,772
Ante-natal Visits	...	1,019
Gynaecological Visits	...	1,573
Total Visits	...	6,364

APPENDIX II.

Comparative Statement of Work done by the Zanzibar Maternity Association.

Number of Cases.

		1919	1920	1921	1922	1923	1924	1925
Arabs	...	—	—	20	13	21	31	27
Swahilis	...	—	—	11	11	12	18	18
Comorians	...	—	2	6	6	4	6	7
Shihiris	...	—	—	—	1	4	2	3
Persians	...	—	—	—	—	—	2	—
Total	...	—	2	37	31	41	59	55
Foreign communities :	...	46	59	55	147	96	182	197
Grand Total	...	46	61	92	178	137*	241*	252

*Total cases including abortions, etc., in 1923 and 1924 were 151 and 253 respectively.

APPENDIX III.

COMPARATIVE STATEMENT OF THE NUMBER OF VISITS PAID BY THE ASSOCIATION MIDWIVES.

	1919.	1920.	1921.	1922.	1923.	1924.	1925.
Number of visits ...	353	697	1,854	3,549	2,853	4,806	6,364

APPENDIX IV.

STATEMENT SHOWING NUMBER OF CASES TREATED FREE OR AT REDUCED FEES IN 1925.

	Free.	Reduced fees.
Swahilis	18	—
Arabs	—	4
Comorians	5	—
Mohamedan Indians not including Ithnasheri Khojas ...	—	1
Hindoos not including Bhattias	—	4
Goans	—	5
Seychellians	—	1
Total	23	15

APPENDIX V.

LIST OF DONATIONS RECEIVED IN 1925.

	Rs.	as.	p.
Mr. Wasonji Kalianji	50	00	0
Captain T. W. Hodkin	12	00	0
Anonymous per Mr. Husein Sherif Dewji ...	56	10	6
Mr. Shavakshaw H. Talati	40	00	0
Messrs. Cowasjee Dinshaw & Bros. ...	50	00	0
Total ...	208	10	0

APPENDIX VI.

EXPENDITURE OF THE ASSOCIATION

	Rs.	as.	p.
1920 ...	5,969	6	6
1921 ...	6,775	4	3
1922 ...	7,405	4	3
1923 ...	8,077	0	9
1924 ...	13,472	12	9
1925 ...	16,836	13	6

THE ZANZIBAR MATERNITY ASSOCIATION.

STATEMENT OF RECEIPTS AND PAYMENTS FROM 1ST JANUARY TO 31ST DECEMBER, 1925

	Rs.	as.	p.
Balance brought forward	17,108	7	3

RECEIPTS.

	Rs.	as.	p.	Rs.	as.	p.
Subscriptions	5,000	00	0			
Fees	3,368	00	0			
Donations	208	10	6			
Miscellaneous revenue ...	770	00	0			
Government Grant for 1925...	4,500	00	0			
Total Income in 1925 ...	13,846	10	6			
Refund of advances ...	413	00	0			
Total receipts				14,259	10	6
Grant total				31,368	1	9

PAYMENTS.

	Rs.	as.	p.	Rs.	as.	p.
Salaries	13,560	00	0			
House rent	2,448	00	0			
Drugs and Dressings ...	206	15	0			
Medical equipment ...	10	00	0			
Furniture	100	00	0			
Contingencies	291	6	0			
Uniforms	88	2	6			
Maternity Home maintenance ...	132	6	0			
Total Expenses in 1925 ...	16,836	13	6			
Advances to Midwives ...	248	00	0			
Total payments				17,084	13	6
By balance				14,283	4	3
Grand Total				31,368	1	9

Note.—Balance is made up as follows:—

By Fixed Deposit Receipts ...	11,240	00	0
,, Cash in the Bank	3,043	4	3
Rs.	14,283	4	3

SHAVAKSHAW H. TALATI,
Hon. Treasurer,
The Zanzibar Maternity Association

Zanzibar, 15th January, 1926

ANNUAL VETERINARY REPORT

FOR THE YEAR 1925.

SECTION I.—ADMINISTRATION.

A. STAFF.

The Veterinary Staff of the Protectorate consists of:—

Veterinary Officer	...	1
Assistant Veterinary Officer	...	1
Veterinary Cadets	...	4
Attendants	...	22

B. FINANCIAL.

The Annual Expenditure for the Veterinary Division was a total of Rs. 25,838-98 as follows:—

		Rs.	Cts.
Personal Emoluments	...	15,488	00
Clothing for Boys	...	64	00
Incidental	...	800	00
Landing Charges	...	882	12
Travelling Expenses	...	311	92
Special Expenditure:—			
Anti-Rinderpest Serum	...	6,000	00
Experimental Animals	...	870	00
Furniture	...	446	07
Four Bicycles	...	592	50
One Typewriter	...	384	37
	...	25,838	98

Revenue from Veterinary Services totalled Rs. 25,783-38. The Revenue is derived from the following sources:—

		Rs.	Cts.
Cattle Importation and Exportation Fees	...	11,275	00
Veterinary Hospital	...	150	00
Abattoir Charges	...	8,432	00
Wharfage Charges for Landing Cattle (about)		2,100	00
Landing Cattle	...	2,462	38
Rent for Mji Mpia Cow-Sheds	...	1,092	00
Cremation fees	...	272	00
Total Rs.		25,783	38

Expenditure on New Buildings, Repairs, etc.

		Rs.	Cts.
Gulioni Abattoir			
Improvements	...	464	58
Mji Mpia			
Dairy Scheme	...	39,624	34
Drainage	...	83	75
Pigaduri Quarantine Park			
Partition to Kraals	...	270	28
Sea Wall Construction	...	4,837	13
Veterinary Hospital Kisiwandui			
Kennel for Dogs	...	59	51
Alterations	...	1,195	00
	Rs.	46,434	59

C. Legislation.

Government Notice No. 76 and 96, published in the *Official Gazette*, dated May 18th and June 15th respectively prohibited the Movement of Cattle, outside the areas of Mwera, Unguja Ukuu and Mangapwani owing to the outbreaks of Rinderpest there. These Notices were repealed, by Notices No. 151 and 162, published in the *Official Gazette*, of 12th September and 3rd October.

SECTION II.—DISEASES OF CATTLE.

Rinderpest.

Pemba remained free from Rinderpest in 1925.

There were four outbreaks of rinderpest in the Island of Zanzibar.

Rinderpest outbreak in the Cattle Quarantine Station.

On March 18th a herd of twenty cattle was landed by dhow from Mogadiscio. These animals were at sea for 15 days, and six of them died on the voyage. Three died at Pigaduri on 21st March, and five others were found to be sick; showing temperatures between 140° and 106°. The ante-and post-mortem examinations revealed typical rinderpest lesions. All sick were promptly slaughtered. This outbreak involved about 400 head of cattle being detained in quarantine, the majority of which were imported by dhows from the Juba Province and Somaliland during the North-Eastern Monsoon.

All necessary measures were taken to combat the disease and to check its further spread in the Island.

As cattle were being imported in large numbers by dhows and steamers from various Arabian and adjacent African Ports, and no accommodation was available at Pigaduri, a notice was published in the *Official Gazette* on 23rd March, prohibiting the importation of cattle from Mogadiscio, Barawa, Merka, Kismayu and Lamu. This notice was repealed on 20th April.

Of the 400 cattle detained in quarantine, 32 died of starvation, the remainder were slaughtered. The Marahubi area which serves as grazing land for cattle in quarantine is about 71 acres, of this one half is planted with coconuts and other agricultural plants, the remaining half where the cattle graze is barely sufficient to fatten twelve oxen. The season being dry, fodder was scarce.

In this connection it is suggested, that the question of the extension of grazing areas for animals in quarantine may be seriously considered. The amount of stock maintained on the Marahubi grazing ground is about 300 animals per month. There are various Government plantations adjoining the present area, which could be profitably utilised for the same purpose.

Rinderpest outbreak in the Districts.

Southern District.—Two outbreaks occurred in the first week of May, one at Dunga, the second at Unguja Ukuu.

442 cattle were inoculated at Dunga and 160 at Unguja Ukuu.

The virulence encountered in the former area was severe, entailing the loss of 98 animals.

Thirty-two deaths were reported from the latter locality.

Eastern District.—An outbreak was reported by the Assistant District Commissioner on 9th June at Mangapwani. It was eventually found by enquiries made on the spot, that the disease had existed in this locality since the end of April or the beginning of May. By the time the Veterinary Officer received this information, 90 or more animals were dead. There were still some villages where the disease had just made its appearance and there 1,766 animals were inoculated. Eight deaths were reported after inoculation.

Trypanosomiasis, Local Stock.—There were two outbreaks of this disease, one at Muangani, and the other at Chwaka. Eleven animals were examined at the former place, they appeared weak and emaciated. The owners stated that though these animals consumed a large quantity of food, yet that they did not improve in condition.

Blood films were taken from all the inspected animals. On microscopical examination, the blood of four animals showed trypanosomes, quite distinct from those, which so far have been detected in the blood of our local stock. These parasites were long and slender (no short or stumpy forms) undulating membrane distinct and well developed, the flagellum long and free. These parasites resembled the Trypanosoma evansi-brucei type of trypanosomes.

The second outbreak occurred at Chwaka in December, the blood of 18 animals was microscopically examined and three showed Trypanosoma congolense.

Generally the disease runs a chronic course and animals harbouring parasites in their blood usually work normally and are seldom suspected of suffering from this sickness. However when there is a drought and fodder scarcity, the duration of illness becomes shorter, and the animals succumb to the disease. This happened at Chwaka, where eight animals died.

Trypanosomiasis, Imported Stock.—Of the 45 blood smears taken from camels imported from Jubaland and Somali ports, 13 proved positive on microscopical examination.

T. evansi	...	8
T. brucei	...	5

All infected camels were forthwith slaughtered at Pigaduri.

East Coast Fever, Local Stock.—Twenty-five cows and calves were examined, and the spleen smears of five proved positive.

East Coast Fever, Imported Stock.—Twenty-two cases of East Coast Fever occurred amongst the cattle recently imported from Kenya and Somaliland.

Ophthalmia in Cattle.—Several cases of this disease were seen. Some of the animals examined were blind. This malady will be enquired into to ascertain if the lesions are due to Filariasis or to accidental injuries.

Distomiasis.—On post-mortem examination at the abattoir, a few cases were detected amongst slaughter cattle imported from Tanganyika Territory.

Diseases of Goats and Sheep.

Scabies.—A few cases were seen in sheep imported from Somaliland.

Hæmonchiasis.—This worm is common parasite of local and imported goats and imported sheep.

Pleuro-Pneumonia of Goats.—Several cases of this disease were observed in imported goats.

Diseases of Equines.

Horse Sickness.—No case came under observation.

Glanders.—No case reported or detected.

All horses and mules imported into the Protectorate, and not accompanied by satisfactory certificates, are tested with mallein.

Ulcerative Lymphangitis.—No case recorded.

Tetanus.—One case occurred at Pigaduri in an imported mule, suffering from a deep wound on its withers. This animal was destroyed.

Diseases of Canines.

Piroplasmisis.—Six dogs examined, none found infected.

Trypanosomiasis.—Six dogs examined, all proved negative.

Rabies.—No case reported or detected.

Diseases of Birds.

Fowl Cholera.—There was an outbreak in the Ngambo district of the town, and some of the owners suffered heavy loss.

SECTION III.—MJI MPIA COW-SHEDS.

The site now consists of ten sheds with an accommodation for 250 milch cows. Six of the sheds though finished, cannot be utilised, owing to lack of efficient drainage.

The health of 107 cows and 60 calves housed in the four sheds was satisfactory. All animals were regularly dipped at a five day interval. Total number of dippings carried out was 14,450.

To prevent Malta-Fever being introduced at Mji Mpia, no goats are permitted within this area.

As the town dairy owners have realised the advantages accruing in housing their milch-cattle at Mji Mpia, the demand for new sheds is on the increase. Unfortunately, the grazing areas in the vicinity of our cow-sheds being very inadequate, the cattle are still stall-fed. To improve the vitality of the cows as also to supply a better and longer milk-supply, it is important that the grazing areas be increased.

SECTION IV.—RECOMMENDATIONS.

1. The construction of new dip in the neighbourhood of Saateni to be used for imported cattle released from quarantine.

At present animals released from Quarantine Park are taken to Mji Mpia and dipped. The introduction of imported animals on to the Mji Mpia site is dangerous. The incubation period of Pleuro-Pneumonia is long and the diagnosis difficult; sooner or later this disease will be introduced by the imported cattle and may cause great mortality among the grade cows.

I strongly urge that this new dip should be constructed to safe-guard the health of the valuable stock at Mji Mpia.

2. That drainage works of a suitable nature be installed at Mji Mpia. The present sullage pits do not function and are a nuisance to the owners and Swahilis living in the neighbourhood.

No pure milk can be guaranteed under existing conditions. If suitable drains are not feasible owing to cost; I would recommend that the dry system of collecting and removing the manure by cart be initiated.

3. Lairage for Cattle. The slaughter cattle are now penned at Walezo, about three miles distant from the town. The pens were erected by the owners on government ground; they pay no rent.

New, up to date, lairage should be provided for slaughter cattle in the vicinity of the Abattoir.

The owners would pay rent for the accommodation provided and a substantial revenue should be forthcoming.

Accommodation should be provided for 250 animals.

4. Four new water troughs similar to those constructed at Mji Mpia are urgently wanted at Pigaduri.

5. A new corrugated iron-roofing to replace the *makuti* roof of the goat shed at Pigaduri.

6. The importation of eight stud bulls for breeding purposes. Probable cost £160.

7. The extension of grazing areas ot Pigaduri and Mji Mpia. See page 92 of this report.

8. Veterinary Work in Pemba:—From time to time the Veterinary Officers visit Pemba when occasion arises.

There are about 17,751 cattle in the Island of Pemba.

At present many Veterinary duties at Chake Chake and Weti are carried out by the Medical Officers, such as the examination and treatment of sick animals, control of abattoirs and quarantine station at Chake Chake.

The Veterinary Division should now take charge of all veterinary duties in the island.

The staff would consist at first of one trained Veterinary cadet, who could relieve the Medical Officer in charge of above mentioned duties. Trained Veterinary cadets are available for this work. One of the Veterinary Officers would inaugurate this new branch division.

A House and Office combined should be built at Chake Chake, and it should be the aim of the Veterinary Division to create as soon as possible in Pemba a veterinary organisation modelled on that in Zanzibar.

TABLE No. I.

Comparative table of deaths in Zanzibar Town and Quarantine Station during the three years 1923-1925.

	1923	1924	1925
Milch Cows ex-Dairies ...	124	64	57
Calves ex-Dairies ...	49	66	52
Cart Bullocks ...	22	3	21
Oxen ...	16	9	38
Goats ...	410	196	258
Sheep ...	20	13	5
Horses ...	1	1	4
Donkeys ...	16	35	31
Mules ...	6	6	7
Buffaloes ...	1	4	0
Camels ...	8	23	4
Total	673	424	483

Considering the increase in number of animals imported during the year under review, as compared to 1924, the death rate amongst stock showed a marked decrease.

Of 5,020 sheep imported, there were five deaths.

There was no serious outbreak of Pleuro-Pneumonia amongst imported goats.

TABLE No. II.

Comparative table of animals imported during the three years 1923-1925:—

	1923	1924	1925
Oxen ...	3,765	3,959	4,455
Cows ...	194	170	121
Calves ...	103	99	113
Goats ...	17,495	16,053	17,931
Sheep ...	4,791	6,544	5,020
Horses ...	3	6	4
Donkeys ...	13	10	21
Mules ...	16	18	20
Camels ...	117	62	18
Dogs ...	11	4	4
Kids ...	32	23	—
Rabbits ...	12	—	—
Total	26,462	26,948	27,707

The year 1925 shows an increase in the number of animals imported as compared with the year 1924. Thirty milch cows were brought from the Highlands of Kenya.

20,389 animals were dipped at Pigaduri in 1925.

Pigaduri Quarantine Park. A new shed was erected to accommodate goats and sheep.

Reclamation work in the form of groins, etc., was undertaken to lessen the damage to the station from sea encroachment.

TABLE No. III.

Comparative table of animals exported during the three years 1923-1925:—

	1923	1924	1925
Oxen ...	453	588	501
Cows ...	3	3	4
Calves ...	3	1	—
Goats ...	988	789	1,931
Sheep ...	29	17	305
Buffaloes ...	4	9	—
Camels ...	2	1	—
Kids ...	14	3	25
Donkeys ...	40	143	195
Mules ...	1	1	—
Horses ...	—	2	7
Dogs ...	8	2	1
Total	1,545	1,559	2,969

The number of animals exported shows a marked increase.

TABLE No. 4.

Table showing the number of animals examined slaughtered in the Government Abattoirs during 1925, compared with the previous two years:—

	Slaughtered in Government Abattoirs.			Carcases Condemned.					
				Wholly.			Partially.		
	1923	1924	1925	1923	1924	1925	1923	1924	1925
Oxen	2,858	2,961	3,496	74	70	119	1,746	1,399	2,264
Cows	126	54	52	..	..	..	86	37	19
Calves	5	8	15	..	..	..	..	..	..
Goats	13,733	13,413	15,415	35	25	62	2,126	2,967	3,759
Sheep	3,622	4,461	3,470	12	21	18	1,263	1,793	1,363
Camels	45	58	9	..	..	..	24	48	4
Buffaloes	3	..	2	..	..	..	..	..	..
Total	20,392	20,955	20,959	121	126	199	5,245	6,644	7,409

A small open shed was constructed for animals awaiting ante-mortem inspection.

119 oxen carcases were condemned for measles.

Carcases of 62 goats and 18 sheep were condemned for Pleuro-Pneumonia and emaciation.

The killing of immature animals for human consumption is discouraged.

During the year 157 oxen, 1,141 goats and 363 sheep were rejected as unfit for slaughter on ante-mortem inspection and returned to their owners for further fattening.

TABLE No. V.

Table showing the number of Post-Mortems performed during the year 1925.

	No. Performed.	E. C. Fever.	Septicaemia.	Senility.	Pneumonia.	Pericarditis.	Colic.	Undiagnosed.
Cows ...	25	12	3	4	2	2	—	2
Calves ...	2	2	—	—	—	—	—	—
Oxen ...	4	—	1	2	1	—	—	—
Horse ...	1	—	—	—	—	—	1	—
Donkey ...	1	—	—	—	—	—	1	—
	33	14	4	6	3	2	2	2

TABLE No. VI.

Table showing the number of examinations carried out in the Veterinary Laboratory during 1925:—

TRYPANOSOMIASIS (local stock):—

	Number Examined.	Positive.	Negative.
Donkeys	116	—	116
Horses	29	—	29
Cattle	16	8	8
Dogs	6	—	—
Total	167	8	159

TRYPANOSOMIASIS (imported stock):—

Donkeys	13	—	13
Horses	7	—	7
Camels	45	11	34
Total	65	11	54

East Coast Fever (local stock):—

Cows	20	5	15
Calves	5	—	5
Total	25	5	29

East Coast Fever (imported stock):—

Cows	30	16	14
Calves	9	6	3
Total	39	22	17
Tetanus (mule)	1	1	—
Fowl Cholera (chicken)	1	1	—
Total	2	2	—

Table No. VII.

Animals treated at Veterinary Hospital, Kisiwandui; during 1925.

Horses	...	107
Donkeys	...	181
Cows	...	24
Bullocks	...	31
Calves	...	3
Camels	...	11
Goats	...	2
Dogs	...	64
Chicken	...	1
Duck	...	1
Parrots	...	2
Turkeys	...	2
Cats	...	6
Total		435

SHAH MOHAMMED KHAN,