LEPER INSTITUTIONS IN NIGERIA

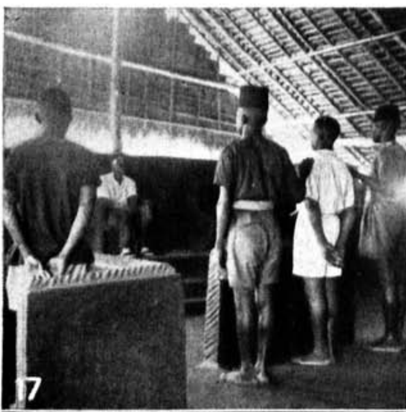
REPORT OF VISITS BY THE MEDICAL SECRETARY OF THE BRITISH EMPIRE LEPROSY RELIEF ASSOCIATION.

1. *Yaba Leper Colony, Lagos.* Visited on 3rd April, 1936. There were 80 inmates, the great majority of which were males. Two or three appeared to have been admitted for diseases other than leprosy. Many of the patients appeared to have only slight signs of leprosy and only about one-third of the men appeared to be seriously infectious cases, though others may have been slightly infectious. women seemed to be chiefly of the secondary neural type with marked deformities. I gained the impression that most of the patients had improved since admission chiefly due to the better food and the hygienic conditions in which they were living. Many of the patients seem to have come from distant provinces. The camp is visited by an African doctor and supervised by the Medical Officer of the African Hospital at Lagos.

2. *Zaria Leper Camp.* Visited on 8th April, 1936. This camp was surveyed by Dr. Howard in February, 1935. He found 39 neural, 13 cutaneous and 43 mixed cases. Of 25 children born in the camp, 4 showed suspicious patches, all of which were found bacteriologically negative at that time. Acid-fast bacilli were found in a nasal smear from one child with clinical signs. Treatment of the men is carried on by a Dogari appointed by the Native Administration, who gets 25/- a month. Treatment to the women is given by a nursing sister from the C.M.S. hospital. There are 106 huts. The sanitation of the camp is good. There is good farming land between the camp and a river which is half a mile distant.

This camp could form a very good nucleus for a Provincial Settlement along the lines recommended in this report. The C.M.S. whose general hospital is a short distance away would be the most suitable mission to undertake this work. Co-operation with the sleeping sickness workers in this province might be considered. The camp is under the general supervision of the Medical Officer, Zaria.

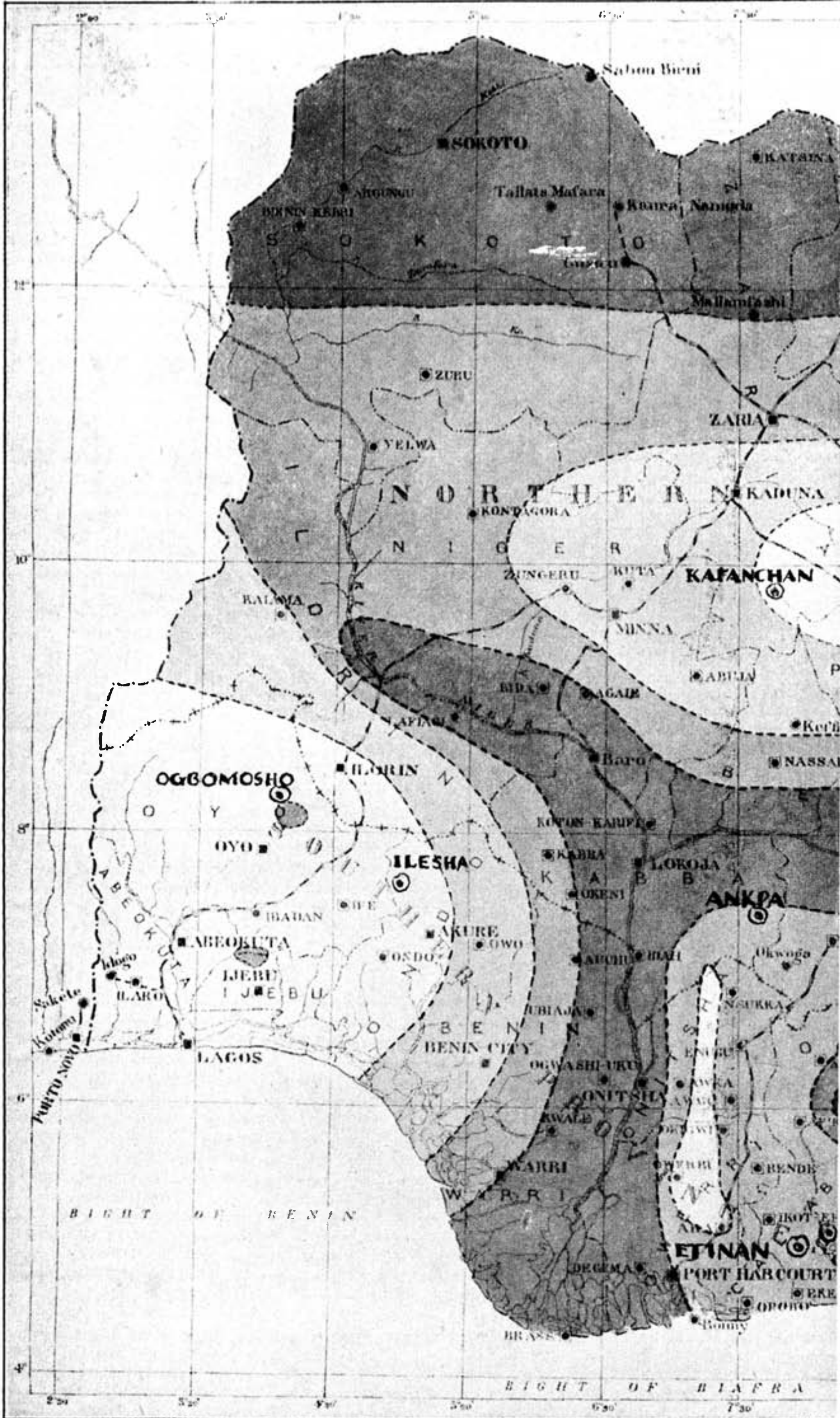
3. *Katsina Leper Camp.* Visited on 10th April, 1936. This camp is superintended by Mr. Crayfird, a Toc H worker, and is under the supervision of the Medical Officer, Katsina. It is situated about 5 miles distant from the station. There is a house for the superintendent near the camp. The great



17. Court of Justice presided over by leper chief.
18. Church from behind the pulpit.
19. Some of the nurses—a pause in the day's work.
20. A street of the settlement—making palm thatch and fish traps.

(17—20 are from the Itu leper settlement, S. Nigeria.)

21. Delousing—an entrancing occupation.
22. A game of skill.
23. Pounding the evening meal of casava and
24. Finger shortened by yaws, not leprosy.



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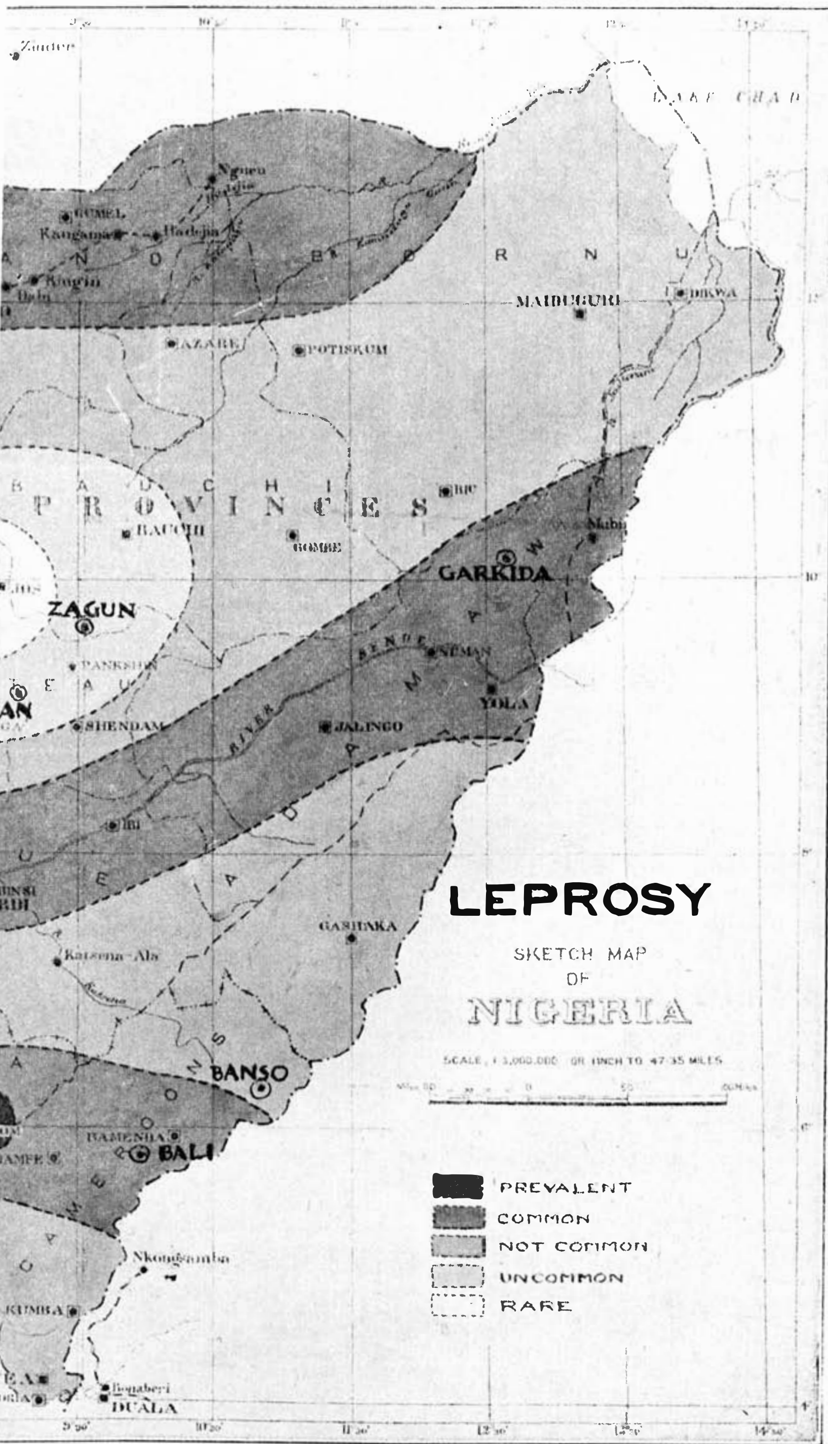
LEPROSY
SKETCH MAP
OF
NIGERIA
PREVALENT
COMMON
NOT COMMON
UNCOMMON
RARE
LAKE CHAD
BAUCHI
PROVINCES
BORNU
ADAMAWA
GARKIDA
ZAGUN
BANSO
BALI
MAIDUGURI
POTISKUM
AZARE
GOMBE
BAUCHI
SHENDAM
JALINGO
NUMAN
YOLA
GASHAKA
DIKWA
Mubi
Nguru
Hadejia
Kangama
GUMEL
IBI
Katsena-Ala
BAMENDA
Nkongsamba
KUMBA
Bonaberi
DUALA
Zinder
River Benue

25 & 26. Children bathing in Lake Bosumtwi.
27. Scout band at village near Ho.
29. Seven lepers correctly picked by local chief from a group of 30 skin disease patients. Makeni.
28. Last stages of crippling from leprosy.
(25—28 are from the Gold Coast.)
30. Case of yaws (with his 6 children) isolated by the same chief under mistaken diagnosis of leprosy.

majority are of the crippled, hopeless type, and out of over 200 patients, only 15 are at present able to work. The buildings are all of mud and are at the one side of the camp. The 80 huts for the patients are in six rows, well spaced out. The sanitary arrangements are good. Water is at present inadequate, but three wells are being dug. The diet of the patients is poor. Their skin is very dry and cracked. The great need is vegetables and butter. The colony as it is at present is not likely to have much influence on the incidence of leprosy in the province. The Native Administration spend £1,000 a year on the camp. The superintendent in spite of great difficulties, is doing excellent work and is very popular with the patients. There are good prospects for farming on the present site. This camp might form a good nucleus for a Provincial Settlement along the lines mentioned in this report. I understand that the Sudan Interior Mission would be willing to undertake the work of this camp. The Resident, the Medical Officer and the District Officer welcome this suggestion. If this change were made the present superintendent might be employed at Zaria, which, I understand, would welcome a Toc H worker for their camp.

4. *Somaila Leper Settlement.* Visited on 13th April, 1936. There are 70 males, 36 of which are cutaneous cases, and 33 females, making a total of 103. The patients come from the following provinces:—Kano 83, Bauchi 4, Zaria 3, Bornu 3, Katsina 3, Sokoto 3, Enugu 2, French Territory 2. There are only 7 cases of the crippled type. The settlement is under Dr. Howard, assisted by Mr. Lambert, a Toc H worker. During the absence of Dr. Howard, the Medical Officer of Health of Kano supervises. There is a good house for the Medical Superintendent and a site is being chosen for a house for the Toc H worker. The colony has been begun on excellent lines and farming is in progress. It might develop into a Provincial Settlement along the lines recommended in this report.

I understand that the Sudan Interior Mission are offering to undertake the work of this Settlement as well as that at Katsina. I think this might be considered after this mission has shown successful work at Katsina, if it is decided to hand over the Katsina camp to them.

It is a pity, I consider, that this settlement is so far away from the city of Kano, but otherwise the site should prove a good one when arrangements for water supply have been made.

5. *Azare Leper Asylum*. Visited on 14th of April, 1936, with the Medical Officer who is in charge. There are about 25 cases, some 6 of which are of the crippled type. They get cooked food from the hospital. They do a little farming, but no proper organisation is possible for such a small number. I think it would be well to send these cases to the Somaila settlement or else to develop the camp into something larger and upon a more self-supporting basis of the nature of a Clan Settlement.

6. *Maiduguri Leper Camp*. Visited on 18th of April, 1936. This camp is about 5 miles from the city. It is superintended by a Toc H worker, Mr. Podrick, under the supervision of the Medical Officer at Maiduguri. Mr. Podrick lives in the City as there is no house for him at the camp.

There are 240 inmates. Of these I found about 50 cases of active leprosy, 140 crippled cases in which the infection had apparently died out, and 50 cases which were apparently suffering from diseases other than leprosy, such as syphilis and yaws. Of the 50 cases of active leprosy, very few, some half dozen, are under voluntary treatment. The rest prefer not to be treated. The whole atmosphere of the place is that of contentment with their lot as lepers. They have all their wants supplied, why should they bother to work or get treated? This must have a very depressing effect on the otherwise hopeful cases.

The object of this camp is to remove unsightly lepers from the streets of the city. It has not, and however much work is put into it, is not likely to have any beneficial effect on the incidence of leprosy. This camp might be left with its present hopeless cases and a new settlement begun at a suitable site along the lines suggested in this report.

I have heard it said that the people in the northern provinces of Nigeria are callous regarding leprosy, suggesting that this is a characteristic of the people as a whole. I disagree with this opinion; the Somaila Settlement disproves it. The reason for the apparent callousness is that such camps as those at Katsina and Maiduguri have been begun on the wrong lines. Meanwhile a small settlement might be begun with the more hopeful cases at a suitable site, and suitable cases added gradually. It would be well, however, in choosing the new site to bear in mind the requirements mentioned in this report, so that there may later be adequate room for expansion. Mr. Podrick could develop this new settlement, and pay occasional visits to the old settlement.

7. *Garkida Leper Settlement.* Visited on 20th of April, 1936. This is conducted by the Church of the Brethren Mission. There are about 475 patients living in small villages. The huts made by the patients themselves are clean, and sanitation is good. The settlement is well conducted and has a whole-time doctor in charge. They have no nursing sister and are at a loss meanwhile as to how to look after the new born children. Dr. Bosler is handicapped in his medical work by having no one to help in superintending building, &c. They have a very good school for children and young adults and should in time be able to train efficient African assistants. They aim at training these and sending them out for health work to the villages. They have one dispenser and one carpenter who are not lepers, all the other African staff is drawn from the lepers themselves. Very satisfactory progress is being made in spite of handicaps. Most of the cases are of a mild type, but there is a certain proportion of maimed cases. Nodular (C3) cases are few. Laboratory work is defective due to lack of staff. This colony is progressing along the best lines. It might develop into a settlement for the Adamawa Province on the border of which it lies, and for the southern part of Bornu and the western part of Bauchi until the latter have suitable Provincial Settlements.

8. *Bauchi Leper Camp.* Visited on the 23rd of April, 1936. I found 28 cases, only 5 of which were frankly infectious. Fifty per cent. were of the deformed, post-leprous type. They get as maintenance threepence a week. There were about 200 cases, but most of these left and went to Auyo, near Hadeija, as there was a rumour of cure through bathing in a pool there. Some 7 came back. They have plenty of land to cultivate, but do very little. I did not see the camp near Gombe, but there is great need for a Provincial Settlement for the Bauchi Province, as leprosy is very common there, especially near Gombe and in the western and southern part of the province.

9. *Vom Leper Camp.* Visited on the 24th of April, 1936. This is a small institution a few hundred yards distant from the Sudan United Mission and its hospital, the doctor of which conducts the camp. The patients work on the local roads for which they are paid and maintain themselves thereby. There are 30 patients of which I saw 24. Of these all with one exception were able-bodied. Five were infectious cases. No bacteriological examinations are done. Three

were cases of doubtful leprosy. The food is good and patients appear to do well. The doctor considered that Vom is not a suitable place for developing a large settlement for the following reasons:—

(1) Food is expensive as it is near the mines.
(2) Ground is expensive for farming as the population is high (7400) in Vom.
(3) The ground is barren.
(4) It is cold at night.

Apparently the incidence of leprosy is not very high in the plateau. The huts of the patients are clean and the camp sanitary.

10. *Kafanchan Leper Camp.* Visited on the 25th April, 1936. This is run as an annex to the hospital by the Medical Officer. There are 6 cases, 4 of which are highly infectious cases.

11. *Mkar Leper Settlement.* Visited on the 27th and 28th of April, 1936. This is 55 miles south-west of Makurdi, and 2 miles from the new government station at Gboko. Dr. le Roux of the Dutch Reformed Mission, runs it in addition to a general hospital. The settlement is about one mile distant from the hospital. Unfortunately just before my visit most of the patients had run away and I saw only 61, which were as follows:—N1—7, N2—26, N3—7, C2—7, C3—11, doubtful leprosy—7. This settlement might very well be developed into a Provincial Settlement for the Benue Province, and as the centre of the scheme recommended in this report. In this the school teachers and others connected with the mission could help materially. Under the present arrangement with only a part-time doctor, further development would be difficult.

12. *Uzuakoli Leper Settlement.* Visited on the 30th of April to the 4th of May, 1936. This is one of the two largest leper settlements in Nigeria. Dr. J. A. K. Brown, the medical officer is a missionary of the Methodist Mission. The running expenses including his salary are met by grants from the Native Administrations of the Owerri Province. These pay the following amounts:—Okigwi £900., Owerri £900., Bende £200., Ahoada £200., Aba £100., making a total of £2300 per annum. Grants of £300., £200 and £50 have been received from the central government in 1933, 1934 and 1935 respectively.

The in-patients and out-patients for last year were as follows:—

	Males	Females	Total
In-patients. ...	559	258	817
Out-patients ...	172	79	251
Un-infected children in the settlement ...	5	9	14

Since last October 250 free patients have been admitted apart from Native Administration support. These pay on admission 5/- for materials for their houses and have either a deposit in the bank or a promise of support from their relatives. These are chiefly cases from the immediate neighbourhood, which shows the high incidence of the disease. These support themselves largely by farming either land given by the settlement or land rented from neighbouring landowners. There were 48 deaths during the year. Of the present cases 20% are early cases, 60% advanced but able-bodied cases, 20% advanced and disabled. The patients are employed in making houses, repairing houses and roads, as nurses, temperature clerks, police, sanitary inspectors, teachers, etc. The industries are carpentry, smithing, soap manufacture, &c. Farming is both communal and individual. The latter is considered the best as it gives better results. The individual interest provides the necessary incentive.

Seed is given to the farm and 20% of the produce has to be returned for initiating other farms. There is an African non-leper laboratory assistant trained in Lagos. All patients are given preliminary treatment for accompanying diseases.

Infants born in the settlement are separated at birth and kept in a creche where they are fed artificially. The mothers see but do not handle their children. Uniformly satisfactory results are obtained. Mrs. Brown the wife of the doctor, herself a nursing sister, has developed this side of the work and has trained African assistants.

Dr. Brown, the Medical Officer of the Settlement, estimates that there are about 25,000 lepers in the Owerri province. To deal with these effectively he suggests 20 out-patient dispensaries in touch with and supervised from the central settlement. This plan would fit well into the scheme suggested in this report.

The discipline of the settlement is excellent. There is a brass band which leads the singing in the large church which holds about 800. The whole atmosphere of the settlement is one of hope, activity and cheerfulness. Unfortunately Dr. and Mrs. Brown have to leave for family reasons, but a new doctor is coming out to take over the work.

13. *Settlements near Afikpo.* Visited with the Senior Health Officer of the Southern Provinces on the 5th of May, 1936. I have already referred to these in my report under Clan Settlements.

14. *Itu Leper Settlement.* Visited from 8th of May to the 14th of May, 1936. This is the pioneer settlement of this kind in Nigeria and is by far the largest. It was founded and is superintended by Dr. Macdonald of the Church of Scotland Mission. He is assisted by Mr. Paterson in the industrial side of the work, and by Mr. MacGregor a Toc H worker. Unfortunately Dr. Macdonald had not returned from leave at the time of my visit. During his absence the settlement is supervised by Dr. Lloyd, the doctor of the General Mission Hospital. Of the 1514 patients in residence on April 1st, 1936, 436 are from the Calabar Province, 309 from the Owerri Province, 228 from the Ogoja Province, 512 from the Onitsha Province, and 11, 16 and 2 respectively from the Benin, Warri and Cameroon Provinces.

The reason for patients gathering from other Provinces is that when this settlement was formed other settlements were not available in the other provinces.

The grants received from Government and Native Administrations are as follows:—

		£
1931-32	=	2627
1932-33	=	2560
1933-34	=	2537
1934-35	=	3120
1935-36	=	2619

From these grants are paid the salaries of the Medical Officer and Mr. Paterson. Considering the large number of patients the expenditure on the colony is surprisingly small.

The Itu settlement has served as a model for other settlements founded later, and considerable benefit has been derived by those who have received training there.

In addition to agriculture, several industries have been developed, such as palm oil, soap making, lemon grass oil. There are carpenters and blacksmiths work shops. The discipline is excellent, being maintained by a Native Court under the presidency of a Chief. One of the most impressive scenes is the large congregation gathered on Sundays in the church which was built by the lepers themselves at a cost of £120. The singing of the 10 to 12 hundred people is led by a well trained choir and a brass band. Round this centres the religious and social life of the lepers. Without the

development of this side of the work no settlement is likely to be conducted satisfactorily.

What the future development of this colony will be it is difficult to forecast. I consider that, as other Provincial Settlements are formed, the patients should be more and more restricted to those from the Calabar Province as far as is practicable. It would, however, be a mistake to carry out any sudden changes such as transferring the 512 from the Onitsha Province to the Oji River Settlement. The latter must be allowed to grow gradually and assimilate its population. On the other hand, a more rapid transference of the 309 patients from the Owerri Province to the well established Uzuakoli Settlement might possibly be considered advisable, but this should not be done without careful consideration of all the points at issue.

15. *Oji River Settlement.* Visited on the 17th of May, 1936. This settlement is situated in the Onitsha Province between the towns of Enugu and Onitsha. It is under Dr. Money, a C.M.S. Medical Missionary, who is assisted by Mr. Parker, a trained dispensing chemist who is one of the Toc H workers. The doctor's salary is supplied by the Halley Stewart Trust through the British Empire Leprosy Relief Association. The settlement has not yet begun; but the administrative buildings have been constructed and one block of huts will be ready for the first batch of patients in about 6 weeks time. The capital expenses have been met as follows:—

	£
Government	1,000
Native Administrations ...	1,600
Fund of Dr. Hasden, (C.M.S.)	1,500
B.E.L.R.A.	500
Mission to Lepers	500
Total ...	£5,100

For running expenses I understand that the following sums have been arranged with the Native Administrations of the Onitsha Province:—£300 a year for drugs, £100 a year for extras, £1,000 a year at £4 a head for 250 patients. This settlement should form an excellent centre for development along the lines suggested in this report. I think that it would form a good centre for training in laboratory, clinical and leprosy control work. For this end I have recommended (see section on training) that the medical officer be deputed to study leprosy in India for a few months. During this period the settlement would be superintended by Mr. Parker.

16. *Ossiomo Leper Settlement.* Visited on the 19th of May, 1936. This settlement is situated between Benin and Agbor at about 10 miles from the latter. About £10,000 was spent on the original buildings which include permanent dwellings for the patients. The medical superintendent is Dr. Lengauer, who is assisted in her work by four other ladies, two looking after the nursing, one the education and one the welfare work. The money for the upkeep is contributed as follows by the Native Administrations:—

Benin Province:

Agbor	...	£400 a year
Ishish	...	150 ,,
Kukuruku	...	50 ,,
Ugwashi	...	150 ,,

Warri Province:

Krishobo	...	£200
Jekri Sobo	...	60
Kwalle	...	120

There are 205 patients, which I examined, giving as follows:

		Infectious.	*Non-infectious.*	*Total.*
Men	...	42 (28%)	112	154
Women	...	3 (11%)	24	27
Children	...	7 (28%)	19	26

In spite of the fact that the settlement was not begun on the best lines, the present doctor and her assistants have secured good discipline. All the patients are actively employed in farming and other activities. Sanitation is excellent. There is a good school for the children. The infants home is one of the best I have ever seen.

Now that the settlement is established, during the last 18 months since the superintendent returned, it will be possible gradually to expand its activities, both by adding to the numbers and by extending into village work.

One great necessity is a good water supply. A certain amount of water is collected from the roofs and stored in tanks. But this is quite inadequate, especially in the dry season; and it is difficult to avoid bowel disease and to keep the patients clean and free from skin diseases. Either wells should be made, if this is possible, or arrangements should be made to bring water in pipes from the stream 1½ miles distant. This should be done as soon as possible, as the want of water increases the burden of the staff and especially of the doctor.

17. *Ilesha Leprosy Camp.* Visited on the 22nd of May, 1936. This is a small camp in connection with the Methodist Hospital, superintended by the hospital doctor, Dr. Hunter. There are 33 patients, of which 3 are highly infectious cases. Brick dwellings are being constructed by the lepers with the help of a grant of £100 from the British Empire Leprosy Relief Association.

18. *Ogbomosho Leper Camp.* Visited on the 23rd and 24th of May, 1936. This camp is conducted by the Medical Missionary in charge of the American Baptist General Hospital. There are 80 in-patients and 12 out-patients. There is one large administrative building with a pan roof, and some permanent dwellings for the patients. But recently thatched huts have been put up by the patients themselves, for the accommodation of more patients.

With a whole-time doctor and other staff this camp might develop into a Provincial Settlement for the Oyo Province. The training college connected with the mission might take a useful share in anti-leprosy and other village health work, and some of the missionaries expressed a strong desire to take part in a scheme of this kind. There appears to be much more leprosy in the northern than in the southern part of the Oyo Province. Possibly Oyo and Ilorin provinces might combine in supporting the settlement at Ogbomosho as this place is central for these two provinces.

19. *Sokoto.* I was unable to visit this province. I understand that leprosy is highly endemic there and that the former leper camp was given up as it was realised that the money spent on it was not justified. It was, like the Katsina and Maidaguri camps, of little value from a Public Health point of view. It seems to me that it would be well if possible to have a Provincial Settlement begun there with the assistance of some mission and under the supervision of a Provincial Leprosy Board. Care should be taken in those provinces bordering on French territory that lepers do not find their way from there into Nigerian Settlements.