1928. N E W Z E A L A N D

COOK AND OTHER ISLANDS.

MAKOGAI LEPER ASYLUM.

PAPERS DEALING WITH THE ARRANGEMENTS FOR CENTRALIZING AT MAKOGAI LEPER ASYLUM (FIJI) LEPERS FROM NEW ZEALAND AND PACIFIC TERRITORIES.

Presented to both Houses of the General Assembly by Command of His Excellency.

Sir.— Government House, Suva, Fiji, 9th February, 1928.

I have the honour to forward twelve copies of the report of the Committee which was appointed to investigate the financial position of the Makogai Leper Asylum and to submit recommendations for a revision of the arrangements that exist with other Administrations for the admission

2. The report will be laid before the Legislative Council for its consideration on the 21st instant. I shall be glad to learn in due course whether the recommendations made by the Committee, in so far as the Dominion and the Administrations of Western Samoa and the Cook Islands are concerned, have been approved by Your Excellency's Government.

I have, &c.,

A. W. SEYMOUR, Acting-Governor.

His Excellency the Governor-General of New Zealand, Wellington, New Zealand.

Government House, Wellington, 14th May, 1928.

With reference to Your Excellency's despatch, No. 11, of the 9th February, enclosing copies of the report of the Committee which investigated the affairs of the Makogai Leper Asylum in January last, I have the honour to inform you that His Majesty's Government in New Zealand concur in the recommendations contained in the report.

2. The Prime Minister states, however, that, while the Government are unable to make any special additional contribution towards capital fund beyond the *pro rata* contribution decided upon by the Committee, they undertake to participate in the scheme for a period of at least twenty years, as suggested in paragraph 7 of the summary of the Committee's recommendations.

I have, &c.,

CHARLES FERGUSSON, Governor-General.

His Excellency the Governor of Fiji, Suva.

MAKOGAI LEPER ASYLUM.

REPORT OF A COMMITTEE APPOINTED TO INVESTIGATE THE FINANCES OF THE INSTITUTION AND TO SUBMIT RECOMMENDATIONS FOR A REVISION OF THE ARRANGEMENTS THAT EXIST WITH OTHER ADMINISTRATIONS FOR THE ADMISSION OF LEPERS.

From the Committee to the Acting-Governor.

Sura, 26th January, 1928.

During the session of the Legislative Council held in October last, His Excellency the Governor, Sir Eyre Hutson, K.C.M.G., gave to the Council an undertaking that before any further expenditure other than the ordinary maintenance expenditure was incurred at Makogai he would appoint a Committee to go fully into the whole question of the finances of the institution, and particularly in regard to the arrangements existing with other Administrations for the admission of lepers to Makogai.

1-A. 3a.

2. The following were appointed to be members of the Committee:—

The Hon. I. McOwan, Acting Colonial Secretary (Chairman).

The Hon. A. Montague, M.B., &c., Chief Medical Officer.

The Hon. Sir J. M. Hedstrom, Senior Elected Member.

The Hon. H. W. Harcourt, Acting Colonial Treasurer.

The Hon. W. Wise, A.M.I.C.E., &c., Commissioner of Works.

The New Zealand Government was asked to appoint a member to the Committee to represent the Dominion of New Zealand, and the Administrations of Western Samoa and the Cook Islands. The Hon. Sir Maui Pomare, K.B.E., C.M.G., was nominated by the New Zealand Government, and, accompanied by Mr. S. J. Smith, of the Dominion Department of External Affairs, arrived in Suva on the 20th instant. The appointment of Sir Maui Pomare as the representative of the New Zealand Government was much appreciated by the local members of the Committee.

- 3. The Committee left Suva for Makogai on the evening of the 22nd instant and returned on the evening of the 24th. The Island of Makogai was inspected on the 23rd, and the Committee, in order to have the benefit of the assistance and advice of Dr. E. A. Neff, M.D., Medical Superintendent, held its first meeting that evening on board H.M.C.S. "Pioneer," Dr. Neff being present.
- 4. It might be of interest if the main features connected with the administration of the island are referred to briefly. The staff at present consists of the Medical Superintendent, a Lay Superintendent, thirteen European nursing sisters, eight Native nursing sisters, a launch-driver and mechanic, eighteen subordinate servants, and three constables. The main leper settlement is at Dalice, where are situated the hospitals, operating-theatre, dressing-rooms, the female patients' quarters, and general administrative offices. All European and half-caste patients are accommodated at Dalice. Extending along the coast on either side of Dalice are the leper villages in which live all male non-European patients who are not required to remain in hospital. The villages are about a quarter of a mile apart, and attached to each other are the village food-plots, which are cultivated by the patients for their own use. The quarters of the nursing sisters are situated at the back of, and at a distance of about 200 yards from, the main settlement at Dalice. The quarters of the Medical Superintendent, the Lay Superintendent, and the subordinate staff are at Nasau, two miles from the nearest village. The time taken in travelling on horseback on the bridle-track between Nasau and Dalice is on an average thirty-five minutes, and by sea in the station launch half an hour. There is a single-line telephone which connects the nursing sisters' quarters, the office at Dalice, and the Medical Superintendent's quarters.
- 5. Annexed hereto are copies of memoranda prepared for the information of the Committee by the Acting Colonial Secretary and the Chief Medical Officer, in which are set out the circumstances which led to the inauguration of the scheme whereby lepers from other Administrations in the Pacific were admitted to Makogai, and which set out in detail the existing financial arrangements with the various Administrations for the maintenance of their lepers.
- 6. The chief aim of the Committee, in discussing the financial arrangements with regard to the Asylum, was to endeavour to reach some agreement which would ensure a fair and equitable distribution of the financial burden between the Administrations interested, and which would be at the same time sufficiently elastic to permit of extension to any other Administrations who might desire later to join the scheme.
- 7. The Administrations at present interested in the Makogai Asylum, the capital which they have contributed, and the number of units under treatment in the Asylum on the 31st December, 1927. are shown in the following table:—

Administration.		,	Capital Contribution.	Units under Treatment on 31st December, 1927.
Fiji Government	 	 	47,675	340
Samoan Administration	 	 	1,448	$32\frac{1}{2}$
Cook Islands Administration	 	 	2,110	5 7
Tonga Administration	 	 	591	14
Dominion of New Zealand	 	 	Nil	17
American Samoa	 	 	Nil	2
			£51,824	$\frac{-}{462\frac{1}{2}}$

8. After much discussion, it was agreed that the simplest and most practicable method of ensuring an equitable division of the financial burden was to regard the Makogai Asylum as being a partnership concern, a "joint-stock company," to be run on the following lines:—

A separate set of books should be opened in which each party which has contributed capital will be credited with the amount of that contribution. At the end of each year working-expenses will be debited with interest on capital at the rate of 5 per cent. per annum, and that interest will then be credited proportionately to each of the contributors, and in the final adjustment the amount of interest payable to the contributor will be deducted from the amount due by that contributor for maintenance of patients. As an example, Tonga has contributed £591 and on the 31st December,

1927, had fourteen units under treatment. Assuming the cost of maintenance to be £50 per unit, the account against Tonga would be as follows:—

			£	s.	d,
Maintenance of fourteen units at £50	 	 	700	0	()
Less interest at 5 per cent. on £591	 	 	29	11	()
			£670	9	Ο

Such a scheme would achieve the desired object, and the method of accountancy would simplify future extensions, because it would not be a matter of importance which Administration provided the necessary funds, since whoever provided additional money would receive interest thereon.

- 9. The method of arriving at the cost of maintenance per unit as set out in Enclosures 2 and 3 to the memoranda attached was approved by the Committee, with the following variations:—
 - (a) It was agreed that an amount should be included to cover overhead charges and the services of officers of the Medical and Public Works Departments other than those whose emoluments already form a charge against Makogai votes. The minimum amount which it was felt might reasonably be considered to cover this charge was £500 per annum—the amount to be reviewed in the light of experience after a period of five years.
 - (b) That the charge of 3 per cent. for sinking fund on the estimated value of buildings, plant, &c., as shown in Enclosure 5 to the Acting Colonial Secretary's memorandum attached, and on the cost of equipment, valued at £1,000, should be paid to a separate account, to be styled the "Makogai Replacement and Building Fund." The funds in this account should be invested and used as required for replacements, rebuilding, and perhaps also at a later date for new buildings. This fund would serve as an insurance against hurricane damage, and would be available at any time at short notice. This charge should also be reviewed after five years.
 - (c) An amount to be included to cover interest and sinking fund on the special loan to be raised for new capital expenditure, as recommended in paragraph 13.
 - (d) The cost of fire insurance on buildings, &c., to be included.
- 10. A statement showing the estimated cost to each Administration per unit, worked out on the proposed new basis, is attached (see Appendix No. 2). Ordinarily, the annual cost to each Administration would be arrived at by multiplying the cost per unit by the average number of that Administration's patients for the year. This average for the year 1926 is not at the moment available to the Committee. In the attached statement, therefore, the number of units on the 31st December, 1926, has been used for the purpose of illustration.
- 11. With regard to the method of arriving at the amount payable annually by each Administration, it was agreed that the most convenient method would be to ascertain the actual cost per unit for one year, and to use that figure as the charge to be made per unit in respect of the following year. For this purpose a Native of the Pacific islands is regarded as one unit: a Chinese as one and a half units; a European, Maori, and half-caste of European standard as two units.
- 12. One of the difficult questions before the Committee was to decide on the best means of providing funds for future capital expenditure on major improvements and new works at Makogai. The Chairman explained to the Committee the restrictions imposed on the colony in regard to the raising of loans, and it was pointed out that, with only limited loan funds at the colony's disposal, any appropriations on account of Makogai on works which were, in any event, non-reproductive reduced the amount available for the general and urgent requirements of the colony. It is not, therefore, the present intention of the Government of Fiji to make any further substantial contribution to capital account. On the other hand, it was agreed that it would not be practicable to formulate any scheme whereby other Administrations should make contributions towards capital expenditure in strict proportion to the number of their patients at the Asylum.
- 13. It was eventually decided to recommend that the authority of the Legislative Council and of the Secretary of State for the Colonies be sought for the raising of a special loan, to be called "The Makogai Loan Fund," for the provision of urgent or desirable works of a permanent nature; that the loan should be raised as and when required, and that the payment of interest and repayment of principal should be made by equal annual payments over a period of twenty years. Should, however, capital to the amount required be contributed by any one of the outside Administrations the need for raising this loan would not arise, and the Administration so contributing would be credited in its annual account with interest at the rate of 5 per cent. on its capital contribution.
- 14. Some of the principal extensions which have either been decided upon or contemplated are as follows:—

Dispensary, with bath and septic tank.

Extension of accommodation for lepers.

Hospital for clean labour.

Oil-mill and refrigerating machinery.

Improving road for motor-transport—Nasau to Dalice.

Quarters for junior Medical Officer.

Main water-reservoir scheme.

Cottage for Public Works Department.

An approximate estimate of the cost of these works is £15,000, the expenditure of which may be spread over a period of two or three years.

- 15. The questions submitted to the Committee for consideration are set out in paragraph 17 of the Chief Medical Officer's memorandum attached. Items (a), (b), and (c) are covered by paragraphs 7 to 13 above. The conclusions of the Committee in regard to the other points are as follows:—
 - (d) What should be the future policy of the Fiji Government in determining what permanent major improvements should be undertaken?

(e) How should questions of improvements causing increased costs for maintenance be decided?

It was agreed that questions affecting expenditure at Makogai should be decided by the Fiji Government, in whom the entire control of the institution should be vested; but that before any works of a major importance involving increased capital expenditure were undertaken, or any substantial increase was made in the working-expenses of the institution, the other Administrations concerned should be consulted.

(f) What security, if any, are outside Administrations prepared to give that they will remain in the scheme for a term of years?

The Chairman explained to the Committee the difficulty in which the Fiji Government would be placed if, having undertaken, after consultation with the other Administrations, further and extensive public works at Makogai, any of the Administrations at present participating in the scheme were to withdraw from it. The Committee were of the opinion that any Administration which had already expended funds in providing accommodation for its patients would be unlikely to withdraw, and it was decided that any administration which had not made and did not desire to make a capital contribution should be required to give a guarantee that it would continue to participate in the scheme for a period of twenty years.

(g) What is the maximum accommodation that can be provided, particularly in relation to watersupply? and

(h) To what extent will the increase of numbers increase the cost per unit owing to heavy expense in increasing the water-supply?

The Committee are of opinion that there is ample room on the island for future extension of buildings to accommodate any number of patients that is likely to be received at the Asylum from the various Island Administrations in the Pacific; but in this connection the question of water-supply is one of paramount importance.

The water-supply at Makogai has been a source of trouble for several years owing to the increased number of patients and the installation of septic tanks. In dry weather it has become necessary to shut off the supply of water for several hours each day. Steps are now being taken to do what is possible by sinking wells and supplying tanks to supplement the existing supply, a sum of £500 having been provided for the purpose in the current year's estimates of expenditure. Pending the completion of investigations which are at present being made, a close estimate of the cost of providing a water-supply which will be adequate to meet the probable future requirements of the institution cannot be given, but the Committee are advised that there is an ample supply to be obtained by impounding stormwaters, the approximate cost of impounding 1,000,000 gallons being £5,000. After a complete examination of the proposals for supplementing the present water-supply, the Committee came to the conclusion that the construction of a dam and reservoir for this purpose was vital to the present and future needs of the institution, and should take precedence over all other works of a permanent nature.

(i) Is the appointment of a second Medical Officer an urgent question?

The Medical Superintendent explained to the Committee the difficulties with which he is faced in endeavouring to attend single-handed to the medical wants of the patients and in administering generally the affairs of the institution. Shortly they are as follows: With the greatly increased number of patients his whole time is occupied in the ordinary routine work of the island, and he has no opportunity of undertaking any research work which would be of benefit to the patients; there is no other professional opinion which he can consult in cases of emergency; he lives a life of great isolation; his work is of a very depressing nature; and he finds it practically impossible to leave the island even for a day or two.

The Committee are convinced that, with the great increase in the number of patients on the island, and in order to provide the Medical Superintendent with the opportunity of having short spells of leave away from it, the appointment of a second Medical Officer is an urgent necessity. The Chief Medical Officer informed the Committee that in his opinion it would be of great advantage if a Medical Officer of the Fiji Service were stationed at Makogai for a period after arrival in the colony; he would thus be given an opportunity of acquiring first-hand knowledge in one of the most important branches of his work—viz., in the diagnosis of leprosy—and his duties at Makogai would provide him with an excellent insight into Government methods and the ordinary routine requirements of a Medical Officer. The second Medical Officer would be definitely junior to the Medical Superintendent, and would be required to remain at Makogai for so long as the Chief Medical Officer decided. It appeared to the Committee that this proposal of the Chief Medical Officer would provide an admirable solution of the difficulty.

(j) What system of rendering accounts and an annual financial statement of expenditure should be adopted?

It was decided that accounts should be rendered as heretofore by the Medical Department in the case of—

- (a) New Zealand patients: To the Director of Public Health, Wellington.
- (b) Cook Islands: To the Minister for the Cook Islands, Wellington.
- (c) Samoa: To the Administrator, Western Samoa, Apia.
- (d) Tonga: To the Premier, Tonga.
- (e) American Samoa: To the Governor, Pago Pago.
- (k) What is the urgency for provision of (1) a motor-road from Nasau to Dalice, and (2) a refrigerating plant?
- (1) The present means of communication between Nasau and Dalice is either by launch or by the existing bridle-track. As a rule, the Medical Superintendent travels to Dalice on horse-back, a

journey which ordinarily occupies thirty-five minutes. Cases of emergency requiring his attendance at Dalice frequently arise after he has returned to his quarters at Nasau. There are frequent instances in which, owing to the absence of any quick means of transport, he is obliged to advise emergency measures over the telephone, whereas, if he were able to reach Dalice in a few minutes, it would be of much greater advantage if he could attend personally to the case. Launch transport is very unsatisfactory, owing mainly to the fact that if the weather is at all bad the rough seas make the journey a wet, slow, and most uncomfortable one. Upon arrival all supplies for the population of the clean area must be transported by launch from the anchorage at Dalice to Nasau. There is no landing-stage close to Nasau, and it has happened that supplies of bread made in the clean area for the patients at Dalice, which cannot be transported over the road, have been saturated with salt water while being carried to the launch and during the subsequent journey to Dalice. The provision of a good road would also greatly facilitate the periodical inspection of the various leper villages. These inspections are now made by the Medical Superintendent and the nursing staff either on foot or on horseback—a severe test of endurance during the summer weather.

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The Committee consider the construction of a good motor-road from Nasau to Dalice to be very desirable, and recommend that the Commissioner of Works should arrange for a proper survey and

furnish an estimate of the cost at as early a date as possible.

(2) The main advantage to be derived by the provision of a refrigerating plant is that a good and regular supply of fresh meat and vegetables will thus be made available to the staff and patients. The present method, whereby a beast is killed and the meat prepared immediately for consumption, is undesirable. The advantages to both the staff and the patients of an adequate and regular supply of ice need not be stressed.

The Committee recommend that a refrigerating plant should be installed, especially as it will be possible to provide the necessary power by connecting it to the new engine which is to be installed for the oil-works.

16. During their visit to Makogai the Committee saw most, if not all, of the patients, including those in the villages and in the various hospital wards. Upon their arrival as many of the patients as were able to attend were gathered at the assembly-ground and extended a welcome of which the heartiness was unmistakable. On the following morning several *mekes*, which the Committee learned had been long in preparation, were given by both the Fijian and Cook Islands patients. The spirit with which these ceremonies were performed was not their least impressive feature.

17. Of the general conditions obtaining at the Asylum—the cleanly appearance of the hospitals, the buildings, and grounds; the obvious air of contentment surrounding the whole institution; the manner in which these afflicted people can nevertheless enter with so lively a spirit into their many pastimes—the Committee cannot adequately speak. They are the fruits of the devoted labours of the medical and nursing staff. Of the regard in which the present Medical Superintendent, Dr. E. A. Neff, is held, alike by the nursing staff and the patients, the Committee had ample proof. The self-sacrificing devotion to duty of the nursing sisters, the zeal and skill with which they care for their patients, are beyond all praise. Anything that can be done, either by the Governments concerned or by private individuals, to promote happiness and welfare of the patients is, the Committee know, as much a source of satisfaction to the staff as to those who are directly benefited.

I. McOwan, Chairman.

Maui Pomare,
A. Montague,
J. M. Hedstrom,
H. W. Harcourt,
W. Wise,

SUMMARY OF RECOMMENDATIONS.

(1) That the Leper Asylum at Makogai, should in future, be regarded as an institution to the working-expenses of which each Administration participating in the benefits of the Asylum will contribute proportionately and on a basis of the number of its leper units.

(2) That interest at the rate of 5 per cent. on the total capital expenditure of the institution be charged to working-expenses, each Administration receiving credit in its account for interest at the

above rate on the amount of capital subscribed by it.

(3) That the cost per unit shall be computed at the end of each year and shall be regarded as the rate to be charged to each Administration in respect of the succeeding year. For this purpose a native of the Pacific islands will be regarded as one unit, a Chinese as one and a half units, a European, Maori, or a half-caste of European standard as two units.

(4) That the annual statement of account upon which the computation in (3) will be made will comprise—

(a) The actual cost of maintenance of the institution, including salaries, provisions, stores, drugs, instruments, furniture, equipment, &c.

(b) The actual cost of maintenance of plant, buildings, and other work.

(c) A charge at the rate of £500 per annum for administration and supervision by the Medical and Public Works Departments, Fiji. This charge to be reviewed at the end of five years.

(d) A charge at the rate of £600 per annum for leave, pensions, &c., granted to the staff.

(e) Insurance charges on buildings and plant.

(f) Interest at the rate of 5 per cent. on the original purchase price of the island and the value of all buildings and plant as estimated at the 31st January, 1928, together with interest at the same rate on the cost of any future capital expenditure.

(g) Annual contribution at 3 per cent. on the value of all buildings, plant, and works as estimated at 31st January, 1928. Payments on this account to be made to a separate account, to be known as the "Makogai Replacement and Building Fund." The question of this charge to be reviewed at the end of five years in the light of the

amount of the accumulated fund at that date.

(5) That a loan, to be called the "Makogai Loan Fund," be raised as and when required for the purpose of providing funds for capital works; payment of interest and repayment of principal to be made by equal annual instalments over a period of twenty years.

(6) That the control of the institution shall be vested in the Fiji Government, who will consult the other Administrations concerned before undertaking any important works involving increased capital expenditure or any substantial increase in the working-expenses of the institution.

(7) That any outside administration that is not prepared to make a capital contribution will give

an undertaking to participate in the scheme for a period of twenty years.

(8) That a junior Medical Officer be appointed at the earliest possible date to act as assistant to the Medical Superintendent.

- (9) That accounts to other Administrations be rendered by the Medical Department, Fiji, to—
 - (a) New Zealand—Department of Public Health.
 - (b) Cook Islands—Minister for the Cook Islands.

(c) Samoa—The Administrator, Samoa.

(d) Tonga—The Premier, Tonga.

(e) American Samoa—The Governor, Pago Pago.

(10) That a proper survey and estimate of the proposed road from Nasau to Dalice be made as early as possible, and that a refrigerating plant be installed.

APPENDIX No. 1.

MEMORANDUM BY THE ACTING COLONIAL SECRETARY.

In July, 1920, a despatch was received from the Governor-General of New Zealand inquiring whether the Fiji Government would provide accommodation for and undertake the treatment at Makogai of lepers then at the Samoan Leper Station of Nusufee. The Governor-General stated: "The cost of maintaining the leper station in Samoa is excessive, and owing to its isolated position it is impossible to give the patients that skilled medical supervision and attention which the sufferers from this dread affliction receive at the very excellent institution established by the Fiji Government at Makogai.

The Fiji Government undertook to receive the Samoan lepers at Makogai on the following conditions: That the Samoan Government should pay the cost of the necessary accommodation and should pay for the patients at the following rates—Half-castes, £70 a year; Chinese, £60 a year; Natives,

The first batch of thirteen Samoan lepers arrived in August, 1922, and an additional seven arrived in May, 1924. The present number from Samoa at Makogai is twenty-seven. In 1922 the Samoan Government paid the sum of £1,048 for the original accommodation provided, and in 1925 paid a further £400 for additional accommodation.

2. In March, 1923, the late Mr. T. E. Fell, Colonial Secretary, paid a visit to Makogai. On his return to headquarters he submitted a report to the Governor, the last paragraph of which is as follows:

"I could not but think that there are great possibilities of making this leper institution a general one for all the British colonies of the Western Pacific. There is ample room in the island for such extension. Were Fiji, the Western Pacific High Commission, Tonga, Samoa, and the Cook Islands to combine in this matter, it might be possible to run an auxiliary schooner for leper-transport only, and to divide the cost of it, and the total cost of the institution amongst the different Governments according to the number of lepers transported and accommodated. It is possible that with such a division of cost the total cost to the Fiji Government might not exceed the present figure, whereas the extension of the institution to other British possessions would confer an immense public benefit throughout the Western Pacific. Whether the idea is worth working out in detail is for Your Excellency to decide."

The Governor submitted a copy of Mr. Fell's report to the Secretary of State, and the last paragraph of his despatch stated: "I should be glad to learn whether you would approve of my taking steps in

the direction suggested by Mr. Fell in the last paragraph of his report.'

The Secretary of State, in reply, stated that copies of the correspondence had been laid before the Colonial Advisory Medical and Sanitary Committee in London, and that "the Committee strongly supported the proposal that lepers from all the British colonies in the Western Pacific should be concentrated in the Asylum at Makogai. I therefore approve of your taking steps in the direction suggested by Mr. Fell.'

It was thus that the scheme for converting Makogai into an institution for the treatment of all lepers in the Western Pacific had its beginning.

- 3. Letters were sent to the Governor-General of New Zealand and to the Secretary to the Western Pacific High Commission conveying an outline of the scheme and inquiring whether it would be regarded favourably by those Governments. The New Zealand Government replied that they were "prepared to consider favourably the transfer of lepers in the Pacific islands forming part of the New Zealand Dominion to the Government Leper Asylum at Makogai," and stated so far as was known, there were thirty-two lepers in the Cook Islands and none on the Island of Niue. The New Zealand Government also requested that the scheme be extended to include the ten lepers who were then at the Dominion leper colony at Lyttelton. A reply was also received from the Government of Tonga stating that they "would be glad to avail themselves of the immense advantages of such a scheme as outlined."
- 4. An endeavour was thereupon made to arrive at what would be a fair and reasonable amount to charge the outside Administrations for the cost of maintenance and treatment of their patients at The Chief Medical Officer recommended that "until the scheme of exact distribution of cost according to expenditure is worked out" the charge should be fixed at £40 a head for Natives and £70 a head for Europeans and Chinese per annum. The Treasury authorities, after going exhaustively into the figures, estimated the cost to the Fiji Government for the maintenance and treatment of patients from other Administrations at-Europeans, £96 4s. 9d.; half-castes and Chinese, £72 3s. 6d.: Natives, £48 2s. 4d.
- 5. Eventually it was decided that the following alternatives should be offered to the Government of New Zealand :-
 - (a) That the Fiji Government should provide the necessary buildings and make an annual charge of £90 a head for European patients and £70 a head for Chinese and Maori
 - (b) That the New Zealand Government should provide the buildings and pay £80 per head for European patients and £60 per head for Chinese and Maori patients
 - (c) That patients should be received on the Native standard at an annual charge of £40 if the buildings are not provided by the Fiji Government and £45 per head if the buildings are so provided.
- 6. As regards the New Zealand lepers, the New Zealand Government accepted the first alternative. Subsequently it was decided that Maori patients should be treated and paid for on the same scale as Europeans.
- 7. As regards the Cook Islands lepers, the New Zealand Government were informed that it would be necessary to provide additional accommodation at an estimated cost of approximately £2,000. An inquiry was made whether, in view of the fact that no funds were available for providing this accommodation, the New Zealand Government would be prepared to make that sum available. The New Zealand Government replied in the affirmative, and the Cook Islands lepers were therefore received on the basis of £40 per head-i.e., the buildings being provided and paid for by the New Zealand Government. The amount paid for this accommodation was £2,110 0s. 5d.
- 8. As regards the Tongan lepers, the Tongan Government paid the sum of £591 0s. 8d. for accommodation for ten patients, the annual charge for maintenance and treatment of patients being fixed at £40 a head. Actually thirteen patients have arrived from Tonga. Temporary accommodation has been provided for the additional three, and the Tongan Government have been informed that the question of providing permanent accommodation for them will be considered at a later date.
- 9. Attached (Enclosure No. 1) is a memorandum by the Chief Medical Officer giving further details in regard to the administration of the Leper Asylum, and setting out the main questions for discussion by the Committee.
 - 10. The following statements are attached:-
 - Enclosure 2.—Capital value of island and buildings, 1926; cost per unit, 1926.
 - Enclosure 3.—Cost per unit, 1927.
 - Enclosure 4.—Number of lepers at Makogai on 31st December, 1927.
 - Enclosure 5.—Estimated value of buildings, January, 1928.
 - Enclosure 6.—Maintenance expenditure for years 1924 to 1927.
 - Enclosure 7.—Proposed expenditure on maintenance of buildings and new works, 1928. Enclosure 8.—Expenditure from loan funds, 1925 to 1927.

 - Enclosure 9.—Proposed further expenditure from loan funds.
 - I. McOwan, Acting Colonial Secretary.

ENCLOSURE No. 1.

MEMORANDUM BY THE CHIEF MEDICAL OFFICER.

The terms on which lepers from outside Fiji are at present received in the Asylum: As regards Tonga, the Gilbert Islands, Samoa and American Samoa, and the Cook Islands, the Government concerned pays the cost of creetion of quarters. This cost was estimated at approximately £50 for each non-European and £100 for each

- European.
 2. From the date of admission the Government pays to Fiji for each Native £40 per annum, for each Chinese £60,
- and for each European (half-castes being regarded as Europeans) £70.

 3. As regards New Zealand, the Government of Fiji built the accommodation at their own expense. Zealand lepers the charges are £90 per annum in the case of Europeans, half-castes, and Maoris, and £70 in the case of Chinese.
 - As regards provision of accommodation and its cost the following must be remembered:—

 - (a) All women live in the female hospital;
 (b) All men who are in sufficiently good condition live in the villages;
 (c) Men who are not in good physical condition live in the male hospital;
 (d) Men may for a time live in the hospital and then go to a village, or vice rersa.

5. It is impossible to know, at a date sufficiently early for us to be able to erect buildings accordingly, how many patients are coming from each Government outside Fiji, what proportion are females, what proportion males well enough to live in villages, and what proportion males that must be accommodated in hospital. Also, in the case of the first batch of Cook Islands patients, a request made by Sir Mani Pomare and agreed to was that the healthy males should be allowed to occupy permanently village houses originally intended for Fijians.

6. For these reasons the amount of accommodation provided at the cost of each outside Government's funds has not strictly corresponded with the number of patients admitted from that Government's territory, and the accommodation provided has not necessarily been occupied by patients from the territory whose Government provided

funds for its erection.

. The Tongan Government provided £591 for accommodation of ten male Natives in a village; but Tonga has sent three men suitable for accommodation in a village, three men who are hospital cases, six women who are in the Native hospital, and one half-caste who is in the European hospital building.

The Samoan Government has provided £1,448, which has been spent on accommodation in the villages for twenty

patients; but there are fifteen Samoan Natives (some women, some hospital cases, and some living in the village), three

- Chinese, six half-castes, and three Solomon-Islanders.

 9. The Cook Island Government provided £2,110, for which accommodation for forty-two persons was erected; but, of the Cook-Islanders, fifteen live in the village originally intended for Fijians, nine males are in hospital, one man and his wife (who is a half-caste) live in a house outside the village, and twenty-four women live in the hospital
- 10. Shortly, the Tongan Government has paid for accommodation for ten and has thirteen patients in the Asylum, the Cook Islands Government has paid for forty-two and has fifty-seven, and the Samoan Government has paid for twenty and has twenty-seven in the Asylum.

11. The cost of maintenance of each patient was arrived at as follows:-

(a) The expenditure from Makogai votes (less the expenditure on transport of lepers, which is an expense from which outside Administrations do not benefit).

(b) Interest on purchase price of island.

(c) Interest on purchase price of island.
(c) Interest and sinking fund on cost of buildings. This is complicated by the fact that some of the buildings were put up to house Samoan, Cook Islands, or Tongan patients at the expense of their respective Governments, and therefore in the cost to Fiji of the maintenance of these patients should not be included interest and sinking fund on the capital cost of these buildings, or interest and sinking fund on the capital cost of the corresponding buildings put up by Fiji to house Fijian lepers. On the other hand, maintenance of all buildings, &c., should be contributed to, and, of course, interest and sinking fund on all other buildings, machinery, &c.
(d) Expenditure on drugs, instruments, &c.
(e) Public-works-maintenance expenditure

(e) Public-works-maintenance expenditure.

(f) Cost of leave, pensions, &c.

12. Of these, I know no way of arriving at more than a guess as regards (g); but such a guess would probably be fairly accurate, and, in any case, the error would not amount to a serious sum.

13. On the other hand, revenue (other than fees for maintenance of lepers) paid into Fiji revenue should be deducted.

14. The total expenditure thus found has to be divided per unit among the patients, but European patients are more expensive than Chinese, and Chinese than Native. The plan adopted is to take a Native as a unit, a Chinese as one and a half units, and a European as two units. This is as nearly accurate as is possible.

- 15. The figures worked out in this way show the cost per unit for 1926 as very closely approximating the charge per unit that is made. (See Enclosure No. 2.)

 16. A valuation of the buildings, machinery, and equipment of the Asylum in January, 1928, has been made by the Public Works Department, and the cost per unit for 1927 has been worked out. (See Enclosure No. 3.)

 17. Points which appear to me to call for consideration, and which fall within the terms of reference, are—

 (a) Should Fill continued to make a fixed shortest at these Administrations are should the testal cost, for each
 - (a) Should Fiji continue to make a fixed charge to other Administrations, or should the total cost for each

(a) Should Fill continue to make a fixed enarge to other Administrations, or should the total cost for each year be ascertained and then each Administration charged in proportion to its daily units in the Asylum? If a fixed sum, should the present charge be varied; and, if so, in what respect?
(b) How should the cost of providing future accommodation for patients from outside Fiji be met?
(c) How should new capital expenditure for the general benefit of the Asylum be met?
(d) What should be the future policy of the Fiji Government in determining what permanent major improvements should be undertaken?

(e) How should questions of improvements causing increased costs for maintenance be decided?

- (f) What security, if any, are outside Administrations prepared to give that they will remain in the scheme for a term of years? What is the maximum accommodation that can be provided, particularly in relation to water-supply?
- (h) To what extent will the increase of numbers increase the cost per unit owing to heavy expense in increasing the water-supply?

(i) Is the appointment of a second Medical Officer an urgent question?

What system of rendering accounts and an annual financial statement of expenditure should be adopted? (j) What system of rendering accounts and an annual mancial scattement of capetation (k) What is the urgency for provision of (1) a motor-road from Nasau to Dalice, and (2) a refrigerating plant?

A. MONTAGUE. Chief Medical Officer.

ENCLOSURE No. 2.

/// - 1 1 1 1 1 - 1004	CAPITAL	L VALUE	AS A	r 31sr De	CEMBER,	, 1926.			e.
Total valuation in 1924— Island Buildings and other	 works	 not incl	 udina	huildings	for ace	ommodati	on of	 nationto	£ 10,000
(estimated)								···	20,000
							£	£	30,000
Expenditure since 1924 Less amount recoverable		••	••	••	• •	• •	3,101		
Less amount expended on	account	of Samo	a and	recovered	••	••	1,048	4 1 40	
									3,098
									£33,098

	Cost PER	Unit,	1926.				£
Interest on value of island at 5 per							500
Interest on value of buildings at 5							1,155
Sinking fund on buildings at 3 per	cent	• •			• •	• •	693
							2,348
Expenditure, Makogai votes							8,984
Expenditure on drugs and instrume	ents						215
Expenditure, Public Works votes							1,766
Allowance for leave, pensions, &c.,	estimated at			• •			600
Less value of produce of the island							13,913 836
Less varie of produce of the island	• •	• •		• •	• •	• •	830
Net cost							£13,077

Cost per unit, $\mathfrak{L}_{\frac{520}{64}}^{\frac{18077}{621}} = \mathfrak{L}40$ 14s. 9d. Amount paid and due by other Administrations, $\mathfrak{L}2,626$. Revenue per unit, $\mathfrak{L}_{\frac{52026}{64}}^{\frac{8026}{64}} = \mathfrak{L}40$ 14s. 3d. Balance per unit against Fiji, 6d.

ENCLOSURE No. 3.

COST PER UNIT, 1927.

The expenditure from	m Leper Asylum votes (XV (iv) a	nd (v)) v	vas £11,79	94. Ded	ucting fro	m	£
	insport of lepers), £500,							10,733
Expenditure on drug								145
	ntenance and minor im							2,367
	t. on purchase price of							500
	t. on value of buildings.				(£23,655	6)*		1,183
	r cent. on value of build		(£23,655))*				709
Allowance for leave,	pensions, &c., estimate	dat	• •	• •		• •		600
т	otal expenditure							£16,237

The value of the buildings is exclusive of the value of those buildings erected at the cost of the Governments other than Fiji; also the value of the equivalent buildings erected at the cost of Fiji to house patients from Fiji and the co-operative store building not paid for from Government funds. It includes the sum of £1,000 for equipment.

The average daily number of units in the Asylum in 1927 was (Natives, 336-7; Chinese, 13-9; Europeans, 14-8 persons) 387-15. Therefore the annual cost per unit, apart from interest and sinking fund on certain buildings as above, was $\frac{16287}{887-15} = £41$ 18s. 8d. The total annual cost per unit, including the interest and sinking fund on all buildings, &c., except the co-operative store, was $\frac{17690}{887-15} = £45$ 13s. 4d.

ENCLOSURE No. 4.

LEPERS AT MAKOG	I FROM	OUTSIDE THE	COLONY	ог Гіл	ом 31sт	DECEMBER,	1927.
Administration of We	stern San	10a					
Samoan Natives							15
Solomon-Islander	s						3
Chinese							3
Half-castes							5
American Samoa—							
Half-caste			• •				1.
Tonga—							
Natives		• •	• •			• • • • • • • • • • • • • • • • • • • •	12
Half-caste	• •	• •		• •	• •	• • • • • • • • • • • • • • • • • • • •	1
Cook Islands—							
Natives	• •		• •	• •		••	57
New Zealand—							
Europeans and ha	ilf-castes	• •	• •	• •	• •	• • • • • • • • • • • • • • • • • • • •	4.
Maoris	• •	• •	• •	• •	• •	••	3
Chinese		• •	• •	• •	• •	• • • • • • • • • • • • • • • • • • • •	2
m . 1							7.00
Total	• •	• •	• •	• •	• •	• • • • • • • • • • • • • • • • • • • •	106
LEPERS AT MAKOG	AI FROM	WITHIN THE	COLONY	оғ Ғіл	on 31st	December,	1927.
Europeans and half-ca	stes						3
Chinese							8
Natives and Indians							322
Total							333

ENCLOSURE No. 5.

VALUE OF BUILDINGS, ETC., AT MAKOGAI, JANUARY, 1928.

(Note by the Commissioner of Works.)

All buildings, including outbuildings, were measured up and valued on a cubic-content basis, the depreciation for age being calculated at the rate of 2 per cent. per annum. Other public works, such as jetties, water-supplies, machinery, plant, and floating stock, have been entered on their present-day value.

^{*} See detailed statement attached.

2. The only buildings not included in the valuation are the following, which are not the property of the Government: Sisters' chapel, Dalice; Roman Catholic church, Dalice; Methodist church, Dalice; Roman Catholic chaplain's quarters, Dalice; church at Nasau.

No.	Description.		Used by	Value.	Remarks.
	-		Nasogatokalau.		
115*	Town A (type houses)		Cook-Islanders	£ 1,622	Includes outbuildings.
1-10	Dressing-room		Cook-Islanders	300	Under construction; full value taken
16*	Lodoni (type house)			124	o zast construction, ran range taze
17*	Lodoni (type house)		Fijians	124	
8, 20-30*	Town B (type houses)		Fijians	1,296	Includes outbuildings.
19	Dressing-room		•••	300	
			Dalice.		
31	Old Government store		37 4 7	15	LTime concrete and stone
32†	School	• •	01 11 1	1,075	Lime, concrete, and stone. Includes septic-tank installation.
33	Sisters' quarters	• •	Cu or	720	No. 1 quarters.
34	Sisters' bath-room	• •	Staff	250	110. I qualters.
35	Sisters' quarters		Staff	833	No. 2 quarters, kitchen, and sept
					tank installation
36	Sisters' laundry	• •	Staff	150	
37	Native sisters' quarters	• •	Staff	322	Old quarters, kitchen, and outhouses
38	Native sisters' quarters Harness-room	• •	Staff	410	Old chapel.
	Harness-room	• •	Staff	. 15	
			Hospital Compound		
39*	Survey house		All patients	632	
40*	Male house		Fijians	307	
41*	Isolation ward		All patients	374	
42	Gaol		All patients	84	
43*	Moribund ward	• •	All patients	116	
44	Workshop	• •	All patients	50	Daid ber Cook Talanda a includes and
45*	Cook-Islanders' building	• •	Cook-Islanders	896	Paid by Cook Islands; includes sept
46*	European male house		New Zealand	750	Includes outhouses.
47	Hospital servants' kitchen		Hospital servants	40	includes outhouses.
48*	European male house		New Zealand	480	Includes septic tank and bath.
49*	House		Chinese and Maoris	422	Includes septic tank.
50	Laboratory		Hospital	664	•
51	Male dining-room		• •	300	
52*	Blind ward	• •	• •	000	Includes septic tank and bath.
53	Main hospital block	• •	TTit-1	1,864	
54 55	Store	• •	Hospital Hospital	$\begin{array}{c} 59 \\ 664 \end{array}$	Includes encuring theatre and lead
99	Dressing-room	• •	Hospital	004	Includes operating-theatre and lead work in building.
56	Kitchen		Hospital	528	worm an adding.
57	Co-operative store		••		
58	Government store		• •	520	
59	Pharmacy	••	• •	125	
$\begin{array}{c} 60 \\ 61 \end{array}$	Office Laundry	• •	Staff	$\frac{224}{132}$	
62	Laundry	• •	Patients	620	
63	Quarters		Police	630	Includes septic tank.
64*	Moribund ward		Female	147	
65*	Isolation room		Women	46	
66*	Hospital		Women	2,444	
67*	Ward (women)	• •	Half-castes	653	
68	Dressing-room	• •	Women	430	
69*	Ward (women)	• •	Cook-Islanders Women	1,214	Built by Cook Islands Government.
$\begin{array}{c} 70 \\ 71 \end{array}$	Dining-room	• •	***	$\frac{259}{177}$	
/1	Store	• •	Women	177	
	•		Yaroi.		
72*	House		Solomons	304	
73-77*	Type houses		Mixed	530	Includes Father Nicoleau's house (no
.	m 1		a	.	numbered) and outbuildings.
78-80*	Type houses	• •	Samoans	546	Built by Samoa.
81*	Quarters	•••	Mixed All	812	Third paid by Tonga.
82 83*	Dressing-room		All Indians	300 703	New. Includes outbuildings.
84-87*	Type houses		Mixed	404	South end, Yaroi.
88*	Dwelling		Chinese	266	Includes outbuildings.
	3		M		
00		1	Nasau.	150	(T. 1.1. or are
89 90	Office		Staff Lay Superintendent	150 $1,574$	Includes outbuildings.
90 91	Dwelling	::	Medical Superintendent	1,374 $1,207$	Includes septic tank and outbuildings Includes septic tank and outbuildings
92	Dwelling		P.W.D. labour	.540	Includes outhouses.
93	Dwelling	::	Makogai labour	270	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
94	Workshop		Nasau	140	
95	Bakehouse		••	720	1
96	Store (tools)			. 61	
	Gaol	• •	Copra-store	35	
97	Canteen			240	
97 98		- 1	TO . 1		
97 98 99	Dwelling		Baker	110	
97 98 99 100	Dwelling Lines	::	Baker Indian labour	522	
97 98 99	Dwelling		T 1' 1 1		

^{*} Buildings for accommodation of patients, cost of which is not included in sum of £23,655 referred to in Enclosure No. 3. † £537 of this amount is regarded as "accommodation."

De	scription.				Value,	Remarks.
		•	Various	Ітемя.		÷
Dalice-					£	
Boat-slip					1 400	1
Storm-drainage					250	İ
Water-supply—						
Dam					500	
4,734 ft. 3 in. main					504	
$6,750 \text{ ft. } 1\frac{1}{2} \text{ in. main}$					260	
1,200 ft. 1 in. main					26	
810 ft. 3 in. main					14	
$1,200 \text{ ft. } \frac{1}{2} \text{ in. main } \dots$					15	
Valves and tanks					170	
asau					1	
Cow-bails					53	İ
Copra-vats					45	
Calf-shed and feed-boxes					10	
${f Water-supply}$ —					İ	1
Dam	• •	••,			100	
Concrete tanks					260	
4,463 ft. 2 in. main	• • •				223	
1,100 ft. 1 in. main					24	
736 ft. ½ in. main					10	
Wharf					250	
Fences					350	
Road					300	
Telephone system					200	
Oil-mill plant					300	Old plant.
Oil-mill plant					550	New.
" Adi Eci " (cutter)					800	
"Jean" (launch)					450	
Whaleboat and punt	• •	• •	• •		50	
Total					£40,824	
Co-operative store		• •			£308	

ENCLOSURE No. 6.

MAINTENANCE EXPENDITURE, 1924-27.

Year.				$egin{array}{c} \mathbf{Medical} \ \mathbf{Expenditure}. \end{array}$	P.W.D. Expenditure.	Total.
1924	 			 $\begin{array}{ccc} & & & \\ & \ddots & \\ 7.690 \end{array}$	£ 905	£ 8,595
1925	 			 8,746	1,042	9,788
$1926 \\ 1927$	 	• •	• •	 $ \begin{array}{ccc} & 8,984 \\ & 11,939 \end{array} $	$\substack{1,766\\2,367}$	$10,750 \\ 14,306$

ENCLOSURE No. 7.

Proposed Expenditure on Maintenance of Building and New Works, 1928.

				Mainte	nance.					£
Maintenance of bu	uildings									950
Painting	••									50 0
Maintenance of ro				• •						50
Maintenance of w		olies	• •							100
Maintenance of fe								• •		50
Maintenance of se	ptic-tank	install	ations		• •	• •		• •		50
									£	1,700
				New V	Vorks.					
School building										266
Veranda to store	• •		• •							150
Gaol buildings	••	• •			• •	• •	• •			230
Entertainment-ha		٠:.		• •	• •					150
Improvements to	water-suj	pplies		• •	• •					500
Incinerators		• •		• •						480
Light tractor	• •	• •	• •	• •		• •	• •			155
									£	1,931

ENCLOSURE No. 8. EXPENDITURE FROM LOAN FUNDS FOR YEARS 1925 TO 1927.

		Item	1.				Estimates.	1925.	1926.	1927.	Total.
Small new pe	rmanent	buildings	and	permanent	additions	to	$\begin{cases} 2,042\\ 900\\ 1,200 \end{cases}$	£ 1,600	£ 399 883 807	£ 48 355	£ 1,999* 931 1,162
New cutter							1,300		676	213	889
Oil plant			٠.				750			526	Incomplete
Bakery							700		729		729
Permanent ext	ensions a	nd improve	ement	s			4,371	••		2,947	Incomplete
							11,263	1,600	3,494	4,089	

^{*} Of this sum, £400 was paid by Samoa, and £591 0s. 8d. by Tonga.

ENCLOSURE No. 9.

				RKS PROP	SED TO	BE UN	DERTAKEN	WHEN
THE NE	w Loan	IS RAISI	ED.			£	£	
rements							3,000	
		*				250		
mon-Island	ers			- •				
				. *				
chinery						1,700		
					-	9.000		
	THE NEW vements optic tank non-Island	THE NEW LOAN rements ptic tank non-Islanders	THE NEW LOAN IS RAISI vements	THE NEW LOAN IS RAISED. vements	THE NEW LOAN IS RAISED. vements ptic tank mon-Islanders	THE NEW LOAN IS RAISED. vements	### THE NEW LOAN IS RAISED. #### THE NEW LOAN IS RAISED. ###################################	rements

List of Works for which it is desirable that Provision should be made in the Unallocated Portion of the Loan.

						£
Additional bathroom at Yaroi			 	 	 	85
Three-roomed house with septic tank			 	 	 	970
Road, Nasau to Dalice			 	 	 	7,500
New wharf, Dalice			 • •	 	 	1,200
						£9.755

APPENDIX No. 2.

ESTIMATED COST PER UNIT ON PROPOSED BASIS.

Expenditure on working-expenses	, Makog	ai, 1927,	less tran	sport of	lepers	£
(Fiji), £500, and revenue obta				٠.,	·	10,878
Public-works expenditure—Mainte						2,367
Interest at 5 per cent. on purchase	e price of	island (f	(10,000)			500
Interest at 5 per cent. on value of						2,091
Sinking fund at 3 per cent. on valu	ie of buil	dings, wo	orks, plan	t, &c. (£4	1,824)	1,254
Insurance on buildings—5s. per ce	ent. on £3	36,710				92
Administration and supervision						500
Leave, pensions, &c., to staff		• •		• •		600

£18,282

Daily average	of units.	1927, 387.15.	Cost per	unit,	18,282 ==	£47	4s. 5d.
---------------	-----------	---------------	----------	-------	-----------	-----	---------

Distribu	tion of C	ost.			£	s.	d.
New Zealand—17 units at £47 4s. 5d.					802		1
Under existing rates cost would be	• •	• •	• •	• •	770	0	0
Cook Islands—57 units at £47 4s. 5d.					2,691		9
Less interest at 5 per cent. on £2,11	10	• •	• •	• •	105	10	0
					2,586	1	9
Under existing rates cost would be	• •	• •	• •	• •	2,280	0	0
Samoa—32½ units at £47 4s. 5d.					$\frac{1,534}{1}$	13	6
Less interest at 5 per cent. on £1,44	8				72		0
					1,462	5	6
Under existing rates cost would be		• •	• •		1,300	0	0
Tonga—14 units at £47 4s. 5d					661	1	10
Less interest at 5 per cent. on £591						$1\overline{1}$	ő
-							
Under evicting retain cost would be					$631 \\ 560$	10	10
Under existing rates cost would be	• •	• •	• •	• •	960	O	U

Approximate Cost of Paper.—Preparation, not given; printing (495 copies), £15 17s. 6d.