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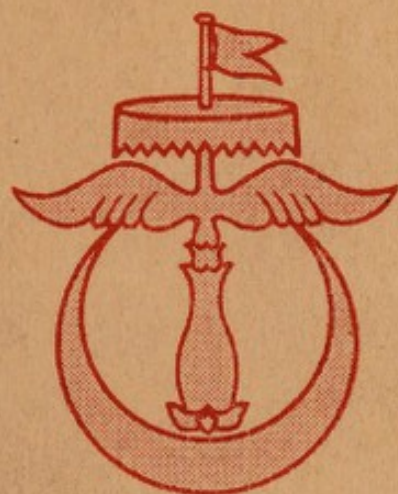
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ANNUAL REPORT

BRUNEI

1955

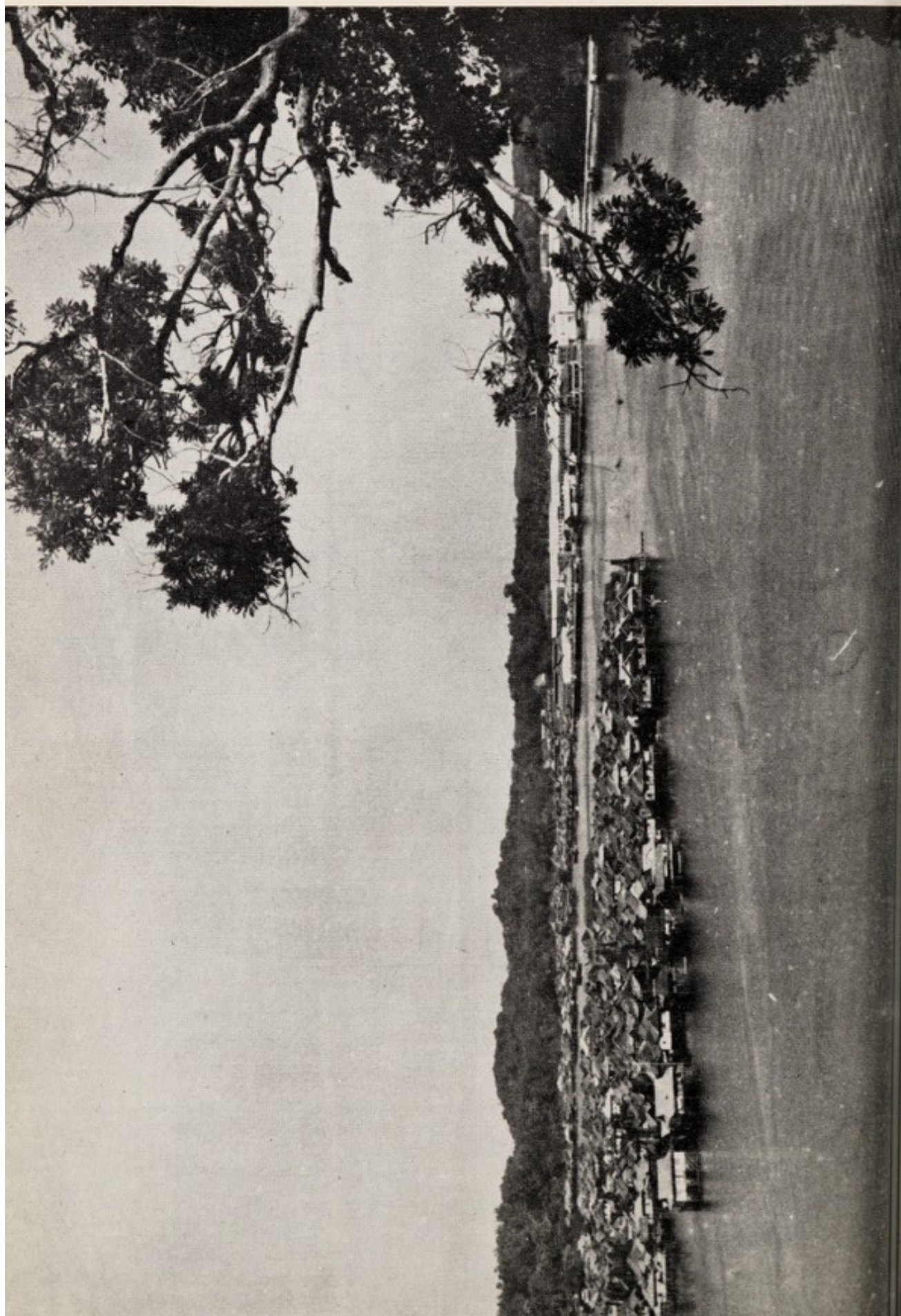
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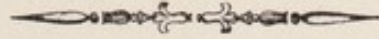
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Kampong Ayer
Brunei.

(Information Service
photograph)



STATE OF BRUNEI



ANNUAL REPORT

1955

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REPORT
OF THE
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PART I.

PART I

PART I.

GENERAL REVIEW OF 1955

THE year 1955 was a year of general prosperity. The finances of the State remained firm and progress under the Five Year Development Plan continued satisfactorily. Labour was able to command good wages, and there was plenty of employment for all.

It was also a satisfactory year for those engaged in Commerce; import duties for 1955 were lower than those of 1954, but this was due to conditions in the British Malayan Petroleum Company's import programme which is bound to fluctuate from year to year.

The most notable event of the year was the visit of Her Majesty's Secretary of State, the Rt. Honourable Mr. Alan Lennox-Boyd, and Lady Patricia Lennox-Boyd. This is the first time in history that a Secretary of State has visited Brunei and it was marked by a tremendous welcome from all members of the community. The Secretary of State was met at the mouth of the Brunei River by His Excellency, Sir Anthony Abell, K.C.M.G., High Commissioner for Brunei and the British Resident. During the latter part of the journey up-river, the launch was escorted by a large number of local craft gaily decorated for the occasion. The Secretary of State and Lady Patricia were welcomed by His Highness the Sultan of Brunei, the Ministers of State and Members of the State Council and a very large and enthusiastic crowd of people.

As the economy of the State depends so much on oil, it is only right that a review of the British Malayan Petroleum Company's activities should be outlined early in this report.

At the beginning of the year, the picture of the future of the Seria Oilfield was one of slowly declining production, the highest peak was believed to have been past. The development

of new techniques has materially altered this forecast, and the production for 1955 was in fact higher than ever before and four million barrels above the estimate.

Also during the year oil was found at Jerudong, approximately 14 miles from Brunei Town. This is the first new find of oil in Brunei since Seria Field was found in 1929. Although oil was found in the first well drilled, later results have been disappointing and it is much too early to make any forecast on what developments may be.

The Managing Director reports that Oilfield developments at Seria may be said to have passed out of the post-war rehabilitation period and are now operating to planned routine.

The Oilfield continues to expand its social amenities without in any way diminishing its progress as one of the largest, most complex and most productive industries in South East Asia.

It is Government's policy to resettle as many families as possible from the historic *Kampong Ayer* (Water Village) on to the mainland, where it is hoped that the people will cultivate the land, planting their own crops, fruit and vegetables, to their eventual benefit. Steps were taken during the year to carry out this policy, and although some progress was made, it was slow. It may be necessary to increase the already attractive financial aid from Government, if it is considered desirable to speed up the progress.

Staff in all departments of Government is inadequate. This is mainly due to the fact that the development of the State generally has produced very much more work both on the technical and administrative sides of the various Departments and also the policy of appointing officers from outside on contract only. The high salaries which it is necessary to offer in order to attract officers with the right qualifications are still not attractive enough to fill the posts, as most officers prefer pensionable posts and security to highly paid contract jobs without any security.

Due to the low standard of education which has prevailed in the State in the past years, it is almost impossible to recruit locally to fill the vacancies in the permanent establishment and it will be some years yet before the education plan will produce

sufficient boys and girls with educational qualifications necessary to fill these vacancies.

At the end of 1955 twenty pupils passed the Sarawak Junior Certificate, which is equivalent to Form III, and it will be another two years before any Brunei pupils obtain their Senior Cambridge School Certificate. This means that it will be seven years or more before Brunei has any candidates graduating from a University.

The recruitment of officers from outside the State is therefore of very great importance at the moment. This policy does not help in building up an efficient and satisfied civil service, and it is hoped that the policy may be relaxed, so that a certain number of candidates from outside can be taken on the pensionable establishment. If these candidates have not been accepted too young, they should not in any way block the promotion of Brunei boys in years to come.

District Advisory Councils were set up in late 1954, and have played a useful part during the year 1955. This is the first time that the people of rural areas have been able to air their complaints and views openly, and they have not been backward in doing so. This has kept Heads of Departments on their toes as their complaints (although sometimes frivolous) are generally directed towards the improvements of water supplies, communications and other social services.

Observers are appointed from each District Advisory Council who sit in State Council in that capacity, and who may address the Council if they give the necessary notice and obtain permission to do so. These observers are also called upon from time to time by the President, to address the meeting on matters dealing with their respective Districts.

On the whole, the experiment has proved successful, and it is hoped that these District Councils will eventually provide the electorate from which unofficial members will be drawn to sit on a Legislative Council.

The cost of living rose considerably during the year and so indeed did the standard of living. There was considerable pressure

constantly on Government to revise the salaries and the cost of living allowances. After lengthy research by a Select Committee, headed by the State Treasurer, a completely new Salaries scale structure was produced and approved by the High Commissioner.

Although there were considerable increases in certain department's scales, such as the Police, Marine and Technical scales, the increases in the clerical and other scales were very small.

One of the main objectives of the Select Committee was to create long time scales for certain types of officers. Experience was to be recognised as well as qualifications, and by these new long time scales, such persons as overseers could see before them a good career, even though they knew they had no chance of getting on to the higher technical scales. In this way an overseer type with long service could receive a salary considerably in excess of a technical assistant's with short service.

In spite of considerable increases in salaries during the year, Brunei is still unable to recruit sufficient local men for the State Police Force, and out of a strength of 364, there were still 112 vacancies at the end of the year. It was found necessary to continue the secondment of one platoon of Field Force from Sarawak in the Oilfields area, and also to ask for the secondment of 80 police from the Federation.

DEVELOPMENT

Development work, in the sense in which it is understood to-day, did not start in Brunei until 1953. The period between the end of the war and 1953 was taken up in repairing the very extensive war damage, and in rehabilitation work. In 1953 the State Council voted \$100 million for development work, but neither the men nor the materials to implement the programme were at hand. During 1954 detailed planning was put in hand and staff was recruited. The year 1955 was therefore the first year in which development really got under way. Reference is made to a number of development projects under the appropriate heads in later sections of this Report, but it will be useful to give a general outline of the main development work in this section of the Report.

Roads:

Probably the greatest achievement of the year was the organisation and starting of the road building programme. Only a few miles of road have as yet been built. The roads in the State are to be built by modern machinery operated in compact groups, and by the end of 1955 two such groups had started working and had constructed their first lengths of road. The first group was rebuilding the Brunei/Tutong Road, and second group was constructing a new road between Danau and Seria; the two sections will ultimately link up from the main Brunei Town—Seria trunk road.

One of the greatest impediments to road building is the acute shortage of satisfactory stone in the State, and during the year the Chief Roads Engineer undertook extensive experiments in the use of soil cement stabilisation. These experiments proved that the system is practicable in the State, and orders were placed for specialised heavy machinery for road construction by this method. By the end of the year some seven miles of road had been built in this way, and the first experimental stretches of soil cement stabilised road had satisfactorily withstood severe usage by the heavy Public Works Department vehicles and by trucks employed by the British Malayan Petroleum Company in the Jerudong area. The success of oil cement stabilisations means that the road programme will be able to proceed with greater speed at a lower cost than was originally thought likely.

Airport:

Work on the Brunei Airport proceeded somewhat slowly during the year, hampered partly by bad weather and partly by the need to put available machinery to work on roads which, during the last quarter of the year were in danger of being closed through exceptionally heavy rainfall. It is confidently expected, however, that the Airport will be available for use by Dakota sized aircraft during 1956.

Communications:

Communications within the State were further improved by the establishment of a VHF radio telephone circuit between Brunei and Kuala Belait and between these main centres and a number of subsidiary centres in the surrounding districts. VHF

telephone communication was also established to Miri in Sarawak and via Labuan to Jesselton in North Borneo.

Electricity:

For a number of years electricity supplies have been severely limited, but by the end of 1955 the power available at the Brunei Power Station was well in excess of the demand. One 280 KW. set had been installed and a second was in process of installation so that while the peak load is in the region of 300 KW. the station is in a position to provide a regular supply of 730 KW.

Agriculture:

Agricultural development work was concerned chiefly with experiments into the mechanised cultivation of padi and surveys for two irrigation schemes at Mulaut and Kilanas. These surveys indicated that considerable areas are suitable for irrigation for wet padi growing and Messrs. Sir Bruce White, Wolfe Barry & Partners are conducting experiments into means of mechanical planting and harvesting without the use of crawler type tractors which are unable to draw machinery through the deep mud of the Brunei padi fields. The experiments are based on a system of cable traction operated from the bunds dividing the padi fields.

The Rubber nurseries established in 1954 were in an advanced stage, and at the end of 1955 the first sales of improved budded stock were made. Stocks of budded stumps are now more than adequate and by the end of the year a replanting programme and programme of assistance to smallholders was drafted for implementation in 1956.

Education:

On the education side, 1955 saw the near completion of the new Government English School at Brunei Town and the dismantling of the old *kajang* buildings which have now been used for some 2½ years while the new school was being built. However, new school buildings are still quite inadequate to the number of children requiring entrance to schools, and many *kajang* buildings remain in use both in Brunei Town and in the Kuala Belait/Seria areas.

Some twenty-two primary schools were in the course of construction in various parts of the State during the year, but unfortunately none of these reached completion. However, it is certain that during 1956 a number of these will be available to replace the unsatisfactory structures now in use.

Broadcasting:

The first steps towards establishing a broadcasting station were taken during the year. Brunei is indeed indebted to Sarawak for much of the detailed work which was undertaken by the Chief Engineer Mr. J. R. Sandison of Radio Sarawak. Mr. Sandison and Mr. Baker a representative of Messrs. Marconi, visited the State in order to make a comprehensive survey of the requirement and to draw up proposals for a State-wide broadcasting service.

General:

The foregoing is an outline of the main aspects of the development programme. Throughout the State, however, there was unprecedented building and constructional activity which included improvements to the water supply in Brunei Town, construction of an entirely new water supply to Kuala Belait, the building of new Customs Houses and Wharf extensions at both Brunei and Kuala Belait, the construction of flats for wage earners and most important of all to the Brunei Malay community—the construction of the Mosque in Brunei Town. By the end of 1955 the scaffolding for this Mosque, which is expected to cost \$4,500,000, had risen well above the level of all other buildings in the town, despite the fact that the main minaret has only reached approximately one-third of its final height and the work on the main dome of the Mosque had not been commenced.

The limiting factor in the rate of development is now labour and supervisory staff. All contractors of good repute have their resources fully stretched and more work can only be let out as other works are completed.

The rapid pace of development in Brunei has necessarily involved the employment of contractors from outside Brunei to undertake the larger building and other development projects since local Malay contractors have not yet reached the necessary standard of efficiency although Government has made a number

of attempts to assist Malay businesses and Malay contractors. This has led to some criticism from the Malay population that profits on development of Brunei are going outside the State to foreigners to the State.. This criticism is however preferable to the alternative criticism of slow progress and delays which would undoubtedly follow any policy of restricting development work to local contractors and it is thought that the majority of the people are becoming appreciative of the benefits already instituted under the Development Plan, such as Old-age Pensions and Disability Pensions, free education, new schools, school feeding schemes, improved medical facilities, etc.

LIST OF VISITORS FOR THE YEAR 1955.

Professor Champion of the Imperial Forestry Institute at Oxford.

General Sir Charles Loewen, K.C.B., K.B.E., D.S.O., Commander-in-Chief, Far East Land Forces, Singapore.

Dr. Herman Kartowisastro, The Consul General for Indonesia and Vice Consul Mr. Saat Djajadisastra.

The Rt. Honourable Mr. Casey, Minister for External Affairs, Australia.

Mr. G. S. McDonald, Technical Education Adviser (Technical Co-operation Scheme of the Colombo Plan).

His Excellency the High Commissioner for Brunei.

Mr. E. A. Madden, Agrostologist, Department of Agriculture, N.Z.

The Rt. Honourable Mr. Malcolm MacDonald, Commissioner General for the South East Asia.

Mr. D. S. Armstrong, Canadian Trade Commissioner, Singapore.

The Rt. Honourable Mr. Alan Lennox-Boyd, M.P., Secretary of State for the Colonies accompanied by Lady Patricia, Mr. A. M. MacKintosh and Mr. J. B. Johnston.

Sir Alan Watt, Australian Commissioner in Malaya.

Mr. J. E. Maynes, Colonial Liaison Officer, National Institute of Agricultural Engineering.

H.M.S. Consort, Commander Mackenzie R.N. visited Belait.

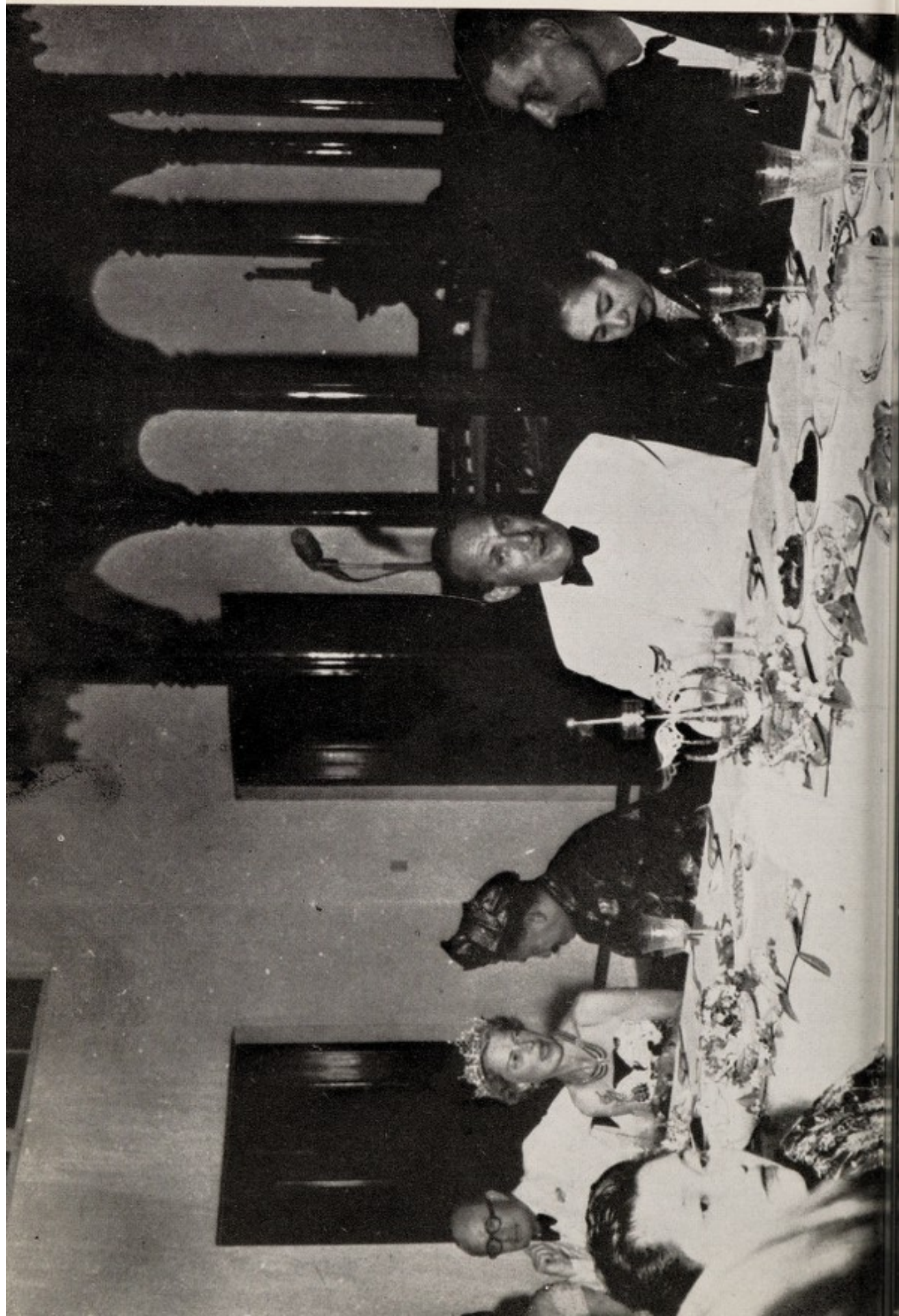
Chasing kites
Brunei river.



(Information Service
photograph)

State Banquet,
Secretary of
State for Colo-
nies' visit.

(Information Service
photograph)



His Highness
meeting Secretary
of State for
Colonies and
H.E. the High
Commissioner
for Brunei on
arrival in Brunei.

(Information Service
photograph)



Weaving, Kam-
pong Ayer
Brunei.

(Information Service
photograph)



PART II.



CHAPTER I.

POPULATION

Distribution of Population:

THE bulk of the people in the State of Brunei live in the two main urban areas, namely, Kuala Belait/Seria and Brunei Town. The former area covers the British Malayan Petroleum Company Oilfield, while Brunei Town is the Government Administrative Centre. The population in these two areas is cosmopolitan.

The remainder of the population lives along the coast or along the banks of the three main rivers. The Malays are concentrated along the coastal strip and up the first few miles of the rivers. The character or distribution of the races up these rivers follows a fairly common pattern i.e. in the lower reaches Malays, then in the following order as one proceeds upriver—*Kedayans* and *Dusuns*; *Muruts* and finally *Ibans* (Dyaks). In one area (*Ulu Belait*), there is to be found, but only after careful pre-arrangement, a small group of *Punans*—the real jungle people. In the world famous *Kampong Ayer* (Water Village) over the river at Brunei Town, about 9,000 Malays live very much as they did several hundred years ago.

Estimation of Population:

In 1947, the year of the last census, it was reckoned that 40,670 persons lived in the State of Brunei in an area of 2,226 sq. miles, thus giving a density of population of 18.2 persons per sq. mile. Further details carried out during 1947 gave the various racial groupings as following:—

Malays (Brunei)	...	...	49.00%
Kedayans	...	...	17.00%
Dyaks	...	...	3.50%
Muruts	...	...	0.50%
Dusuns	...	...	7.00%
Chinese	...	...	19.00%
Indian	...	...	1.50%
Europeans	...	...	1.50%
Others	...	...	1.00%

Since 1947 it is estimated that the population has increased gradually until the figure of 60,770 was reached in 1954. During 1955 23,598 males and 10,159 females entered the State, a total of 33,737; on the other hand, 22,014 males and 9,433 females left the State giving a total of 31,447, or a gain of 2,290 persons by immigration. In addition to this the births totalled 3,600 and the deaths 878. The nett gain in population of the State was, therefore, 5,012, thus bringing the total estimated population to 65,342. This figure is an approximate one only.

Registration of Births and Deaths:

Births and Deaths Registration was introduced in 1922. The State Medical Officer is the Registrar of Births and Deaths. Deputy Registrars comprise Hospital Assistants in-charge of outstation Dispensaries, District Officers, *Ketuas* of *Kampongs* and Chinese Headmen. Other than in the three main Hospitals, the accuracy in connection with Births and Deaths cannot possibly be guaranteed. It has been noted however, that the outstation Deputies are doing more and more in an endeavour to keep proper records. In time to come, a separate Registration Office with trained outstation personnel may be established.

The following tables breakdown the figures for Immigration, Births and Deaths as indicated:—

TABLE I.

IMMIGRATION.

Nationality (In Alphabetical order)	Entering		Leaving		Nett	
	Male	Female	Male	Female		
American	44	14	41	13	+	4
British Indigenous	1,299	457	1,282	443	+	31
British Dyaks	1,500	210	1,289	196	+	225
British Malays	6,355	3,339	5,765	3,049	+	880
British Non-Indigenous ...	451	238	399	205	+	85
Burmese	38	35	34	29	+	10
Chinese (British & Aliens)	11,612	5,131	11,027	4,836	+	880
Dutch	230	120	290	126	—	66
French	14	4	10	2	+	6
Indian & Parkistanis ...	944	172	963	151	+	2
Indonesian	98	46	135	39	—	30
Swiss	15	3	15	4	—	1
Others	978	390	764	340	+	264
GRAND TOTAL	23,578	10,159	22,014	9,433	+	2,290

TABLE II.

DEATHS GROUP ACCORDING TO AGE, SEX, NATIONALITY.

Deaths by Age Groups	Sex	Europeans	Eurasians	Chinese	Malays	Indians	Native Bornean Races Other Than Malay	Others	Total
0 Weeks	M	—	—	16	174	—	26	—	216
	F	—	—	9	111	—	33	—	153
1 Year	M	—	—	6	52	—	9	—	67
	F	—	—	6	57	—	7	—	70
5 Years	M	—	—	2	4	—	—	—	6
	F	—	—	4	5	—	4	—	13
10 Years	M	—	—	—	9	—	1	—	10
	F	—	—	1	11	—	2	—	14
15 Years	M	—	—	2	4	1	6	—	13
	F	—	—	—	6	—	2	—	8
20 Years	M	—	—	1	3	—	3	—	7
	F	—	—	—	4	1	3	—	8
25 Years	M	—	—	—	12	—	1	—	13
	F	—	—	—	22	—	3	—	25
30 Years	M	—	—	1	6	—	3	—	10
	F	—	—	3	10	—	1	—	14
35 Years	M	—	—	2	12	—	2	—	16
	F	—	—	—	11	—	5	—	16
40 Years	M	—	—	3	4	1	4	—	12
	F	—	—	—	8	—	4	—	12
45 Years	M	—	—	3	6	—	2	—	11
	F	—	—	2	4	3	1	—	10
50 Years	M	—	—	1	6	—	2	—	9
	F	—	—	3	8	—	2	—	13
55 Years	M	—	—	15	44	—	9	1	69
	F	—	1	7	42	—	13	—	63
Total Deaths	M	—	—	52	336	2	68	1	459
	F	—	1	35	299	4	80	—	419
TOTAL	MF	—	1	87	635	6	148	1	878

TABLE III.

BIRTH REGISTERED ACCORDING TO SEX AND NATIONALITY.

Sex	Europeans	Eurasians	Chinese	Malays	Indians	Native Bornean: Races other than Malay	Others	Total	Total Both Male and Female
Male	17	11	519	857	47	396	26	1,873	
Female	19	6	454	845	49	332	22	1,727	
Total	36	17	973	1,702	96	728	48	3,600	3,600

TABLE IV.

DEATHS REPORTED BY DEPUTY REGISTRARS.

Certified by Medical Practitioners ...	...	...	...	152
Certified by Registering Officers after Death	...	...	...	278
Uncertified	...	...	...	448
GRAND TOTAL				878

Comments:

A study of Table I shows that more Chinese entered the State than any other nationality. This is easily accounted for. This increase represents almost entirely an inflow of Chinese labourers on contract work, and they will be in the State for a maximum period of two years only.

The tables of Births and Deaths indicate an Infant Mortality rate of 102.5 and the following table gives this rate over the period 1948-1955:—

1948	...	...	...	258.5 per 1,000
1949	...	...	...	128.3 per 1,000
1950	...	...	...	136.9 per 1,000
1951	...	...	...	80.9 per 1,000
1952	...	...	...	103.9 per 1,000
1953	...	...	...	113.3 per 1,000
1954	...	...	...	99.6 per 1,000
1955	...	...	...	102.5 per 1,000

The United Kingdom rate for 1953 was 28 per 1,000.

For those who like comparisons the following tables may be of interest:—

CRUDE BIRTH RATES (APPROXIMATE ONLY)

			1953	1954	1955
Total Birth	...	...	2,903	3,332	3,600
Male	...	...	1,496	1,734	1,873
Female	...	...	1,407	1,598	1,727
Birth Rate Per Mille	...		52.3	57.3	52.5

CRUDE DEATH RATES (APPROXIMATE ONLY)

			1953	1954	1955
Total Deaths	...	...	808	766	878
Male	...	...	447	415	459
Female	...	...	361	351	419
Death Rate Per Mille	...		14.6	13.1	13.9

Note: The Crude Birth and Death rates are based on an approximate mid-year population of 62,836. However the reader should bear in mind the fact that there has been one census only in (1947), since the Second World War. Furthermore records for the period immediately following this census are scanty, and the population increase has been based mainly on Immigration figures, and those Births and Deaths which have been reported. It is not possible to state the margin of error, which almost certainly exists.

CHAPTER II.

OCCUPATION, WAGES AND LABOUR ORGANISATION

DURING the year there was little change in the overall picture of occupation in the State. At one end of the scale is the cultivation of small holdings by the rural indigenous population engaged in self-sufficient pursuits such as agriculture, fishing or the harvesting of jungle produce. At the other is the oilfield of Seria, where employment and in many cases preliminary training, is available in many of the skilled, unskilled and artisan trades incidental to an oil company.

With the extensive development programme of the State, the construction of roads and buildings, both public and private buildings continued within the localities of Brunei Town, Seria and Kuala Belait. Large numbers of skilled and unskilled labour were absorbed and to meet this increased building activity the number of small sawmills, woodworking and furniture shops increased by 40% in number and productivity.

The high price prevailing for rubber during the year induced considerable interest in small holder production. The four larger estates, due to labour shortage, were not able to increase their output as much as the high price for the commodity justified. Market gardening in the western area of the State continued to expand in order to meet the increasing oilfield area's demand for fresh vegetables.

Unemployment is non-existent as the demand for labour in both the skilled and the unskilled grades for outstrips supply. There is, therefore, no unemployment problem. The problem is rather the converse and consists in meeting excess demand for labour caused by the activities of the British Malayan Petroleum Company and their contractors, the Public Works Department and their contractors in carrying out the State Development Plan, the four rubber estates and some 18 small sawmills and woodworking industries working at full pressure. Outside these

activities the population is mainly engaged in peasant agriculture. Excess demand for unskilled labour must therefore be met by recruitment from either Sarawak or North Borneo, and in the case of skilled and artisan workers, by importation from Hongkong, Malaya and India.

A careful check is kept on the entry of such labour into the State. Such immigrant labour may only be engaged by reference to the Commissioner of Labour. All permits are for limited periods and are granted only to enable the completion of a specified task and where practicable, the training of a local worker in the same project.

With a slightly increased output of crude oil in 1954, the British Malayan Petroleum Company, Limited, had at Seria in its service some 1,308 (1,277 in 1954) European and a reduced Asian labour strength composed as follows:—

<i>Nationality</i>	<i>Unskilled</i>	<i>Skilled</i>	<i>Total</i>
Chinese	438	1,028	1,466
Malays	665	994	1,659
Indians	88	589	677
Ibans	345	128	473
Javanese	12	29	41
Others	1	3	4
Total	1,549	2,771	4,320

Wage Policy of the Oil Company:

The basic rates of pay of the Company's workers ranged from the minimum of \$3.56 per day for unskilled to \$9.30 per diem for the highest skilled artisans. Out of 4,320 (5,000 the previous year) workers employed by the Company some 290 only are on minimum rates, a figure comparing favourably with the 600 of the previous year.

Some additional 2,360 workers are employed by contractors operating on behalf of the Company within the oilfield area. The Company endeavours to safeguard the interests of such labour by inserting in the contract a clause binding the Contractor to observe all Brunei legislation effecting the conditions of employ-

ment in the State. Constant scrutiny and inspection is undertaken both by the Company and the Commissioner of Labour to ensure that such legislation is observed.

Additional features of the Company's wage policy include a temporary cost of living allowance at the rate of 25% of basic pay for married and 15% for single workers, schemes of allowances for workmen working in areas where living accommodation, amenities, etc. are temporarily below the standard provided elsewhere. Other allowances additional to normal pay are given for such work as diving, work of an exceptionally dirty nature, standing by, etc.

Hours of work are $43\frac{1}{2}$ per week, the working week consisting of $5\frac{1}{2}$ days. Shift workers do, however, work 6 shifts of 8 hours per week; but these men are paid a bonus for the afternoon and night shift.

Fifty percent extra pay is paid for all overtime worked. Employees receive annually two week's leave with pay, and, when absent from work through sickness, they receive full pay and cost of living allowance for the first two, and half pay plus half cost of living allowance for the next 10 weeks.

On retirement the Company pay an ex gratia payment in accordance with its own regulations on the basis of service and last rate of pay.

Of the welfare and amenities provided by the Company for its staff and workers the following are of interest:—

Health and Medical Services:

From its inception the Company has provided its own medical and health services. These have been open not only to employees, but also to their dependants. The Company operates a well equipped hospital at Kuala Belait with modern X-ray installations and full equipment for medical and surgical treatment and laboratory examinations. In addition to the hospital there are dispensaries and First Aid points throughout the oil-field to deal locally with staff and labour. These are coupled with an emergency medical and ambulance service which covers

the oilfield areas and conveys patients rapidly to the Kuala Belait hospital. For maternal and child Welfare the Company runs a pre-and-post-natal clinic.

A Joint Company and Government campaign against malaria is maintained. All new arrivals are checked for malaria infection and active measures are taken to eliminate the mosquitoes by draining and spraying potential breeding grounds.

Clubs:

There are four clubs for Labour Force employees in the Seria oilfield and each are run by a management committee elected from the club members. Although the policy is one of non-interference the Company takes considerable interest in their activities, assisting whatever necessary.

Recreation and sports amongst its employees have always been strongly encouraged by the Company and the clubs each have their facilities and equipment for football, cricket, hockey, badminton, volley ball and other games.

For the Regional Staff (Senior Asian Staff) there is a recreation club offering similar facilities.

The Kuala Belait Recreation Club, the only club in the area with no Company affiliations continues to expand. Members, including Company and Government employees and members of the commercial community, with widely differing interests, have found it a most valuable common meeting ground.

Cinema:

The oil company operates a new cinema of permanent open construction at Seria. Shows are held on daily and include British, American, Malay, Chinese and Indian films.

Transport:

The oil company provides free transport for its workmen to and from work.

Joint Consultation:

An effective channel of communication exists between the Company and their workers. Labour Force representatives who are elected annually meet the management once a month and

discuss working conditions, disputes, grievances and other matters affecting mutual relations and understanding. They are composed of ten Malays, ten Chinese, five Indian and five Iban members, roughly in proportion to their strengths in the Labour Force.

The Management Chairman is the Labour Force Officer. The Industrial Relations Officer, the Assistant Operations Superintendent, a Senior Engineering representative and other technical representatives attend from time to time to accord with the subject matter of the agenda, for example in any medical discussions the Chief Medical Officer would attend.

The scope of the discussions are very wide and, excepting individual cases, may consider any question concerning working conditions in general and any proposal by the workers or by the Company in regard to the promotion of industrial relations, improved production and efficiency.

Examples of subjects discussed during the year were housing, provision of transport, increased shift rates, medical and health, provision of safety boots, leave, retirement gratuities, grading of jobs, wages and allowances, provision of telephones at selected points, provision of water tanks and extension of ferry services.

In this way an effective channel of communication exists between the Company and its workers with a view to promoting a good management—employee relationship, so essential to an organisation of this nature.

Housing:

The housing programme continues to progress and more labour and regional staff are now housed to a standard that compares favourably with any other oilfield in the world.

Safety:

Since 1950 the Company has made a great effort to improve safety precautions and to reduce its accident rate. A safety department under an experienced officer specially trained in Safety work is actively engaged in the investigation of accidents and the inspection of plant and operations. A detailed analysis of accident statistics is made in order to determine the chief

causes and so indicate the type of campaign required to combat them e.g. whether by way of propaganda, mechanical safeguards, protective equipment, training, lectures or disciplinary action.

The safety department has the full support of management and by tact and enthusiasm has obtained the co-operation of Department Heads. This has enabled a considerable improvement in the overall accident frequency rate.

Education:

In addition to subsidising the attendance of children of its workers at non-Company schools in Seria and Kuala Belait, the oil company runs a Technical Trade School at Seria. This provides a three-year apprentice course and gives practical training in fitting, turning, motor and diesel mechanics, welding and blacksmithing; on the theoretical side there is instruction in the theory of mechanics, workshop practice, electricity, mathematics and machine drawing. During the first year the apprentices do a full time school course equally divided between the classroom and the school workshops. In the second and third years 70% of the time is spent in the Company's workshops and 30% in the classroom.

Entry to either Trade Schools has hitherto been open to pupils from any school in British Borneo but with the Brunei English School now reaching the stage in their development where they can provide candidates with secondary school qualifications the seeking of candidates from outside Brunei is being reduced.

To illustrate the growth of the Trade School the number of apprentices at the end of 1952 was 67. Comparable figures for 1953, 1954 and 1955 respectively 100, 130 and 141. The estimated figure for the end of 1956 is 200.

In 1953 the Company and the Government negotiated a Scheme whereby the Company would take 25 Brunei youths the following year and thereafter annually. This Scheme is progressing and these youths are making good progress.

The Company also grants a number of scholarships to the children of Labour and Regional Staff to enable them to pass the Senior Cambridge Examination. The recipient of these awards

is in no way bound to enter Company employment on completion of the scholarship.

At the end of the year His Highness the Sultan opened new Trade School buildings to house these apprentices. These consisted of some 4 to 5 blocks for the purpose of housing, feeding and instructing them on the lines of a modern English Public School.

General:

The following table shows the racial distributions of Labour employed by the main sources of occupation outside the oil company:—

<i>Race</i>	<i>Government (Public Works)</i>	<i>Rubber</i>	<i>Sawmills & Woodworking</i>	<i>Total</i>
Malays	1,835	317	121	2,273
Ibans	189	14	211	414
Chinese	86	32	146	264
Indians	9	5	—	14
Javanese	1	14	—	15
Others	16	8	6	30
	<hr/> 2,136 <hr/>	<hr/> 390 <hr/>	<hr/> 484 <hr/>	<hr/> 3,010 <hr/>

The Labour Commissioner for Brunei, is also the Labour Commissioner for Sarawak and is normally stationed in the oil-fields at Kuala Belait. All Assistant Residents are Deputy Commissioners of Labour and are responsible within their Districts for enforcing labour legislation and for the periodical inspection of places of employment.

An up-to-date Labour Ordinance embodying the principles of the International Labour Conventions exists. Enacted in 1954, it gives workers protection in such matters as hours of work, health conditions, the age of admission to employment, medical treatment, provision of written contracts of employment, notice pay and conditions of extra-territorial recruitment. A new up-to-date Workmen's Compensation Enactment has been prepared to replace the present one. Similarly a new Factory Ordinance has been drafted.

The cost of living was stable during 1955. Taking 1951 as 100 the average cost of living throughout the year was 93.61. This compares with 94 for the previous year. The limits of monthly oscillation were between the figures of 89.45 and 98.52. These figures are based on the cost of reasonable living requirements of a workman, his wife and three children.

With the exception of one minor strike Brunei State was free from Labour unrest during 1955. Minor cases of wage disagreements were settled without difficulty by either the Commissioner or Deputy Commissioners of Labour. Industrial disputes are rare. Demand for labour is in excess of supply and wages are generally high.

CHAPTER III.

PUBLIC FINANCE AND TAXATION

Revenue and Expenditure:

THE surplus of Revenue over Expenditure, other than Development Expenditure, for the year 1955 was \$73,735,464 compared with \$72,674,509 in 1954 and \$76,329,946 in 1953. Revenue and Expenditure figures for the years 1953, 1954 and 1955 are given below:—

				<i>Revenue</i>	<i>Expenditure</i>	<i>Surplus</i>
				\$	\$	\$
1953	...	...	...	98,976,643	22,646,697	76,329,946
1954	...	...	...	96,035,394	23,360,885	72,674,509
1955	...	...	...	102,669,423	28,933,959	73,735,464

Development Expenditure during 1955 amounted to \$14,068,315 bringing total expenditure to \$43,002,274 or almost \$720 per head of population.

Revenue:

Details of revenue collected during 1955 are given below. The 1953 and 1954 figures are also shown for comparison:—

	1953	1954	1955
	\$	\$	\$
Duties, Licenses & Taxes	65,293,794	58,845,608	54,225,597
Fees of Court etc. ...	205,907	373,275	432,545
Government Undertakings	516,785	694,881	4,036,163
Revenue from Government			
Property ...	25,688,983	26,811,723	31,896,451
Interest ...	6,640,452	8,747,719	11,176,716
Miscellaneous ...	501,313	418,838	552,892
Land Sales ...	129,409	143,350	349,059
	<u>\$98,976,643</u>	<u>\$96,035,394</u>	<u>\$102,669,423</u>

The main Heads of Expenditure are shown hereunder:—

PART I

1.	Pensions, Retiring Allowances & Gratuities ...	174,870.87
2.	H.H. the Sultan	300,933.23
3.	Ministers	63,987.83
4.	British Resident	103,321.49
5.	Assistant Resident—Brunei	19,742.70
6.	Assistant Resident—Belait	70,813.36
7.	Agriculture	566,679.18
8.	Audit	36,140.28
9.	Civil Aviation	52,331.29
10.	Customs and Marine	995,851.53
11.	Education	1,179,514.91
12.	Electrical	729,360.87
13.	Forests	106,450.74
14.	Information Service	110,296.44
15.	Judicial	37,767.09
16.	Labour	30,316.62
17.	Land & District Offices	674,045.92
18.	Legal	52,574.36
19.	Medical & Health	1,669,329.46
20.	Miscellaneous	5,035,264.20
21.	Municipal	583,333.63
22.	National Registration	4,112.69
23.	Police	1,038,761.01
24.	Postal Services	253,260.80
25.	Prisons	39,524.60
26.	Public Works Department	637,553.49
27.	Public Works Annually Recurrent	1,536,238.44
28.	Public Works—Non-Recurrent	7,596,726.16
29.	Religious Affairs	97,915.02
30.	State Custom, Religious & Welfare	37,541.00
31.	State Stores	84,624.85
32.	Supplies	3,523,801.57
33.	Survey	504,922.43
34.	Telecommunications	865,900.64
35.	Treasury	120,150.79

\$28,933,959.49

PART II—DEVELOPMENT PLAN EXPENDITURE

50.	Rubber Development	...	...	...	...	33,108.22
51.	Wet Padi Irrigation	...	...	...	...	49,931.29
52.	Mechanical Cultivation of Padi	...	...	...	...	264,384.66
53.	Agricultural Research	...	...	...	...	—
54.	Electricity—Brunei	...	...	...	...	815,889.99
55.	Electricity—Belait	...	...	...	...	109,610.39
56.	Electricity—Tutong	...	...	...	...	27,966.97
57.	Water Supplies	...	...	...	...	185,684.34
58.	Automatic Telephone Exchanges	...	...	...	...	—
59.	V.H.F. Radio Telephones	...	...	...	...	—
60.	Roads Programme	...	...	...	...	5,546,365.38
61.	Bridle Paths	...	...	...	...	77,495.66
62.	Brunei Airport	...	...	...	...	748,339.72
63.	Wharf, Kuala Belait	...	...	...	...	169,646.11
64.	Brunei Port	...	...	...	...	27,420.19
65.	River Clearing	...	...	...	...	—
66.	Miscellaneous	...	...	...	...	61,843.02
67.	Shops—Brunei	...	...	...	...	31,956.78
70.	Brunei Hospital	...	...	...	...	12,836.57
71.	Physiotherapy Department	...	...	...	...	18,397.52
72.	Hospital—Belait	...	...	...	...	32,475.78
73.	Rural Health Centres	...	...	...	...	2,080.00
74.	Rural Dispensaries	...	...	...	...	—
75.	T.B. Sanatorium	...	...	...	...	—
80.	Trades Training	...	...	...	...	328,766.56
81.	Teachers from Malaya	...	...	...	...	48,816.20
82.	Building grants	...	...	...	...	115,000.00
83.	Secondary school building programme	...	...	...	...	766,805.78
84.	Brunei Secondary (Girls)	...	...	...	...	148,776.06
85.	Seria Secondary (mixed)	...	...	...	...	33,134.46
86.	Higher Primary Schools	...	...	...	...	140,514.44
87.	Seria Malay School	...	...	...	...	157,634.00
91.	Primary Schools	...	...	...	...	705,537.71
92.	School Feeding Scheme	...	...	...	...	496,733.46
93.	Broadcasting	...	...	...	...	282.25
94.	Housing	...	...	...	...	120,797.65

95.	Resettlement schemes ...	...	...	...	42,040.50
96.	Sports and Clubs ...	...	...	...	11,258.50
97.	Pensions—Administration ...	...	...	...	44,713.08
98.	Pensions Payments ...	...	...	...	521,132.00
100.	Administration and equipment ...	...	...	...	39,806.77
101.	Public Works Compounds ...	...	...	...	655,581.72
102.	Heavy Equipment ...	...	...	...	56,908.82
103.	Workshops & Mobile Maintenance ...	...	...	...	238,722.41
104.	Quarters and Rest House ...	...	...	...	623,332.43
105.	New Scheme ...	...	...	...	—
					<u>\$14,068,315.39</u>

Financial Statement:

The Statement of Assets and Liabilities as at 31st December, 1954 and 1955, are set out hereunder:—

ASSETS

Previous Year
1954

1955

\$					\$
11,784,532	Cash in Treasury & Bank ...	...	...	...	4,634,905
6,846	Current accounts ...	...	...	...	12,890
2,726,016	Advances & Loans ...	...	...	...	554,503
73,503	Suspense ...	...	...	...	35,489
Investments					
150,034,975	General Reserve ...	...	...	...	193,188,775
134,604,274	Surplus Balances ...	...	...	...	160,490,437
<u>299,230,146</u>					<u>358,916,999</u>

LIABILITIES

\$					\$
920,834	Deposits ...	...	...	...	718,753
90,967	Current accounts ...	...	...	...	312,753
150,034,975	General Reserve Fund ...	...	...	...	193,188,775
56,469,429	General Revenue Balances ...	...	...	...	87,051,093
91,713,941	Development Fund ...	...	...	...	77,645,625
<u>299,230,146</u>					<u>358,916,999</u>

During the year 1955 a further sum of \$43,153,799 was transferred to General Reserve Fund from General Reserve Balances.

Public Debt:

There is no public debt.

Customs Tariff:

The Customs Tariff is divided into two parts, namely—Import Duties levied on Intoxicating Liquors, tobacco, sugar, petroleum products, textiles and a variety of other products and Export Duties levied on rubber, copra, sago, livestock and sundry other products. Total import duty in 1955 amounted to \$3,813,342 and export duty totalled only \$58,531.

There was no change in the tariff in 1955.

Excise, Stamp Duties and Other Taxes:

Excise duty is levied on locally distilled samsu, which is the only alcoholic beverage manufactured for sale in Brunei.

Stamp Duties are levied on all documents required to be stamped under the provisions of the Stamp Enactment, and include a stamp duty on cheques, bills of exchange etc., and affidavits and contracts.

Estate Duty is levied under the Stamp Enactment upon all estates the value of which exceeds \$1,000 and the rates are as follows:—

Where the principal value of the estate;

exceeds \$	1,000 and does not exceed \$	5,000—	1%
exceeds	5,000 and does not exceed	10,000—	2%
exceeds	10,000 and does not exceed	25,000—	3%
exceeds	25,000 and does not exceed	50,000—	4%
exceeds	50,000 and does not exceed	100,000—	5%
exceeds	100,000 and does not exceed	150,000—	6%
exceeds	150,000 and does not exceed	200,000—	7%
exceeds	200,000 and does not exceed	300,000—	8%
exceeds	300,000 and does not exceed	400,000—	9%

exceeds	400,000 and does not exceed	500,000—10%
exceeds	500,000 and does not exceed	750,000—11%
exceeds	750,000 and does not exceed	1,000,000—12%
exceeds	1,000,000 and does not exceed	1,250,000—13%
exceeds	1,250,000 and does not exceed	1,500,000—14%
exceeds	1,500,000 and does not exceed	2,000,000—15%
exceeds	2,000,000 and does not exceed	3,000,000—16%
exceeds	3,000,000 and does not exceed	5,000,000—17%
exceeds	5,000,000 and does not exceed	7,000,000—18%
exceeds	7,500,000 and does not exceed	10,000,000—19%
exceeds	10,000,000	—20%

Income Tax:

Income tax is charged, levied and collected under provisions of the Income Tax Enactment 1949, but at present only in respect of the incomes of registered limited Companies. On every dollar of the chargeable incomes of such Companies Income Tax is levied at the rate of 30%. There are reliefs in respect of tax paid in some other Commonwealth countries.

CHAPTER IV.

CURRENCY AND BANKING

Currency:

THE State is a party to the Malayan British Borneo Currency Agreement and only currency issued by the Board of Commissioners of Currency, Malaya and British Borneo is legal tender in Brunei; this, of course, includes the currency of the former Board of Commissioners of Currency, Malaya. The Dollar is valued at 2/4d (Sterling).

On 31st December, 1955, the amount of Malaya British Borneo Currency in circulation was estimated at \$39,490,000.

Banking:

Banking facilities in Brunei are provided by the Hongkong and Shanghai Banking Corporation which has branches at Brunei Town and Kuala Belait. The Hongkong and Shanghai Banking Corporation also operates a Savings Bank and at the 31st December, 1955, there were 893 accounts with deposits totalling \$1,843,287 compared with 294 accounts with deposits totalling \$486,481 at 31st December, 1954.

Post Office Savings Bank:

The number of depositors in the Post Office Savings Bank at the end of 1955 was 1,872 compared with 1,665 at the end of 1954. The growth of the Savings Bank is illustrated by the figures shown in the following table:—

<i>Year</i>			<i>Number of Depositors</i>	<i>Amount of Deposits</i>
31st December 1950	...	...	759	\$195,455
31st December 1951	...	...	928	265,605
31st December 1952	...	...	1,162	374,122
31st December 1953	...	...	1,399	521,378
31st December 1954	...	...	1,665	608,589
31st December 1955	...	...	1,872	670,633

CHAPTER V.

COMMERCE

TRADE and Commerce in Brunei is conducted by an increasing number of agency houses and Chinese merchants. The most important of the agency houses are the leading European firms, and they are responsible mainly for the import of goods direct from Great Britain, Australia and other sources. The number of Chinese merchants holding important agencies however, is on the increase, although the majority prefer to deal in the wholesale and retail distribution of goods purchased from merchants in Singapore, with whom they have had long established connections.

The Chinese merchants are responsible for the purchase of rubber and other jungle produce from the small holder and they provide the up-river population with sundry goods in exchange.

The whole of the import and export trade is carried on in the two ports of the State, i.e. Brunei Town and Kuala Belait, and it is at these two towns that the principal firms have established their business houses.

External Trade:

The value of the external trade of the State for the year 1955 was \$396,802,916 compared with \$373,357,401 in 1954, an increase of \$23,445,515.

The trade figures are made up as follows:—

	1955	1954
Total value of Exports ...	\$303,418,823	\$273,476,507
Total value of Imports ...	93,384,093	99,880,894
	<hr/>	<hr/>
Favourable trade balance ...	\$210,034,730	\$173,595,613
	<hr/>	<hr/>

Exports:

The f.o.b. value of exports for 1955 was approximately \$303,418,823, made up as follows:—

	1955	1954
Crude Oil	\$286,920,405	\$262,206,468
Rubber	3,569,958	1,180,896
Firewood mangrove	104,340	172,678
Jelutong Rubber	360,664	311,760
Natural gas	654,364	588,458
Sundries (including re-exports)	11,809,092	9,016,247
	<u>\$303,418,823</u>	<u>\$273,476,507</u>

Imports:

The declared value of imports for 1955 was approximately \$93,384,093 made up as follows:—

	1955	1954
Food	\$17,993,823	\$15,818,496
Beverages & Tobacco	3,830,632	4,222,615
Petroleum & Petroleum products	2,975,220	6,293,145
Textiles & wearing apparel ...	2,896,732	2,906,995
Chemicals & Drugs	2,481,578	2,005,910
Machinery & transport equipment	21,753,059	39,882,383
Building materials	14,899,034	4,639,606
Exposed cinematographic films ...	14,843,650	10,456,761
Manufactured articles and sundries	11,710,365	13,604,983
	<u>\$93,384,093</u>	<u>\$99,880,894</u>

Cargo Tonnage:

The total tonnage of cargo discharged and loaded for the year 1955 was as follows:—

	Discharged (Tons)	Loaded (Tons)
Brunei Town	40 076	16,947
Kuala Belait	125,177	44,627
Total	<u>165,253 tons</u>	<u>61,574 tons</u>

New Customs offices and godowns were constructed at Kuala Belait during 1955, together with a wharf with berthing facilities of 300 ft. At Brunei Town work commenced on the construction of Customs offices and godowns; a 400 ft. wharf is already in use. The buildings and wharves at both places have been, and are being constructed to provide adequate cargo handling facilities for the State. The Straits Steamship Company have three vessels operating on a full time run from Malaya and Borneo ports to Brunei.

Customs Revenue:

The total Customs revenue for 1955 amounted to \$4,004,305.

		1955	1954
Export Duties	... ..	\$ 178,179.75	\$ 58,532.00
Import Duties	... ..	3,826,125.61	4,433,943.00
		<hr/>	<hr/>
		\$4,004,305.36	\$4,492,475.00
		<hr/>	<hr/>

The increase in revenue collected from export duties was occasioned by the increase in the value and amount of plantation rubber exported during the year.

Tariffs:

The following alterations were made to the Customs tariff during 1955:—

Export duties were imposed on pepper and illipenuts
(Engkabang)

Legislation:

The following were the principal changes during 1955:—

The Customs Enactment, 1954, came into force on 1st January, 1955, and the following rules and regulations during that year:—

27-10-55	Notification 200/1955	Customs (Prohibition and Restriction on Imports & Exports) Order, 1955.
27-10-55	Notification 202/1955	Customs (Compoundable Offences) Order, 1955.
27-10-55	Notification 203/1955	Customs (Import & Export) Duties Order, 1955.
2-12-55	Notification 243/1955	Customs (Establishment of Customs Warehouses and Warehouse Rent) Order, 1955
28-12-55	Notification 277/1955	Customs Regulations, 1955.

Excise:

The only alcoholic beverage distilled in the State is *samsu*, the product of three distilleries. Excise duty is chargeable at \$5 per gallon and duty collected in 1955 amounted to \$32,260 as compared with \$36,523 in 1954.

Trade Correspondence:

The Controller of Customs & Excise is designated as Imperial Trade Correspondent for the State of Brunei. Numerous enquiries were received during the year from various business firms in other parts of the world and appropriate action was taken in respect of each.

CHAPTER VI.

(a) LAND UTILIZATION AND TENURE

Agricultural Land:

ANY person born in Brunei may acquire agricultural land in perpetuity. Others may acquire land with the approval of the State Council.

The Land Code contains an utilization clause and land must be brought under cultivation within three years of alienation, in practice it is most difficult to ensure that land is in fact brought under cultivation within the prescribed period and in a great many cases land is acquired by speculators who only commence work on the land if and when they receive the six months notice to cultivate which the Land Code requires should be given to those who do not at once comply with the conditions covering alienation of land.

During the last three years land prices have appreciated considerably, particularly so in the vicinity of the larger towns. There are cases where land under poor quality seedling rubber has changed hands at \$15,000.00 per acre or more. The appreciation in the price of land has increased the demand for a secure title and applications for land have increased correspondingly, so much so that the Land Office has been unable to cope and the time lag between the submission of an application and the issue of a title has shown a tendency to lengthen. To cope with this situation increases in staff were authorised, the additional staff are undergoing training and the Land Office should be shortly capable of handling a greater volume of work. The situation is nevertheless very far from satisfactory and it will probably be at least two years before applications for land will be dealt with as expeditiously as is desired. Plans to reorganize the Land Office and Survey Department are being considered and some reorganization has in fact already been carried out.

The great difficulty in recruiting officers with the necessary qualifications is however an almost insuperable obstacle to rapid improvement in the situation.

There is need for revision of the Land Code and it is hoped that a Bill will be introduced into the State Council in 1956, legislation is also required in order to permit land to be classified, but at the moment there is no recognition in law of customary tenure although in fact, very large areas are utilized in this way. A Land Classification Enactment would permit of greater security of tenure being granted in those areas where the traditional methods of land utilization are based on extensive as distinct from intensive cultivation and should also do much to prevent inflation in land values and speculative dealings in land in areas where development is considered likely.

The improvement in communications is creating a greater demand for land in outlying areas but development has not been as rapid as would have been expected since many of the people living in rural areas have preferred to seek employment for wages rather than to devote their efforts to primary production.

Land and Water Conservation and Utilization:

Road and River Reserves have been declared for all roads and navigable waterways. Grants issued subsequent to the Notification have made allowance for these but little progress has been made in carrying out mutation surveys in the case of titles issued prior to 1951. The work involved is enormous and the compensation payable amounts to a considerable sum.

During 1955 increase in the demand for labour for Public Works of various kinds has imposed considerable strain on the resources of agricultural labour. In the Tutong Road area practically every unskilled labourer employed on Public Works has been taken away from agricultural pursuits. The result has been that a certain amount of agricultural land was uncultivated. In addition to this a much larger area was only partially utilised. It is unlikely that the situation will alter during the next couple of years and one must expect a gradual diminution in the production from land in this area.

During the year it became apparent that the rate which land was being alienated demanded far more attention to planning than

had been the case in the past, particularly if it was intended to raise the standard of living of the agricultural community.

In October last His Highness the Sultan proposed that substantial funds be made available to assist Rural Development and suggested that particular attention should be paid to the possibility of raising the standards of living and increasing production by the introduction of a system of agricultural credit which over a comparatively long period would assist in increasing capital resources to farmers or agricultural workers.

An application was made to the Government of the Commonwealth of Australia with a request that they should, if possible, assist us in carrying out soil surveys in the State. The Australian Government promised to send an expert from the Division of Soils of the Commonwealth Scientific and Industrial Research Organization who would carry out preliminary surveys in order to advise on the methods we should follow. Dr. Stephens had not arrived at the end of the year, but was expected very early in 1956. At the same time Sir Bruce White, Wolf Barry and Partners, Consultant Engineers, with wide experience in Malaya, were carrying out surveys of the Mulaut, Kilanas and Sengkurong areas, with the purpose of advising us whether these areas could be used for drainage, irrigation and possibly for mechanical farming. Their preliminary report indicated that mechanical cultivation and proper drainage and irrigation methods could be used.

As the land had previously been alienated to the community, it became necessary to consult the people living in the area with the object of obtaining their agreement to revision of land boundaries and a surrender of old titles in consideration for the issue of new ones. The State Surveyor was appointed "Settlement Officer" for this purpose and spent a considerable amount of time on settlement work in the areas, despite very considerable opposition in the area. He had, by the end of the year managed to obtain a great measure of agreement to the settlement and revision of land boundaries being carried out.

Land Ownership:

During the year efforts were made to prevent further inflation in land values, yet our efforts were only partially successful.

The Survey Department increased the number of surveys very considerably over the previous year and to a great extent the back log in issuing of titles has been overcome. This has been very greatly appreciated by those people who had almost despaired of ever receiving a title to their land. It is necessary to emphasise, however, that the continuing difficulty has been in recruiting staff for providing as rapid an improvement as had originally been planned. At the end of 1955 the Survey Department was still sadly understrength. Also there were a considerable number of persons under training.

(b) AGRICULTURE

Weather:

Apart from the month of January the weather conditions were normal throughout the State till the end of May. From August to December heavy showers occurred resulting in flooding in many of the low lying areas and also land slides in certain areas in Brunei district. This year's records and comparisons with last year's figures are shown in Appendix "D".

CROP REPORTS

Rubber:

The efforts of Departmental Officers and the Rubber Inspectors to induce small-holders to prepare smoked sheet in lieu of unsmoked sheet met with very fair response. This was chiefly due to most of the small-holders, who were contented to sell their unsmoked sheets at lower price than what they should be entitled to. By selling unsmoked sheet extra care and labour were saved.

It can, however, be stated that the quality of small-holders' rubber has gradually improved generally during the year. As a result the interest to build smoke cabinets specially designed for small-holders are slowly diminishing throughout the State. *Prices*—In January the price was \$100 per picul, and from February the price declined at \$80 to \$90 per picul till June. In July an upward trend started, when prices stood at \$100 to \$125 per picul.

Diseases. Mouldy Rot (*Cerastomella Fimbriata*) was the only at all prevalent or of a serious nature in the State. There

were outbreaks in the riverine districts of Temburong and Tutong, particularly severe during the wetter months, but elsewhere outbreaks were of a comparatively minor nature and soon yielded to treatment.

The incidence of termites (*Coptotermes curvignathus*) remained approximately the same as in previous years. The Agricultural Department took over the 26 acre Rubber Nursery at Berakas Government Rubber Plantation towards the end of the year. The necessary budding of the seedlings were then immediately started. Out of 490,363 seedlings in the nursery 37,046 have already been budded and out of which 700 were sold to small-holders at 25 cents per stump.

There was a marked increase in export of rubber sheet during the year. A total of 1,442 tons being exported this year as compared with 882 tons last year.

Padi Season 1954/55:

The acreage of wet padi increase by approximately 132 acres, and the crop was also higher by 499,915 *gantangs*.

As compared with that of the 1953-54 season. Negligible pest damage and favourable condition appear to have been largely responsible for this increase.

The dry padi crop likewise compared unfavourably with that of the previous season, the planted area decreasing by some 1,111 acres and the crop being approximately 479,783 *gantangs* less. Most of the areas were planted late and became overrun with weeds.

Season 1955/56:

It is estimated that the total acreage of wet padi planted in the State is less than that of the previous season. This was chiefly due to the fact that most of the padi planters were employed on various jobs, for example, by the Public Works Department, contractors and British Malayan Petroleum Company as a result planting of padi was carried out only as a part time work.

Drainage and Irrigation Ditches:

Regular inspections of drainage and irrigation works have now been included in the routine duties of the Subordinate Staff and it is found that small repairs can often be attended to by the cultivators themselves before the damage reaches the stage when it would become necessary to employ skilled workers.

The following figures showed new construction and clearing of drains during the period under review:—

<i>District</i>		<i>New Con- struction in chain</i>	<i>Cost</i>	<i>Clearing of old drain in chain</i>	<i>Cost</i>
Brunei	...	774½	\$17,359.00	1,218	\$13,436.50
Kuala Belait	...	105	1,965.00	403	4,369.00
Temburong	...	139	2,680.00	35	525.00
Total	...	1,018½	\$22,004.00	1,656	\$18,330.50

Swamp Padi Surveys:

The Consulting Engineers Sir Bruce White Wolfe Barry and Partners completed the Preliminary survey of Lumapas and Mulaut during the year and presented a report and project plan for Lumapas. From this it seems likely that up to 2,100 acres could be developed as irrigated padi land in this area. The report and project plans for Mulaut were not ready by the end of the year, although all survey work had been completed, due to the need to investigate an alternative source of supply of irrigation water. Originally it had been intended to impound water in the upper Damuan valley but as there appeared to be considerable pollution from oil mining operations in that area, it was decided to base plans for development of the Mulaut area on water from the Limbang river in Sarawak.

Sago:

The area under this crop remained the same as in previous year. The total output of raw material during the year was 2,517 piculs and out of which 247 piculs were exported to neighbouring territory. The remainder being consumed locally chiefly by the peasants. Manufacture of raw sago continued to be a profitable minor industry. Hand labour is used throughout in the manu-

facture. The bye-product usually sold to pig rearers for feeding purposes.

Coconuts:

The estimated acreage under this crop at the end of the year was 1,999 acres as compared with 1,648 acres in 1954. The major portion is grown in the districts of Brunei, Tutong and Temburong. The growers chiefly Malay small-holders except Temburong district where a Company has planted 351 acres with the aid of Government loan to start this industry.

All the nuts produced are used for local consumption and no attempt to manufacture copra is made owing to scarcity of nuts.

Squirrels did certain damage to young and matured nuts.

Fruits:

The total area under fruits in the State is estimated to be 1,561 acres, of which, 1,048 acres were in mixed cultivation.

The mid-season crop was a good one in so far as the majority of the local types of fruit were concerned. *Membangan, langsung, durian, rambutan, belunu* and *Kambayau*, in particular, were available in considerable quantities.

There were 15 village fruit nurseries in Brunei district during the period under review which were made up as follows:—

Kilanas	1
Sengkurong	4
Jalan Muara	7
Tutong	2
Kuala Belait	1
	<hr/>
	15
	<hr/>

MARKET GARDENS

The area under vegetable gardening remained the same as in previous year's. Most of the gardens were being maintained and cultivated. The Chinese still continued to be the main producers, especially near the towns. vegetable cultivation amongst the Malay small-holders continued to make slow but steady headway

and many of the smaller and more remote villages are now self-supporting.

AGRICULTURAL AND PADI TEST STATIONS

Agricultural Station, Kilanas:

The growth of the permanent crops continued to be satisfactory. Fair crops of *rambutans*, *pulasan*, mangosteens, bananas and citrus were harvested.

Most of the area was kept under *Calopogonium* covers. The most successful fruit crops were grown with dressings of cattle droppings and artificials before flowering.

Good progress was maintained during the year. Replacement of some of the permanent crops was completed, while annual crops were grown in rotation. An additional plot of 4,900 sq. ft. was brought into cultivation to allow extension of the nursery area for budding work. Considerable quantities of planting materials were distributed from the Station to other Agricultural Stations, School gardens and local cultivators. The distributed planting materials consisted of the following:—

Rambutan (budded)	485
Rambutan (seedlings)	1,129
Pamello (marcotts)	39
Orange (marcotts)	197
Lemon (marcotts)	11
Lime (marcotts)	15
Pulasan (budded)	7
Sapodilla (marcotts)	2
Jambu mawar (marcotts)	17
Coffee (seedlings)	117
Papaya (seedlings)	290
Durian Belanda (seedlings)	88
Orange (seedlings)	23
Manggis (seedlings)	43
Coconut (seedlings)	8,670

Cattle, Buffaloes and Goats:

Breeds of various animals which would be of economic importance to this country are kept so as to serve as a demonstration centre to the farmers. Saanan goats are now in an excellent condition and have become acclimatised to this country. These milch goats have very great possibilities for milk production in this country and can easily be maintained by farmers with a little extra care.

Local goats and buffaloes maintained their usual good record.

Poultry:

As a result of instructional work and example set by Agricultural Subordinates the demand for pure bred poultry has exceeded the supply. In November, 945 day old chicks were ordered from Australia for raising at this Station. These will be segregated and penned for breeding purposes. Surplus cockerels, for which there is a good demand, have already booked by smallholders. The work, however, was severely hampered during the later part of the year on account of the very poor laying and fertility of the pure-bred parent stock. The health of the stock was excellent, and few losses occurred in spite of severe outbreaks of disease in the neighbouring holdings.

Season 1954/55:

There were 15 varieties being planted in the usual multiplication plots during the seasons. Although the season was a good one the crops were slightly below average owing to minor pest damage coupled with unsuitable condition just before harvest was commenced.

Season 1955/56:

The 1955-56 programme included (a) Varietal trials (b) manurial experiments and (c) multiplications.

(a) One five-way Latin Square was laid down, comprising the following varieties:—

Engkatek, Langsat Puteh, Siam 29, Trengganu and Langsat Kuning.

(b) The five by five Latin square was laid down to test a mixture of lime, phosphate and sulphate of ammonia sug-

gested by the Director of Agriculture, Sarawak. The varieties used were *Engkatek*, a new short strawed type from Sarawak and *Langsat puteh* one of the most popular local types. The first application of the treatments was a month after transplanting and the second treatments broadcast just before flowering. Very marked advancement in growth and earlier ripening is apparent when compared with other adjoining untreated areas.

(c) All land not utilized for experiments has been planted with various strain types for multiplication purposes. Transplanting was completed during the month of November. Prolonged flooding necessitated replanting of certain areas. At the end of the year the crop was doing well and was free from much damage from rats and other pests.

Wet Padi Mechanical Cultivation Scheme, Mulaut:

Season 1955/56: The experiment on wet Padi mechanical cultivation was started by the Consulting Engineers but they were greatly handicapped by the delays in the supply of equipment. Progress was, as a result, rather disappointing but towards the end of the year it was possible to commence trials of cultivating equipment, using the cable bantam technique, with one track laying tractor that had arrived and a drag-line excavator intended for canal construction work.

In preparation for harvesting trials when the second tractor arrives 15 acres of padi (4 different varieties) was planted accurately by hand and will be harvested mechanically. Transplanting and further cultivation trials will be possible out of season when full equipment arrives and the water control over the experimental area has been secured.

Padi Test Plot, Lumapas:

Season 1954/55: The whole of the five acre plot has been planted with various pure strain types for multiplication purposes. At the close of the year rats had been the only pest resulting in any material damage. Control measures have been adopted, but uncultivated areas have minimized results. Growth over the majority of the area is quite average for the district.

Season 1955/56: Work are continued on similar lines to previous years and consisted of large multiplication plots of local and imported selected varieties which were grown to provide seed for distribution to local padi planters.

Heavy rains fell shortly after transplanting and flooding occurred in all areas in the district. Fortunately the flood waters subsided quickly and, only slight damage was occasioned to the transplanted seedlings.

Agricultural Station, Birau:

Very satisfactory progress was made by most crops, viz:—liberian coffee, pepper, citrus, *rambutan*, *pulasan*, bread fruit, *jambu ayer*, oranges, pomelo, jack-fruit, soursop, cocoa, bananas and illipe-nuts.

No further land from the reserve was brought under cultivation.

Food crops grown during the year, cuttings and seeds from which were distributed to small-holders were groundnuts, sweet potato, maize and yams. Citrus marcots, papaya seedlings, pineapple suckers, betel-leaf cuttings and calopogonium seeds were also distributed to other districts and stations.

Considerable attention was paid to drainage problems in the various plots during the year. On one occasion towards the end of the year flood waters inundated the low-lying portion of the Station and caused considerable damage to growing crops particularly the vegetable garden.

Horticultural Garden, Jalan Istana:

This garden served a useful purpose to the public in the way of supplying ornamental trees, shrubs and plants to Government Officers' residences and public gardens. All the materials issued or supplied were charged for. The area is now being fenced in. A proper potting shed is also in the course of construction.

The following planting materials were distributed or issued during the period under review:—

Begonia splendens	8 plants
Bougainvillea sp.	52 plants
Galadium bicolor	23 plants
Canna sp. & var	102 plants
Chrysanthemum sp.	10 plants
Crossandra undulaefolia	6 plants

Dahlia sp. var	3 plants
Dieffenbachia sp.	8 plants
Gaillardia sp.	4 plants
Galphimia glauca	18 plants
Gardenia florida	3 plants
Hydrangea	24 plants
Hibiscus rosa senunsis	26 plants
Ipomea digitata	6 plants
Lantana camara var	18 plants
Nerium olander	4 plants
Nyamphaea Lotus & var	9 plants
Plumeria sp.	5 plants
Rose	14 plants
Salvia splendens	25 plants
Sansevieria frifsciata	6 plants
Spathoglottis plicata	2 plants
Thunbergia erecta & sp.	10 plants
Turnera trionaeflora	4 plants
Typhonium trilobatum	2 plants
Casaurina sumatrana	66 plants
Dacrudium elatum	8 plants
Delonix regia	4 plants
Peltophorum ferrugineum	15 plants
Spathodea campanulata	4 plants
Total	489 plants

(c) ANIMAL HUSBANDRY

Animal Breeding Farm, Jerudong:

This station is steadily gaining progress as more and more developments are taking place. More of scrub-land was fenced off as pasture.

Experimental paddocks for testing the stock carrying capacity has been completed. These are divided into 13 half acre plots, each planted with different grasses and legumes both foreign and indigenous. The following are used for trial:—

- (1) Guinea Grass (*Panicum maximum*)
- (2) Molasses Grass (*Melinis minutiflora*)
- (3) Carpet Grass (*Axonopus affinis*)

- (4) Bahama Grass (*Cynodon dactylon*)
- (5) Kampau
- (6) Batong Batong
- (7) Galagah Tikus
- (8) Sesik Buayu halus
- (9) Sesik Buayu kasar.

The results of these tests will only be available in a few years. From these experiments we hope to obtain the grass most suited to the soil and climate and which would permit a large number of animals to be kept at a minimum of concentrates.

Sindhi Cattle: Two bulls and 6 cows were introduced into this farm in May, one bull is used to grade up local cattle at the farm and the other to maintain a pure herd. Two bull calves and 1 heifer calf were born in the farm, of which 2 are in excellent condition. The first Sindhi cross bred calves are expected next year. From observations made, the Sindhis are doing fairly well.

Bali Cattle (Bos Sondaicus): These domesticated Banteng are in an extremely fine condition and seem to thrive on very rough grazing. These hardy species seem to be ideal for beef production in this country from observations made at the Station.

Local Cattle: These are in a fair condition. Two breeding bulls have been loaned to Labu Estate and His Highness herd.

Swamp Buffaloes: The hardy local buffaloes continue to be in excellent condition. Three bulls are used for work in the farm.

Goats: These continue to be in excellent condition. The private herd to His Highness maintained in Jerudong are in a fair condition. A total of 2,933 pints of milk were produced in the farm with only one milking. The calves being allowed to suckle all the milk in the later part of the day.

General Animal Husbandry in the State:

Buffaloes: The annual stock census showed that there were 11,389 buffaloes (a decrease of 128) as compared with 11,517 heads last year. During the off-season, the stock graze on the padi stubble and are generally in better condition as a result.

This practice has its drawbacks, however, as it is highly probable that the animals take more from the land than they put back, thereby entering into direct competition with the padi crop for the supply of soil nutrients; also buffaloes being heavier animals do considerable damage to bunds and water courses.

Cattle: At the end of the year the cattle population was 1,433 and this figure showed a slight increase compared with the previous year. The health of the local animals in general was quite satisfactory. There was no death of animals which could have been caused by serious disease.

Goats: The total number was estimated at 771 an increase over last year's figure. Interest in rearing these animals still being maintained during the year by the local peasants. Most of the goats were kept in free range grazing and there was no report of outbreaks of any serious disease amongst the animals.

Pigs: Attempts to grade up the local breed of pig, by crossing with the Middle White Breed, has been a failure owing to suitable boars not being available. Pig rearing in the State are all in the hands of Chinese, *Dusuns*, *Muruts* and Dyaks.

Poultry: There was an increased interest in poultry keeping throughout the State during the year. Small flocks were started in one or two of the Malay Schools. The demand for pure and cross-bred cockerels for crossing with local hens was greater than the supply. On the whole these pure-bred have done sufficiently well under *kampong* conditions to induce more enlightened keepers to destroy their local cockerels and to use only improved stock.

Agricultural Credit Schemes & Subsidies:

Although quite a number of applications for loans were received for Agricultural purposes, but none was approved till the end of the year owing to some misunderstanding between the borrowers and the Government.

The policy of sale of barbed wire at 50% of cost to owners of buffaloes to fence their communal grazing grounds were still in operation. There were 1,300 rolls of barbed wire issued.

Agricultural Show:

An Agricultural Show organised on a State basis was held at the Sultan Mohamad Jamalul-Alam Malay School, Brunei, on 20th August, and was formally opened by the *Yang Maha Mulia Raja Istri* of Brunei. The Show was a success and attracted some 1,000 people during the one day. Entries in all classes were fairly satisfactory.

The usual special section of Silverware, Brassware and Arts and Crafts were exhibited, and prizes for these were awarded by the Commissioner-General, South East Asia.

A departmental stand on which various Agricultural produces were also exhibited. This has proved to be the chief attraction of the show.

Visitors:

There were 1,163 visitors to the Agricultural Stations during the year. Amongst the notable visitors as hereunder:—

His Highness the Sultan of Brunei
The Raja Isteri
B.P. Behandar D. P. Pemancha
Mr. G. W. Nye, Colonial Agricultural Adviser
Mr. R. W. R. Miller, Director of Agriculture, Sarawak
Mr. J. L. Greig, Director of Agriculture, North Borneo
Mr. Song Thian Siang, Agricultural Officer, Miri.

Administration:

Mr. F. J. Harper, Deputy Director of Agriculture, Sarawak, officiated as State Agricultural Officer until the 5th August, 1955, when he was relieved by *Inche* Hamidoon bin Awang Damit for the remainder of the year. Mr. F. J. Harper still being retained in the State as Deputy Agricultural Adviser. His assistance and advice on the Wet Padi Mechanical Cultivation Scheme at Mulaut was being sought till the end of the year.

Three students were sent to the College of Agriculture, Malaya, to undergo the one year course. The Agricultural Assistant (*Inche* Hamid bin Ja'afar) left for Australia towards the end

of the year to take up the 3-year diploma course at the Gatton Agricultural College, Brisbane, Australia, under the Colombo Plan.

A seconded Assistant Veterinary Officer (Mr. A. K. Sundram) from Sarawak reported for duty on the 28th December, 1955, and he is now attached to the Agricultural Department.

The staff of the Agricultural Department at the end of the year consisted of:—

- 1 State Agricultural Officer
- 1 Assistant Veterinary Officer
- 2 Agricultural Assistants
- 11 Agricultural Field Officers
- 9 Agricultural Field Inspectors
- 2 Probationers
- 1 Special Grade Mechanic
- 4 Drivers
- 2 Clerk Grade B
- 1 Clerk Grade A
- 1 *Peon*

(d) FORESTRY

(Figures for 1954 are given in brackets after figures for 1955)

INTRODUCTION

Certain facts place the Brunei forest department in a unique position compared with others in the Commonwealth. These facts need to be emphasised because they are fundamental to an understanding of forestry in Brunei. They are—

- (i) Freedom from pressure on the land. Fifty thousand persons inhabit 2,226 sq. miles of the State; 75% is under high forest.
- (ii) Freedom from pressure on the forest. The present cut is far below the potential cut on a sustained yield.

- (iii) Indifference to revenue. The State's revenues from the oil industry are sufficient for current expenditure and for development. The policy is therefore not to squeeze every cent out of the forests at the present time, as most States are compelled to do in order to balance their budgets, but rather to conserve and develop the forests against the day when the oil wells start to run dry.

Total area of State	Forest Reserves	Stateland Forests	Secondary Forests	Agricultural and residential areas
Sq. Miles 2,226	938	740	456	92
%	42%	33%	21%	4%

Forest Reserves:

These are intended to be kept under high forest in perpetuity, and to form the permanent forest estate. The list of forest reserves is given in Appendix "E" and their position is shown on the map at the end of this report.

The development of the Government gravel quarry on the coast at Berakas, and of access roads thereto, resulted in the clearing of a good deal of forest in the Berakas forest reserve; it was therefore decided to excise the area affected, and to extend the reserve westwards along the coast. A preliminary notification describing the proposed new boundaries of the reserve was published in September.

State land forests:

These also belong to the Government but will tend to disappear as the land is alienated for other purposes or cleared for shifting cultivation.

Secondary forests:

These consist of secondary growth or bush fallow, varying in age from 1 to 40 or 50 years, on land that has been cleared of its virgin forest for shifting dry padi cultivation. The land is still owned by the Government, but the person who originally clears the virgin forest has the right to cultivate dry padi on the land subsequently, under native customary law.

2. MANAGEMENT OF FORESTS

A 10-year plan 1955-64 for the management of the forests of Brunei was approved by the State Council on the 28th February, and printed copies are available from the State Forest Officer. It includes a description of the forests, with areas covered by the various forest types, and a detailed statement of the Government's policy for both forest reserves and state land forests. It is considered that adequate areas of forest have been reserved for the time being, and the plan calls for management of the reserves on the basis of sustained yield by working circles.

The plan was circulated in draft, before submission to the State Council, to the Forest Adviser, to the High Commissioner for Brunei and also to the Forest Adviser to the Secretary of State for the Colonies, and their valuable suggestions incorporated in the final draft.

Maps:

A Delft scanning stereoscope, purchased early in the year, proved most useful in preparing 1:25,000 maps of forest reserves, particularly in the *ulu* Belait, *ulu* Tutong, and *ulu* Temburong areas. All forest reserves are now for the first time covered by maps on this scale, all compiled and drawn in the forest office.

3. SILVICULTURE

Silvicultural treatment after fellings continued in the Anduki forest reserve, where the work was brought up to date. Similar treatment will be extended to the Andulau forest reserve as soon as exploitation in the first compartment (No. 5) has been completed. The treatment consists in poisoning all unwanted trees with sodium arsenite.

4. COMMUNICATION

The proposal to clear the Belait river of snags, mentioned in last year's report, has now reached the stage of calling for tenders for the work.

5. PROTECTION OF FORESTS

Maintenance of boundaries:

Batu Apoi forest reserve. The boundary rentis from the Sungai Batu Apoi northwards to the boundary ridge was cleared.

Labu forest reserve. All rentises were cleared, except the Sarawak-Brunei boundary rentis which was done last year.

Belait peat swamps. The Sarawak-Brunei boundary rentis was cleared from the Pagalayan Canal to the sea.

Forest offences:

No important forest offences were detected during the year.

6. FOREST INDUSTRIES

The four main forest industries in the State are—

- (i) the timber industry;
- (ii) the firewood and charcoal industry;
- (iii) the *jelutong* industry;
- (iv) the minor forest products industry (rotans, leaf *ataps*, *damar*, etc.).

Timber industry:

The industry concentrates on supplying the internal market, which is dominated by the 700 cubic tons per month (average) requirement of the British Malayan Petroleum Company, mostly in the Seria-Kuala Belait oilfield area. Government contractors also buy large quantities of timber for the numerous buildings under construction by the Public Works Department. The industry is unable to meet the full requirements of the market, largely for want of an adequate and reliable labour supply, and in consequence about half of the timber used is imported (chiefly from Sarawak).

Timber prices in the oilfield, which controls the market, remained much the same as over the two preceding years:—

	<i>\$ per cu. ton</i>
Selangan batu (c.i.f.)	330
Kapor bukit (f.o.b.)	170
Kapor paya (f.o.b.) 18' and under	130
Kapor paya (f.o.b.) 20' and over	140
Keruing (f.o.b.) 18' and under	170
Keruing (c.i.f.) 18' and under	178
Semayor (c.i.f.) 18' and under	178
Meranti (f.o.b.) ex Marudi, Weston	110
Seringawan (f.o.b.) ex Badas	110
Sempilor (f.o.b.) ex Lawas	110

The British Malayan Petroleum Company kindly supplied the above figures; other species are very rarely purchased by them.

Sawmills:

No sawmill may be installed without a permit from the Forest Department; such permits are always linked with a licence for a suitable area of forest. There are 23 sawmills in the State, but many of these are one-bench mills, driven by a petrol engine (such as a Ford V8) or a light diesel engine, and move about periodically from one patch of State land to another. At least seven of these small mills are either moribund or struggling hard to keep going; in general, experience has shown that it is difficult for the small up-river mill to compete with the larger mills at Belait and Tutong unless either they are cutting a valuable timber (e.g. semayor or selangan batu) or they are very accessible to the market (e.g. Liew Kim's small mill in Anduki forest reserve). Needless to say it is the moribund mills that apply to Government for large financial loans, in the hope that a shot in the arm will keep them going a year or two longer.

Chinese hand-sawyers continued to demonstrate that they can compete successfully with sawmills, and a small but steady outturn of valuable timber cut by them comes out of the Kuala Abang road forests.

The two mills in Kuala Belait are being equipped with electric motors, and will go over to electricity as soon as Government can supply the power. The most recent of these two mills, belonging to the Shing Yip Co., is expected to be completed in April 1956, and will have a capacity of 15 tons sawn output per day; if their logging organization can provide enough logs, this mill should go a long way to meeting the demands of the Seria-Kuala Belait area. It is hoped that the clearing of the Belait river, to be undertaken by Government during 1956, will materially assist these two sawmills.

Timber:

	<i>Outturn in cu. ft.</i>	
	<i>1955</i>	<i>1954</i>
Forest reserves, round logs	147,102	(133,491)
Forest reserves, sawn timber	128,562	(115,134)
Other forests, round logs	424,110	(486,977)
Other forests, sawn timber	113,851	(123,221)

These figures are summarised from the statement in Appendix "G". There is no significant difference between the figures for 1954 and 1955. Where convenient, all logs are measured in the round before milling, but where this is impracticable as, for example, in some of the small mills upriver, the timber is measured for royalty after sawing. It is for this reason that our statistics are partly in terms of round timber and partly of sawn timber.

Poles:

	<i>Outturn in cu. ft.</i>	
	<i>1955</i>	<i>1954</i>
Mangrove poles	47,330	(29,202)
Junglewood poles, taken by B.M.P. Co.	9,478	(15,607)
Junglewood poles (Misc.)	4,417	(24,233)
	<hr/> 61,225 <hr/>	<hr/> (69,042) <hr/>

Firewood:

(a) *Mangrove.* Production of mangrove firewood was 396,120 (408,678) cubic feet. Of this total 9,693 (11,518) shipping tons was exported to Hong Kong by the George Ah Foott Firewood

Co. Ltd., who state that the drop in production is due to labour difficulties. The Hong Kong price for firewood fluctuates considerably, and during 1955 the price received ranged from Str. \$21.85 down to Str. \$7.56 c.i.f. with an average of Str. \$13.54.

The use of *nyireh bunga* firewood for firing the Soon Lee brick kilns at Sengkurong continued during the year.

(b) *Other firewood.* Production of firewood other than mangrove totalled 62,371 (48,484) cubic feet. This was mostly produced in the Tutong district for firing the Soon Lee brick kilns at Sengkurong; it is more expensive than *nyireh bunga* firewood, but sufficient supplies of the latter cannot always be obtained owing to labour shortage in the mangrove forests.

Charcoal:

Seventeen kilns produced 38,844 (34,558) cubic feet. The market for charcoal is limited, and it is doubtful whether it can absorb much more than the present production, which goes mostly to coffee shops in the towns. The local manufacturers are unable to compete with the highly organised Malayan industry in the Hong Kong market, and there are no exports.

All the kilns are sited on Pulau Berbunut, and burn mangrove wood exclusively; *bakau* (*Rhizophora* sp.) is used for making the charcoal, but for firing the kilns other species can be used. As one *pikul* of charcoal is roughly equivalent to 9 cubic feet, the outturn for the year was about 4,300 *pikuls*.

Jelutong:

Production of *getah jelutong* totalled 3,690 (2,566) *pikuls*. The swamp forests of the Belait and Tutong districts, and the Labu forest reserve, are the principal areas in which this product is obtained; it provides part-time employment for many persons living in rural areas, and yields one-quarter to one-fifth of the total forest revenue each year.

Minor forest produce:

Appendix "H" gives details of returns from minor forest produce. Not appearing therein (because no royalty is charged) is an item of 814 *pikuls* of illipe nuts (fruit of *Shorea* spp.) exported, on which the Customs Department collected duty.

7. IMPORTS AND EXPORTS

There was no export of timber during the year. Export is prohibited because the timber trade is at present unable to meet the demand for timber within Brunei State, as the following paragraphs illustrate. Figures for exports of mangrove firewood and *jelutong* are given in previous paragraphs.

Imports:

(a) *Belian ataps (shingles)*. These are the traditional roofing material in Borneo, and are mostly obtained from Bintulu in Sarawak, but export from Sarawak to Brunei is only permitted by the Sarawak Government against indents issued by the P.W.D. Figures for imports in 1955 are not yet available.

(b) *Timber*. The Department of Trade and Customs, Sarawak, annual statistics for the year 1954 show the following sawn timber exported to Brunei:—

<i>Type</i>	<i>Quantity in tons of 50 cu. ft.</i>
Lumber, conifer	974
Lumber, ramin	100
Lumber, meranti	7,966
Lumber, belian	146
Lumber, hardwoods	2,572
Lumber, non-conifer not elsewhere specified	966
	<hr/> 12,724 <hr/>

Production of lumber within the State during the same period is estimated from Appendix "G" of the Brunei 1954 Annual Report at 11,360 tons in terms of sawn timber (assuming 50% recovery on conversion of round timber). In other words, in 1954 the timber trade in Brunei was producing less than half the total internal requirements, and it is thought that the 1955 figures when available will show a similar pattern. Some lumber is also imported from British North Borneo and from Singapore, but the quantities are small by comparison.

Sarawak forest department 1955 statistics show that the export of timber to Brunei from Sarawak Fifth Division ports (chiefly Lawas, to a lesser extent Limbang, Sundar, Trusan)

totalled 56 (144) tons of round timber and 2,371 (2,902) tons of sawn lumber during the year. This includes 79 tons of conifer timber (*sempilor*).

8. RESEARCH

1955 will go on record as one of the heaviest and most general flowering and fruiting years of the family *Dipterocarpaceae*; this was probably consequent on an unusually dry spell in February and March. Some valuable botanical material was collected by all ranks of the forest staff. The State Forest Officer visited the Forest Research Institute at Kepong during February for 10 days to study all the Brunei material available in the herbarium there; discussions with the Director of Forestry and the Forest Botanist led to a recommendation that Brunei should employ a qualified botanist for at least 5 years to produce a manual of the timber producing species on the lines of Symington's "Forester's Manual of Dipterocarps"; without such a manual scientific forestry and sound silviculture cannot make much progress. A check-list of all known Brunei dipterocarps has been drafted in typescript by the State Forest Officer as a basis for future work.

9. EDUCATION

As usual, Brunei sent one student to the Forest School for the one year vernacular course. Forest Guard Yahya was placed 28 out of 60 in the final examination, obtaining a pass certificate; he also received a good report from the Instructor.

10. FINANCIAL RESULTS

A summary of revenue and expenditure for the year is given below:—

Year	Revenue	Expenditure			Surplus
		Personal Emoluments	Other Charges	Total	
1955	120,492	72,096	32,635	104,731	15,710
1954	128,633	61,498	38,352	99,850	28,783

Details of revenue from different classes of forest produce are given below:—

<i>Kind of Produce</i>	<i>Revenue 1955</i>	<i>Revenue 1954</i>	<i>Increase or Decrease</i>
Timber and poles	65,639	82,564	16,925
Firewood and charcoal	13,263	15,504	2,241
Jelutong	38,818	30,349	11,011
Minor forest produce	2,542		
Other sources	179	111	68
Compensation and fines	—	105	105
	<hr/> 120,441 <hr/>	<hr/> 128,633 <hr/>	<hr/> 8,192 <hr/>

The drop in revenue was principally in the Belait district, where the Anduki forest reserve has almost been worked out. It is hoped that this trend will be reversed in 1956 by the two sawmills in Kuala Belait, both of which are enlarging their mills with more modern equipment. The clearing of the Belait river should make it easier for them to obtain adequate log supplies from their licenced areas in the very extensive forests of the upper Belait.

11. ADMINISTRATION AND GENERAL

Mr. B. E. Smythies, Assistant Conservator of Forests, held the post of State Forest Officer for the third year in succession, in addition to the post of Section Forest Officer, Limbang and Lawas sector, Sarawak. In order that he might be available to see the Forestry Development Plan through the State Council and the Press, an offer of the post of acting Conservator of Forests, Sarawak, was declined.

The staff of the department at the end of the year consisted of—

- 1 State Forest Officer
- 1 Chief Clerk
- 3 Assistant Clerks (Brunei, Tutong, Kuala Belait)
- 3 Forest Rangers (Brunei, Tutong, Kuala Belait)
- 6 Foresters
- 13 Forest Guards

- 7 Forest Labourers
- 1 Driver/Boatman
- 1 Draughtsman
- 1 Office *Peon*

The forest labourers, as in Malaya, are monthly-paid non-establishment personnel; vacancies of forest guard are normally filled from their ranks.

Conferences:

The State Forest Officer attended the annual conference of Sarawak forest officers in Kuching, 1-5th February.

He represented Brunei at the first forestry conference of the three Borneo territories, held in Sandakan 14-19th November; this included a two-day excursion to the Sepilok forest reserve to study silviculture and management.

Visitors:

Professor H. G. Champion, C.I.E., I.F.S. (retd.) Professor of Forestry at the University of Oxford, paid a brief visit in January and was shown the mangrove workings in Selirong forest reserve and the *kerangas* forest in Berakas forest reserve.

Legislation:

During the last quarter the Forest Rules were revised and reprinted. The explanatory note printed at the end of the new Rules is quoted below:—

“The Forest Rules, 1935, were based on the Forest Rules in force at the time in the Federation of Malaya. The latter have since been revised more than once, and the latest revision, in draft form, has been used for the revision of these Brunei rules, which are a simplified version of the Malayan ones. It was also considered desirable at the present time to have the rules reprinted so that they should be available to the public, and it was decided to revise them prior to reprinting.

The principal change in these rules is that royalty on all minor forest produce other than *jelutong* and other *getahs* and rattans is waived, and it is no longer necessary for the public to

obtain a licence to work bamboos, *damar*, leaves (*kajang*, *mengkuang* leaves, *mengkuang* mats, *nipah* leaves, *nipah atap*, *pandan* mats, *rumbia atap*), or *nipah* sugar.

The timber roll in Schedule I has been simplified by reducing the number of classes to two, as against four previously.

The old rules required sawmills to be licenced, but no form was prescribed. The Sarawak form is now prescribed, and a charge of \$20 per saw-bench introduced, as in Sarawak."

The reason for waiving royalty on minor forest produce was that the royalty obtained was negligible (see Appendix "H") but entailed a good deal of office work in district forest offices.

The new rules will come into force on 1st January, 1956.

(e) FISHERIES

The principal fishing areas of the State of Brunei are mostly coastal in the vicinity of river mouths and estuaries, or near coral beds and rocky patches, and while in previous years the Industry has depended almost wholly on these inshore grounds, the introduction and extensive use of outboard engines, originally purchased on interest free Government loans to the individual fisherman, has in 1955 enabled the Industry to extend its activities to the nearer offshore grounds with very gratifying results.

The mechanization of the fisherman with outboard engines commenced in the latter half of 1953, and although 1954 was the transitional period an immediate increase in the annual production was apparent. In 1955, with practically the whole of the Industry mechanized and only the very small one or two man *perahus* (canoes) still using hand paddles as a means of propulsion, the benefits derived from the use of engines became obvious as the following tables will show.

	1953	1954	1955
Total landings of Fish (all grades)	2,264.45	3,429.99	9,115.38
Prawns 	589.38	921.45	1,008.80

These figures are given in the local weights of *pikuls* and *katies* that is 1 *pikul* (100 *katies*) is equal to 133½ lbs.

All fisheries in the State of Brunei are seasonal and methods of gears used vary accordingly. In 1955, however, a marked increase in the all year round use of the 'Bubu' is noted, and is

again attributable to the use of the powered craft and the resultant extended area of operation. Tables below show the various gears for which licences were issued during the year, and previous years' figures are also given for comparison.

<i>Gear</i>	<i>1953</i>	<i>1954</i>	<i>1955</i>	<i>Explanation</i>
Pukat	24	17	21	Small drift net.
Rantau	14	3	19	Large drift net.
Kilong	107	31	27	Deep water fishing trap.
Paguyot	3	4	19	Drag net.
Kabat	24	25	30	Small fish trap.
Bubu	55	265	757	Similar to Lobster pot.
Tambak	10	20	24	Set net.
Lintau	58	118	102	Shoal water fish trap.
Slambau	3	18	16	Watched set net.
Penakat	40	32	—	Line fishing.
Rambat	7	8	10	Cast net.
Gurit	10	1	1	Long line.
Anchau	—	3	4	Similar to drag net.

These tables are for the whole State, and following is a break down of gears and boat licences issued during the year.

	<i>Gear Licences</i>			<i>Boat Licences</i>		
	<i>1953</i>	<i>1954</i>	<i>1955</i>	<i>1953</i>	<i>1954</i>	<i>1955</i>
Brunei Town	93	83	76	92	59	68
Baru Baru	75	20	244	44	20	25
Kuala Belait	69	101	509	22	—	13
Tutong	19	160	678	19	21	31
Kuala Labu	69	80	92	76	71	96
Muara	71	63	120	32	39	39
Total	396	507	1719	285	210	272

River Fisheries:

River fisheries consist of a small number of fish wiers (*Kilongs*) and traps (*Bubus*) with the occasional use of a short line with baited hooks, and cast net (*Rambat*) fishing by night. Returns from river fisheries, however, are negligible, and such catches as are obtained consist mostly of small fish (*Bilis*) which have no marketable value and are cooked and eaten whole by the fisherman. These methods of river fishing are operated in the main for the personal consumption of the owner.

Prawn Fishing Industry (Tugu):

The "Tugu" industry, a characteristic type of prawn fishing using conical nets (*Tugu*) secured to wooden stakes and set in long rows across the flows of the tide, is centered around the southern part of Brunei Bay and has its headquarters on the two small Islands of Baru Baru and Berbunot. In this area, sets of *Tugu* nets, of up to nine or ten nets to a set (*Mata*), can be seen extending from the Southern shores practically right across the Bay and leaving only the navigable channels of Brunei, Temburong, Limbang and Pandaruan Rivers.

A percentage of the prawns landed in Baru Baru and Berbunot is, after being sun dried and powdered, exported as "prawn dust". Considerable quantities of small prawns are also used as pig food to the farm on the latter named Island, and as no check can be made of the quantities used for these two purposes, the exact total weight of the products of the *Tugu* Industry is unfortunately not available.

With the exception of "prawn dust", all fish and prawns landed in Brunei are for consumption within the State and there is no other export of these commodities.

Early in the year, Price Control of fish and prawns was extended to include the oilfield areas of Seria and Kuala Belait. Previously, price control was exercised only in the Brunei Town area and adjacent districts, and in spite of 'movement restrictions' being enforced on sea food produce landed Brunei, a large quantity of the daily landing was diverted to the oilfield area and resulted in a flourishing 'black market' and frequent shortages of sea food in the Northern half of the State. Extension of price control has ensured a satisfactory and fair distribution of fish and prawns landed in Brunei, and removed the incentive to 'smuggle' these commodities out of the area in which they are caught.

In 1955, 'Exports' of fish and prawns from Brunei to Seria were as follows:

Fish	471.05 <i>pikuls</i>
Prawns	250.00 <i>pikuls</i>

Marketing remains in the hands of a limited number of licenced merchants (*Towkays*). The '*Towkay*' system, largely finances the fishing Industry in Brunei, the fisherman obtaining the necessary and boats, and in some cases even food from his '*Towkay*', and is thereafter considered to be under 'contract' to hand over to the *Towkay* all the fish he catches. This system is open to abuse, and is not really satisfactory, for often the initial debt is out of all proportion to the fisherman's earnings and is carried on indefinitely. It is, however, of advantage during the monsoon seasons when for days the fisherman may be weather-bound and unable to put to sea.

The introduction of power driven craft, however, with, as can be observed from the foregoing tables, a resultant increase in the fisherman's returns, should in time enable the fisherman to become independent of the *Towkay* system, and consideration is now being given to a marketing scheme which it is hoped will to a large extent remove from the few licensed wholesalers the control they now exercise over sea produce after it has been landed.

(f) MINING

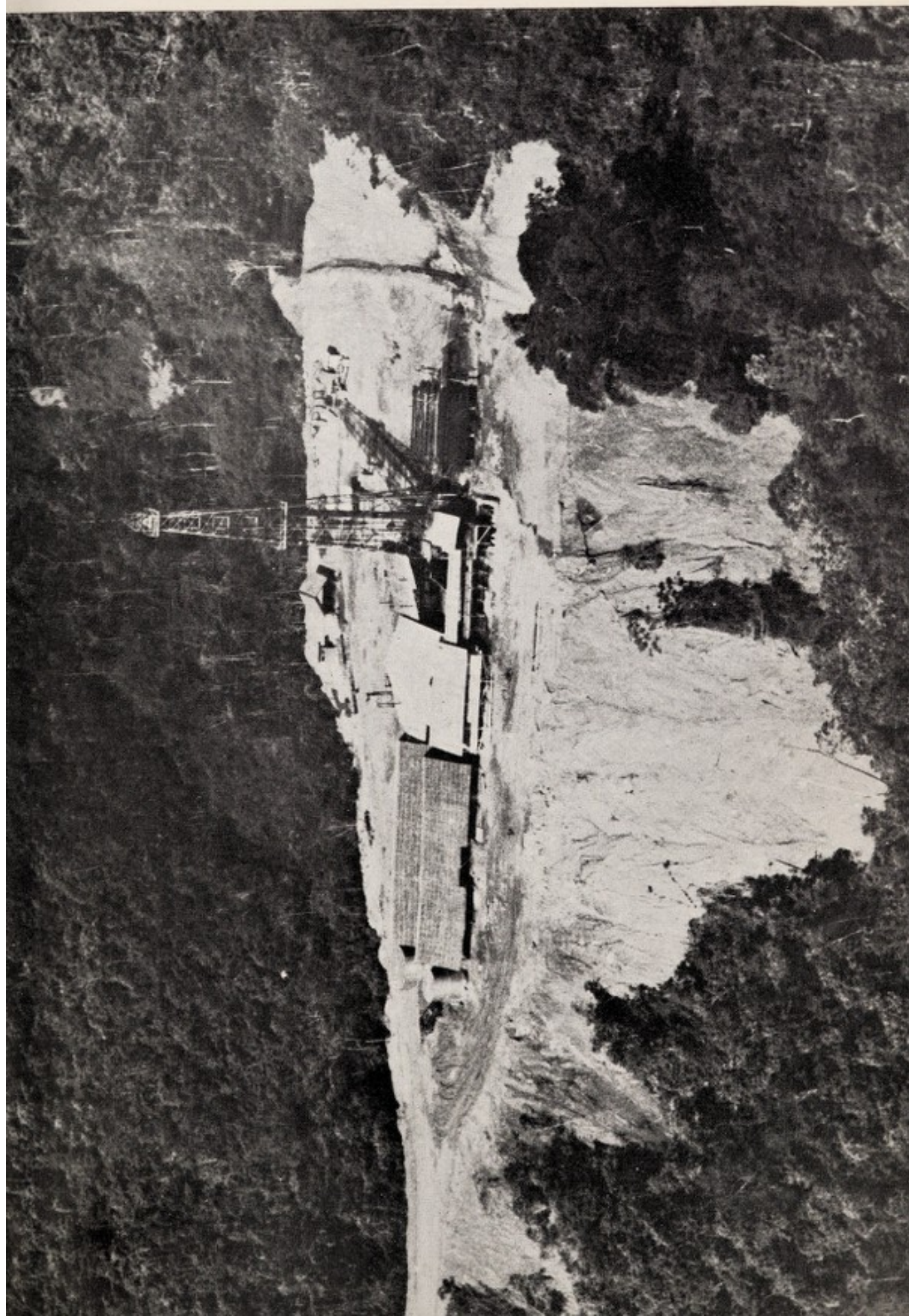
Production of light and heavy crude oil from Seria field by The British Malayan Petroleum Company Limited amounted in 1955 to approximately $38\frac{3}{4}$ million barrels, about four million barrels more than in 1954.

This increase was attained as a result of (a) improved production techniques resulting from a fuller knowledge of the oilfield's reservoir conditions and (b) the bringing into production of a larger number of wells, resulting from an appreciable speed-up in drilling operations.

Drilling operations involved the making of 209,900 feet of hole within the Seria field (compared with 168,000 feet in 1954), and as a result 34 new oilwells were completed, all of them producers. By the end of 1955 there were 292 wells in production at Seria: but it should be understood that this total fluctuates almost daily, as the older wells are subject to closure for maintenance work at sometimes frequent intervals.

The oil produced at Seria is of two types: a light, waxy oil of specific gravity 0.83, and a heavy, non-waxy oil of 0.95 specific

Exploration
drilling rig at
Jerudong.



(by courtesy of
B.M.P. Company,
Seria)

B.M.P. Company
helicopter in
flight.

(by courtesy of
B.M.P. Company,



gravity. The heavy oil forms about 10% of the field's production. During 1955 a great deal of time and money were devoted to devising methods of mitigating the formation of wax deposits in the oilfield's installations as a result of the handling of the light oil, and some progress was achieved in keeping the pipelines and tanks free from these accumulations.

Geological and other exploration work went on throughout the year. Exploration drilling on a considerable scale in the Labi area failed to produce any worthwhile results, and was abandoned in the middle of the year. The oil company had built a 26-mile road through jungle from Bukit Puan (on the Belait River) to Bukit Teraja, inland, in pursuance of these operations. This road resulted in considerable benefit to the small communities living in the Labi area, and by arrangement between the Government and the B.M.P. Company was acquired as a State road when drilling operations were abandoned.

A potentially important development occurred at Jerudong, an area roughly midway between Tutong and Brunei Town, where in 1955 the B.M.P. Company drilled three exploration wells and prepared a fourth site for drilling. One of the wells produced what the Company described as an "interesting" show of oil, although by the end of the year the exact run of the oil-bearing formation had not been located, and it was too early to say definitely that the discovery would have commercial significance.

Oil exploration at Jerudong had the unfortunate by-product of helping to break down the surface of the main road from Brunei Town to Jerudong. Unusually heavy rains and the extra traffic occasioned by the passage of large oil company vehicles rendered parts of the road virtually unusable for periods extending to a week and more. Prompt action by the Public Works Department, assisted by a fleet of heavy transport units loaned by the oil company, quickly restored the road to usable condition, but there was at one period a considerable dislocation of traffic.

Work continued during 1955 upon the drilling of wells into the bed of the South China Sea, from marine platforms erected in the sea about a mile off the coast at Seria. By the end of the year four such platforms were in use, or about to come into use—three served by aerial ropeways from the shore, and the fourth

connected to the beach by a long Bailey Bridge. Potentially satisfactory results are being obtained from this sea-bed drilling, and a great deal of knowledge is being gained to add to the picture of the complicated underground structures in and around the Seria field.

The coastal waters of Brunei and Northern Sarawak were the subject of intensified geophysical investigation during 1955, when a seismic survey ship was employed by the B.M.P. Company to obtain information about possible oil-bearing formations beneath the sea-bed. Helicopters (which are mentioned later in this chapter) were used to provide communication between the ship and shore.

At the end of 1955 the B.M.P. Company had on its books in Seria, Kuala Belait and Brunei outstations the following employees:—

Senior Staff (all races)	403
Regional Staff (all races)	1,001
Labour (all races) (excluding casual labour)	4,320

In addition, 2,360 workers were employed in the oilfield area by contractors working virtually whole-time for the oil company.

The year 1955 saw a continuation of the consolidation noted in 1954. The building of permanent houses for staff and labour continued at a high pitch, and many capital development schemes which had been held up by equipment shortages abroad were brought into operation. For example, a new water-intake plant was installed at Badas, on the Belait River to serve a system of filter-beds erected in the industrial area of the oilfield itself. As a result, all domestic and much of the industrial water supply of the area now consists of purified and chlorinated water.

A new communications centre was opened, and associated with it went a re-organisation and improvement of the oilfield's large internal telephone system. Oilfield drainage—a particular problem in this low-lying area—continued to receive a great deal of attention, while work was continued on further sections of the sea-wall designed to protect the coast at Seria from erosion by the sea.

A large cold-storage food shop was opened at Seria to serve the oilfield community, replacing a temporary installation which had been in service since the end of the war. This installation is one of the best in south-east Asia, and in addition to providing fresh and frozen foods for the oilfield itself, continues the tradition of making cold storage supplies available to approved Government and other customers throughout the State.

A hotel was completed and opened at Seria for the housing of Company official visitors and staff, and another 3,000 k.w. alternator was brought into service at the Company's power station to help deal with the increased electrical load of the oilfield area. Seria bazaar was, by Government-Company arrangement, brought into the Company's electrical network, and the Government's generators were transferred elsewhere.

New major overhead power lines were laid in the oilfield area, and the electrification of such services as oil pumping at tank groups and the pumping of oil from the less active oilwells continued to expand.

As in previous years, the B.M.P. Company continued to pay much attention to the question of accident prevention. The prosecution of vigorous campaigns secured further reductions in industrial and traffic accidents. The Company continued to issue safety equipment free to its industrial workers, and also to subsidise their purchase of safety footwear.

Major schemes in progress at the end of the year included the erection of a new club for senior staff, swimming pools for Regional and Senior Staff (a new Regional Staff club is to be started in 1956), and (on the medical welfare side) plans for the coming into operation early in 1956 of a "Health Visitor" service designed to increase the post-and ante-natal facilities available for expectant mothers, and to supervise the health of all oilfield children up to the age of ten.

B.M.P. continued to operate its own aviation service, both for internal transport purposes and to provide a link with the main-line airfield at Labuan. During the year, Company aircraft made about 6,250 flights, carried 17,543 passengers and 3,200,000 pounds of freight, and used 72,000 gallons of aviation gasoline in so doing. Special flights were made for the carriage of V.I.P.'s, for ambulance purposes, and for photographic reconnaissance.

An interesting addition to the Aviation Department's activities was the arrival on charter of two helicopters which were used for general local transport purposes, and for communication with outstations and the marine drilling platform.

The land and sea transport departments of the Company's activities were somewhat curtailed as a result of the increase in these services available from outside organisations. The B.U.T.C., a Government-aided 'bus company, took over many of the recreational and shopping runs hitherto provided by the Company's own transport, while there was an increase in the amount of chartered sea-tonnage to convey goods to the oilfield from the deep-sea port at Labuan. However, B.M.P.'s own vehicle fleet consisted of 115 heavy vehicles, 483 cars and light vehicles, 34 'buses and trailers, and 129 motor-cycles at the end of the year. Company 'buses carried a total of 2,282,945 passengers during the year, while its lorries moved 348,995 tons of supplies and equipment. The sea transport department operated 26 coastal craft, which between them carried 114,000 tons of cargo and 4,117 passengers.

A locally-important development in the Company's operations during 1955 was an extension of its policy of "sharing prosperity"—placing more work in the way of small local contractors, enabling them to build up their businesses in the service of the oilfields. B.M.P.'s policy is, wherever possible, to confine its operations to matters concerned strictly with the winning of oil. As many background services as possible—house maintenance, grass cutting, civil engineering and building and the like—are being put out to tender by local contractors, and will continue to be so dealt with as long as efficient service is obtained.

The educational work of the B.M.P. Company's Trades School has already been referred to elsewhere in this Report, as have the many welfare services maintained by the Company on behalf of its staff and labour.

To summarise oilfield developments during 1955, it may be said that Seria has passed out of the post-war rehabilitation period, and is now operating to a planned routine. The oilfield continues to expand its social amenities, without in any way diminishing its progress as one of south-east Asia's biggest, most complex, and most productive industrial units.

CHAPTER VII.

SOCIAL SERVICES

(a) EDUCATION

THE year 1955 has been the first full year in the operation of the Development Plan for Education in Brunei. The most outstanding developments during the year have been—

(a) secondary education in the State has now reached junior secondary level (up to the Sarawak Junior Certificate Examination);

(b) the vexed question of the settlement of reasonable Government financial aid to Chinese schools (half the total recurrent cost);

(c) three and a half million dollars have been spent in the Development Plan out of a total of some ten million dollars for the five-year period;

(d) the constitution of an Education Advisory Committee.

This Report is divided into two parts:—

1. The work of the Education Department during 1955.
2. The progress of the Development Plan (1955-60).

1. THE EDUCATION DEPARTMENT DURING 1955

Another substantial increase in school enrolment must be noted. The total enrolment for the year in all types of schools was 8,632 children, showing an increase on 1954 of 1,451. The rough percentage of increase of children in all schools was about fifteen percent rise. The most encouraging feature is the gradual rise in the number of girls now attending school. During 1955 there were 2,853 girls in school showing an increase of nearly 600. Even so, the proportion of boys to girls in school is 2:1. For a clearer and more detailed picture of respective increases readers are referred to the statistical tables farther on in this Report.

The low ratio of girls to boys in Malay Schools is still very marked but there was an increase of over 400 Malay girls during the year. Much of the reluctance of parents to send their girls to school is due to the scarcity of trained women teachers in the primary schools. It is assumed that there must be some 6,000 Malay children of school age living in the State. If this is correct there are very few Malay boys not attending school but there must be over 2,000 girls of school age still staying at home. Much propaganda has been carried out by the Education Department especially through the contacts with parents at school functions, including Parents' Days, physical training and garden competitions, and sports events organised by the schools. Even when girls are sent to school by their parents very few remain to take even the Primary IV Examination and therefore fail to qualify for junior secondary education in the Government English Schools.

Turning to secondary education, it is heartening to see the rise in numbers of both boys and girls. There were over 100 extra children receiving secondary education (either English or Chinese) during 1955, not including some 30-odd children receiving secondary education outside the State.

Malay Vernacular Schools — Government:

During this year eight more schools were opened in temporary *kajang* buildings. They were sited at Sukang, Birau, Layong, Rambai, Masin, Pangkalan Batu, Batu Apoi and Jerudong. The usual financial aid was given to each community building these schools which is a \$400 Government grant to help the *kampong* people to purchase the necessary materials. All labour is provided free by the local community. Already under the Development Plan the building of permanent schools has commenced at Pangkalan Batu and Masin. The following schools were provided with permanent school buildings by the end of 1955. They are Puni, the first permanent school to be built under the Development Plan, Penanjong, Sinaut and Baru Baru. All these schools have additional permanent quarters for teachers. The standard of the housing of teachers in Brunei is without doubt the best in Borneo. Wherever permanent quarters for teachers are built, the teachers feel very much happier and settled in their family life. It has been noted that wherever a new school building is erected, the village people tend to move their houses

nearer to the school and it is good to report that the village school building is becoming more and more the centre of village social life. The biggest problem in housing teachers is in urban areas. Under the Development Plan there has been a remarkable rise in the influx of regional, technical officers and as with regional teachers on contract with the Department it is necessary to build temporary *kajang* quarters for such officers. The ultimate solution is the erection of teachers' flats, the first of which will be completed in the middle of 1956.

Several schools have benefited from additional minor works in improving the present school buildings but the largest amount of money has been spent in the preparation and drainage of playing fields. When siting a school, generally near a road or on the bank of a river, priority in selection of a site is given where there is sufficient level space to provide at least a fullsize football field adjacent to sufficient space for a school garden.

Parents' Day or *Hari Ibu Bapa* continues to be a popular feature in all these schools. Over \$13,000 was collected from parents and friends of the schools by the Headmasters of the Malay Schools during 1955. This sum is matched by Government in the form of a free grant on a dollar-for-dollar basis. Supervisors, Headmasters and teachers deserve much credit for the amount of work, organisation and keen enthusiasm which go into these happy gatherings of parents and pupils.

The Malay School gardens continue to be a source of pride to all concerned and \$1,739 was collected from the sale of vegetables and fruits this year. Prizes were won for the best school gardens as follows:—

1. O.K.S.B., Kilanas.
2. Bangar, Temburong.
3. Puni, Temburong.

Although football is the favourite game of all Malay boys, badminton is coming more and more into the picture. Wherever possible a badminton court is made on the playing field of each school. The Annual Schoolboy's Football Competition was won again this year by the Government English School, Seria. Runner-up was the Bukit Bendera School, Tutong. Physical training

competitions were again held in all rural areas with practically every school sending a representative team. The final placings given by the judges were as follows:—

1. S.M.J.A. School, Brunei Town.
2. Bukit Bendera School, Tutong.

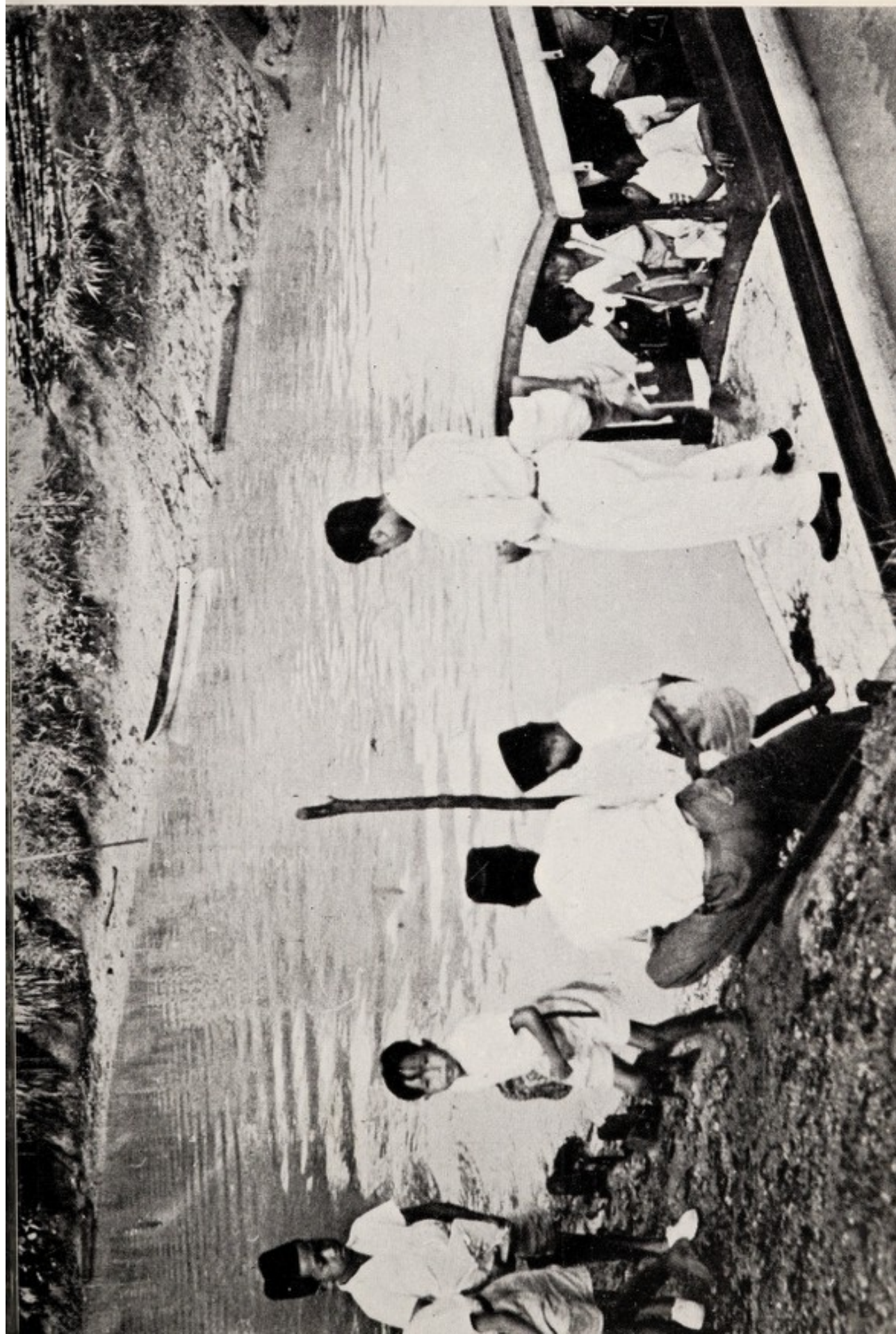
An added impetus to the teaching of physical training and organised games has been given by the arrival of an expatriate officer from the United Kingdom who is an expert in this vital subject.

There is no diminution in the demands from parents for their children to be taught English as a second language. There were over 400 Malay and Chinese children tested for possible entry to the preparatory departments of the Government English Secondary Schools. Some 200 children gained admission to these schools at the end of the year. Those who failed to get in revealed genuine disappointment and considerable heart-burning, both the children themselves and their parents. The teaching of English in the Malay Schools is still our biggest problem but with the arrival in August 1956 of the first batch of Kirkby teachers the problem will gradually disappear. This scheme will build up to a total of fifteen Kirkby-trained teachers, but it will take several years before the teaching of English can be really effective as a second language in these schools. As an interim measure three regional trained women teachers have been posted to the three largest urban Malay Schools.

The number of children staying on to Primary V and VI continues to grow each year, and remains the only recruiting ground at the moment for very junior Government posts, including probationary teachers. It is confidently anticipated that during the Development Plan recruitment for prospective teachers and Government employees will pass on to the Government Secondary Schools. The paucity of English teaching in the general curriculum of Malay Schools has already been mentioned and it has been found that having been forced to transfer several vernacular teachers to the preparatory departments of the secondary schools has weakened at least two staffs of the primary schools in the urban areas. 1956 will be a lean year for additional trained teachers. This is due to the Malay teachers training being extended to three years. Therefore there is no output from Batu Lintang during this year. It is considered that the teaching of

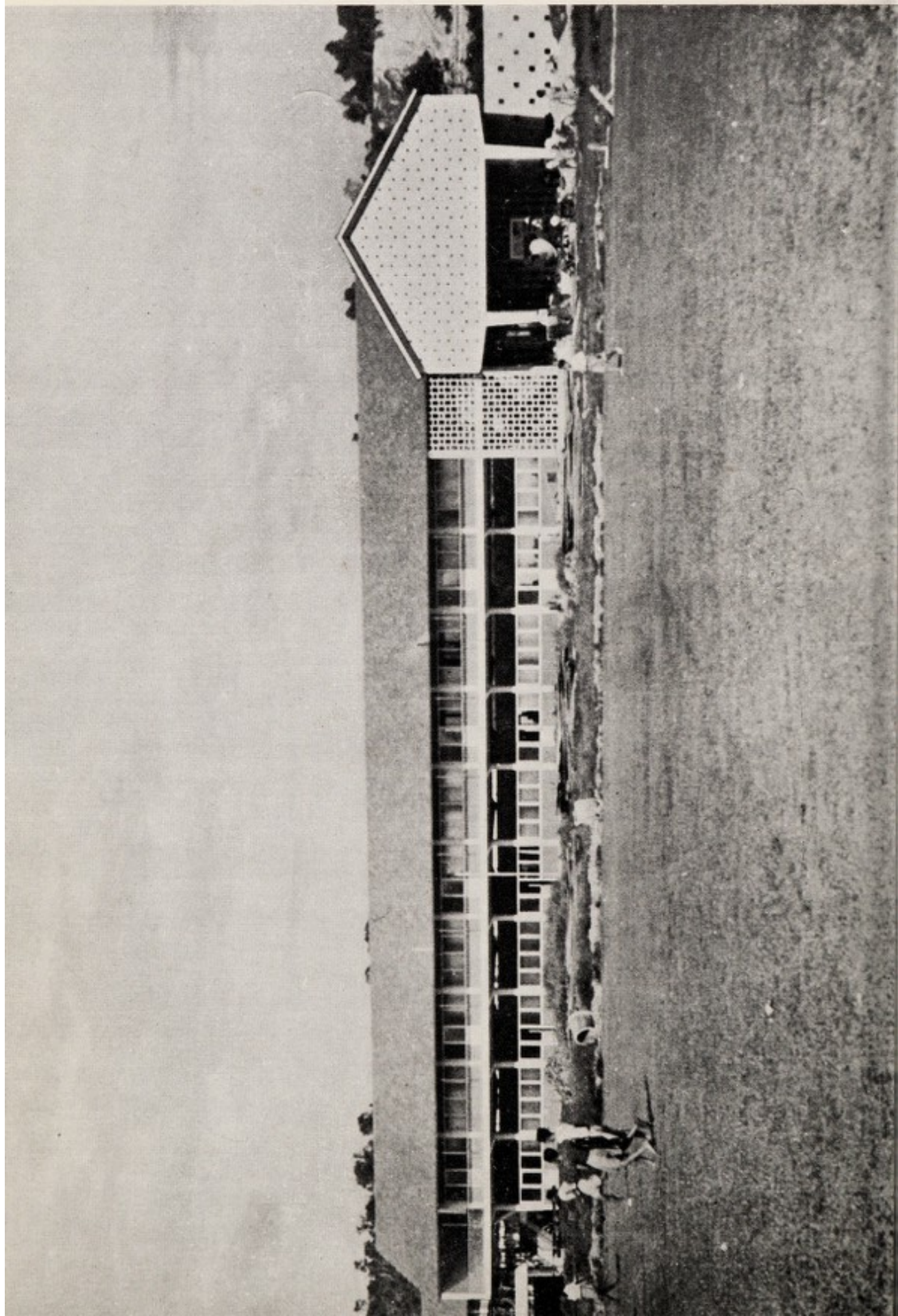
Coming to School
by water-bus.

(Information Service
photograph)



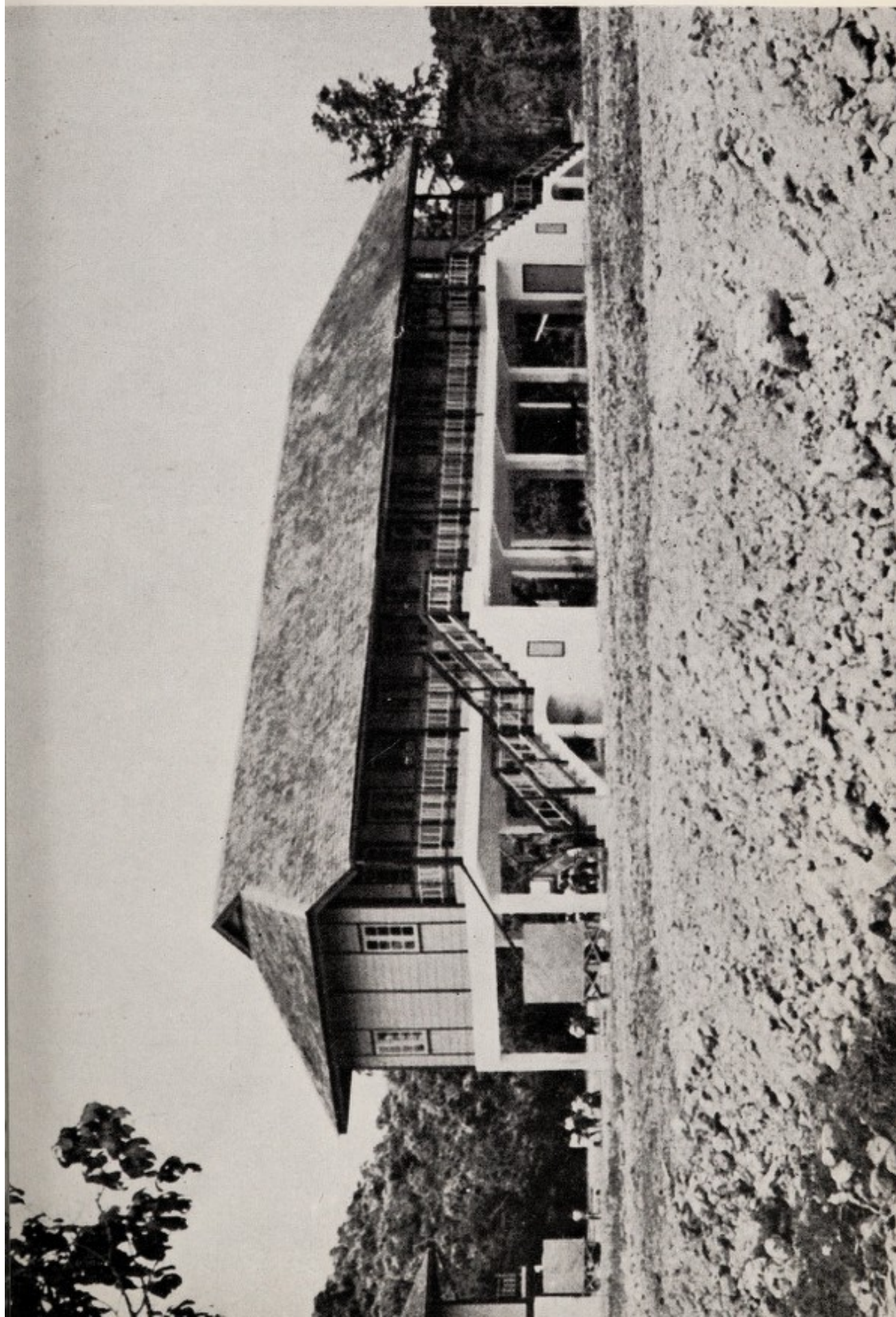
Classroom Block
Sultan Omar Ali
Saifuddin's
College Brunei—
Phase I.

(by Courtesy of
Brunei Press,
Kuala Belait)



Sinaut School—
Typical example
Rural schools
now being built.

(Information Service
photograph)



His Highness
visiting Girls'
School (tem-
porary building)
Brunei.



(Information Service
photograph)

Malay is not as high as should be desired in a Malay State and steps have already been taken with regard to the revision of the curriculum and time-tables with the gradual introduction of more up-to-date Malay Primers and textbooks. In the secondary schools the continuation of Malay studies up to the School Certificate level is compulsory for all Malay pupils. Religious instruction continued to be given by religious teachers from the Department of Religious Affairs.

Teacher Training (Malay):

Statistical tables are given in this Report. The Brunei Government revised its policy in continuing to send students to Batu Lintang Training Centre at the end of the year. It has now been found possible to include a small teacher training centre in His Highness's College, Brunei Town, and from January 1956 there will be 21 students housed in temporary buildings pending the completion of a new annexe to the College. The maximum number of students will be 42 men. The new annexe will comprise adequate classroom space, dormitory accommodation, store rooms and living quarters for the staff. Recruitment is proceeding for a Principal and an English specialist for the staff of this new project. It is intended to integrate the practical training of these students with the facilities already provided for the secondary school students in the college. These facilities will eventually comprise woodwork, metalwork, local handicrafts, art, library, general science, gymnastics and organised games facilities. The temporary staff includes an expatriate officer as Acting Principal, a trained graduate seconded for service from the Johore Government and a local Group Teacher.

The six girls undergoing training at Kent College have made most satisfactory progress in this experimental scheme this year. A further intake of six young women has already been recruited, and next year there will be a total of twelve women undergoing training in this teachers' institution. It is confidently anticipated that as the secondary education of girls develops, the field of recruitment will continue to widen. Our probationary women teachers continue to be handicapped by their extremely poor knowledge of English. Three vacation courses have been successfully organised by a Lady Education Officer. The majority of probationary teachers, both men and women, attend evening classes in the urban areas.

Comparative Tables are given below:—

	1954	1955
1. Trained Teachers (men)		
(a) Sultan Idris Training College, Malaya	28	29
(b) Batu Lintang Training Centre, Kuching	43	50
2. Trained Teachers (women)		
Malay Women's Training College, Malacca	4	5
3. Untrained Teachers		
(a) Men	27	27
(b) Women	4	3
4. Probationers		
(a) Men	74	74
(b) Women	8	22
5. Temporary Teachers		
Men	—	—
	—	—
Total	188	210
	—	—

Number of Teachers undergoing Training Overseas—1955:—

1. Sultan Idris Training College, Malaya	...	2
2. Malay Women's Training College, Malacca	...	2
3. Batu Lintang Training Centre, Kuching	...	35
4. Kent College, British North Borneo	...	6
	...	—
Total		45
		—

Chinese Schools:

At long last the vexed question of the Government award of adequate financial assistance to Chinese School Committees has been solved. At the meeting of the State Council in October, the Council approved the award of a free Government grant to cover half the cost of recurrent expenditure in these schools for 1956 in addition to substantial grants towards school buildings. The new terms of this generous offer were accepted by all the Chinese communities after addresses to these communities by the State Education Officer. The major condition which has already been accepted is that half the school committee shall be appointed as Government representatives by the State Education Officer who also has the authority to appoint the Chairman of these school committees. The year 1956 will be in the form of an experiment but there is no doubt that with the goodwill and

co-operation of the Chinese communities with the Government a sound system of regulations applying to Chinese schools can be evolved. The total estimated expenditure for these Government grants will be around a quarter of a million dollars not including a possible expenditure of some \$200,000 in form of free Government grants for approved new school buildings. Generally speaking, all Chinese teachers will now receive a rise in their salaries of some 25 percent. Already the recruitment of Chinese teachers both in quality and quantity showed a marked improvement at the end of 1955. The general feeling of unrest among Chinese teachers has practically disappeared and there is no reason to doubt that the required qualifications for Chinese teachers will be reflected in the new recruitment for future vacancies. During 1955 a sum total of \$109,000 was awarded to school committees who had built new schools or additions to their present buildings. The major building project which was started during this year was at the Chinese School, Kuala Belait. The Government in Brunei is anxious that the standard of building of Chinese Schools will show improvement in the future so as to be commensurate with that high standard of public buildings now being erected by Government in the State's Development Plan.

Secondary Education (English):

This has been an important mile-stone in the progress of secondary education in Brunei. For the first time in the history of Brunei an external examination was held in three junior secondary schools. The entrants and results were as follows:—

<i>School</i>	<i>Entrants</i>	<i>Passed Sarawak Junior Cert.</i>	<i>Approved Form III Cert.</i>
St. Michael's R.C. School, Seria	10	6	3
Government English School, Seria	9	7	—
Sir Omar Ali Saifuddin College, Brunei Town	12	7	—

This result has been most encouraging to the staffs of these schools and it has now been found possible to start a Senior Certificate (Cambridge) course next year lasting two years with some 16 students who have passed the Sarawak Junior Certificate Examination.

Two more expatriate officers for these schools arrived during the year, one a graduate in Science, and the other a specialist in physical training and youth work.

At the end of this year, the first phase of His Highness's College was opened. This comprises the following new buildings—

- 16 form rooms
- Staff room
- Principal's room
- Office
- Store rooms
- Tuck shop
- Lavatories.

The new hostel was nearly completed and will be available for 120 boys and youths by the end of March next year. As a temporary measure some classrooms have been made into practical rooms pending the completion of Phase 2 of the College buildings. Practical facilities now include art, general science, local handicrafts, woodwork. It may well be that January 1957 will see the completion of the whole of the buildings of the College. The second phase will include the following buildings in addition to the Teacher Training Centre:—

- Woodwork Room
- Metalwork Room
- Air-conditioned Library
- Chemistry, Physics and General Science Laboratories
- Commercial Room
- Art and Local Handicrafts Room
- Hostel Master's Flat.

The final stage will be the completion of an auditorium seating 600 persons with an adjoining modern gymnasium and dining room facilities. It will now be possible with the completion of permanent buildings to give each pupil a modern secondary education with separate streams taking one of the following courses:—

- (a) Commercial
- (b) Pre-technical
- (c) Pre-agricultural, rural science
- (d) Advanced studies in Malay or Chinese
- (e) One stream proceeding to the Cambridge external examinations leading to university degrees and diplomas.

There are now thirty masters and mistresses on the staffs of the two Government Secondary Schools. The only difficulty

for future recruitment is finding adequate housing accommodation for regional officers on contract under the Development Plan.

Tenders have been placed for permanent buildings for the Seria Government English School.

The Roman Catholic Mission School at Seria continued to improve the quality of its teaching staff and completed the first phase of their new school building project. This included a large classroom block accommodating some 600 children. The Advisory School Board for Catholic Schools continued to meet regularly with the State Education Officer as an ex-officio member. As the grants for mission schools will be doubled next year it is confidently anticipated that more and more trained teachers will be recruited for this important Catholic School.

The British Malayan Petroleum Company continued to award scholarships to selected children of their employees (\$500 for each child annually) tenable at any recognised secondary school. Eleven extra children were awarded these scholarships at the end of 1955. Six children were pupils at St. Michael's School, Seria, two at St. Columbus's School, Miri, and three outside the Borneo territories. Instituted in 1951, a total of 47 such scholarships have been granted, 35 children are still benefitting from these grants and the cost to the Company is in the region of \$20,000 annually.

Vocational Training:

The following table gives the number of youths in training at the British Malayan Petroleum Company's Apprentices Trades School, Seria, 1955:—

<i>Race</i>	<i>1st Year</i>	<i>2nd Year</i>	<i>3rd Year</i>	<i>Total</i>
*Malay	26	27	8	61
Chinese	34	27	23	84
Indian	1	2	—	3
Dusun	—	—	1	1
Melanau	2	2	4	8
Dyak	3	2	3	8
Eurasian	1	1	—	2
Burmese	—	1	—	1
Philippino	1	—	—	1
Total	68	62	39	169

*includes Government students

Through the Development Plan the Brunei Government's scheme is progressing satisfactorily whereby 20-25 Malay youths are sent for vocational training to the Trades School, being taught solely in the vernacular. The total number at present is 23 second year and 15 first year students. This is definitely a scholarship scheme and not an apprenticeship scheme. Under the five-year Development Plan, 1956 will see the maturity of this particular scheme and it is confidently anticipated that should this scheme continue, further intakes after 1956 will be equipped with sufficient English to enable them to be taught in English and not the vernacular. It may be mentioned that several boys found it very difficult to settle down in the Trades School and Hostel, being suddenly plunged into a highly organised industrial system. The majority of the boys participating in this scheme have come from country districts. On completion of their course, these boys will be awarded a bonus according to their attainment in English. They are all encouraged to learn English in Adult Evening Institutes. Details of the cost of this scheme are given in the Notes on the Development Plan.

Adult Education:

The two Government Adult Evening Schools at Seria and Brunei Town continued to function successfully throughout the year. The enrolments have been considerably higher and at the end of the year all students were examined and graded in the following grades:—

Grade I	— Primary 2 —	66 passed
Grade II	— Primary 4 —	40 passed
Grade III	— Primary 6 —	36 passed

As an experiment it was decided to hold examinations set by the Royal Society of Arts. There were 111 entries, the majority being for the subjects English for Foreigners, Typewriting and Shorthand. The results of these examinations are awaited.

At the moment the Department cannot keep pace with demands for classes in semi-urban districts.

No attempt has yet been made to start an adult literacy campaign in Malay. However, recruitment of the right type of

officer is proceeding and it is anticipated a start can be made next year.

There were 450 students attending Adult Evening Classes in English subjects during 1955.

School Feeding:

The School Feeding Scheme under the Medical Department was modified during the year as urban schools were given a vitamised drink for each child on every school day but in the country districts the usual well-balanced curried meal was served. It is intended at the end of the year to hand over this Scheme to the Education Department. Next year the whole Scheme will be decentralised whereby each Principal or Head Teacher will be responsible individually for carrying out this Scheme. \$493,970 was spent during the year and the following numbers of school children were included in the Scheme:—

Children receiving full meal each day	1,999
Children receiving vitamised drink	4,174

The guidance given by the Medical Department again deserves special praise and it is worthy of record that the majority of Head Teachers and Assistant Teachers have co-operated well and have given their service and time ungrudgingly to the welfare of all children participating in this very important Development Plan Scheme.

Medical Attention in Schools:

Medical attention continued in schools throughout the year. Preliminary stages were investigated prior to launching a scheme regarding Defective Vision. Two thousand nine hundred and twelve Mantoux Tests were carried out as part of the B.C.G. Campaign. There were 365 Vaccinations (Smallpox), whilst during the year a Dental Officer carried out a limited amount of work with 1,832 patients.

All pupils admitted to Government English Schools and students proceeding to Teacher Training Centres overseas together with students for the Trade School, B.M.P. Co., Seria were medically examined prior to admission. The total number was 260.

SECONDARY EDUCATION (ENGLISH AND CHINESE) 1955

Under 11 years	...	...	Form One (1st Year)		Form Two (2nd Year)		Form Three (3rd Year)		Totals
			B.	G.	B.	G.	B.	G.	
11 — 12	...	...	—	3					3
12 — 13	...	...	3	3	—	2		3	5
13 — 14	...	...	13	6	1	2		14	8
14 — 15	...	...	23	15	5	1		28	16
15 — 16	...	...	21	9	13	9	1	35	20
16 — 17	...	...	36	16	16	7	3	55	25
17 — 18	...	...	17	12	23	4	10	50	17
18 — 19	...	...	8	4	9	3	7	24	7
Over 19 years	...	...	1	2	5	3	7	13	9

Total Boys: 222

Total Girls: 110

ANALYSIS SCHOOL ENROLMENTS—1955—RACIAL
ALL SCHOOLS

<i>Race</i>	<i>Boys</i>	<i>Girls</i>	<i>Total on Roll</i>
Malay	2,643	905	3,548
Chinese	2,143	1,532	3,675
Indian	67	58	125
Eurasian	46	44	90
Kedayan	459	101	560
Dusun	240	97	337
Others	181	116	297
Totals	5,779	2,853	8,632

2. THE DEVELOPMENT PLAN

The Development Plan for Education entered its second year of the scheme. All schemes are now in operation with the exception of (a) Adult Literacy in Malay, and (b) the Production of Vernacular Literature.

By the end of the year approximately one third of the cost of all schemes had been spent, the largest amount being spent on new school buildings. Contracts were placed at varying times during the year for two new secondary schools, three large urban Malay Schools, and 21 country schools. By the end of the year building operations had commenced at 14 sites and the buildings are in various stages of completion. All contracts included teachers' houses and facilities for the School Feeding Scheme. The programme of providing new primary accommodation should be completed by the end of next year. The secondary schools will take longer to complete as they constitute major building projects.

The following tables together with notes are self-explanatory:—

DEVELOPMENT PLAN—SUMMARY OF COST OF SCHEMES (PART I)

Name of Scheme	Total Cost	Expenditure 1954	Expenditure 1955	Total Progress Expenditure
1. School Buildings (Primary)	\$4,236,000	309,335*	1,267,515	1,576,850
2. School Buildings (Secondary)	4,102,000	203,871	632,429	836,300
3. School Equipment (Primary)	264,000	72,000*	72,765*	144,765
4. School Equipment (Secondary)	398,000	99,200*	84,196	183,396
5. Trade School Buildings B.M.P. Co.	300,000	27,881	250,000	277,881
6. Trade School (Recurrent) B.M.P. Co.	700,000	36,368	78,767	115,135
7. Kirkby Teacher Training Scheme	150,000	—	48,817	48,817
8. Building Grants to Mission and Chinese Schools	500,000	50,000	115,000	165,000
	\$10,650,000	798,655	2,549,489	3,348,144

*Partly from Part I Estimates.

NOTE: Approximately *one third* (\$3,348,144) of the total amount of Approved Schemes totalling \$10,650,000 has been spent from August 1954 to December 31st, 1955.

DEVELOPMENT PLAN — PROGRESS OF SCHEMES 1955

<i>Scheme</i>	<i>Approximate Cost \$</i>	<i>Category</i>	<i>Notes</i>
1. Teachers' Training			
	60,000	1. Batu Lintang Training Centre	(a) Thirty-five students were being trained during the year. As this is now a 3-year course there were no graduating students this year. It is anticipated that Brunei will start its own Training Centre during 1956.
	15,000	2. Kent College, North Borneo	(b) Six women students entered the College for the first time in March 1955. All are making satisfactory progress. A further six women have been selected for entry in January 1956.
		3. Kirkby College, Liverpool, U.K.	(c) A further five students—3 men and 2 women students from Malaya—were selected by the S.E.O. in Kuala Lumpur during May 1955. There are now ten students being trained for secondment to the Brunei Service. The first output of these teachers will be in July 1956. A further five will be selected during 1956 when the scheme matures.
	12,000	4. Sultan Idris Training College, and Malacca Women's Training College	(d) There were 2 men and 2 women in training during 1955.

<i>Scheme</i>	<i>Approximate Cost \$</i>	<i>Category</i>	<i>Notes</i>
2. Scholarships			
	20,000	Overseas	(a) Colombo Plan. (Australia) One scholarship in Civil Engineering. One scholarship in Agriculture. One scholarship in Public Administration. One scholarship in Electrical Engineering. There are 8 applications for Australian Correspondence Scholarships (Colombo Plan).
	30,000		(b) United Kingdom (local funds) One scholarship in Social and Public Administration. One scholarship in Agriculture. Two scholarships in Local Government. Two scholarships in Secondary Education.
	15,000		(c) Malaya and Sarawak Three scholarships in Agriculture at Serdang. One scholarship in Teacher Training, Singapore. One scholarship in Agriculture at Kuching.
	16,000	Local (Regional)	(d) Local Scholarships (i) 5 were awarded to Malay Boys for Secondary Education in Singapore and Malaya. (ii) Four were continued for Malay Boys in St. Thomas' School, Kuching; one Chinese boy in Sibü and one Chinese girl at St. Mary's School, Kuching.

<i>Scheme</i>	<i>Approximate Cost \$</i>	<i>Category</i>	<i>Notes</i>
2. Scholarships	14,762	Educational Study Tour, United Kingdom	(c) Four selected Supervisors of Primary Education were sent to the U.K. under the auspices of the British Council in May. They returned in August. Sir Patrick McKerron acted as interpreter/guide.
3. School Buildings and Equipment	1,340,280	Primary	(a) Preparation of sites and building operations commenced during the year at 14 Primary Schools of which four were large schools in Urban Areas. Four schools with ten teachers quarters were completed. Five houses were completed for the Supervisory Staff.
	801,625	Secondary	(b) The first Phase of the new Boys Secondary School, Brunei Town, was completed with the exception of the Hostel for 120 boys which will be completed by February 1956.
			(c) Piling was completed for the new Teacher Training Centre and this project consisting of classrooms, dormitory, tutors flats, will be completed by July 1956.
			(d) Considerable earthworks and preparation of the site for the Second Phase of the new Boys Secondary School, Brunei Town, were completed. Five Temporary Quarters were completed for Regional Government English Teachers.

<i>Scheme</i>	<i>Approximate Cost \$</i>	<i>Category</i>	<i>Notes</i>
3. School Buildings and Equipment			
			(e) Sites were prepared and soil tests carried out for the new Girls High School, Brunei Town, and two houses built for Lady Education Officers. Tenders have been called for the new Government English School, Seria. A Domestic Science Centre was opened in Brunei Town.
			The following Contracts were placed during the year:—
		(a) 14 Primary Schools (Brunei District)	\$1,660,000
		(b) 7 Primary Schools (Tutong District)	728,500
		(c) 5 Quarters for Supervisory Teachers	123,100
		(d) 3 Town Primary Schools	722,464
		(a) 2nd Phase Boys Secondary School, Brunei Town	985,000
		(b) Quarters for Secondary School Teachers, etc.	85,000
		(c) 1st Phase, Girls High School, Brunei Town	258,064
			<hr/> \$4,562,128 <hr/>

<i>Scheme</i>	<i>Approximate Cost \$</i>	<i>Category</i>	<i>Notes</i>
4. Grants-in-Aid	115,000	Chinese and Mission Schools	Government Building Grants were made to the following Chinese Schools:— (a) Kuala Belait \$ 60,000 (b) Seria 10,000 (c) Tutong 15,000 (d) Labi 12,000 (e) Sungai Liang 12,000 (f) Brunei Town (R.C. Mission) 6,000 <u>\$115,000</u>
5. Expatriate Staff	100,000	Educational Officers from the U.K. and Regional Asian Staff	Building operations at the above schools were commenced either on new schools or additional units. Total expenditure to date under this Scheme was \$165,000. Two Education Officers arrived in May; one Science specialist and the other a Physical Training Specialist. Fourteen new Regional Teachers of English arrived during the year, eleven of whom were placed in local Secondary Schools and three in large Urban Malay Schools.
6. Technical Training	Buildings 250,000 Recurrent 78,767	Government participation in B.M.P. Co. Trades School	The second intake of 18 boys entered the B.M.P. Co. Trades School in May. There are now a total of 38 boys from Vernacular Schools. All boys were transferred to the new Trades School Hostel in October.

<i>Scheme</i>	<i>Approximate Cost ₹</i>	<i>Category</i>	<i>Notes</i>
7. Adult Education	11,557	Literacy in English	<p>(a) Adult English Education continued most satisfactorily throughout the year with a total number from all sources of 450. Examination results conducted by the Department were as follows:—</p> <p>Primary II — 66 Primary IV — 40 Primary VI — 36</p> <p>(b) One hundred and eleven entries for the R.S.A. Examination mainly at Elementary level were received. The largest numbers sat for English for Foreign Students, Arithmetic, Typewriting and Shorthand. Results are awaited.</p> <p>(c) Seven entries were received from the B.M.P. Co. for the City and Guilds Examinations next year.</p> <p>(d) Three successful classes in Typewriting and Shorthand were held during the year.</p> <p>(e) No start has yet been made in the proposed Malay Literacy Campaign.</p>
8. School Text-books, Visual and Aural Aids	48,270	Part I Estimates	<p>A considerable improvement was made in the supply of Text-books and equipment for both Primary and Secondary Education. This improvement will extend to Chinese Schools next year.</p>

<i>Scheme</i>	<i>Approximate Cost \$</i>	<i>Category</i>	<i>Notes</i>
9. Games, Physical Training Apparatus, etc.	9,335	Part I Estimates	Much improvement is being effected by the P.W.D. in levelling school playing fields, etc. Badminton, football and hockey equipment was supplied to many.
		Part II Development Plan	Gymnastic Equipment has been ordered to the value of \$7,000 for the use of the newly-arrived specialist in Physical Training. The usual P.T. Competitions were held in urban areas.
10. School Libraries	8,803	Part I Estimates	Over 3,000 books chosen by the British Council arrived for the Secondary Schools. Five hundred have been allocated to the Children's Section of the Kuala Belait Lending Library. A Travelling Library will start next year for which \$25,000 has been earmarked.
11. Production of Vernacular Literature	Unknown at present	Development Plan	Negotiations are proceeding for a Vernacular Publications Bureau to be started in Brunei.

Expenditure on Education during the year 1955:

The approximate total expenditure was as follows:—

(a) Part I Estimates	...	...	...	\$1,078,919
(b) Part II Estimates	...	...	...	2,549,489
			Total 1955	<u>\$3,628,408</u>

Conclusion:

The past year has been one of considerable implementation of the Development Plan. The resultant pressure of development work on all concerned with the Plan has been cheerfully and loyally accepted by all connected with the Education Department. The willing co-operation of all Heads of Departments is gratefully acknowledged; outstanding Departmental Heads have been the Commissioner of Development, the State Engineer and the State Medical Officer. Advisory Education Committees, Head Teachers and Assistant Teachers, many of whom continued to work under very trying conditions, have shown again throughout the year their splendid loyalty and enthusiasm for bringing the approved education schemes to successful fruition within the limits of the Education Development Plan.

Head of Department:

Mr. H. J. Padmore continued as the State Education Officer throughout the year.

(b) PUBLIC HEALTH

MEDICAL AND HEALTH DEPARTMENT

Introduction:

In the Annual Report of the Medical and Health Department for the year 1954, mention was made that the Annual Report for 1955 should give one a clearer picture of the work done, and that to come. This has proved true to a considerable extent, and it is hoped that the short summary of the Development Plan of the Department, which is included in this report, will assist the reader further in understanding the difficulties that have to be faced to achieve the progress that is so desirable.

During 1955 the problem of insufficient qualified staff still remained, but was not as acute as in the previous year, and towards

the end of the year adequate numbers of girls were coming forward for training, though only enough for our present needs. Housing was still a problem, but a number of building projects for the Department were in hand by the end of the year, which should help to ease this difficulty to a great extent during 1956, particularly for staff living in Brunei Town.

The main feature of note was the presentation and approval of the Development Plan of the Department. This Plan was prepared by the State Medical Officer—Dr. E. C. Vardy.

General:

The work of the Department, as before, was divided into that relating to (A) Hospitals and Dispensaries (B) Health Centres and Rural Clinics (C) Public Health as administered by the Health Department.

(A) HOSPITALS AND DISPENSARIES

The two main Government Hospitals in Brunei Town and Kuala Belait, and the two Dispensaries at Tutong and Temburong remained the only Government centres where patients could be admitted, when necessary, for treatment as in-patients. Facilities for out-patients remained the same as in the previous year with one important exception. This exception was the opening of an Eye Clinic on a temporary basis in the General Hospital, Brunei Town, and also in Kuala Belait, where cases were seen by the Ophthalmologist, who visits the State twice a year now, each visit lasting about one month. Ward accommodation was also made available for eye cases undergoing operative treatment by the Specialist. Outstation visits by Medical Officers were carried out at regular intervals whenever possible.

The figures for medical attendances for In-patients and Out-patients are as follows:—

MEDICAL ATTENDANCE

	1952	1953	1954	1955
<i>Brunei:</i>				
In-Patient	1,394	2,143	2,311	2,132
Out-Patient	30,256	35,965	27,860	30,058

Kuala Belait:

In-Patient	746	1,098	1,169	1,257
Out-Patient	32,157	45,449	35,981	36,455

Tutong:

In-Patient	69	83	261	100
Out-Patient	19,350	22,571	16,138	20,118

Temburong:

In-Patient	18	4	21	149
Out-Patient	6,200	7,986	7,820	8,148

Total In-Patients 3,638. Total Out-Patients 94,779.

There has been a slight decrease in the number of in-patients in Hospitals and Dispensaries, and a rise in the total number of out-patients treated. The increase in attendances in Temburong District is worthy of note, as the Department has had a difficult time in this area.

Numerous remote *kampongs* have been visited regularly by the Travelling Dispensaries stationed at Tutong, Temburong, and Kuala Belait, and though it is sometimes very hard work getting there, the numbers of patients treated make the trips worth-while most often.

Due to occasional bad weather which affected roads under repair, the Brunei Town Travelling Dispensary was not able to carry out its schedule regularly, though things were much better towards the end of the year.

(B) HEALTH CENTRES AND RURAL CLINICS

The Maternity and Health Centres continued to flourish, and the following comparative tables serve to show work and progress during 1955:—

HEALTH AND MATERNITY CENTRES

	1952	1953	1954	1955
<i>Brunei:</i>				
Attendance	4,108	3,482	3,250	5,316
Home Confinements	813	790	260	292

Kuala Belait:

Attendance	6,211	8,138	4,883	4,715
Home Confinements	279	3,25	395	425

Seria:

Attendance	—	—	3,485	4,872
Home Confinements	—	—	118	152

Tutong:

Attendance	525	532	561	427
Home Confinements	53	65	83	52

Brunei Kampong Ayer:

Attendance	—	—	1,431	1,583
Home Confinements	—	—	828	450

Temburong:

Attendance	—	—	404	287
Home Confinements	—	—	50	41

Sengkurong:

Attendance	—	392	503	328
Home Confinements	—	54	47	34

Muara & Sarasa:

Attendance	—	591	495	534
Home Confinements	—	24	37	38

RURAL CLINICS

	1952	1953	1954	1955
Berakas Estate	75	142	100	225
Lamunin	—	153	14	12
Baru Baru	—	130	126	93
Kilanas	—	63	93	27
Sinaut	—	50	104	397
Kiudang	—	61	30	—
Danau	—	115	105	64
Lumapas	—	50	44	241
Kumbang Pasang	—	99	59	63
Telisai	—	—	40	106
Batu Marang	—	—	62	217

SOCIAL SERVICES

95

Pengalan Batu	—	—	5	90
+ Jerudong	—	—	—	324
+ Kampong Bunut	—	—	—	230
+ Bar Bunut	—	—	—	135
+ Seradang	—	—	—	65
+ Kampong Puduk	—	—	—	103
+ Kampong Kupang	—	—	—	68
+ Kuilap	—	—	—	13

+ New Clinics opened in 1955.

SCHOOL VISIT ATTENDANCE

	1953	1954	1955
Brunei	2,332 pupils	3,673 pupils	831 pupils
Rural Area	34 pupils	223 pupils	—

TRAVELLING DISPENSARIES

	1952	1953	1954	1955
Brunei (Riverine)	1,143	1,446	1,968	1,911
Kuala Belait	1,325	3,208	3,621	4,091
Tutong	497	1,995	2,129	2,522
Temburong	1,268	1,180	1,217	2,258
Brunei (Road)	8,822	9,386	10,609	5,109

HEALTH VISITING

	1952	1953	1954	1955
Brunei	1,715	3,146	4,053	3,203
Kuala Belait	2,096	2,244	2,614	812
Seria	—	—	—	1,347
Tutong	336	3,054	1,762	2,987
Temburong	100	80	152	1,842

TOTAL ATTENDANCES FOR THE STATE

	1952	1953	1954	1955
In-Patients	2,227	3,328	3,760	3,638
Out-Patients	87,963	111,971	87,799	94,779
Births	2,809	2,903	3,332	3,600
Health Centres	14,639	25,807	28,303	22,019

Total Attendances 124,036.

One Clinic at Kiudang had to be discontinued due to poor attendances, but several new Clinics were opened during the year (as shown on page 95). At first there appeared to be a drop in the figures for the *Kampong Ayer* Clinic in Brunei Town, as compared with those given in the Annual Report for 1954, and this was investigated. It has been found however that there has been a gradual increase in the work carried out by this Clinic, despite the disparity shown, and it is encouraging to note that the people living on the Brunei River are now realising more and more the value of modern treatment.

The Health visiting figures in Kuala Belait District are now divided separately into those for the towns of Kuala Belait and Seria.

School visit attendances were not maintained as such due to shortage of staff. However vaccination teams visited school during the year, and a report on their work is given later. Regular visits were also paid by the Dental Officer based at Brunei Town.

(C) PUBLIC HEALTH AS ADMINISTERED BY THE HEALTH DEPARTMENT

The Public Health Section showed little change, and the situation here will remain difficult for the State Medical Officer until such time that a Health Officer is appointed. This is catered for in the Development Plan. Meanwhile the State Medical Officer continued to run this Section personally.

Detailed Progress Reports:

(A) HOSPITALS AND DISPENSARIES

I. GENERAL HOSPITAL, BRUNEI TOWN

During the year a new laundry house was completed, and also a new incinerator shed. The laundry equipment had not arrived by the end of the year, but the two incinerators were functioning satisfactorily. The walls of the Hospital appeared to have settled now, but falling tiles are still a problem, which we hope will be solved soon. Storage space has been a major problem, and this will continue until the new State Medical Store is built. After thorough disinfection, the Tuberculosis Annexe was converted to an Eye Ward for the visit of the Ophthalmologist.

During the year the Electrical Department erected a sub-station in the Hospital area, and this has altered the difficulties experienced previously, regarding the supply of electrical power. The total bed strength of this Hospital is 140.

Special Departments: (1) *Dental Department*—This Department is still expanding and is based in the General Hospital. However, with the arrival of a second Dental Officer in December, one Dental Officer will be posted eventually for permanent duty in Kuala Belait District. Trained junior staff are still required before the Department can really get down to work, though it has managed very well up till now. Schools were visited regularly and a considerable amount of dental work was carried out. Dental treatment is now welcomed by school-teachers and pupils, who show great interest and are very co-operative. Routine visits were paid monthly to Kuala Belait District. A certain amount of out-station travelling was also carried out by the Dental Officer.

(2) *Laboratory*—The work has increased in this Department which is under the charge of the Chief Laboratory Technician. It will be seen that the Laboratory covers a great deal of ground in its activities.

(3) *X-Ray Department*—Work continued as usual, with a slight decrease generally. The mass radiography machine has not been ordered yet, pending improvement in the staff situation. There is one portable machine and one large machine in the Hospital, and the work is managed by one trained X-Ray Technician in charge of the Department, who has received his training abroad.

(4) *Physiotherapy*—New machines arrived during the year, and this Department is fairly well equipped now, and treatments include Short Wave Therapy, Faradism, Galvanism, Ultra-violet Light, Massage, Exercises, etc. The Physiotherapist also deals with Occupational Therapy in the Hospital, which has proved most useful. Patients now make various types of toys, pictures, etc. and some of the exhibits were placed on view at the Agricultural Show held during the year.

(5) *Teaching Unit*—Training of staff continued till September when there was a break due to the departure of the Sister

Tutor on leave. Those receiving training include Probationer Hospital Assistants, Probationer Nurses, and Probationer Assistant Nurses. The following numbers were still undergoing tuition in the school at the end of 1955, and will resume lectures and practical classes when the Sister Tutor returns:—

Probationer Hospital Assistants	12
Probationer Nurses	6
Probationer Assistant Nurses	10

The first two groups receive similar training lasting three years, but the Assistant Nurses receive a simplified course of lectures and training lasting two years.

A significant step forward in the training of staff was the meeting in September between Matrons and Sister Tutors of Brunei, North Borneo and Sarawak, followed by a meeting of Heads of Medical Departments of these territories. The main object of these meetings was to try and standardise training in the three territories, and to work for recognition of such training by the General Nursing Council in the United Kingdom, even though this will take many years. On the whole, the school had a fairly successful year.

II. GOVERNMENT HOSPITAL, KUALA BELAIT

No new construction was undertaken during the year, though preparations were in hand to expand the Hospital so as to include beds for Tuberculosis cases, and the plans had been prepared by the end of the year. The staff problem in Kuala Belait still remains difficult, though matters will ease considerably once a Nurses Home is established there. The total bed strength is 30.

Special Departments:

(1) *Laboratory*—This was under the charge of a Laboratory Technician, and there was an increase in the work carried out during the year. The work done also covered the Seria Clinic.

(2) *X-Ray Department*—There is one portable machine in the Hospital, and the work is managed by a trained Hospital Assistant, who has received a certain amount of tuition locally in X-Ray work. The work in Kuala Belait District showed a considerable increase on the figures for the previous year.

III. TUTONG DISPENSARY

Preparations were in hand by the end of the year to start work on the new Dispensary site, which lies west of the Town. The bed strength of the present Dispensary is eight.

IV. TEMBURONG DISPENSARY

There was no construction undertaken here, though this Dispensary will be expanded eventually. The bed strength is eight.

(B) HEALTH CENTRES AND RURAL CLINICS

BRUNEI TOWN AND RURAL AREAS

The work here has been divided up between the land Health Clinic situated in the General Hospital Brunei Town, and the *Kampong Ayer Clinic*, with the land Clinic also looking after Rural areas. A considerable amount of work has been carried out in both Clinics despite difficulties regarding staff and transport.

(a) *Land Clinic, Brunei Town*—While maintaining and increasing the town clinic attendances, seven new Rural Clinics have been established at Jerudong, *Kampong Bunut*, Bar Bunut, Seradang, *Kampong Puduk*, *Kampong Kupang* and *Kuilap*. The staff shortage, however, made it necessary to discontinue the school hygiene inspections early in the year, but it is hoped to resume these in 1956. The present health visiting staff for Brunei Town (excluding *Kampong Ayer*) and Rural areas consists of one Health Sister, One Trained Nurse, and One Trainee Assistant Nurse. Seven Midwives manage the work in the Brunei Town and *Kampong Ayer* and it is proposed to transfer four of these Midwives to work in *Kampong Ayer* exclusively. Rural Midwives continued to work at Tutong, Sengkurong, *Kampong Sinaut*, and Sarasa. Two pupil Midwives were employed during the year. The bad road conditions often prevented visits to Lamunin and *Kampong Kupang*, and Danau and Baru Baru have not provided the good Clinic attendances hoped for in 1954. The issue of milk to ante-natal mothers in Brunei Town Clinic continued throughout the year and has proved of considerable value. Nestle's continued to contribute a monthly allowance of milk, and this generosity is much appreciated. There is a similar allowance of milk from the State, and all this is supplied free to the children of needy families. The Red Cross allowance of \$30.00 per month was discontinued by request during the year, as it was felt that

the State could take over this responsibility, thus leaving the Red Cross more funds for other purposes.

(b) *Kampong Ayer Clinic*—This Clinic is situated in the very large *kampong* on the river. The housing conditions of the people vary enormously, some of the houses being of good size and open to fresh air, while others are completely hemmed in by other houses. The majority of the women still dislike and usually refuse to attend or be admitted to Hospital. However a large amount of home visiting was carried out by the District Travelling Nurse with the aid of an Assistant Nurse, and the work of this Clinic has increased gradually. The Clinic was visited once a week by a Lady Medical Officer from the General Hospital. A new medical launch, under the control of the State Marine Department was introduced towards the end of the year to see whether transport difficulties for both staff and patients could be improved, and a final report is awaited with interest.

KUALA BELAIT AND SERIA

Each has a Health Clinic, and again a considerable amount of work was carried out at each centre, in spite of the lack of trained staff. The work is managed by four trained Midwives, and two pupil Midwives were engaged during the year. There are no Rural Midwives in the Kuala Belait District yet. Both Clinics are under the charge of One Health Sister, who spends roughly half her time at each Clinic. The numbers of attendances decreased slightly in Kuala Belait, but increased in Seria.

TRAVELLING DISPENSARIES

These are based at Brunei Town, Tutong, Temburong, and Kuala Belait, and travelling is by river generally, except in Brunei District. Most of the State was covered by these Dispensaries, and in addition the larger *kampongs* were visited by a Medical Officer, when possible. The Brunei Town Dispensary figures show a drop for the year, and it is hoped that this indicates an improved state of health among the *kampongs* visited. No rearrangement of the previous system was contemplated during the year, though it was arranged that the Dispensaries work to a fixed schedule known to *Penghulus* and *Ketuas* of the area to be visited, who informed the people there. Plenty of time was allowed in case of a breakdown, but boats and engines behaved very well

during the year, thanks to the supervision of the State Marine Department.

(C) PUBLIC HEALTH AS ADMINISTERED BY THE HEALTH DEPARTMENT

This may be divided into two main Sections corresponding to the Eastern and Western Districts of the State with the Tutong river acting roughly as the dividing line. The Health Department is under the direct control of the State Medical Officer.

EASTERN SECTOR

The main work here was carried out in Brunei District, and visits were also paid to Tutong, Muara, and Temburong Districts. The work was managed by the following staff:—

Health Inspector	1
Anti-Malarial Assistants	3
Health Mandors	5
Labourers/Oilers	52
Driver	1

(1) *Conservancy and Scavenging*—These were maintained as before and in addition, the Municipal Department of Brunei Town purchased a conservancy truck, which is capable of desludging tanks, and has proved most useful.

During the period under review, an average of 383 buckets were emptied daily and the amount of household and trade refuse removed and disposed of daily was 1,260 cubic feet. All refuse was transported to the dump located at Mile $\frac{3}{4}$ *Jalan Tutong*, where land reclamation is in progress. Oiling and earth cover were managed at the dump by three Health Department personnel. During the year an area of approximately 289 feet long x 114 feet wide was reclaimed.

(2) *Slaughter Houses*—The conditions of the existing slaughter houses remained unsatisfactory. It is anticipated that the new slaughter houses for pig and buffalo will be ready for use sometime early in 1956.

Ante-mortem inspections of all animals for slaughter were carried out daily. The total numbers of animals slaughtered during the year were as follows:—

Pig	881 head
Buffalo	324 head
Other cattle	8 head

(3) *Drainage*—The construction of concrete drains within the Municipal area progressed rapidly. A total of 59,730 yards of earth drain was maintained by the Health Department gang in the Kumbang Pasang area and the outskirts of the Municipal area.

Subsoil Drains—Drainage of a ravine adjacent to Australian Ridge was improved by the use of subsoil pipes by the department during the months of May and June.

(4) *Infectious Diseases*—The following diseases were notified:—

A Dysentery	3
Chicken Pox	5
Typhoid	1

Investigations and appropriate preventive measures were carried out in the above cases. On the instructions of the State Medical Officer, a total number of 888 persons were vaccinated against smallpox, in certain *kampongs* during the year.

(5) *Licensed Premises, Hawkers and Stalls*:—

Hawker	49
Food Shop	8
Coffee Shop	21
Bakery	9
Vegetable	19
Fish	4
Chekor	10
Coffee Stall	2
Rice Mill	1
Sago Mill	1
Pork Butcher	2
Buffalo Butcher	8

Laundry	2
Ice Cream	4
Billiards	4
Lodging House	2
Aerated Water Factory	3
Barber	4
Cold Storage	1

In connection with the issue of the above licences, a total number of 155 persons received T.A.B. inoculations, 238 persons had their stools examined and the sputum of 249 persons was examined for Tubercle Bacilli.

All licensed premises and hawkers were inspected regularly.

(6) *Water Supply*—Monthly inspections were made of the following sources of water supply:—

Tasek Reservoir	Satisfactory
Tumasek Reservoir and Filtration Plant	Satisfactory
Residency Road Plant	Satisfactory
K. Pasang, Australian Ridge Plant	Water was sampled and found unsatisfactory
Muara Reservoir	Satisfactory
Tutong Reservoir	Not satisfactory

A filtration plant is being installed at *Jalan Tasek*, and it is anticipated that filtered water will be available for general use sometime next year.

(7) *Housing*—The year saw the completion of 20 Second-Class Shophouses—10 located along *Jalan Tasek*, and 10 at *Muara*. Demolition of temporary shophouses, built immediately after the war, was carried out.

Ninety-four Government buildings were completed during the year.

Muara—Visits were carried out monthly by the Health Inspector. Ten Second Class Shophouses have been completed and occupied. Two Health oilers have been employed permanently in this area. Sanitary conditions are fairly satisfactory.

Tutong—Visits were carried out monthly by the Health Inspector. Sanitary conditions are fairly satisfactory. There are two Health labourers here under the supervision of the Hospital Assistant-in-charge.

(8) *Rat Eradication*—Forty-nine rats of the following types were caught and destroyed:—

Rattus rattus	28
Rattus norvegicus	19

(9) *Port Health Work*—With reference to Notification No. 249/54 dated 29.12.54, inspection of vessels from foreign ports was reduced to a small figure. The total number of Optional Bills of Health issued was nineteen.

Inspection—Inspection of imported animals was carried out as usual:—

Pig	1,487 head
Goat	219 head
Buffalo	843 head
Poultry	343 head
Cats	3 head
Dogs	2 head
Birds	6 head

The above were imported mainly from neighbouring territories.

WESTERN SECTOR

The main work was carried out in the towns of Seria and Kuala Belait, with the aid of the following staff:—

Senior Health Inspector	1
Prob. Health Inspector	1
Anti-Malaria Assistant	1
Mandors	2
Oilers	11
Labourers	8

(1) *Conservancy and Scavenging*—These were maintained as before with gradual improvement. The total volume of refuse removed daily is as follows:—

	<i>Household Refuse</i>	<i>Trade Refuse</i>
Kuala Belait	580 cu. ft.	1,680 cu. ft.
Seria	720 cu. ft.	2,168 cu. ft.

Refuse collection was carried out by a gang of 14 men, and 5 scavenging lorries. Gas incineration was employed for disposal of refuse during the first half of the year. On 9th July, 1955, controlled tipping commenced at Mile 5½ *Jalan Seria*. A daily supply of 3 truck loads of sand was delivered by the Public Works Department making a total of 584 loads of sand of which 65 loads were paid for by the Medical and Municipal Departments. An area of approximately 500 sq. yards was reclaimed.

Action was taken to enforce the use of a standard type of dust-bin in all houses within the Municipal areas.

(2) *Slaughter Houses*—There was only one slaughter house (Buffalo) located at Kuala Belait, and this was unsatisfactory. In December funds were made available for repairs and lime-washing, and the improvement was quite noticeable. No pig slaughter house as such exists in the area.

The total numbers of animals slaughtered during the year was as follows:—

Pig	3,827 head
Buffalo	954 head

(3) *Drainage*—In Kuala Belait Municipal area, concrete drains have been constructed for the new shops and their immediate surroundings. A few new concrete drains have been made in other parts of the Municipal area, but much remains to be done still.

In Seria, the position is not so good although concrete drains have been provided for the fronts of shops. However, there were no drains constructed for the back lanes which are more important, from the health point of view, and it is hoped that these will be completed early in the new year.

(4) *Infectious Diseases*—During the year there were two cases of Paratyphoid Fever notified, and also one case of Diphtheria.

(5) *Licensed Premises, Hawkers*—A total of 449 licences were issued during the year. These are as follows:—

<i>Type of Licence:</i>	<i>K. Belait</i>	<i>Seria</i>	<i>Well 22</i>
Coffee	22	25	4
Coffee and Eating	26	31	4
<i>Market Stalls:</i>			
Fish	18	32	—
Vegetables	14	29	—
Coffee	2	—	—
Poultry	15	20	—
<i>Hawkers:</i>			
Bread	2	1	—
Ice-Water	—	3	—
Sundry	13	15	3
Chindul	—	—	1
Cake	1	—	1
Food	7	18	1
Tawhoo	1	1	1
Vegetables	80	4	2
Fruit	17	31	2
<i>Other Licences are as follows:</i>			
Cloth Hawker	5	4	—
Cinema	1	1	—
Billiard	1	3	—
Crackers	4	13	—
Lodging House	2	1	—
Laundry	1	—	—

All food licensees and their assistants were medically examined. Regular inspections have been made of all licensed premises and hawkers.

(6) *Water Supply*—The shortage of an adequate water supply constitutes the greatest health problem in the two Municipal

areas. The B.M.P. Co., Ltd., has an excellent piped water service, and in certain instances, this service is extended to Government houses and public places. Generally, rain water is stored and used. The construction of a piped water supply by the State is still in progress, and will be a great boon to the people in these areas.

(7) *Rat Eradication*—The following species were caught and destroyed:—

Rattus rattus	510 head
Rattus norvegicus	29 head

Two rat-catchers were employed, one in Kuala Belait and one in Seria.

(8) *Port Health Work*—

No. of foreign incoming vessels granted pratique	54
No. of Bills of Health issued	8
No. of Health Certificate issued	12

Inspection of imported animals was carried out as usual:—

Pig	6,009 head
Buffalo	290 head
Goat	64 head

Other State Wide Services of the Medical Department:

(1) *State Medical Store*—The year was notable for the large amount of special equipment ordered for the Department. By the end of the year, most of this had arrived and varied from electrical incinerators, and electrical washing equipment for vehicles, to the latest medical and surgical equipment, and up-to-date reference books on a variety of medical subjects. The additions have proved extremely useful. Stores and drugs were dispatched to various parts of the State as and when necessary.

(2) *School Feeding Scheme*—The scheme continued to flourish, and was handed over to the State Education Officer at the end of the year. The State Medical Officer still remains the medical adviser in the scheme. In April steps were taken to change the usual routine, and it was decided that rural schools should continue as before, and be provided with meal, but urban schools would be supplied with a fortified drink only, and no

meal. This has worked well, and by the end of the year the following numbers of schools were in the scheme:—

Urban schools 12 with 4,174 children

Rural schools 32 with 1,999 children

(3) *State Malaria Eradication Campaign*—This comprises residual spraying of the internal walls of houses in the rural areas only. Two sprayings were completed during the year. The first spraying began on 10th January, 1955, and was completed on 20th April, 1955. The second spraying began on 13th June, 1955, and was completed on 15th December, 1955. The total numbers of days work were 79 days and 95 days respectively.

Two Anti-Malaria Assistants and 8 oilers, one Driver and one Landrover were engaged in the project.

The following figures indicate the work done:—

<i>First Spraying</i>	<i>Second Spraying</i>	<i>Remarks</i>	
1. No. of villages sprayed 124.	No. of villages sprayed 152	Increases	28
2. No. of houses sprayed 2,176	No. of houses sprayed 2,550	Increases	374
3. Population directly protected 14,066	Population directly protected 15,532	Increases	1,466
4. Area of operation 350 sq. miles	Area of operation 500 sq. miles	Increases	150 sq. miles

The increases for the second spraying were due to the inclusion of some Belait rural districts, which were not sprayed before. Efforts were made to reach all houses and *kampongs* in the State. There were instances, where the spraying gang had to walk along jungle paths for 3 to 4 hours before reaching a village, chiefly in the *Ulu Belait* area.

(4) *Vaccination Campaigns*—During the year a team carried out a vaccination campaign against Smallpox. This disease has not been reported in the State for very many years now, but it was felt that a preventive campaign in certain *kampongs* was merited nevertheless. A total number of 6,146 vaccinations were carried out, and the campaign covered 79 *kampongs*.

School children in Brunei District were Tuberculin tested using the Jelly Patch test, though unfortunately the negatives were

not given B.C.G. immediately. However during 1956 Jelly Patch tests will be repeated on these negatives and then B.C.G. given when indicated. What has been done already constitutes a form of Tuberculin survey which should give us some idea of the conversion-rate. Two thousand nine hundred and twelve pupils in thirteen schools were tested and there were 2,537 positive and 375 negative readings. B.C.G. continued to be given to most new-born babes in town areas.

(5) *Development Plan*—This was prepared by the State Medical Officer—Dr. E. C. Vardy, and was approved by State Council in October, 1955. Very briefly the Development Plan provides for an expansion of the facilities offered by the Medical Department in urban and rural areas. For the former there will be a new General Hospital and Polyclinic at Brunei Town, and a General Hospital and two Polyclinics for Kuala Belait and Seria. In addition there will be one Tuberculosis Hospital for the State, sited at Brunei Town. Rural areas will be provided with nine Rural Dispensaries, and five additional Ante-natal Clinics, the former being staffed by a trained Hospital Assistant and Midwife, and the latter under the charge of a Midwife only. Along with the above, there will be various preventive campaigns undertaken against Helminthiasis, Tuberculosis, Venereal Disease, etc. The plan arranges for the eventual provision of modern medical aid in the form of advice and treatment for all people living in the State.

Conclusion:

(1) *Incidence of Disease*—As in the previous year the main diseases of importance were Tuberculosis and Helminthiasis. Both of these will remain problems for some time to come, though it is hoped that this time will be shortened considerably once the Development Plan gets under way. There was a fair amount of gastro-intestinal disease reported during the year, and it must be confessed that this probably included a certain amount of helminthic infection which was not diagnosed.

Other respiratory infections were numerous too, a large number due, no doubt, to an influenza epidemic which occurred in the State towards the end of the year. Skin conditions requiring treatment were also fairly common, and there were the usual mild outbreaks of measles and chicken pox. Venereal disease

showed a slight reduction when compared with the figures for the previous year. Finally there was a decline also in the number of reported cases of Malaria, from 2,728 in 1954 to 1,369 for the year under review, a drop which is due in no small measure to the State Malaria Eradication campaign.

(2) *Administration*—During the year the offices of the State Medical Officer and of the Health Department in Brunei Town were situated on the ground floor of the old Nurses Home. Later in the year the State Medical Officer moved into the adjoining kitchen block, which had been converted for his use. Conditions were somewhat trying for all, and it is hoped to remedy this state of affairs during 1956. The staff have continued to work hard and well, and the general atmosphere has been good.

There has been close liaison with the Medical Department of the British Malayan Petroleum Company Limited, and the Company continued to manage the Government Tuberculosis Ward situated in their Hospital at Kuala Belait, for the whole year. As before this Hospital undertook the treatment of all emergencies sent there by the Government Hospital in Kuala Belait, where facilities are limited due to shortage of staff and space. These services by the Company have been much appreciated.

During the year the following visits were paid to the Medical Department:—

Dr. W. G. Evans (D.M.S. Sarawak)	1. 3.1955
Miss M. Chalmers	27. 4.1955
Dr. J. H. Strahan (W.H.O.)	27. 4.1955
Dr. R. Dickie (D.D.M.S. Sarawak)	7. 4.1955
Dr. W. W. Yung (W.H.O.)	17. 5.1955
His Excellency the High Commissioner Sir Anthony Abell	9. 8.1955
The Secretary of State for the Colonies The Right Honourable Mr. Alan Lennox-Boyd	9. 8.1955
Dr. J. Clapham (D.M.S. North Borneo)	26.10.1955

This report is brought to a close now with a word of thanks to numerous officers outside the Medical Department who have

assisted considerably in various ways in easing the task of administration within the Department and who have contributed towards the progress shown in this report.

(c) HOUSING AND TOWN PLANNING

During 1955, 27 Government Quarters were erected in the Belait District and in the Brunei District. In addition, well over 300 private buildings were constructed in the State, despite this, there was a considerable shortage of houses in Brunei. The figures quoted above do not include 270 dwellings constructed by the British Malayan Petroleum Company for their own staff.

The rapid development in the State has made it necessary to revise ideas on town planning. An attempt is being made to obtain the services of a Town Planner and pending his arrival, no finalization of Town Plans has been made in Brunei Town area.

Brunei Town. Ten small shop houses were completed at Tasek and the old temporary Bazaar of Brunei Town was demolished. The land left by the demolition of these temporary shophouses has been alienated for commercial purposes and it is anticipated that steps will be taken during 1956 to construct five blocks of offices and some seven shops. In order to alleviate the acute housing situation, an area of some 7 acres at Tongkadeh has been laid out for Government houses and it is anticipated that before the end of 1956 three blocks of flats and 60 quarters will have been completed.

Muara. Ten shophouses are under construction and these should be ready for occupation early in 1956.

Belait. Consolidation of the zones created in the Municipal Board areas of Kuala Belait and Seria in 1954 took place in 1955, and the alienation of land in the two areas took place in accordance with this zoning. In November, the Seria Municipal Board area was extended to include the area zoned for the resettlement scheme of the squatters in the Well 22 area in the Oilfields, and to include also the area in which the new Roman Catholic Church and Mission School are situated. The proposed Old Persons' Home for the district will also be sited in this area.

The new Customs House in Kuala Belait was duly completed during the course of the year and was officially opened by His

Highness the Sultan on the 26th November, 1955. It has not yet been possible to utilise the godown space in the new building, as access to the wharf in front of the new Customs House has not yet been completed, but it is hoped that full use of the new Headquarters will take place in the early part of the New Year.

Forty-two second-class shops are under construction in the Seria Municipal Board area and completion is expected in the early part of 1956. When this has happened, the derelict old shops in Seria will be dismantled, and already the old market in Seria has been removed with the completion of the very fine new market in Seria which opened on 11th November, 1955. It is hoped to commence work on the new market in Kuala Belait in the early part of 1956.

Sites have been chosen for a new Administration Headquarters in Kuala Belait, a new Post Office, and a Town Hall, and work should start on the new Post Office (which is an urgent priority) in the very near future. Work on the other projects is limited by capacity.

Work has started on the extension and improvement of the District Office, Court House and Post Office in Seria, and should be completed during 1956. A Town Hall on a smaller scale than in Kuala Belait is also planned for Seria. A good class hotel is still non-existent in the district, but plans have been approved for what appears to be a very pleasant hotel on *Jalan McKerron* in Kuala Belait, and it is hoped that work will start in the early part of the New Year. The Public Works Department continued its extensive programme of providing concrete drains and road metalling, and a storm drain completed in Kuala Belait during the course of the year has been of great advantage in draining the area which it serves. Some urgent work in the way of concrete drains and road metalling is required in the New Year in the Seria Municipal Board area.

Plans have been completed for slaughter houses separately for pigs and for cattle both in Kuala Belait and in Seria, and it is confidently hoped to see some work take place in this connection in 1956.

The resettlement of the dwellers along the River Belait water front near the mouth of the river in Kuala Belait has commenced

during the course of the year, and will it is hoped to be completed in 1956. The dwellers have been given amenable sites in a residential area in Kuala Belait near the town centre. In Seria difficulties in the resettlement of the squatters from the Well 22 area have been encountered in reclaiming land, but timber and undergrowth have now been cleared, sandfilling will take place shortly, and actual work on construction of new houses for Phase I of the scheme should take place very soon. Phase II of the scheme which will move squatters into an area which is under tall timber is unlikely to be implemented until 1957.

New and well equipped pork markets are now in operation in both Kuala Belait and Seria. It is hoped that a cooked food market will be constructed in both Kuala Belait and Seria during 1956, and it is hoped that this will remove from the streets a large proportion of the current hawkers.

Work proceeds on the river wall along a large stretch of the water front in Kuala Belait and work is well under way in constructing the new enlarged wharf in Kuala Belait.

Disappointment has been felt in the implementation of the scheme to provide a piped water supply to Kuala Belait and Seria, but steps have now been taken to expedite the completion of the scheme, and there is little doubt that water in good quantities will be available to both Municipal areas before the end of 1956.

A scheme to provide a properly reticulated gas supply to both Municipal areas has been submitted to the State Government but owing to difficulties of providing equipment it is not likely that the scheme will be implemented at an early date.

Arrangements were completed during the course of the year to purchase electric poser from the B.M.P. Co. Ltd., and in the not too distant future the supply of electricity to both Municipal areas should be more than adequate and reasonably cheap.

Work is under way to construct the new Malay Schools in both Kuala Belait and Seria and these buildings should be ready by the middle of 1956. There has been an unfortunate delay in proceeding with the new Government English School in Seria, but it is hoped that this will be rectified in the New Year. The

new Noxious Trades Zone in Kuala Belait has taken shape and land has already been alienated in this area along its new access road for several industrial purposes.

Land was alienated in the latter part of 1955 in Seria for the construction of an Anglican Mission School.

A very extensive programme of sandfilling was carried out by the Public Works Department in both Municipal areas during the course of the year, and residents in the old Municipal areas are still able to have their private land sandfilled at a cost subsidised up to 90% by the Government. Development in new areas in the district is impossible without sandfilling to reclaim swamp land, and in the latter part of the year additional money was provided by the State Government to allow such reclamation to take place. Land applications in this area however will not be subsidised by Government in the matter of sandfilling.

The lack of hotel accommodation in Kuala Belait was aggravated on the 13th December, 1955, by the unfortunate burning down of a large portion of the accommodation of the Government Rest House in Kuala Belait. B.M.P. Co. completed a hotel in Seria for the use of its own personnel.

The flooring of the new bus station in Kuala Belait was completed during the course of the year and in the New Year a small building will be erected in the station to provide shelter for passengers and busmen. Taxis will also be parked in this station. It is hoped to proceed with work on the Seria station in 1956. New parking arrangements for private cars were implemented in Kuala Belait during the course of the year and have proved more than satisfactory. Seria presents more of a problem, but it cannot be said that parking arrangements there are unsatisfactory.

The area has continued to be served adequately with open spaces and in Kuala Belait, the main *padang* has been improved by the addition of dressing rooms for participating sports teams. Preparation of the new *padang* in Seria has commenced, and it should not be long before a useful *padang* in the Seria Municipal area is available to the public.

Assessment rates continued in the district at the same level, and several land holders who had not previously paid assessment

as they were outside the Municipal area paid assessment for the first time with the inclusion of their lots in the extended Municipal areas. The maximum rate for assessment remains at 12% of the estimated annual value of the property, but this is levied only where all Municipal services are provided, and the average assessment rate remains at approximately 6 or 7 per cent, of the annual value.

(d) SOCIAL WELFARE

The following Social Service Organizations are active in the State:—

Girl Guides

Boy Scout Association

British Red Cross Society

Community Service Council (Belait).

The Community Service Council has done very useful work co-ordinating the Social Service and Community Service activities in the oil fields. It is intended to support the Council by a generous grant and during 1956 will erect and run a home for old persons and T.B. patients whose chances of cure are remote.

The Rotary Club which had been started in 1954 unfortunately went into a state of suspense in 1955.

A State Religious Custom and Welfare Office caters for the occasional case of hardship and small pensions are paid to those who are disabled and who are in need. It is necessary, however, to point out that the Malay, Dusun, Murut and Iban social structures are such that applications for assistance are rare. Members of the family consider it their responsibility to take care of relatives who are in need and cases have occurred in which an offer of assistance has given genuine offence to those whom it has been offered. In some cases the micro-community automatically accept responsibility where aid is beyond the resources of the family. A highly organized Social Welfare Organization is therefore unlikely to be of much use at present, but the changing structure of local society may necessitate far more attention being devoted to this subject in the next decade.

(e) PENSIONS SCHEME

In the opinion of Mr. E. W. Barltrop, Labour Adviser to the Colonial Office, who visited the Pension Department in October, 1955, the State Pensions Enactment (No. 10 of 1954; approved on 23.12.54) is unique as being the first to introduce a pension scheme in a territory peopled largely with illiterates. It provided non-contributory pensions and allowances without a means test for:—

- (i) Elderly persons aged 60 years and over at the rate of \$20 a month.
- (ii) Blind persons aged 15 years and over at the same rate, with similar allowances for their adult dependants, plus \$10 a month for dependants under 15 years of age, subject to a maximum payment of \$100 per month in respect of any one blind person.
- (iii) Dependants of—
 - (a) lepers receiving treatment in an approved settlement;
 - (b) lunatics detained in any mental hospital or committed to the care of any relative or friend under the terms of the Lunacy Enactment at the rate of \$20 per month for adults, and \$10 per month for a dependant under 15: subject to a maximum payment of \$100 per month in respect of any one leper or lunatic.
- (iv) Disabled persons (not yet in operation).

All these pensions are available to all races, subject to a residence test.

The Pensions Adviser, Mr. H. A. Mck Billings, was appointed the first Controller of Pensions, and for the first year of its working the Pensions Office was placed under the aegis of the Commissioner of Development.

Surveys made in 1954 had shown the Pensions Adviser that it would be impracticable to introduce in Brunei any system of payment based on the English model that involved the production of order books or postal drafts at post offices, because of (i) the illiteracy of most of the population (ii) that fact that there were few post offices with facilities for handling the volume of cash

involved, and (iii) it would have been unreasonable to expect elderly people, possibly disabled as well, to undertake long and arduous journeys to receive their pension. At the same time, it was desired to arrange that every payment should be under control and that receipts should be obtained at all stages.

After consultation with the District Officers, it was decided to use approved headmen to distribute the money and to report changes of circumstance. Although not all of these men could read or write, local assistance could be counted upon.

No pension scheme can operate without forms and the Brunei one is no exception. They were kept as simple as possible and practical demonstrations of their use, and how to take fingerprints, were arranged at each District Office with the full co-operation of the District Officers. In actual practice the headmen have carried out their duties surprisingly well. Disabled pensioners have the money taken to their homes; in some districts the pensioners assemble at a convenient central point, and a kind of "pension parade" takes place amid the exchange of local gossip.

With the introduction of the Old Age Pension in April, 1955, with arrears back to 1st January, 1955, the pension scheme achieved popularity almost overnight. As Registration of Births did not commence until 1922, some kind of an alternative evidence of age had to be relied upon, and use was made of the rough estimates of age made when Identity Cards were issued in 1949/50, supported by statement by responsible persons. Experience showed that these estimates were often inaccurate, but they did provide a basis to work on. The existence of duplicate Registration records enabled the bulk of the application forms for this pension to be prepared in the Pension Office before the appointed day. For a few weeks there was a rush of would-be pensioners hotly disputing the ages recorded on their identity cards, where these indicated them to be less than 60 years of age, and considerable strain was put on the medical officers by the sudden need for medical examinations.

On 1st July, 1955, Pensions for the blind and their dependants, and for the dependants of lepers and of lunatics under treatment in Kuching were put into payment. One blind man

with a wife and 6 children receives the maximum pension of \$100 a month. Only one kind of pension may be awarded in respect of any one person. An elderly blind man, for example, may draw the old age pension or the blind pension, whichever is the more valuable to him, but not both. For this reason, the number of blind pensions awarded does not represent the full number of blind persons in Brunei.

The Enactment provides a right of appeal by unsuccessful claimants to the Sultan in Council. An Appeal Committee was set up and had its first meeting on 11th October, 1955. Alternative evidence of age or residence is considered; 19 appellants were successful out of the 53 who were heard in 1955.

An Advisory Committee of local residents, representative of each district and of the main races, was approved by the Sultan in Council during the year. Their duties will be to advise the Controller of Pensions on any matters arising from the working of the Pensions Enactment.

The Brunei Pension Department became a member of the International Social Security Association during the year and was represented by a small exhibit at an exhibition arranged in Mexico City in connection with the XII General Meeting of the Association in November-December, 1955.

Requests for details of the Brunei Pensions Scheme were received from the Commissioner for Labour, Malaya; the Secretary for Social Welfare, Singapore, and from the Director of the Federal Social Security Institute, Yugoslavia.

PENSIONS DEPARTMENT

PENSIONS AND ALLOWANCES AWARDED IN 1955

<i>Type of Pensions</i>	<i>(a)</i>			<i>Number of</i>	
	<i>Jan.-Nov.</i>	<i>Dec.</i>	<i>Total</i>	<i>Pensioners</i>	<i>Dependants</i>
	\$	\$	\$		
<i>Old Age Pensions</i>					
Brunei Town	303,960	27,500	331,460	1,370	—
Kuala Belait	89,530	8,400	97,930	410	—
Temburong	32,460	3,220	35,680	151	—
Tutong	90,860	8,500	99,360	432	—
	<u>\$516,810</u>	<u>\$47,620</u>	<u>\$564,430</u>	<u>\$2,363</u>	—

	<i>July-Nov.</i>	<i>Dec.</i>	<i>Total</i>	<i>Number of Pensioners Dependents</i>	
	\$	\$	\$		
<i>Blind Pensions</i>					
Brunei Town	6,480	1,560	8,040	47	38
Kuala Belait	780	200	980	6	5
Temburong	900	160	1,060	7	2
Tutong	—	280	280	2	2
	<u>\$ 8,160</u>	<u>\$ 2,200</u>	<u>\$ 10,360</u>	<u>62</u>	<u>47</u>
<i>Lepers Allowances</i>					
Brunei Town	—	—	—	—	—
Kuala Belait	350	70	420	—	5
Temburong	—	—	—	—	—
Tutong	250	50	300	—	3
	<u>\$ 600</u>	<u>\$ 120</u>	<u>\$ 720</u>	<u>—</u>	<u>8</u>
<i>Lunatics Allowances</i>					
Brunei Town	—	—	—	—	—
Kuala Belait	—	80	80	—	1
Temburong	—	—	—	—	—
Tutong	250	50	300	—	4
	<u>\$ 250</u>	<u>\$ 130</u>	<u>\$ 380</u>	<u>—</u>	<u>5</u>

Number of claimants who died during year	68
Number of pensioners who visited Mecca	6 (b)
Number of rejected claims	81
Date of first appeal session	11.10.1955
Number of appeals heard	53
Number of successful appeals	19
Number of medical examinations	678

Notes:

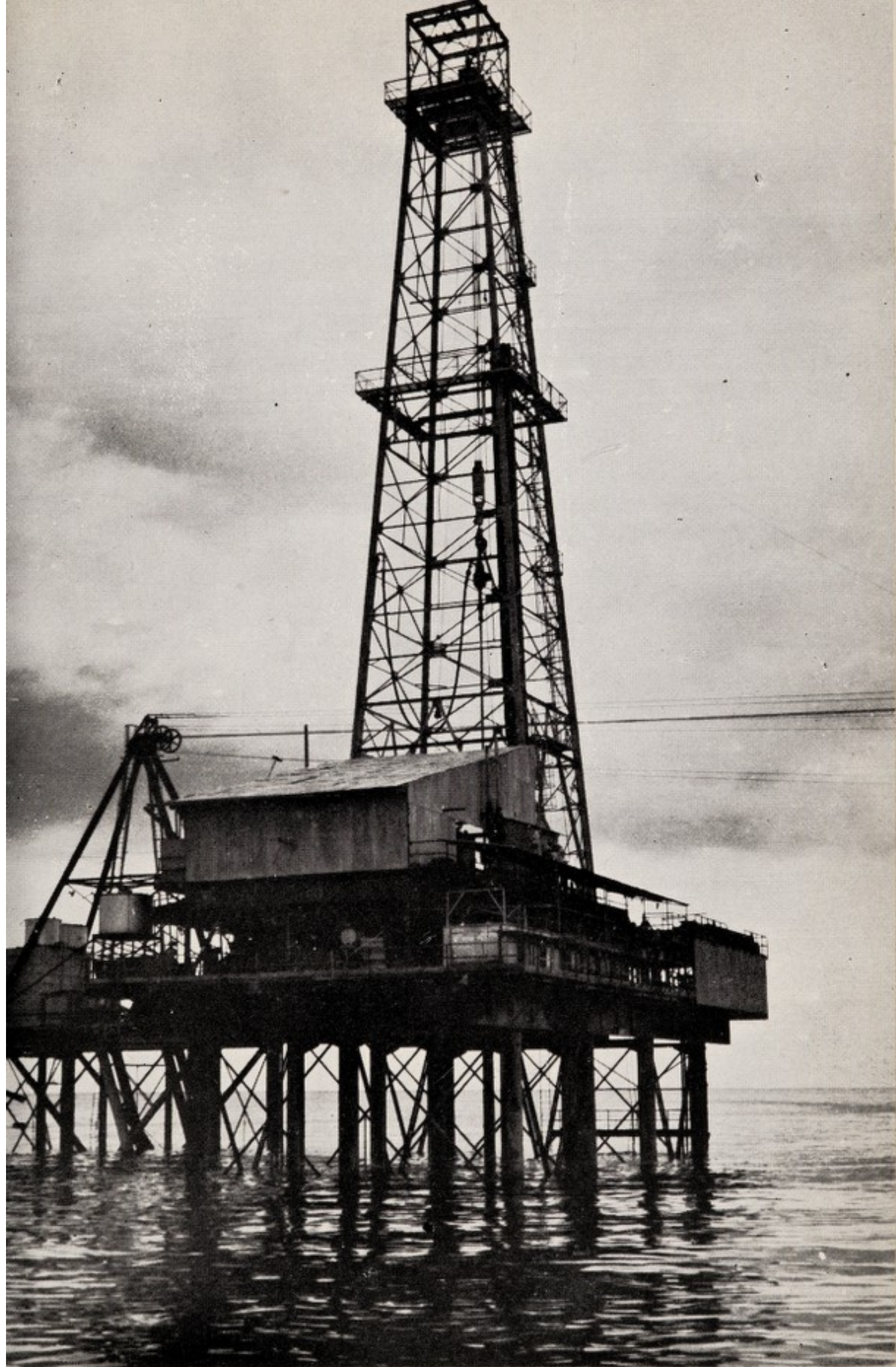
(a) As all pensions are payable monthly in arrears, pensions to which title arises in the month of December cannot be paid until the following January. The amounts shown in column (1), therefore, represent the total pensions actually paid in 1955.

(b) The Act provides that absence from the State for the purpose of a pilgrimage to Mecca does not disqualify the pensioner from receiving his pension, even if his absence exceeds 3 months.

NUMBER OF PENSIONS AWARDED TO VARIOUS CULTURAL GROUPS.

(Note:— A residence test of 30 years has to be satisfied by persons not born in Brunei before an old age pension can be awarded).

<i>Cultural Group</i>	<i>Type of Pension or Allowance</i>			
	<i>Old Age</i>	<i>Blind</i>	<i>Lepers</i>	<i>Lunatics</i>
Malay	1,955	56	—	1
Chinese	187	1	2	1
Iban	50	2	1	—
Dusun	132	1	—	—
Murut	12	2	—	—
Javanese	19	—	—	—
Indian	6	—	—	—
Siamese	1	—	—	—
	<hr/> 2,362 <hr/>	<hr/> 62 <hr/>	<hr/> 3 <hr/>	<hr/> 2 <hr/>

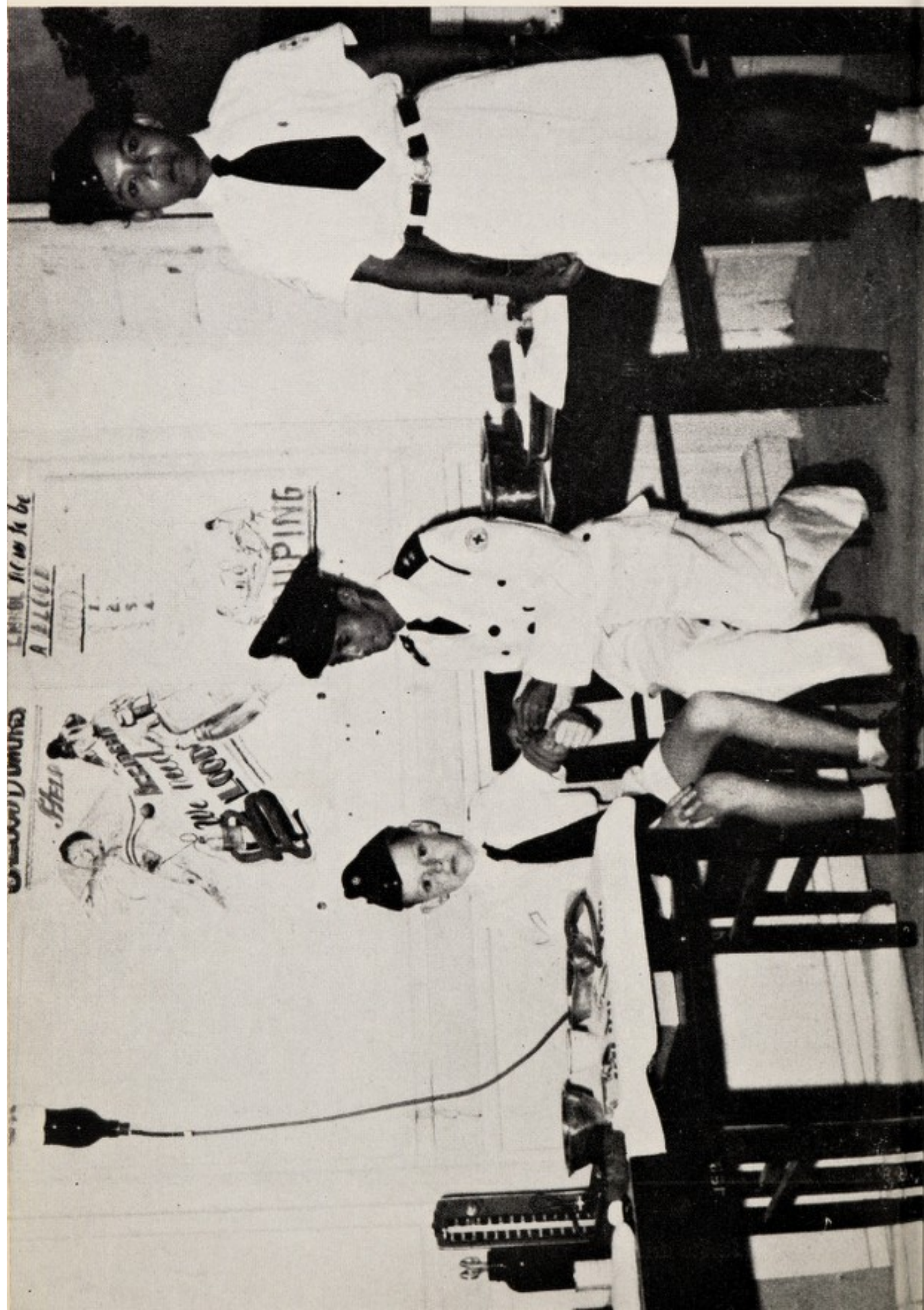


(by courtesy of B.M.P. Company, Seria)

Marine drilling location off the coast at Seria.

Red Cross
demonstration
during Agricultural
Show, 1955.
Blood donors,
under auspices
Red Cross.

(Information Service
photograph)



CHAPTER VIII.

LEGISLATION

THE main body of the law consists of the enactments contained in the Revised Edition of the Laws (1951) together with certain other Enactments passed before that date, which were excluded therefrom by virtue of the provisions of section 5 and the Schedule to the Revised Edition of the Laws Enactment (Cap. 1), and all enactments, other than the Revised Edition of the Laws Enactment, passed since the 1st of January, 1956.

In addition certain of the Proclamations made by the British Military Administration still retain the force of law by virtue of the provisions of the Proclamations, Transfer of Powers and Interpretation Enactment, 1946. The most important of these Proclamations is the Finance Regulations Proclamation, 1946, which together with the regulations made thereunder contain the law relating to exchange control.

The legislation has seen fit to adopt in the State certain laws from Malaya, Singapore, Sarawak and England.

The laws adopted from Malaya are—

- (a) The Evidence Ordinance, 1950;
- (b) The Bankers Books (Evidence) Ordinance, 1949;
- (c) The Contracts (Malay States) Ordinance, 1950; and
- (d) The Specific Relief (Malay States) Ordinance, 1950.

The subsidiary legislation as amended or replaced from time to time of the Colony of Singapore referred to in the Second and Third Schedules of the Air Navigation Enactment, 1954, apply in the State.

The Penal Code and Criminal Procedure Code have been adopted from the Colony of Sarawak but have been published in the Revised Edition. In addition, Brunei has adopted with cer-

tain amendments the Trade Marks Ordinance and Merchandise Marks Ordinance of Sarawak.

By the Application of Laws Enactment (Cap. 2 of the Revised Edition) the English common law, principles of equity and statutes of general application which were in force on the 25th day of April, 1951, shall, with necessary modifications, apply in cases where there is no provision either in the enacted or adopted laws of the State.

The official language of all legislation is English.

The State Council met on 6 occasions during 1955 and the following enactments were passed:—

No. 1 — The Criminal Procedure Code (Amendment) Enactment, 1955.

This Enactment made certain amendments to the Criminal Procedure Code (Cap. 7) and brought it into line with the law in force in Sarawak.

Included among the amendments are provisions—

- (a) rendering admissible voluntary statements made after caution to certain authorised police officer;
- (b) providing for the transfer of cases to a Court of higher jurisdiction when such course is considered desirable;
- (c) enabling a Magistrate to commit a convicted person to the High Court for sentence providing for a case to be referred, after determination by the High Court in its appellate capacity, to the Court of Appeal on a point of law which the Judge who heard the appeal or the Public Prosecutor considers should in the public interest be determined by that Court; and
- (d) providing for the conditional discharge of persons of unsound mind.

No. 2 — The Prize Courts (Authorization) Enactment, 1955.

This Enactment provided for the application to the State of Brunei of the Prize Courts Act, 1894, and the Prize Act, 1939, of England.

No. 3 — The Police Force (Amendment) Enactment, 1955.

The amendment to the Police Force Enactment (Cap. 50) contained in this Enactment enables police officers from Singapore or Malaya to be sent to Brunei with the consent of the Sultan in Council, and also enables police officers from Brunei to be sent to Singapore or Malaya with the consent of the Government of the receiving territory.

No. 4 — The Land Code (Amendment) Enactment, 1955.

The principal amendments to the Land Code (Cap. 40) contained in this Enactment have the effect of—

- (a) reserving to the Government the right to build a road not more than 150 links wide on payment of compensation;
- (b) making it clear that, in the absence of any provision to the contrary, land alienated by the State may only be used for agricultural purposes; and
- (c) transferring to the Sultan in Council the right to revise rents and providing that in future rents can be revised at any time.

No. 5 — The Pensions (Amendment) Enactment, 1955.

This Enactment amended the Pensions Enactment (Cap. 38) by making provision for the payment of gratuity to the legal personal representative of a pensionable officer who dies in the service, or in certain cases, after his retirement.

No. 6 — The Chinese Marriage Enactment, 1955.

This Enactment gave full legal effect to marriages contracted according to Chinese law and custom so as to allow persons of the Chinese race to marry lawfully according to their own law and customs.

No. 7 — The Minor Offences (Amendment) Enactment, 1955.

This Enactment amended the Minor Offences Enactment (Cap. 15) so as to make it possible for Offences under that Enactment to be tried by a Third Class Magistrate and not only by a Magistrate of the First or Second Class.

No. 8 — The National Registration (Amendment) Enactment, 1955.

This Enactment provided that offences under the National Registration Enactment (Cap. 15) could be tried by Second

Class Magistrates. Formerly such offences could only be tried by Magistrates of the First Class.

No. 9 — The Oil Mining (Amendment) Enactment, 1955.

This Enactment amended the Oil Mining Enactment (Cap. 43) so as to enable the Sultan in Council to grant oil exploration licences, oil prospecting licences and oil mining leases, over the area of the continental shelf contiguous to the territorial waters of Brunei which has been annexed to the State.

No. 10 — The Income Tax (Amendment) Enactment, 1955.

This Enactment amended the Income Tax Enactment (Cap. 35) so as to make it possible for the Sultan in Council to grant certain tax concessions in cases where he considers that such concessions are necessary or expedient to facilitate the development of the State, to encourage the establishment or expansion in the State of any trade or undertaking, to procure the investment of capital in any undertaking established in the State or in any other case where it is in the public interest to make such concessions.

No. 11 — The State Pensions (Amendment) Enactment, 1955.

This Enactment amended certain printing and grammatical errors occurring in the State Pensions Enactment, 1954 (No. 10 of 1954).

No. 12 — The Water Supply (Amendment) Enactment, 1955.

This Enactment made two minor amendments to the Water Supply Enactment, 1954 (No. 7 of 1954).

No. 13 — The Malayan Laws Adoption (Amendment) Enactment, 1955.

This amended the Malayan Laws Adoption Enactment (Cap. 3) making amendments by the Malayan Legislature to the adopted Enactments no longer applicable in Brunei. The opportunity has been taken to amend the Schedule by inserting the latest Malayan Ordinance relating to Evidence, Contracts and Specific Performance, by deleting the Civil Procedure Code which is no longer applicable and by adding the Bankers' Books (Evidence) Ordinance, 1949.

No. 14 — The William Frederick Runagall (Appointment as Government Printer) Enactment, 1955.

This Enactment provided for the appointment of Mr. Runagall as a Government Printer and for matters ancillary thereto including providing penalties for improper disclosure of confidential information.

No. 15 — The Road Traffic (Amendment) Enactment, 1955.

This Enactment made certain amendments to the Road Traffic Enactment, 1954 (No. 12 of 1954) and provides for the Enactment coming into force on the 1st of January, 1956.

Included among the amendments are provisions—

- (a) enabling any vehicle to be called in for examination at any time to ensure that it is in a roadworthy condition;
- (b) creating a special offence with increased penalties for reckless or dangerous driving if death results therefrom;
- (c) simplifying the procedure relating to the grant of franchises to transport undertaking; and
- (d) increasing the right of appeal against decisions made by Licensing Authorities and district Licensing Authorities.

No. 16 — The Land Requisition (Amendment) Enactment, 1955.

This Enactment amended the Land Acquisition Enactment (Cap. 41) by providing that compensation will be paid on the market value of land at the date when the State Council notified its intention to acquire such land and that no improvements made thereafter would be taken into consideration unless they were made with the prior approval of the Land Officer. The opportunity was also taken to make it clear that in urgent cases such as road construction it is possible to carry on vital public works without waiting for an award to be made by the Land Officer, provided that there are no buildings on the land concerned.

No. 17 — The Oil Mining (Amendment) (No. 2) Enactment, 1955.

This Enactment further amended the Oil Mining Enactment (Cap. 43) by providing that oil exploration licences, oil prospecting licences and oil mining leases should be grant-

ed by the Sultan in Council and not by the Resident as was the case previously. Provision was also made that the fees and royalties in the various licences and leases should apply and revoked the provision requiring that the Resident should prescribe such fees and royalties.

No. 18 — The Probate and Administration Enactment, 1955.

This Enactment which comes into force on the 1st of February, 1956, provides for matters relating to the administration of the estates of deceased persons. The Enactment provides for the appointment of a probate officer to have control over the administration of the Enactment but when dealing with the estates of deceased Muslims who were domiciled in the State he shall act on the advice of the Religious Council.

No. 19 — The Midwives Enactment, 1955.

This Enactment provided for the registration and supervision of midwives and matters ancillary thereto.

No. 20 — The Religious Council, State Custom and Kathis Courts, Enactment, 1955.

This Enactment which comes into force on the 1st of February, 1956, provides for the establishment of a Religious Council for Muslims in the State, makes provisions for the legal recognition of Malay Customs as practised in the State, provides for matters relating to the marriage and divorce of Muslims and revises the powers and duties of Kathis Courts.

No. 21 — The Moneylenders (Amendment) Enactment, 1955.

This Enactment amended the Moneylenders Enactment (Cap. 62) so as to exclude from its operation Banks who have been licensed as such by the Resident.

CHAPTER IX

JUSTICE, POLICE AND PRISON

THE Courts constituted in the State for the administration of civil and criminal law are as follows:—

The Supreme Court of Sarawak, North Borneo and Brunei, consisting of the Court of Appeal and the High Court,

Courts of Magistrates of the First Class,

Courts of Magistrates of the Second Class,

Courts of Magistrates of the Third Class,

Courts of Kathis.

This Judicial system was created by the Sarawak, North Borneo and Brunei (Courts) Order in Council, 1951, and the Courts Enactment (Cap. 6). The old Court of Appeal and the Court of the Resident have been abolished.

The Supreme Court. The Supreme Court, which has a unified jurisdiction over the three territories of Sarawak, North Borneo and Brunei, consists of the Chief Justice (styled the Chief Justice of Sarawak, North Borneo and Brunei) and as many Puisne Judges as may from time to time be appointed.

An uneven number, not being less than three, of Supreme Court Judges constitutes the Court of Appeal. In certain special circumstances two Judges can constitute the Court. It deals with appeals, criminal and civil, from the High Court.

One Supreme Court Judge constitutes the High Court. The High Court has an unlimited original jurisdiction in all civil matters other than the annulment of marriages solemnized between Christians in the United Kingdom or any British Colony and matters concerning Mohammedan marriage, religion and divorce. It has an unlimited criminal jurisdiction in the case of all offences committed in the State or on the high seas on board ships registered in the State, or committed by subjects of the

State on the high seas aboard any ship, whether registered in the State or not. It may pass any sentence authorised by law, including sentence of death. Appeals lie to the High Court, in civil and criminal cases, from the judgments of First Class Magistrates, sitting in either original or appellate jurisdiction, and from the judgments of Second Class Magistrates.

Courts of Magistrates of the First Class. The Court of a Magistrate of the First Class has original civil jurisdiction in suits involving not more than \$500 (which limit may be specially extended by Chief Justice to \$1,000), and original criminal jurisdiction in the case of offences for which the maximum term of imprisonment provided by the law does not exceed two years and the maximum fine does not exceed \$5,000. The maximum sentences which may be passed by the Court are imprisonment for twelve months and/or a fine of \$1,000. The Court has an appellate criminal and civil jurisdiction in respect of case tried by Magistrates of the Third Class.

Courts of Second Class Magistrates. The Court of a Magistrate of the Second Class has civil jurisdiction in suits involving not more than \$250 and criminal jurisdiction in the case of offences for which the maximum term of imprisonment provided by law does not exceed six months and the maximum fine does not exceed \$1,000. The maximum sentences which may be passed by the Court are imprisonment for six months and/or a fine of \$250.

Courts of Third Class Magistrates. The Court of a Magistrate of the Third Class has civil jurisdiction in suits involving not more than \$50 and criminal jurisdiction in the case of offences for which the maximum term of imprisonment provided by law does not exceed six months, and the maximum fine does not exceed \$250. The maximum sentences which may be passed by the Court are imprisonment for two months and/or a fine of \$100.

Courts of Kathis. The Court of a Kathi deals solely with questions concerning Mohammedan religion, marriage and divorce, and may impose a fine not exceeding \$50. Appeals lie from this Court to the Sultan in Religious Council.

Procedure in the Courts is regulated by—

- (a) The Courts Enactment (Cap. 6);
- (b) The Sarawak, North Borneo and Brunei (Courts) Order in Council, 1951;
- (c) The Sarawak, North Borneo and Brunei Court of Appeal Rules, 1951;
- (d) The Supreme Court of Sarawak, North Borneo and Brunei (Appeal to Privy Council) Order in Council, 1951;
- (e) The Magistrates Court (Civil Appeal) Rules, 1952;
- (f) The Magistrates Courts (Court Fees) Rules, 1952;
- (g) The Magistrates Courts (Execution Proceedings) Rules, 1954;
- (h) The High Court (Fees) Rules, 1954;
- (i) The High Court Execution Proceedings;
- (j) The High Court of Sarawak, North Borneo and Brunei (Civil Procedure) Rules; and
- (k) The Magistrates Courts (Civil Procedure) Rules, 1955.

There were three First Class Magistrates, Six Second Class Magistrates, Two Third Class Magistrates and Two Kathis functioning in the State during the year.

The following table shows the number of cases instituted and disposed of in the various courts:—

<i>District</i>	<i>Letter of Adminis- tration</i>	<i>Probate (Re- sealing)</i>	<i>Coroner's Inquest</i>	<i>Criminal Appeal</i>	<i>Civil Appeal</i>
Brunei	2	—	4	2	1
Belait	3	—	4	4	2
Seria	—	—	10	2	—
Temburong	—	—	—	—	—
Muara	—	—	—	—	—
Tutong	—	—	—	2	—
Total	5	—	18	10	3

COURT RETURN OF FIGURES (CRIMINAL & CIVIL CASES) FOR THE YEAR 1955

CRIMINAL

District	No. of Cases in High Court	No. of Cases in 1st Class Magistrate's Court	No. of Cases in 2nd Class Magistrate's Court	No. of Cases in 3rd Class Magistrate's Court	Total	No. of Persons sentenced	No. of Accused discharged	No. of Cases withdrawn	No. of Cases pending	No. of Transfer
Brunei	2	16	453	37	508	451	7	34	12	4
Belait	8	96	243	97	444	414	5	22	—	3
Seria	—	—	680	25	705	576	39	87	—	3
Temburong	—	2	20	—	22	20	1	1	—	—
Muara	—	—	—	—	—	—	—	—	—	—
Tutong	—	2	47	—	49	46	2	1	—	—
	10	116	1,443	159	1,728	1,507	54	145	12	10

CIVIL

District	No. of Cases Judge of Appeal	No. of Cases in High Court	No. of Cases in 1st Class Magistrate's Court	No. of Cases in 2nd Class Magistrate's Court	No. of Cases in 3rd Class Magistrate's Court	No. of Cases missed	No. of Cases settled out of Court	Amount claimed
Brunei	1	1	5	17	—	—	—	\$ 9,382.01
Belait	—	19	41	11	2	9	—	80,961.18
Seria	—	—	—	29	—	5	—	2,808.06
Temburong	—	2	2	2	2	1	—	4,514.38
Muara	—	—	—	—	—	—	—	—
Tutong	—	—	5	6	—	1	4	3,235.85
	1	22	53	65	4	16	4	\$100,901.48

NOTE:— 1. Of the 1,728 criminal cases, 1,702 were brought against adults and 26 were brought against Juveniles.

Of the 1,702 cases brought against adults convictions were registered in 1,507, 54 resulted in acquittal, 145 were withdrawn and 12 were pending.

Of the 26 cases brought against juveniles convictions were registered in 25, 1 resulted in acquittal, nil were withdrawn and nil were pending.

2. Of the persons convicted—

- (1) 865 were punished by imprisonment and fine, the most severe sentence imposed being 6 months imprisonment and a fine of \$5,000.
- (2) 15 were punished by imprisonment, the highest sentence being 2 years.
- (3) 496 were punished by fine, the highest fine imposed being \$1,000.
- (4) 42 were discharged on probation.
- (5) 94 were cautioned and discharged.
- (6) 1 was sentenced to death.

POLICE

Command:

Mr. J. G. C. Kirby-Turner, Superintendent of Police, arrived in Brunei from North Borneo on the 19th of January, and took over command of the Force from Mr. T. F. Stone, Assistant Superintendent of Police on 26th of January. The former commanded the Force throughout the year.

Kuala Belait. Mr. T. F. Stone while acting as Chief Police Officer during the first half of January resumed duty as Officer Commanding Police District Belait on the 26th January vice Senior Inspector Pengiran Jaya who acted as Officer Commanding Police District Belait during the period under reference.

Brunei. On 8th January, 1955, Mr. B. N. Lewis, Assistant Superintendent of Police, relinquished his post as Officer Commanding Police District, Brunei, and proceeded on leave.

Chief Inspector Stephen Liew took over command of Brunei District from 13th January until the arrival of Mr. C. S. Baker, Assistant Superintendent of Police, on 21st January. Mr. Baker remained as Officer Commanding Police District, Brunei, until 22nd March when Senior Inspector Pengiran Jaya relieved him. Mr. Baker then took over command of Immigration Department on 23rd March, 1955.

Senior Inspector Pengiran Jaya left for United Kingdom on a course on the 28th June and Inspector B. M. G. Carvalho took over command of Brunei District from that date. The command was held by the latter throughout the year.

Special Branch. Mr. P. J. Rewcastle, Assistant Superintendent of Police, was in command of Special Branch up to the 23rd May when he proceeded to United Kingdom on leave on 31st May, 1955.

Mr. C. S. Baker took over command of Special Branch in addition to his substantive duties as Immigration Officer, Brunei, on 23rd May.

Immigration. Mr. C. S. Baker, Assistant Superintendent of Police, took charge of Immigration Brunei on 22nd March, 1955.

Field Force. The Force was commanded by Mr. E. W. Crunden, Assistant Superintendent of Police until 21st March, 1955. Mr. J. Tiernan, Assistant Superintendent of Police took over command of the Force on the 21st March when the former went on leave.

Chief Inspector Stephen Liew assumed responsibility for all investigation and preparation of all papers in Belait District in addition to his Special Branch work.

The Brunei Police Force Headquarters removed from Kuala Belait to Brunei Town on the 25th March, 1955.

Establishment and Strength:

There was a slight change in the Establishment during the year 1955. The following figures show the strength and establishment of the Force:—

	<i>Strength</i>	<i>Establishment</i>
Gazetted Officers	3	5
Inspectors	12	15
Sergeants Major	3	3
Sergeants	17	17
Corporals	19	26
Lance-Corporals	29	33
Police Constables	134	277
Additional Police Officers	7	—
	<hr/> 224	<hr/> 376

	<i>Deficiencies</i>	<i>Surpluses</i>
Gazetted Officers	2	—
Inspectors	3	—
Corporals	7	—
Lance-Corporals	5	—
Police Constables	143	—
Additional Police Officers	—	7
	<hr/> 160	<hr/> 7

During the year 38 recruits were enlisted, whereas 9 men resigned on completion of contract. Two men were discharged and 2 were dismissed, therefore of the 13 men lost to the Force, 38 replacements were enlisted.

Health:

The health of the Force remains satisfactory. No personnel suffered from T.B. Four hundred and fifty men reported minor ailments with a total of 577 man-days lost through sickness.

Discipline:

Minor Offences	60
Major Offences	34
	<hr/>
Total	94

Recruiting:

Thirty-eight recruits only presented themselves for enlistment during the year. It is not thought that the pay is the only reason for this state of affairs. The population is not big enough to sustain a Police Force of three hundred men.

Two Probationary Inspectors were recruited from Malaya during the year.

Training:

During the year 38 recruits were trained in the Police Training School, Kuching, and were absorbed into the Force on the completion of their training courses.

Senior Inspector Pengiran Jaya attended the A2 Course at Ryton-on-Dunsmore Police College during the year.

Transport:

The situation is very satisfactory and the Force is equipped as follows:—

Landrovers	13
Commer 5-ton trucks	2
Bedford 3-tonners	3
Bedford 15 cwt.	3
Motor-cycles	11
Fire-engines	3
Saloon Car	1

The maintenance of the transport in the Belait District is still being carried out by Borneo Motors Limited.

Brunei District transport is still maintained by the Public Works Department.

Housing and Building:

No new building was built during the year.

The Immigration Department moved in to the Belait Police District Headquarters building during the year.

Signals:

The six "19" H.F. sets were still in use to great advantage.

Traffic:

There was a slight decrease in traffic accidents. However, there were 4 fatal accidents during the year. Many of the Police

Traffic Squad now have their own motor-cycles and this system is proving of great value in the control of traffic.

Crime:

There was one murder committed during the year which resulted in an initial sentence of death, later commuted to fifteen years. The only other crime of importance during the year was the burglary of approximately \$100,000 worth of jewellery. Two persons were arrested and convicted in this connection with the recovery of over 90% of the stolen property.

Aliens' Registration and Immigration:

During the year 46,428 persons entered the State whilst 42,184 left the State. The majority of the movements were by permanent residents leaving the State for short visit and returning thereafter.

During the year 1,968 aliens were registered. The number of other documents issued by the Immigration and Aliens Registration Departments are as shown below:—

(1) Full visas and transit visas	1,768
(2) Certificates of Identity (British subjects and subjects of His Highness the Sultan)	909
(3) Emergency Certificates	1,095
(4) Police 64's for non-British subjects	545
(5) Special Passes	1,516
(6) Aliens Certificates of Identity	238

Figures concerning persons travelling to and from China during the year are as follows:—

	<i>To</i>	<i>From</i>
Total	67	—
Total number in age group 16-30	20	—
Total number of family groups	3	—
Number of re-entry permits granted	—	—

C.I.D. and Special Branch:

This remains the same throughout the year.

Welfare:

The position remains satisfactory.

There has been an increased interest shown in sport.

Societies:

Thirteen societies were registered during the year, all of which were organised for welfare and cultural purposes.

General:

The year has seen continued improvement in the organisation of the Force. Traffic Squads were formed in Seria, Kuala Belait and Brunei Town. These squads are working well and have, with increased road patrols, had a marked effect upon traffic generally.

The establishment of the Oilfields Security Force was increased to 225. Uniforms were provided during the year. The organisation and training were improved and this unit is now a very valuable asset in the Oilfields area.

Plans were completed for a new Station and District Headquarters at Panaga and for Police Stations at Labi and Sengkurong. Work on these stations is due to commence early next year.

Provision has also been made for 12 Radio Patrol Cars to operate in Seria and Kuala Belait early next year.

Arrangements were finalised for a contingent of seconded Malayan Police to reinforce the Brunei Police. The contingent is due to arrive in Brunei early next year.

Police Headquarters was moved from Kuala Belait to Brunei Town in March. All paysheets are now prepared at Police Headquarters.

The Force has once again gone through a year over a hundred understrength. The hard work and esprit de corps of all ranks deserves very special mention.

PRISONS

The number of Prisoners detained during the year at the main Jerudong Prison has at no time been large. The Kuala Belait Prison is not a suitable place for the detention of prisoners and it is intended that all prisoners be incarcerated in the Jerudong Prison early in the new year.

Prisoners are employed extra-murally whenever possible, but the shortage of land in the vicinity of the prison limits such employment to a certain extent; furthermore the upkeep of the Prison compound and buildings makes it necessary for the majority of prisoners to be detailed for fatigue duties within the compound.

Youthful offenders are normally transferred to the Boys Home in Sarawak where facilities for rehabilitation and training are available.

Prison statistics for 1955 are as follows:—

1. *Prison Population by Race:*

Malay	8
Indian	2
Chinese	30
Iban	3
	<hr/>
	43
	<hr/>

2. *Classification by age groups:*

Under 20 years	5
20 — 25 years	6
26 — 30 years	8
31 — 40 years	11
41 — 50 years	9
Over 50 years	4
	<hr/>
	43
	<hr/>

3. *Classification by sentences:*

Under 1 month	32
1 — 3 months	5
4 — 6 months	1
7 — 12 months	2
Over 12 months	3
	<hr/>
	43
	<hr/>

CHAPTER X

PUBLIC WORKS AND UTILITIES

PUBLIC WORKS

General:

THE total expenditure of the Public Works Department for the year 1955 was \$19,521,900 which shows an increase of approximately 12% over the amount spent in 1954. Of this total, \$9,330,200 was expended from Part I of the Estimates, as compared with the actual expenditure of \$12,839,345 in 1954. The remaining \$10,191,700 was expended under Part II of the Estimates for which a total of \$18,126,500 under the control of the State Engineer, was approved for 1955, for works to be undertaken under the Development Plan, over the years 1954-1958. The expenditure represents 56.2% of the approved expenditure.

Staff:

There was a considerable improvement in the staff position during 1955. The year saw the formation of a Road Section and negotiations are now in hand for the appointment of an Architect and Water Engineer which will improve the organisation still further.

Throughout 1955 Mr. G. T. Myles, B.A., B.A.I. (Dublin), A.M.I.C.E., an Officer on secondment from the Sarawak Establishment continued to act as State Engineer, Brunei. Mr. P. G. Lindsay, Dip. C.E. (Sydney) filled the position of Assistant State Engineer, Kuala Belait and Mr. D. J. Causby, B.E. (Adelaide), an Officer on secondment, from the Sarawak Establishment acted as Assistant State Engineer, Brunei. When Mr. Lindsay left on leave in November, Mr. Causby took over the position of Assistant State Engineer, Kuala Belait, and position was filled by Mr. Wong Chow Kee, a newly appointed Assistant Engineer. Mr. W. C. Wilkinson remained in charge of the Heavy Equipment Section until he left on long leave in November when he was succeeded by Mr. W. Crosby-Emery, another new appointee.

During the year, the Workshop staff was reorganised with the arrival of the Mechanical Engineer, Mr. J. A. Rolph. Mr. J. Allison Wood was transferred to Kuala Belait as Workshop Supervisor, Mr. A. P. Jack continued as Workshop Supervisor in Brunei and Mr. W. H. Doughty acted as Officer-in-Charge of the heavy equipment in the P.W.D. Workshops.

In April the Road Section of P.W.D. was formed with Mr. G. J. Cliff as Chief Roads Engineer assisted by Road Engineers I. J. M. Kelly, J. D. S. Brookes, and C. Powter. Three experienced road foremen were recruited from Australia and with the appointment of several overseers, clerks and other personnel, the new Section took over the planning and construction of all roads and associated projects in the State.

This expansion in trained staff has enabled the Public Works Department to carry out a very heavy works programme in 1955, and with further expansion in 1956, even faster progress can be expected.

Labour:

The labour position continued to improve considerably during 1955 and by the end of the year there was no shortage of unskilled labour. Local skilled tradesmen were still in short supply and a number have had to be imported from Hong Kong. A large number of apprentices are being trained in the P.W.D. Workshops and within a few years these should be able to take over the work now being performed by imported tradesmen. Apprenticeships have proved very popular, and there is now a long list of applicants waiting for vacancies.

Contractors:

A considerable number of new contractors have been registered in the State during the year and there are now 85 registered contractors appearing on the Department's books. These are made up as follows:—

22	—	Class "A"	
22	—	Class "B"	
34	—	Class "C"	
7	—	Miscellaneous	— Electrical
			Stone
			Plumbing
			Transport

The Classification is made up thus:—

Class "A" — can tender for an unlimited amount.

Class "B" — can tender up to \$150,000.

Class "C" — can tender up to \$ 25,000.

Due to the large number of contractors registered in the State, the tender prices have been more competitive, and costs have fallen favourably.

During the year 48 contracts were let out in Brunei Town, amounting to \$6,032,637. The largest single contract given out by tender was for the construction of 40 blocks of houses and flats at Tongkadeh valued at \$1,484,000.

At Kuala Belait the position has also improved considerably, and the greater competition has resulted in the improvement in the standard of workmanship. This has also been helped by the importation of quite large numbers of skilled tradesmen.

Materials:

Stone: Practically all the stone used by the P.W.D. in the area extending from Muara to Tutong, is worked from the sand-stone gravel deposit on the sea-shore at Berakas.

During the year a new area was opened up, approximately $\frac{1}{4}$ mile west of the existing quarry. Removal of the overburden was started in this new area, and an access road is being cut for transport to the stone face. The gravel seam approximately follows the course of a small stream, and the visible stone faces are encouraging enough to warrant the development of the area as a potential quarry. It is estimated that stone will be available from this area by the beginning of 1956.

The arrival of two "22 R.B. Excavators" in June, did much to increase the development of, and production from, Berakas. A "D7 Hystaway" with clamshell has started recovering stone from below sea-level—a hitherto untapped source.

The production of good stone from the Berakas Quarry is daily becoming more difficult owing to overburden difficulties. In spite of these obstacles the quarry produced an annual total of 90,883 cubic yards of sand/stone mixture, and 4,012 cubic

yards of hand picked crushing stone. The stone crusher at the Quarry produced an average monthly output of 775 cubic yards of crushed aggregate with a maximum output of 1,200 cubic yards in November. In December, the Commissioner of Development Mr. E. R. Bevington, the State Engineer Mr. G. T. Myles, and the Chief Roads Engineer Mr. G. J. Cliff went to Batu Gading in Ulu Baram, Sarawak, to investigate limestone deposits in that area. The purpose of the visit was to investigate the suitability of this limestone for road building, the manufacture of cement, and other purposes.

Samples were brought back to Brunei and these are now being tested.

In the Kuala Belait and Seria area great difficulty was experienced during the year in maintaining adequate supplies of suitable stone. This was mainly brought about by contractors failing to deliver as promised. Towards the end of the year more shipments were received, and it was possible to build up a stockpile of various sizes of aggregate. The poor supplies of stone considerably slowed down the construction of roads in the area.

Supply of uncrushed stone from Brunei continued but the quality was poor, and the stone only suitable for road base course. The British Malayan Petroleum Company maintained a steady supply of Temburong stone of quite good quality, but unfortunately in inadequate quantity. This stone is 10% of their production at Biang on the Temburong River, and is supplied to the Government by mutual agreement.

Prices of uncrushed local stone varied from \$23 to \$27 per ton, a slight upper trend, and imported crushed stone, at prices between \$29 and \$33 per ton, showed a slight downward trend. After crushing, the local stone costs almost as much as imported crushed stone, and it is of far lower quality.

Stone supplied to P.W.D. Kuala Belait during 1955 is as follows:—

Local uncrushed	10,878 tons
Imported crushed	4,100 tons
Imported blockstone	231 tons

Sand: There are ample supplies of sand in the State, but the majority of it is much too fine for good quality concrete work. However, mixing one part of stone dust from the crushes with six parts of sand greatly improves the quality.

Timber: Adequate supplies of soft-wood and hard-wood were readily available, but work was often delayed waiting for the timber to season properly. The importation of *belian* roofing shingles was reduced because various types of asbestos roofing have been found to be more satisfactory, and are comparable in price. At Kuala Belait, *belian* logs for the fender piles of the new wharf were imported, but the quality was poor and the lengths restricted by shipping difficulties.

Land Reclamation:

In both Brunei and Kuala Belait there are many low lying areas which require filling before they are suitable as building sites. During 1955 a considerable amount of filling was done on such sites.

Brunei: Clay fill from Tasek Hill was supplied for various projects, the more important of which were P.W.D. Compound, Wireless Compound, the new Mosque, Riverside wall and Power Station. Some of these schemes necessitated the carting of up to 32,000 cubic yards of fill.

Other areas where considerable filling was carried out was at the Chinese School where the old *Sungei* was filled in and the general level of the area was raised by 2 to 3 feet, the Brunei Town *Padang* and the Tongkadeh Housing Area.

Kuala Belait: The whole of the town areas of both Kuala Belait and Seria are low lying, and in order to raise the general level of these areas to give better drainage and healthier conditions, \$2,000,000 was approved in 1954 for sand filling of approximately 400 acres. Progress with this filling was slow during 1954, but in 1955, following the complete mechanisation of loading sand on the beach, and with the purchase of a fleet of vehicles for this work, the rate of filling was greatly increased. At the end of 1955 the filling of these areas was approximately 30% complete.

During 1955 it became apparent that further filling was required outside of the old Municipal Board boundaries, and a further \$500,000 was approved.

Government assisted filling whereby the owner pays 10% of the cost of filling was continued, and private lots were completed. The opening up of new areas resulting from the building of new sand-filled roads has caused a flood of applications for sand filling from land owners, and where filling of these lots has been carried out, many new houses have been built. All Government Quarters built during the year have been on newly sand filled areas.

In the outlying areas of the Belait District, work was commenced on a school *padang* at Kuala Balai, and preparations made for another at Bukit Sawat. At Kuala Balai filling is being brought from a sand bank about 6 miles upstream in order to raise the level above the swampy surrounding country. At Bukit Sawat, portion of a neighbouring hill side was resumed by the Government, and fill for the *padang* will be pushed down by bulldozers.

P.W.D. Workshops:

This organisation is responsible for the operation of workshops in both Brunei Town and Kuala Belait, and for the maintenance and repair of all Government vehicles, plant, and machinery.

Brunei Town: During the year the Workshops were gradually moved from the centre of the town, to the new site at Tasek, and they were officially opened by His Highness the Sultan, on 1st October. The workshops are designed on modern lines, and are equipped to maintain, repair, and service some 150 Trucks, 30 Bulldozers, 20 Land Rovers, 7 Graders, 10 Stone Crushers, 18 Road Rollers and other miscellaneous equipment.

The main Repair Shop is 210 ft. x 68 ft., with room for extension, and three bays are shortly to be added. Other shops include a Machine Shop, Store 97 ft. x 41 ft., and two other buildings which contain an excellent Service Station and other small shops usually required for repair work. The Office Block is 81 ft. x 20 ft., and the Workshops and Offices employ just over 200 men.

Adjacent to the Workshops, a large covered Car Park has been built, and has P.O.L. Offices, Petrol and Dieseline Electric Pumps.

Owing to the increasing number of vehicles to be maintained, plans have already been made to increase the size of the Machine Shop so that parts could be manufactured and rebuilt.

Kuala Belait: In 1954, the Workshops at Kuala Belait was a small building near the present P.W.D. Office. During early 1955, a new site covering roughly 12 acres was planned. Most of the buildings have now been erected, and work is already being done in the new shops. The main workshop is 160 ft. x 50 ft., and there is also a Store of the same size, which carries transport and heavy equipment spares.

The Machine Shop is rather small, but provision has been made to extend the building and purchase extra equipment early in 1956.

A Service Station is being constructed, and will have two 5 ton, and one 3 ton hoist installed. Adjacent to the Service Station is a twin wash ramp, where vehicles can be washed under high pressure.

The Workshops are responsible for maintaining some 50 Trucks and Tractors, 3 Graders, 14 Bulldozers, 11 Land Rovers, 3 Road Rollers and other miscellaneous equipment, all materials being ordered from the main Store at Brunei Town.

The Staff at present consists of 10 Fitters, 25 Apprentices and 7 other Tradesmen. These are controlled by a European Officer-in-Charge Workshops, 1 Asian Transport Overseer, and 3 Shop Supervisors.

Seria: The Workshops of the British Malayan Petroleum Company have been developed since the end of the war at a capital expenditure of approximately \$3½ million, and to-day covers an area of about 25 acres.

The term "Workshops" embraces a number of self-contained units, including the following:—

- (1) Mechanical Equipment Repair Shop
- (2) Machine Shop
- (3) Welding Shop
- (4) Automotive Repair Shops

- (5) Instrument Shop
- (6) Carpenter and Paint Shop
- (7) Salvage Yard
- (8) Refrigeration Shop
- (9) Equipment Records
- (10) Administration and Accounts.

The Supervisory Staff consists of 15 Senior Staff, and 65 Regional Staff, controlling a labour force of 720 men, 80% of whom are either skilled artisans or apprentices and trainees.

The equipment contained in the Shops includes a large crank-shaft grinding machine, submerged arc-welding equipment, modern transformer, welding and Oxy-Acetylene propling machines.

Modern power-hammers meet the requirements of the Blacksmith's Shop, whilst both the Mechanical Equipment Repair Shops, and the Instrument Shop contain air-conditioned rooms for fuel pump and delicate instrument repairs respectively.

Modern dynamometers in the Mechanical Repair Shop provide a fitting conclusion to the joint efforts of skilled labour-Supervision, and the latest in testing and repair equipment. The Carpenter's Shop is similarly equipped to handle anything from packaging to cabinet making.

The volume of work put through the Shops Complex in 1954 about 6½ million dollars, and 1955 figures so far indicate a similar value for this year.

P.W.D. Stores:

Workshop Stores: Although standardization is insisted upon whenever possible, the stores holding of spares is very considerable.

The Stores commenced operations at the beginning of 1955 with a total stock of \$509,706 on hand. These items were actually in three places, but were collected and brought to Tasek Store. The new Storekeeper for Tasek had the job of starting a store system, providing suitable bins, stock cards etc. Up to October 1955, there has been a considerable amount of receipts, totalling \$1,085,770, and the issues for the same period were valued at \$484,994.

The Stores have a staff of one Storekeeper, and nine other personnel made up as follows:—

- 2 men on receipts
- 2 men on issues
- 2 men posting invoices and adjusting stock cards.
- 3 men on general duties.

Plans have already been made to increase the size of the Store.

Unallocated Stores: From the 1st January the main P.W.D. Unallocated Stores were combined with the State Supplies Department, under a Controller of Government Stores.

It was not until April that the removal of these Stores from the wharf area to Tasek Compound was completed and same time elapsed before a suitable staff could be obtained. In July a detailed physical check of all these stores was completed, with very satisfactory results.

During the year complete Vocabularies of eight separate Government Stores have been made, comprising 17 separate books, covering 14,782 items. These have been kept up to date with alterations and additions.

During the year the total volume passing through the State Stores and Supplies Department is approximately—

Purchases	\$4,529,724
Sales	4,283,308
Total	<hr/> \$8,813,032 <hr/>

Buildings:

With the assistance of architects who have been given the charge of the larger building projects in the State, good progress was made in Buildings in 1955.

Brunei: Government buildings completed in 1955 include the High Commissioner's Lodge at Muara, the Annexe to the *Istana*, and the Sir Omar Ali Saifuddin College building (1st phase). 1955 also saw the completion and occupation of the P.W.D. Compound. With all the Stores, Workshops, and garages

conveniently sited within the area, work will be carried out more quickly and efficiently.

Contracts have been signed for the construction of 21 Rural Schools and Quarters, and work on these are in varying stages of construction. Other contracts let out under the School's programme are the Sultan Mohamed Jemalul Alam Girls School and the Domestic Service Blocks.

During 1955, all Government buildings in the State were maintained and kept in good repair. Repainting of quarters was continued using a more colourful variety of colours. It is hoped that all quarters and buildings would look brighter in the near future with the abolition of the standard external white and green. Improvements to some old type quarters were made and 1956 should see many brighter and more modern quarters.

Generally, the construction of all buildings in the State was carried out in a satisfactory manner, though some of the construction of the Rural Schools and Quarters was delayed by site preparation. Quite a number of these sites are either in swamp areas, or on hilly ground, necessitating either filling or cutting, or both.

The site preparation of the housing areas for Junior Service Quarters behind the *Sungei Tongkadeh* was completed towards the end of the year, and the contract for building 40 blocks of various types of quarters was signed. Half of these are expected to be completed in 1956, and these will help to ease the housing situation considerably.

Keen competition between contractors was maintained in 1955, resulting in lower building costs.

For details of buildings completed in the Brunei, Muara, Tutong and Temburong Districts see Appendix "M".

Kuala Belait: Once again a heavy building programme was undertaken, but it was impossible to complete all of the works requested, because of shortage of staff. The shortage of quarters was practically overcome following the completion this year of 32 Junior Service Quarters, 20 Barrack Quarters, and 4 Senior Service Quarters. In addition to these, a construction camp com-

prising of 1 temporary Senior Service Quarters, and 10 temporary Barrack Quarters was built at *Sungei Liang* for the road staff.

Work on the Public Works Department compound proceeded, and by the end of the year, the Workshop, Machine Shop, Main Store, and Furniture Store were completed and occupied, and construction of the Service Station, Blacksmith and Paint Shops had started.

Sino-Malayan Engineers completed the new Customs Building at Kuala Belait, and the Customs Department moved in towards the end of the year. The design and supervision of this building was done by Messrs. Booty and Edwards, Architects.

For details of buildings completed during the year, and buildings under construction at the end of the year in the Kuala Belait-Seria area, see Appendix "N".

Works under the Supervision of Messrs. Booty & Edwards, Architects:

1. *New Mosque at Brunei.* The construction of the superstructure of the new Mosque is now proceeding satisfactorily after a long delay due to the difficulties encountered with pile-driving and foundation work. To date, the main structure is complete up to the first gallery level. The formwork for the main arches is now being constructed, and reinforcing steel is progressively being placed.

The structure of the main tower has reached the level of the 3rd Floor, and formwork is being constructed towards the 4th Floor level. The basement to the Pool is now structurally complete, and work is proceeding above the floor level.

2. *Customs' House, Brunei Town.* The progress on this job is steadily improving. Foundation work is now about three-fourths complete and formwork for the floor slab to one half of the building is being made.

3. *Government English School for Boys, Phase I, Brunei Town.* Work on this contract has not been satisfactory, but it is hoped that the classroom block will be ready for occupation by the commencement of the new school term on the 3rd January, 1956.

Work on the dormitory and kitchen block is approaching the finishing stages, and pending the arrival of certain materials, no further delay is anticipated.

4. *Government English School for Boys, Extension to Phase I, Brunei Town.* Piling work is now in progress and is nearing completion.

5. *45 Municipal Flats at Tasek.* All work on this block of flats has been stopped due to the necessity to underpin the two ends of the building. When this work has been completed fresh tenders will be called for the completion and rehabilitation of the building and appurtenant works.

SURVEY DEPARTMENT

During 1955 the staff of the Survey Department has been strengthened by the recruitment of one Assistant Surveyor, one Theodolite Surveyor, one Computer, two Computer/Draughtsmen, one Draughtsman and 7 Tracers. There were also 5 resignations from Drawing Office Staff and 2 resignations from the Field Staff. This recruitment has considerably increased the output potential of the department, but as only the Assistant Surveyor did not require training, the actual increase of output is not related to the increase of the staff. Also 3 of the Tracers were recruited in December 1955, and have done very little productive work. Even this recruitment does not bring the department up to the approved establishment, there still being vacancies for 2 Assistant Surveyors, 3 Theodolite Surveyors, 2 Computers, 5 Draughtsmen, 10 Demarcators, 1 Plan Custodian and 2 Lucigraph Operators.

The aim of the department is to produce accurate and reliable 4 Chain Cadastral sheets covering all alienated land. To achieve this object, the field staff of the department have been carrying out revision surveys of all land alienated prior to the setting up of the Survey Department in 1952, and the surveys of new Land Applications, received from various Land Offices. To enable these surveys to be accurately positioned and plotted, a network of theodolite traverses is being undertaken. In 1955, prismatic compass surveys were made of 2,897 lots, and 12,364 chains (154.55 miles) of theodolite traverses were run. This brings the total since the Department was formed, to 10,092 lots surveyed

by prismatic compass, and 19,391 chains (242.4 miles) of theodolite traverses completed.

The plotting and fair drawing of the cadastral sheets has however been held up by the lack of computers to compute theodolite controls already run. This shortage of computers should however be remedied in 1956, as the two Computer/Draughtsmen having been trained in draughting work, will be undergoing training as computers in 1956, and will then be employed full time on computations.

At the beginning of 1955 there were 2,331 new applications awaiting survey, besides all the revision surveys that were necessary. It was realised that if new applications for land were received in 1955 in the numbers they had been in 1954, it would be impossible for the Survey Department to catch up on the backlog of work. It was felt also that the majority of the applications for land were from speculators, and not from genuine farmers. It was therefore decided by State Council to stop all applications for land, unless the land was put to a use of economic benefit to the State. It was reported in 1954 that an effort had been made to collect all outstanding land applications from District Land Offices, even so in 1955, 3,274 applications for land were received from various Land Offices. Some of these applications were first made in 1940, and had only now been passed for survey. With this large number of land applications held in District Land Offices, it is very difficult to arrange survey programmes, so that one area at a time is completed and not as must happen now, an area coming under survey two or three times. Even in the last month of 1955 outstanding applications were being received from Land Offices, but it is hoped that most of them have now reached the Survey Department.

In order that the issue of titles for new Land Applications are not held up, the department continues to chart surveys of new Land Applications on existing plans, calculate the areas from the draughtsmen's plot, and prepare the sketch on the form; "Extract from the District Register" which is passed to the Land Office for their necessary action. In the year under review, 806 new Land Applications were dealt with in this manner, bringing the total since the department was formed to 1,477. This figure shows what a big improvement has been made in the output of the Drawing Office in 1955.

Besides this work the Drawing Office has prepared 86 Standard 4 Chain sheets on tracing cloth, which will be known as temporary 4 Chain sheets, on to which have been traced after fixing to any existing controls, all revision surveys, and surveys of new alienations. The primary object of these temporary sheets was to obtain as complete a picture as possible of all the alienated lands, so that adequate theodolite controls could be run to the best advantage. It had been found more or less impossible to join up the existing land office plans for this purpose, as they were on no common base, however these sheets have not only proved their value, as a base for planning theodolite controls, but are now used by the Land Office for recording new applications. Also copies have been supplied to the P.W.D. for use on road work, and to the British Malayan Petroleum Co. Ltd., for pipe line and site location.

A fair drawing for reproduction was also completed of a Map of Brunei on the scale of 1/500,000, compiled from the 1/500,000 Map of Sarawak and Brunei, for the 1955 Annual Report. A Composite Map of Brunei Town on the scale of 4 Chains to an inch was also drawn, and many copies of this map have been distributed to Government Officers and the General Public.

In September the State Surveyor was able to arrange for the R.A.F. to undertake low level photography over Brunei Town and environs, the first prints of this photography being made available in a little over a fortnight. From these photographs has been compiled by simple lay-down of photographs a Map of Brunei Town on the approximate scale of 1/5,000, copies of which will be supplied to Government Officers. When extra prints of these photographs are received, an uncontrolled mosaic will be prepared, and reproductions of this mosaic made available to Government Departments.

In July of this year the Department received and installed a photostat machine, which has enabled the department to supply many copies of plans very quickly and at short notice. This work would have previously taken many hours of skilled draughtsmen's time preparing tracings, when they could have been employed on original work.

The only setback the Department has suffered, is the loss of concrete marks, marking the traverse stations of 1st Class Theodolite Traverses along roads. The traverses were run along the routes of roads, before the State had finalised the road improvement programme, with the result that traverse marks, which were emplaced well off the trace of the old road, have disappeared when road improvements commenced. Therefore in 1956 it will be necessary to resurvey a considerable amount of 1st class traverse, in order to have connections for the 2nd class control traverses.

WATER SUPPLY

Brunei Town:

During the year the supply from Tasek still caters for practically the whole of Brunei Town. However, with the completion of the filter house and storage tank in the Tasek area, it will soon be possible to supply the town with chlorinated and filtered water in conformity with present day requirements. At the end of November, tests were carried out to the four Jewell Filters, and results were favourable, except for some minor adjustments. This plant will be in full operation by the end of December.

A new Reinforced concrete Water Tank in Kumbang Pasang providing supply to the quarters in that area, and the Berakas Airfield, was completed in August. This tank, with a capacity of 180,000 gallons, will be supplied direct by gravity from the main storage tank. Reticulation mains to the area are now being laid, and the scheme will be operating by mid-February, 1956.

At mile 2, Tutong Road, a new R.C. Tank was erected for supplying water to the new Istana staff quarters, and the wireless stations. A high level steel Water Tank was also erected at mile 3, Tutong Road in order to provide water for the Municipal Slaughterhouses.

Several improvements to minor supplies were made during the year. A temporary earth dam was constructed in Dato Gandi to supply the school and quarters there, and a scheme is being prepared to erect a small concrete dam across the *Sungei Menjalin* to provide a new supply to *Kampong Ayer*.

Blind Pensioner
receiving his
pension from
Katua (Headman)

(Information Service
photograph)



New Customs
House,
Kuala Belait.

(by Courtesy of
Brunei Press,
Kuala Belait)



The following figures show the increase in the average daily consumption in Burnei Town during the past few years:—

1953	288,000 gals.
1954	355,600 gals.
1955	428,035 gals.

To improve the present supplies many new mains were laid, and some of these improvements involved the re-laying of existing mains. The following lengths of pipe were laid during 1955:—

10" dia	1,865 feet.
8" dia	3,321 feet.
6" dia	Nil
4" dia	1,514 feet.
3" dia	1,825 feet.
2" dia	8,164 feet.
1½" dia	5,857 feet.
1¼" dia	63 feet.
1" dia	3,337 feet.

During the year, 30 new connections were made to Government quarters and 33 to private houses. Five new standpipes were erected for the use of the public. Contractors were supplied and charged for water used for constructional purposes, and 17 such temporary supplies were made during the year.

Kuala Belait:

It was hoped that a new water supply scheme for both Kuala Belait and Seria would be in operation during 1955. All of the pumps and storage tanks were completed, but unexpected difficulties were encountered in laying the mains through swampy country.

This supply, when completed, will supply chlorinated filtered water from the British Malayan Petroleum Company supply at Badas, to a low level tank at Seria, from where the water is pumped to high level tanks in Seria and Kuala Belait, and thence by gravity supply to the consumers.

The existing supply continued to be unsatisfactory in both quantity and quality and very few additional connections to consumers were made during 1955.

The following extensions to the supply were made:—

<i>Kuala Belait</i>		<i>Seria</i>	
$\frac{1}{2}$ " dia.	95 lengths	$\frac{1}{2}$ " dia.	59 lengths
$\frac{3}{4}$ " dia.	21 lengths	1 " dia.	26 lengths
1 " dia.	82 lengths	$1\frac{1}{2}$ " dia.	10 lengths
$1\frac{1}{2}$ " dia.	44 lengths	2 " dia.	73 lengths
2 " dia.	74 lengths		

It was necessary to replace the following lengths of pipe because of leaks and damage:—

<i>Kuala Belait</i>		<i>Seria</i>	
$\frac{1}{2}$ " dia.	12 lengths	2" dia.	2 lengths
1 " dia.	39 lengths	3" dia.	2 lengths
$1\frac{1}{2}$ " dia.	7 lengths		
2 " dia.	20 lengths		

Muara:

Maintenance work was satisfactorily carried out during the year. Supplies were connected to the new shop-houses, and the Government Quarters. The following figures show the total lengths of pipes laid:—

2 " dia.	799 feet.
$1\frac{1}{2}$ " dia.	273 feet.
1 " dia.	420 feet.

New connections made during the year were:—

Government	1
Private	12
Public Stand-pipes	3
Temporary	1
Total	<hr/> 17 <hr/>

Serasa:

This supply was extended to provide 5 additional stand-pipes for the *Kampong*. Altogether 350 feet of $1\frac{1}{2}$ " and 510 feet of 1" pipes were laid.

Jerudong:

The following new connections were carried out during the year:—

Government	3
Private	3
Public Stand-pipes	1
	<hr/>
Total	7
	<hr/>

Bangar:

Maintenance work was carried out during the year, and 2 new connections were made to Government Quarters. Work is now in progress on a dam at Punai which will supply water to the new school, Government quarters and the *Kampong*.

GAS SUPPLY

This is confined to the Kuala Belait and Seria areas, where waste gas from the oilfields at Seria is utilised. Ample supplies of this natural gas are available, but the present distribution system will soon be inadequate for the rapidly expanding town areas of Seria and Kuala Belait. A complete new reticulation scheme has been proposed, and the expenditure of \$611,500 has been approved in order to give an adequate supply to a much larger area than is covered by the present system. The ordering of materials for this new supply should be started early in 1956, and it is hoped to have the scheme well under way by the end of the year. Connections were still made on the old distribution system, but by the end of the year, this had almost reached saturation point.

Number of connections made in 1955 660

Lengths of pipe laid in 1955:—

<i>Kuala Belait</i>		<i>Seria</i>	
$\frac{1}{2}$ " dia.	114 lengths	$\frac{1}{2}$ " dia.	55 lengths
$\frac{3}{4}$ " dia.	8 lengths	1 " dia.	101 lengths
1 " dia.	62 lengths	$1\frac{1}{2}$ " dia.	49 lengths
$1\frac{1}{2}$ " dia.	232 lengths		
2 " dia.	2 lengths		

It was also necessary to replace the following lengths:—

<i>Kuala Belait</i>		<i>Seria</i>	
$\frac{1}{2}$ " dia.	22 lengths	1" dia.	5 lengths
1 " dia.	46 lengths	2" dia.	1 length
$1\frac{1}{2}$ " dia.	29 lengths		
2 " dia.	6 lengths		

ELECTRICAL DEPARTMENT

GENERAL REVIEW

The year under review was characterised by the commissioning of additional plant in Brunei, and the concluding of an arrangement with the British Malayan Petroleum Company Limited for the purchase of bulk supply for Belait and Seria Area, with consequent relaxation of the frustrating restrictions on the use of electricity.

The sales of electricity in all categories showed noteworthy advances, notwithstanding the restrictions imposed during the first 10 months of the year.

Construction of the second 280 K.W. set in the Brunei Power Station continued to be up to schedule and this is expected to be put into commission in early February, 1956. This will then bring the total installed plant capacity of the Brunei Power Station to 1,010 K.W. It is anticipated, however, that the maximum system demand will then have reached the safe limit of the installed plant capacity by 1957/1958, in the event of which, a new Power Station with bigger generating sets will be required.

As a result of the British Malayan Petroleum Company's prospecting for oil at Jerudong, the chances of obtaining cheap natural gas for the generation of electricity has considerably altered the situation, and consequently, the final phase of siting a power house, and the type of Plant required, are to be kept in abeyance pending the outcome of the exploration.

2,095,677 units were generated and purchased during the year as compared with 1,534,521 units for the preceding year, an increase of 36.5 percent.

The number of consumers connected to the system showed an increase from 1,529 at 31st December, 1954, to 1,975 at 31st December, 1955. This represents an increase of 29.1 percent.

Sale of electricity totalled 1,902,077 units, an increase of 47.9 percent over the preceding year where sales totalled 1,296,049 units.

The revenue for the year amounted to \$408,538.03 an increase of \$123,860.65 on the previous year.

Capital expenditure during the year amounted to \$699,967.00 bringing the gross book value to \$1,659,498.00.

The demand for hire of domestic appliances continued to make good headway and at the end of the year under review the Department had invested \$206,291.00.

DEVELOPMENT SCHEME

A comprehensive report by Messrs. Preece, Cardew and Rider, concerning the Brunei Electrification Scheme, costing \$9,000,000.00 was finally abandoned, and approval was obtained for \$4,000,000.00 to cover the scheme.

During the year under review, greater attention was given to long-term technical investigation, development of the distribution system for Brunei, Kuala Belait and Seria, and diesel generating stations for small towns, as a result of which considerable materials have been ordered for various projects.

At the end of the year, preparations were made to commence work on the rehabilitation and extension of the Brunei Town distribution system. The laying of 8,187 yards of underground cable, and the construction of 5 indoor substations with a total of 1,200 K.V.A. were completed and commissioned. The laying of 11 K.V. and 660 volt underground cables, and the construction of further 5 indoor substations are in progress.

No accident occurred during the year.

All sections of the Department have had a very busy year and have achieved commendable progress in the face of many difficulties arising from shortage of staff and delayed deliveries of Plant. The State Electrical Engineer desires to put on record

his appreciation of the loyal and conscientious efforts of the staff who have contributed so largely to the achievements recorded in this report.

BRUNEI TOWN

The operation and maintenance of the Power Station in Brunei Town continued satisfactorily without a single major breakdown taking place. The installation of one 280 K.W. Ruston and Hornsby oil generating set in the latter part of November brought the total capacity of the station to 730 K.W.

As in 1954 the Electrical Department was unable to meet the full demand of light and power requested by the public, due to insufficient strength of the distribution system. It is, even then, satisfactory to record that the maximum possible output was derived to meet the additional power required for lighting and small power.

With the installation of an additional 280 K.W. generating set, and the commissioning of five indoor substations fed by newly laid underground cables, together with the erection of new overhead distribution lines of increased capacity, it was possible to remove the restrictions imposed on the use of electricity. Moreover, it was possible to meet the further demand for the supply of electricity that poured in after the restrictions had been removed.

The total units generated during the year under review was 1,247,945 an increase of 276,645 or 28.48 percent on the previous year. The maximum load recorded during the year was 388 K.W. and the load factor was 34.7 percent.

Distribution:

(a) *Underground Cables.* With the arrival of further materials the work of laying the cables was started during the year, and up to the close of the year the total lengths of cable laid were as follows:—

11 K.V.	0.15	sq. in.	3,739 yards
11 K.V.	0.075	sq. in.	1,026 yards
11 K.V.	0.0225	sq. in.	2,443 yards
L.T.	0.1	sq. in.	1,979 yards

A total of 21 straight through, 30 indoor and 10 outdoor, all H.T., joints were made.

In addition, 2 tee joints and 4 outdoor joints, all L.T., were also made.

The work of laying cable and making joints is still in progress.

(b) *Substations.* During the year under review the work of constructing the substations was put in hand by the Public Works Department and up to the year seven substations were completed. Work on the other substations is in hand.

Up to the close of the year five substations have been put in commission namely—

- (i) Tasek Substation with 1—300 K.V.A. transformer.
- (ii) Kumbang Pasang Substation with 1—300 K.V.A. transformer.
- (iii) Hospital Substation with 1—300 K.V.A. transformer.
- (iv) *Istana* Substation with 1—150 K.V.A. transformer.
- (v) Tutong Road Mile 1 Substation with 1—100 K.V.A. transformer.

Work of putting the other substations in commission is in hand.

(c) *L. T. Distribution Overhead Mains:* New overhead L.T. lines of increased capacity have been run and at the close of the year the following lengths of lines have been erected:—

(1) Tasek Substation.

- (i) 0.15 sq. in. — 832 yards
- (ii) 0.075 sq. in. — 444 yards

(2) Kumbang Pasang Substation.

- (i) 0.15 sq. in. — 987 yards
- (ii) 0.1 sq. in. — 436 yards
- (iii) 0.075 sq. in. — 865 yards

(3) Hospital Substation.

- (i) 0.1 sq. in. — 97 yards

(4) *Istana Substation.*

- (i) 0.15 sq. in. — 415 yards
- (ii) 0.1 sq. in. — 364 yards
- (iii) No. 6 S.W.G. — 88 yards

In addition a temporary single phase line was run from the Berakas Airport to the site of the proposed erection of a radio beacon. The length of the mains so run was 964 yards of No. 6 S.W.G. copper, and 300 yards of 7/.044 P.B.V. insulated wire.

Consumers:

The total number of consumers connected at the end of the year was 1,091 showing an increase of 221 over the previous year. In Government Quarters and Buildings, 1,985 new points were wired and 68 points rewired.

Meters and Protection:

The total number of meters installed at the end of the year was 1,233 as compared with 957 in 1954. Dispute tests were carried out on 3 meters during the year and in all three cases the deposits were forfeited.

The protection system operated satisfactorily.

Public Lighting:

The total number of street lamps connected on the system at the end of the year remained at 70.

Routine inspections and relamping were maintained throughout the year.

Domestic Appliances:

Details of domestic apparatus on hire at the end of the year are as follows:—

	1954	1955
Cookers	8	27
Water Heaters	13	27
Ceiling Fans	14	32
Table Fans	37	52
Refrigerators	125	166
Air Conditioners	1	2
Washing Machines	—	6
Freezers	—	2

Statistics:

	1953	1954	1955
Lighting Consumers	542	653	792
Power Consumers	154	225	299
Total Consumers	696	878	1,091
	1954	1955	
Total units generated	971,300	1,247,945	
Total units sold	799,097	1,091,424	
Total units used in works	15,129	18,224	
Total Magnetising unit	18,372	39,925	
Total units unaccounted for	—	7.9%	
Number of gallons of fuel used	66,935	87,851	
B.Th.U's per unit generated (B.Th.U's per pound of fuel are taken as 18,800)	—	12,350	
Installed plant capacity	450	730	
Maximum demand	295	388	
Load factor percentage	—	34.7	

KUALA BELAIT

The operation and maintenance of the Power Station in Kuala Belait continued satisfactorily without a single major breakdown. The total installed plant capacity of the station is 257 K.W., and the effective plant capacity is 172 K.W.

It is expected to purchase bulk electricity supply from the British Malayan Petroleum Company Limited during 1956, and therefore, no further generating sets were ordered, although the maximum demand of the station has exceeded the effective plant capacity.

The total units generated during the year under review was 546,477 showing an increase of 109,991 or 25.2 percent and the load factor was 30 percent. The total fuel used (excluding fuel used for mile 4 engine and for cleaning) was 47,806½ gallons, and the fuel consumption was 0.82 lbs. per unit generated.

Distribution:

The entire overhead system was regularly inspected and maintained in effective condition throughout the year. For the extension of the overhead system, poles planted and copper wire used were as follows:—

1. 34 ft. Step Poles	23
2. 30 ft. Step Poles	41
3. 27 ft. pipe poles (temporary)	73
4. 0.1 sq. in. hard drawn copper wire	6,379 yards
5. 0.075 sq. in. hard drawn copper wire	3,389 yards
6. No. 2 S.W.G. Copper wire	4,100 yards
7. No. 4 S.W.G. Copper wire	1,965 yards
8. No. 6 S.W.G. Copper wire	4,527 yards
9. No. 8 S.W.G. Copper wire	913 yards
10. Lighting wire	1,605 yards

Consumers:

The total number of consumers connected at the end of the year was 609 showing an increase of 107. In Government Quarters 328 new points were wired and 266 existing points were rewired in conduit.

Meters and Protection:

The total number of meters installed during the year was 101 and the protection system operated satisfactorily.

Public Lighting:

The total number of street lights connected at the end of the year was 58 compared with 50 in 1954. Routine inspection and relamping was maintained throughout the year.

Domestic Appliances:

Details of domestic appliances on hire at the end of the year were as follows:—

	1954	1955
Table Fans	3	3
Refrigerators	34	50
Air Conditioners	2	6

Statistics:

	1953	1954	1955
Lighting consumers	300	347	427
Power consumers	50	161	181
Total units generated and purchased	213,605	453,188	563,824
Total units sold	169,470	405,232	533,069
Total units used in works	202	4,254	6,546
Total units unaccounted for	43,933	43,702	24,209
Revenue per unit sold	26.8cts.	22.1cts.	22.4cts.
Expenditure per unit sold	32.5cts.	18.5cts.	19.6cts.
Fuel used in gallons (excluding mile 4 used 4,653 gallons)	9,065	36,665½	47,806½

SERIA

The Power Station was closed down on the 12th May, 1955, and the supply was tapped from British Malayan Petroleum Company's transformer station G-26 Lorong two.

The total units generated during the year under review was 67,612 and the total units purchased was 216,296. The maximum demand was 155 K.W.

Distribution:

The entire overhead system was regularly inspected and maintained in efficient condition throughout the year.

For the extension of the overhead system, poles planted and copper wire used during the year were as follows: —

1. 35 feet step poles	16
2. 30 feet step poles	31
3. 30 feet temporary pipe poles	8
4. 25 feet temporary pipe poles	10
5. 0.15 sq. in. hard drawn copper wire	1,560 yards
6. 0.1 sq. in. hard drawn copper wire	3,720 yards
7. 0.075 sq. in. hard drawn copper wire	2,114 yards
8. No. 2 S.W.G. copper wire	345 yards
9. No. 6 S.W.G. copper wire	2,614 yards
10. No. 10 S.W.G. copper wire	490 yards
11. Lighting wire	2,060 yards

Consumers:

The total number of consumers connected at the end of the year was 276 showing an increase of 133. In Government Quarters 15 new points were fixed.

Meters and Protection:

The total number of meters installed during the end of the year was 4. Routine inspection and relamping was maintained throughout the year.

Domestic Appliances:

Details of apparatus on hire at the end of the year are given below:—

	1954	1955
Refrigerators	2	4

Statistics:

	1953	1954	1955
Lighting consumers	37	107	198
Power consumers	3	36	78
Total units generated and purchased	27,428	110,033	283,908
Total units sold	22,750	91,720	277,584
Total units used in works	—	1,893	2,215
Total units unaccounted for	4,678	16,420	4,509
Revenue per unit sold	29.9cts.	24.2cts.	20.9cts.
Expenditure per unit sold	25.8cts.	26.9cts.	13.6cts.

TUTONG

The Tutong Electrification Scheme was first put into operation in August, 1955, and a plot of land for the Power Station site was surveyed, marked and pegged out for jungle clearance. The route for the erection of High and Low Tension mains was also marked and pegged out.

The Power Station site was cleared of all jungle growth and levelled off. Foundations for the 2 — 70 K.W. sets were laid. Due to shipping delays the materials for the housing only arrived late in the year. It is expected that the erection of the Power house will be completed before the end of March, 1956.

Distribution:

Erection of poles for both High and Low Tension mains has started during the year. A total of 40 x 34 feet and 8 x 28 feet

poles were erected. The work of planting and erecting stays and struts is proceeding and it is expected to start straining the wire early in the coming year.

Installation:

Forty-one Government Quarters and Buildings have been wired. The total number of points wired was 395.

The work of wiring private houses and buildings by private contractors is also proceeding and up to the end of the year 17 shophouses with a total of 105 points have already been wired.

UNALLOCATED STORES

The year 1955 started with a carry-forward stock to the value of \$61,518.90. Total purchases and issues during the year amounted to \$192,570.56 and \$77,592.08 respectively. The closing balance at the end of December, 1955 was \$176,497.38. Materials purchased through the Crown Agents amounted to more than 70% of the total purchase.

There is also an allocated stores account and the total purchase under this account came to \$796,246.00 of which more than 90% were purchased through the Crown Agents.

GENERAL

The Profit and Loss account is shown in Appendix "O".

Mr. E. Rajaratnam, A.I.E.E. (England) substantive holder continued to officiate as State Electrical Engineer.

CHAPTER XI.

COMMUNICATIONS

SHIPPING

Kuala Belait:

SITUATED on the right bank of the Belait River about half a mile upstream from the river mouth, this port is extremely difficult to enter owing to the existence of a shallow sand bar lying right across the river mouth and over which heavy surf is constantly breaking. A shallow channel for vessels drawing up to 8' leads through the bar and is indicated by marker beacons in transit. This channel, however, is very narrow, and during the year a number of craft attempting it through the heavy surf found themselves in difficulties. Fortunately, no loss of life was experienced, and of some half dozen incidents only one vessel was a total loss. This vessel, the Tug "Red Leaf", grounded on the bar in heavy surf and was further disabled by her tow, a 200 ton dumb steel lighter, drifting alongside. The tugs crew abandoned ship by jumping on board the lighter which was then cast off and drifted safely ashore, but the "Red Leaf", probably holed by the pounding, sank just clear of the channel.

The total tonnage of shipping handled in Kuala Belait during the year, of which approximately 50% is or for the British Malayan Petroleum Company Limited is as follows:—

In	300,184
Out	297,635

Facilities: There are four wharves in Kuala Belait, the largest of which, approximately 375' in length is owned by the British Malayan Petroleum Company Limited, and is used mainly by the Company's own vessels, commercial and other craft proceeding direct to the two Government wharves situated a short distance further upstream.

The work of joining these two Government wharves together was commenced during the year, and on completion will provide about 350' of Government wharfage in one long span.

Fresh water is not available to shipping in Kuala Belait and vessels using this port obtain their supplies in Miri, Labuan or Brunei Town.

Fuel oil and lubricants are obtainable in 44 gallon drums, and also a limited supply of fresh and dry provisions. There are two Company owned cranes, one with a lifting capacity of 20 tons, operated on the Company's wharf, and a 10 ton Mobile crane operated by the Marine Department and available for private hire, on Government wharf.

The Straits Steamship Company's coaster type vessels continue to ply regularly between Kuala Belait and Labuan and operate a shuttle feeder service to these and other ports in the Brunei Bay area. The bulk of cargoes landed in Kuala Belait, however, are for the British Malayan Petroleum Company and are carried by the Company's own fleet of L.C.T.s.

Native craft based on this port consist of large Outboard motor boats and small launches and are used to carry local produce and merchandise up and down the Belait river and on short coastal voyages.

Tutong:

Situated on the Northern bank of the Tutong River about 8 miles up stream.

Facilities: As the Tutong river is navigable by small native craft and light launches only, very little facilities are provided for shipping at Tutong village. Like most ports on the West coast of Borneo, the entrance to Tutong River is difficult owing to the existence of a shallow, shifting sand bar across the river mouth. The village, which is on the main road between Brunei Town and the oilfields, possess a 20' wooden wharf used mainly by native craft plying between Tutong and the upper reaches of the river, and as a stand-by berth for Government outboards and launches used as patrol boats and travelling dispensaries, etc.

A Government owned and operated vehicle ferry service plys between Kuala Tutong on the North Bank of the river mouth and Danau, on the South Bank. This service forms a main link between the two halves of the State separated by the Tutong river, and is in constant operation ferrying vehicles, the volume of traffic which considerably increased during the year. Quite early in 1955 it became obvious that the one twin screw, wooden vehicle ferry would soon be inadequate to deal with the ever increasing traffic, and an order was placed for a much longer more modern vessel to be built in steel. Delivery of this vessel is expected early in 1956, and it is anticipated that a "shuttle" service operated by the two ferries will eliminate the necessity of "turn waiting" at each side of the river, and deal adequately with the largest of the heavy vehicles now using this service. In the latter half of the year the following vehicles were transported on this ferry:—

<i>Buses, Trucks</i>	<i>Land Rovers, Jeeps</i>	<i>Motor Cycles</i>
3,600	1,216	248

Muara (Brooketon):

Situated on the Western shore of Muara Harbour.

Facilities: A small pier with a depth of 7' alongside at LWS exists at Muara, and the harbour provides a completely sheltered anchorage in depths varying from 3 to 8½ fathoms. The pier is used mostly by fishing *perahus* and small native craft, and is not provided with fresh water for shipping.

Fuel and oil are not available in Muara, but small quantities of dry provisions may be obtained in the Bazaar.

The Muara Slipway and Engineering Company, a private concern who obtained permission to rebuild the formerly Government owned slipway in Muara, continue to operate and service vessels of up to 200 tons. Hull and engine overhauls are carried out at Muara by this Company and in the latter half of 1955 a total of 1,145.5 tons of shipping were accommodated on this small slipway, which, unfortunately and owing to its limited carriage rail length, is confined to the handling of shallow draft vessels only. These slipway and repair facilities in the vicinity of Brunei Town port provide a much needed and advantageous service for both Government and commercial launches which otherwise would

have to go to the Port of Labuan in the neighbouring Colony of British North Borneo, some four hours steam across Brunei Bay, or even down to Kuching in Sarawak, some 700 miles distant.

Brunei Town:

Brunei Town, the capital of the State of Brunei, situated about 9 miles up river from the Inner Bar where the Brunei river enters Brunei Bay.

Facilities: In addition to the 400' reinforced concrete Government wharf available for Government and commercial shipping, a 25' faced timber wharf was rebuilt by the Shell Co. Ltd. at Subok $1\frac{1}{2}$ miles down stream from the Town wharf, and is now used by the Company's tankers to service a bulk fuel oil installation completed in the latter half of the year.

Fresh water is available from 5 water points on the Town wharf and a reasonable supply of fuel oil, lubricants, and fresh and dry provisions can be obtained in the Town.

Heavy lifts can be catered for by prior arrangement, but otherwise shipping requiring lifts of over 10 tons have to rely on their own derricks.

The Straits Steamship Company continue to operate their local coastal services and the Singapore Brunei direct service which was introduced in 1953 and which was instrumental in relieving the "bottle-neck" occasioned by the transhipment of cargoes in Labuan—the bulk of Brunei consigned cargo now being delivered direct.

The total tonnage of shipping handled alongside Brunei Town wharf during the year again shows an increase on previous years:—

1953	1954	1955
100,476 N.R.T.	122,237 N.R.T.	138,331 N.R.T.

This continued increase is largely due to the inauguration of a bi-monthly service Hong Kong-Brunei by two different Hong Kong companies, one of which has now opened an agency in the Port of Brunei Town. The vessels used on this service are an 800 ton British built freighter, and an ex U.S.M. fleet supply vessel of similar tonnage. Arriving regularly with full cargoes,

these two vessels return to Hong Kong carrying logs, lumber, firewood and scrap metal. A fleet of tugs and lighters was also brought to Brunei by one of these companies and now operates a towage service along the coast. The above figures represent scheduled services only, and do not include the unscheduled vessels and native owned launches, *tongkangs*, and other craft which operate a coasting trade in local produce between Brunei and neighbouring ports in Brunei Bay, and make frequent use of the port of Brunei.

The Marine Department continues to operate the thrice weekly motor launch service carrying mail and passengers between Brunei and Labuan, and in 1955 carried a total of 24,921 passengers in and out of the State.

Figures are given below, together with those for previous years:—

	1953	1954	1955
Inward	12,018	13,238	13,863
Outward	10,601	11,565	11,058

Early in the year it became obvious that the two passenger launches which in addition to their other duties were operating this service, were unable to handle the increasing passenger traffic, and a serious backlog of "missed out" passengers was slowly building up both in Brunei and Labuan. By running extra services the balance of these passengers were transported, but it was not practicable to increase the thrice weekly schedule owing to other commitments and the necessity of withdrawing regularly either one of the two vessels for servicing, and an order was placed with a Hong Kong shipbuilding firm for the construction of a 110' twin screw all steel mail passenger and general purpose vessel for delivery early in 1956.

Additions to the State fleet during the year consisted of one twin screw Aluminium Alloy Ramped Cargo Lighter and one 45' single screw wooden hull bar launch specially designed for crossing Brunei's shallow sand bars with the minimum of danger.

Vessels operated by Government are listed below:—

One 85' twin screw sea going mail and passenger launch,
M.V. "Sultan".

One 65' twin screw fast mail and passenger launch M.L. "Muara".

One 45' twin screw general purpose launch, M.L. "Pretty".

One 45' single screw bar launch, M.L. "Laila Menchanai".

One 35' single screw river launch, M.L. "Sri Seria".

One 65' single screw motor barge, M.B. "Awang Semaun".

Two 35' single screw work boats, M.'s "Sri Belait" and "Juanita".

One twin screw vehicle ferry, V.F. "Higgins".

One 25' single screw aluminium dispensary launch, M.L. "Dove".

In addition to the above, 5 thirty two foot 25 H.P. outboard motor launches were constructed and put into service, making a total of 30 in all. These outboard launches provide fast transport and services in the shallow upriver reaches of Brunei Waterways where larger vessels cannot navigate, and include amongst other duties those of travelling dispensaries, police, customs patrols, fisheries and lighthouse inspections etc.

Large ocean going ships cannot enter any of the ports in the State of Brunei, but vessels up to 4,000 G.R.T. continue to use the deep water anchorage off the Island of Baru Baru (approx. 2 miles east from the entrance to Brunei River) and there in perfect safety load lumber cargoes and firewood from barges and lighters.

By working the tides, however, vessels of up to 1,700 G.R.T. cross the inner bar, where at M.L.W.S. they are limited to a draft of 7', and proceed to Brunei Town wharf to discharge their cargo. After safely crossing the inner bar, the narrow bends and corners in the Brunei river form the chief obstacle to vessels wishing to reach the Town wharf was 250' O.A.L. with a loaded draft of 12', yet shorter ocean going freighters of approx. 180' O.A.L. frequently cross the bar drawing 16' and navigate these corners and bends to the Town wharf without any difficulty.

Navigational Aids — Lights:

Some difficulty was experienced with the re-inforced concrete stands constructed to support the electric lights purchased for the River lighting scheme, and it was not until after delivery of the lights, late in the year, that alterations and amendments to the stands could be put in hand. This work is now practically completed and the first of the new lights will be installed and put into operation in January, 1956, the remainder at approximate intervals of 1 month thereafter. Additional lights have been ordered to complete the scheme, and the whole work of installation will be finished in the 1st half of the new year.

Marine drilling platform locations off the coast have also been provided by the British Malayan Petroleum Company Limited with sea and air navigational warning lights.

Unlit Marker Beacons:

Practically all the marker beacons indicating the shallow channels in Brunei's many waterways were renewed during the year and a system of "sign post" marker beacons constructed and established to indicate the main channels between Brunei and neighbouring ports and outstations, which with a great saving of time, can be reached by smaller vessels by following the branches and back streams of the maze of waterways to be found at the head of Brunei rivers, and in which it is easy for visiting launches and sailormen who are not familiar with the local geography to get lost.

CIVIL AVIATION

Work on the Brunei Airport continued during the year, but at no period was there more than 900 yards available for use. This meant that only Rapide and similar light aircraft could use the airfield. Construction work on lengthening the airfield to 1,500 yards was carried out by the Heavy Equipment Section, and was in an advanced stage at the end of the year. The whole work is expected to be complete by April, 1956.

Materials used in construction this year included—

16,000 cu. yds.	Berakas Sand and Stones
120,936 cu. yds.	Clay Filling
2,000 cu. yds.	Crushed Stones

Despite the limited facilities, the Malayan Airways Feeder Service brought an ever increasing volume of traffic, as is shown by the following figures:—

In January there were 100 Aircraft movements with 202 passengers embarking or disembarking. By December there were 207 movements with 595 passengers embarking or disembarking, and the figures for the months in between show a steady progress to the high figure for December. The total for the year was 1,740 Aircraft movements, and 4,331 passengers.

The air service still remains sadly inadequate for the requirement, as is shown by the fact that the Government launch service carried 24,921 passengers between Brunei and Labuan during the year. It may safely be assumed that not less than 50% of these passengers would prefer to travel by air if seats could be obtained. As it is, bookings must often be made two or three weeks in advance to ensure a seat.

Designs were completed during the year for a terminal building at the airport, and the contract for this work was let to the China Construction Co., Ltd. It is hoped that the airfield will be completed, and the terminal building opened by late 1957.

The British Malayan Petroleum Company Limited maintained their private airfield in service at Anduki, the landing fees being paid by the Government as part of the Feeder service Agreement.

The British Malayan Petroleum Company had the following aircraft on their register during the year:—

Auster Aircraft	VRUDO
Short Sealand	VRUDV
Short Sealand	VRUDS
Percival Prince	VRUDA
Percival Prince	VRUDB
Percival Prince	VRUDR

A Helicopter, operated under Charter from Bahamas Helicopters Ltd. was also introduced by the Company during the year. The B.M.P. Co's aircraft are used exclusively on the Company's own business, and for transporting Company personnel between Lutong, Anduki and Labuan.

There was one accident during the year when an Auster Aircraft landing at Brunei Airport, bent its propellor and damaged the engine. No one was hurt.

ROADS

The Year 1955 the second of the three year development programme marked the real start of the planned works. In 1954 although a great deal of preliminary work was carried out, this work was mainly of type that could be utilised to bring materials to sites, and due to shortage of trained staff, little planned development could take place. The acquisition of plant also required time, and much of 1954 was devoted to this work.

In 1955 the bulk of the plant requirements had been obtained, and the appointment of the Road Section Staff had been made.

The Chief Roads Engineer, with two Roads Engineers took up appointments during February, 1955, whilst another Road Engineer arrived at the beginning of the year. Three Technical Assistants also took up positions in the latter part of February.

For the first three months of 1955 the Roads programme was carried on with the P.W.D. staff, and Roads Section organisation did not commence operations until 1st April.

With the formation of Road Section of P.W.D. a commencement was made on the investigation and survey and planning for the various Development works to be undertaken. The shortage of Technical Assistants and Surveyors made this work somewhat slow, but it was possible to keep planning ahead of the actual construction work, and to provide sufficient information to allow for Government survey officers to proceed with necessary land resumptions etc.

With a review of the position in May, 1955, authority was given for the employment of 5 experienced Roads Foremen, to be engaged from Australia, and to be placed in charge of the larger construction projects. To the end of 1955 four had been appointed, and of these three had taken up positions. The appointment of these foremen greatly eased the problem of supervision, and has produced a much higher standard of work all round, and in addition has provided an efficient training organisation for the local road workers.

The year was not a good one for road construction. The weather was exceptionally wet, and long delays were experienced on all earth works due to the inability of plant to handle the conditions. The location of oil in the Jerudong area threw a great volume of traffic on to the Tutong Road, which was already showing signs of distress due to the increase in loads and number of trucks engaged on Development projects. The very heavy loads that comprised the drill rigs etc. managed to get through, but in the process, old culvert structures etc. collapsed, completely upsetting the drainage of the road, with the result that long sections broke up completely, and became impassable to any traffic. Joint operations were carried out by P.W.D. Road Section and the B.M.P. Co. in an attempt to restore traffic. B.M.P. supplied a number of trucks, and two heavy graders, whilst P.W.D. supplied all necessary labour, spreading facilities, trucks and material from Berakas Quarry. Restoration of the road surface took approximately 3 months, and the material placed down was wherever possible designed to be incorporated in the future planned improvement works. Since the completion of the repairs it has been possible to maintain the road in reasonable condition.

The location of the new oilfields at Jerudong, and the very large programme of bores planned by B.M.P. has made the original scheme for the Tutong Road obsolete, and it has now become necessary to completely re-design the road, improve the alignments, and to provide detailed designs for new and heavier drainage structures over the whole length. This work is proceeding as fast as possible, and a number of new structures have been put in hand.

Since the formation of Road Section continuous experiments have been carried out with soil cement stabilisation, in the hope that this process could be used as a substitute for stone bases.

A trial length of stabilisation had been carried out in late 1954 in Brunei Town, Wireless Hill, and the results here showed that the process had distinct possibilities, although this work had been carried out with a somewhat make shift plant. In April 1955 a length of construction work in heavy fill was undertaken near 4 mile on the Tutong Road. This heavy fill became waterlogged due to heavy rains, and it became impossible to operate any plant on the work, nor could traffic get along on the new

work. To speed up the work it was decided to carry out some experimental stabilising work over the damaged subgrade, and a $4\frac{1}{2}$ inch consolidated pavement of locally procured sand clay stabilised with 10% cement was laid down, this coat was later surfaced with a three inch bitumen grouted crushed stone wearing course. The pavement has been carrying traffic now for over 9 months, this including all the heavy drilling equipment for the B.M.P. operations at Jerudong, some of the loads up to 57 tons on three axles, and to date there has been no sign of any failure of the stabilised section. The result has been very gratifying, and has encouraged the extension of this form of road construction.

With the complete success of this stabilised section, and with knowledge gained from a succession of tests carried out in the Road Section Soil Laboratory, a long length of stabilised pavement was put down extending from Kuala Tutong for a distance of $3\frac{1}{2}$ miles towards Tutong Town. This pavement has also proved highly successful although the beach sands available are not considered ideal for the purpose.

The first two works above were carried out with inefficient plant, but the success of the method encouraged the purchase of modern stabilising equipment, and the first of three units ordered, came into service on December 8th, 1955. This unit, a Seaman Trav-L-Plant has completed a very large length of new stabilised pavement in a very short time. Two additional units will come into operation early in 1956.

A number of new concrete bridges were constructed and completed during 1955 by private Contractors; one in Kuala Belait, one in Brunei Town, two on the Brunei-Tutong Road and three on the Lumut-Liang Danau new road survey.

Lack of Engineering and Technical staff in the early part of 1955 necessarily slowed up the programme, but it was possible to keep designs slightly ahead of the actual construction work, and with the arrival of additional staff later in the year, a considerable speeding up on design and planning of work was possible.

The completion of new road works during 1955 has not been up to the planned programme requirements, but this is necessarily caused by the amount of detail survey and planning that has to be done before actual road construction can commence.

The benefits of this planning will be seen in the following years, when rate of completion of works should approach the target.

A review of the main operations of Road Section for 1955 show that considerable work has been carried out by the various units, and a list of the more important results are set out below:—

Employees engaged on road works —	Day Labour	1,342
	Contract	248
	Total	<hr/> 1,590 <hr/>

New Road Construction, Brunei Town, and Kuala Belait, Seria. 5M. 13 ch.

Surface sealing of pavement, Brunei Town, Kuala Belait, Seria, etc. 128,355 Syds. (Equivalent to $10\frac{1}{2}$ miles, of 21' pavement).

New road formations completed $13\frac{1}{2}$ miles.

Road Surveys completed 53 miles.

Bridle paths constructed 1955 $24\frac{1}{4}$ miles.

New bridges on bridle paths, 56.

Construction of concrete drains Brunei Town, Kuala Belait, Seria. 6M. 41 ch.

New pipe culverts constructed, 92.

R.C. Box Culverts, 2.

Traffic bridges in wood and concrete, 8, totalling 349 ft. in length.

Cement stabilised pavement 43,120 Syds. ($=3\frac{1}{2}$ miles of 21' pavement).

Improvements to pavements in prep. for surfacing 46,200 Syds. ($=3\frac{3}{4}$ miles of 21' pavement).

Construction of new shoulders to roads, 12 miles 40 chs.

Clearing of Rivers, 12 miles.

Construction of new side drains to roads, $18\frac{1}{2}$ miles.

Waterbound macadam road pavements, 2 miles.

Stone crushed, carted, and spread on roads, 39,135 Cyds.

Berakas Quarry stone hauled and spread on roads, 17,045 Cyds.

Bitumen and bituminous emulsions sprayed on roads, 16,907 gall.

Cement used in stabilising works, 23,500 bags.

Cement concrete pipes manufactured and placed in roads 1,222.

Major tests carried out in Soil Laboratory, 510.

The early part of 1955 was taken up mainly in investigation and survey, to enable works to proceed on a planned basis and the greater bulk of the work listed above has taken place in the second half of the year, so that it can be seen that works have been greatly accelerated as the investigation and designs have been prepared, and this acceleration should continue into the coming year, with the gradual building up to the technical and design staff.

Details of the various roads and projects undertaken are given below :—

Brunei Town Roads: New road construction has proceeded well during the year. A total of 14,685 Lft. of new road construction was completed and surfaced with bitumen. New concrete drains were constructed in various housing areas totalling 14,649 Lft.

Surface reseals of all the earlier constructed roads were completed, this work covering an area of 50,275 Syds.

Road designs were prepared for new works extending from Brunei Hospital to Tongkadeh Bridge, and work commenced as the moving of electric and telephone lines would allow. Design of new approach roads to Clifford Bridge was completed, but owing to difficulties in the moving of telephone and electric services, work has had to be confined to drainage projects only for the present.

The extension of the surfaced road to Berakas airport has been pushed ahead, and the work completed to the airport by-pass turnoff.

New road construction with drainage was commenced late in the year extending from Kianggeh Bridge towards the Residency.

Construction of a new concrete bridge over *Sungei Tongkadeh* was completed, and work is now in hand with the completion of new approach roads.

Kuala Belait, Seria Town Roads: Considerable road construction and drainage work has been completed during the year. A total of 12,584 Lft. of new road construction was completed, and the majority of this road has been provided with a penetration wearing coat, or surface sealed. A total of 35,200 Syds. of penetration wearing coat work was provided.

Concrete drains, both main and subsidiary, were constructed for a total length of 14,228 Lft., and at the end of the year, contracts were in hand for completion of a further 4,518 Lft. of new drains.

A new concrete bridge was constructed over the main storm-water drain near the P.W.D. Offices, providing access to the new P.W.D. Depot site.

Tutong Road: This road suffered very severely from the weather conditions experienced throughout the year, and later by the movement of heavy traffic to and from the Jerudong Oil Fields. The new construction work did not get under way until late in the year owing to the need to provide detailed surveys and designs of works, and to acquire the necessary land to enable improvements in widths and alignments to proceed.

Road survey and design was completed to the 18½ miles and necessary steps taken to acquire all land.

In September the section of road from 4 mile to 11 mile due to influences of excessive traffic and loads combined with exceptionally wet conditions, became untrafficable and emergency repairs had to be commenced. The Road Section and B.M.P. combined efforts, and placed all available trucks and graders on the repairs, and as a result of nearly three months continuous work the section of road was restored for full time traffic. The emergency repairs made necessary, seriously delayed the reconstruction work, as all plant and equipment had to be thrown in to speed up repairs.

The collapse of sections of the Tutong Road was mainly due to the failure of old drainage structures, and an all out efforts has

been made since to replace all the old structures with either new pipe culverts, or heavy R.C. Box culverts.

Soil stabilising with cement and local sand clays has been carried on in various sections along the road, and these sections are standing up well to the heavy traffic loads. Short lengths have been completed and covered with bituminous coats at the 4 mile, $14\frac{1}{2}$ miles and a length of $3\frac{1}{2}$ miles constructed on the Kuala Tutong Rentis. This latter length is now being covered with a waterbound macadam wearing coat. Total quantity of stabilising carried out on this road during 1955 amounted to 36,960 Syds. (equivalent to 3 miles of 21' pavement).

A new concrete bridge was completed at $14\frac{1}{2}$ miles to replace the old wooden structure, and a second bridge at $26\frac{1}{2}$ mile is almost complete and is due to be open for traffic early in 1956.

Approximately 9,000 Syds. of surface seals in bitumen and emulsion have been completed during the year.

Road formation has been widened and brought up to standard in preparation for new pavements over a length of $8\frac{1}{2}$ miles, whilst shoulders and new side drains have been constructed over a total length of $14\frac{1}{2}$ miles.

The addition of cement stabilised pavements over the newly prepared formations, commenced on the 8th December, on the arrival of the new heavy Seaman Trav-L-Plant. Since the commencement of work with this machine, a considerable amount of work has been carried out, and the work progressively linked up, to give a finished road surface from 4 mile to the 6 mile. With the arrival of new plants, the provision of this improved pavement will be accelerated, and it is hoped that new construction will be completed to 10-11 mile before the middle of 1956.

Road construction along the Tutong road has been retarded by weather, and heavy traffic, but there has also been considerable delay due to the plant position, and also to the serious shortage of stone and material necessary for finishing off the roads. The stone situation has been affected by plant breakdowns, and also to a great extent by adverse tides, which have prevented the delivery of gravel to the crushers.

Berakas Road: During 1955 slow but steady improvement work has been carried out to this road. The old Berakas stone surface is being covered with a 3" crushed metal penetration bitumen coat, and this work has been completed over a total area of 27,720 Syds. ($=2\frac{1}{4}$ miles) of road surface. New shoulders have been constructed for a length of 8,800 Lyds. and 16 new pipe culverts have been placed in position.

With the serious position on the Tutong Road, and the necessity to concentrate all plant on this road, it became necessary to slow down new construction on the Berakas road.

Construction work on the Airfield by-pass has proceeded satisfactorily, and at the end of the year some 70 per cent. of the earthwork had been completed. The construction of large R.C. box culverts is now in hand, and it is expected that one road should be available for traffic in March of 1956.

(1) The maintenance of the road was carried out by the Heavy Equipment Section, with a Mandor, 15 labourers and a grader and road roller. A new length of road was cut by this section at mile 9, in order to straighten out a bad bend and hill. A culvert was constructed by the Road Section, and the clay filling and stone topping was completed in September. A small area was also cleared at mile 4 for an access road into the Burong Pingei Settlement Area. The formation was filled with 8" of Berakas stone and sand for a length of approximately $1/10$ th mile.

Muara Road: A Survey is being carried out over the whole length of this road, so that a planned development can be undertaken. Little new construction has been completed in the year, but isolated lengths of road have been improved and prepared for new pavements, and generally the road surface made more trafficable. Surface sealing and penetration work has been completed over an area of road of 6,160 Syds. ($=\frac{1}{2}$ mile).

Improvements to pavements in preparation for addition of surfacing, covers 46,200 Syds. ($=3\frac{3}{4}$ miles) and addition of new shoulders extends over a length of 4,400 Lyds.

Work is proceeding on experimental soil stabilisation road pavements new Muara. The work here is in the nature of an

experiment, as the local materials are not very suitable for stabilising processes, and it is intended to study the sections laid down before carrying out additional work.

Jerudong Road: No new construction work was carried out during the year, as it was decided to cart large amounts of fill over this road for works on the Tutong Road, and new construction was delayed, until this cartage had been completed. The road has been well maintained during the year.

Kuala Abang Road: Maintenance work only has been carried out on this road, and minor improvements carried out on swampy sections.

Limbang Road: Maintenance has been carried out on this road and the surface has been well maintained during the year.

Bangar Pandaruan Road: Considerable improvement has been effected to this road, and it is now in good order. Bridges and culverts have been well maintained.

Anduki-Lumut-Liang Danau: Survey of the length of road, Lumut to Danau, was completed early in the year, and Contracts let to Ewart & Company for the construction of three concrete bridges at Lumut, Liang, and Tungaliang. These bridges are now complete. Construction work on the section of road from Liang, and extending towards Lumut, was commenced in April, and proceeded through until October, when weather conditions became unfavourable and work was stopped until early in the year 1956. At the time of stopping, some $2\frac{1}{2}$ miles of formation had been carried out to rough grades. With the stoppage of work at Liang, plant was moved on to the Section Danau to Telisai, and by the end of the year, nearly three miles of new formation had been completed, and at the date of this report a further $3\frac{1}{2}$ miles of formation has been completed.

The work in this area has called for the building up of a complete organisation at Liang, and a large camp with all facilities has been established. This camp will serve the whole road construction in this area.

A Survey has been completed of the proposed new road line from Anduki to Lumut, and it is expected that work will commence on new construction early in the coming year.

A large number of concrete box culverts etc. are being placed along the whole length of these roads.

Tutong-Talamba, Telisai: This 12 mile length has been surveyed, and two large bridge sites located and investigated. The line runs through undeveloped country and generally is very favourable for road construction. A new bridge site near Tutong over the Tutong River, and a second bridge site over the Telamba River near Telisai will eliminate the Kuala Tutong Ferry service. Tenders have been called for the design and construction of these bridges.

Labi Road: Late in 1955 the Labi Road and structures was purchased from the B.M.P. Coy., and road section has now set up an organisation at Bukit Puan to maintain the road and bridges. The old Company buildings have been taken over where required, and the installations at Bukit Puan improved and added to, so as to provide facilities for a full size road camp and maintenance workshop. Provision has also been made to house a Road Foreman and family. New plant has been obtained for this road, and most of this was in operation before the end of the year. The road has been well maintained, although several sections have suffered by slips in cuttings, but these are being moved as the new plant comes into operation.

Bridle Paths: All bridle paths have been well maintained during the year, and considerable additions have been made to the constructed lengths. Some 24½ miles of new paths were constructed, and 56 bridges provided on these paths.

Bitumen Spraying Unit, Brunei: This unit came into operation in June of 1955, with the arrival of two new mobile sprayers, together with heaters and other gear. A competent and experienced foreman was obtained from Australia, and under his guidance the unit has proved highly satisfactory. The men on the operations have generally taken a keen interest in their work, and have adapted themselves quickly to carry out the job in a competent manner. In the short period of existence the units have sprayed over 93,000 Syds. of road surface, using nearly 17,000 gall. of bitumens and emulsions, and 1,400 Cyds. of imported granite chippings.

This unit is being extended with the addition of a complete mix plant to be installed in Brunei, together with Barber Greene Tamper and finisher, and these units should enable a very high standard of work to be produced.

TELECOMMUNICATIONS

A direct radio telegraph service is maintained between Brunei and Singapore, and also with Kuala Belait, Seria and Temburong within the State, Jesselton and Labuan in North Borneo, and Kuching and Limbang in Sarawak.

Most of the V.H.F. equipment for the V.H.F. radiotelephone system has been installed. One 150 feet self supporting Tower was erected at *Bukit Saillelah* near Brunei Town.

Radiotelephone circuits have been opened between the following places, Brunei Town, Tutong, Kuala Belait, Miri, Limbang, Labuan and Jesselton.

The construction of a building for the automatic telephone exchange at Kuala Belait is progressing satisfactorily.

New buildings for the High Frequency Wireless Transmitters at mile 2 *Jalan Tutong*, has been completed and occupied.

The title of "Wireless Engineer, Brunei", a post held by Pengiran Kerma Indra Mohamed, M.B.E., has been changed to "Controller of Telecommunications".

POST OFFICES

There are six Post Offices in Brunei State, situated in Brunei Town, Tutong, Bangar (Temburong District), Kuala Belait, Seria and Muara. Mails to and from these places are usually conveyed by bus and launch.

An inland airmail service between Brunei Town and Seria, which operates daily from Monday to Saturday was introduced during the year.

In addition to the weekly oversea surface mails, regular and frequent overseas air mail services were maintained. These services provide five airmail despatches per week to and from Brunei, Singapore, Sarawak and North Borneo.

The total number of articles dealt with during the year was 1,460,341, compared with 1,420,304 in 1954 and 1,031,907 in 1953.

CHAPTER XII

PRESS, BROADCASTING, FILMS AND GOVERNMENT INFORMATION SERVICES

Press:

THE local press still consists of the three newspapers THE BORNEO BULLETIN, and the two SALAM British Malayan Petroleum Company papers, one in English and the other in Malay.

These three papers which are issued every Saturday morning, are printed at the Brunei Press, Kuala Belait.

THE BORNEO BULLETIN is a private commercial paper, published by the Brunei Press, and sold at 20 cents per copy. The two SALAM papers are published by the British Malayan Petroleum Company Information Department at Seria, and issued free of charge for the information of its workers. The English edition covers the Company's operations and activities, whilst the Malay edition which is printed in Romanised version covers current local news having public interest. This has proved beneficial to the Malay employees of the Company, as well as to the Malay reading public outside it. All the three papers work closely together.

A normal liaison between the press and the Government Information Department was maintained throughout the year. Apart from the supplying of press releases to them, the Government Information Department also supplied news photos. In many cases unfortunately, the latter offered no maximum exploitation for their use, because of the time delay in preparing blocks for such purpose. Block making had still to be done in Singapore, which meant at least a week lost before any photos could be used.

The Brunei Press, Kuala Belait had made a considerable expansion in 1955. In February, another building was taken over adjacent to the original one on *Jalan Bunga Rambai*, half of which was immediately used as a store room. Additional new machineries had also been introduced which included one flat-bed printing machine, one guillotine knife sharpening machine and a Ludlow type-casting machine. The latter proved to be a great boon in setting the headlines for THE BORNEO BULLETIN and SALAM as well as for other general work.

The proprietor of the Brunei Press was appointed Government Printer by the State Council on 27th October this year. This meant the need for more type-setting equipment, and a reorganisation in some of its departments is now being planned for the near future to meet Government's needs.

The popularity of THE BORNEO BULLETIN, and the SALAM papers could be gauged by the increase in their circulation. According to recent figures, THE BORNEO BULLETIN soared up to 6,450 copies per issue; the English SALAM with 4,600 copies; and the Malay SALAM with 6,000 copies. Last year's figures were 5,500, 3,750 and 4,800 copies respectively.

Broadcasting:

The summary of proposals for the State's five year development included the establishing of a broadcasting station in the State.

During December a representative of Messrs. Marconi's visited the State and conducted a Field Strength Survey in order to ascertain the power of transmitter that will be necessary to give coverage over the whole State. At the same time he made enquiries with a view to establishing a complete organisation, and a draft broadcasting scheme should be ready for laying before the Development Committee early in the new year.

Films:

The Government of Brunei Information Service added three more locally taken 16 mm short subject motion picture films, covering public occasions. Despite the fact that it had no qualified cameraman, the attempt to take motion pictures of local events, for showing to local audiences continued. The three short subject

films were SECRETARY OF STATE FOR THE COLONIES VISITS BRUNEI, HIS HIGHNESS THE SULTAN VISITS ULU BELAIT and HIS HIGHNESS THE SULTAN'S 39TH BIRTHDAY CELEBRATIONS.

As usual the exposed films had to be processed overseas; and the version has still remained silent.

Commercial Cinemas:

Brunei has five commercial cinemas, two in Brunei Town, one in Kuala Belait and two in Seria. One of the two in Seria is operated by the British Malayan Petroleum Company Limited. This was opened early this year, replacing the old open air type.

The influence of modern improvements in motion pictures had steadily benefited the local public audiences. At least one cinema provided the facilities for the showing of Cinemascope and Vista-Vision films.

Types of films shown by the cinemas were of various languages, to cater for the multi-racial groups in the State: English, Malay, Chinese, Hindustani etc. Occasionally, continental films were also shown.

Information Services:

Assistant Information Officer, Pengiran Mohamed Yusuf bin Pengiran Haji Abdul Rahim, who went to the United Kingdom on Government scholarship to take up a year's special course in Public and Social Administration at the South Devon Technical College, Devon, Torquay, returned to Brunei on 6th October. He resumed duty after taking two weeks leave.

The appointment of Editor was filled in November, by an officer from Malaya on a probationary period in the first instance.

Kuala Belait Branch — On 27th June this year, the Kuala Belait Office moved into a new building along *Jalan McKerron*, formerly housing the Immigration Office. The Department is sharing the building with the Education Office and the Belait Lending Library.

Film Shows—The number of GBIS film showings throughout the State had increased over the previous year's figure, at the

same time boosting the audience total. Approximately not less than 90,000 people were reached, and 540 showings were put up. This was made possible by the introduction of new lightweight electric generators, and their uninterrupted operation.

Films used were mainly feature films hired from Singapore, supported by the Gaumont British News, and educational and informational films borrowed from the United States Information Service, Public Relations Office and the Australian Commissioner's Office in Singapore.

A new mobile cinema and public address van of the Land Rover Pick-up type was acquired for Kuala Belait. An outboard boat for the ulu *GBIS* film showings was also purchased.

A total of 88 reels of films were added to the Films Library during the year, bringing the grand total to 501 reels altogether. These films comprised mostly those from the Malayan Film Unit, and the Gaumont British News from the Central Office of Information, London. Apart from these, films of educational and informational value were also added.

Reading Room — The Reading Room in Kuala Belait moved into a new building (see under Kuala Belait Branch). About 7,000 persons of different nationalities made use of the facilities.

A portion of the Reading Room in Brunei Town office was taken up to accommodate the extra space required for the general office. An estimated 7,800 persons visited this place during the year.

Photography — Photographs were taken during the year, and relevant copies of these were supplied to the press. Sets of these pictures were also displayed at both Reading Rooms with suitable captions.

The appointment of a photographer was still vacant. All processings therefore, had still to be done by commercial photo studio.

A small darkroom was built adjoining the workshops, in the Brunei Town office in the anticipation of doing our own photographic processings.

PART III.

PART III

CHAPTER I

GEOGRAPHY

BRUNEI is a State on the north-west coast of Borneo, lying between latitude $4^{\circ} 2''$ and $5^{\circ} 3''$ north and longitude $114^{\circ} 4''$ and $115^{\circ} 22''$ east. It forms two enclaves into the territory of Sarawak, by which it is bounded on all sides, or perhaps it would be more correct to say, historically speaking, than an intrusion of Sarawak formed by the basin of the Limbang river splits the State into separate parts. It comprises of an area of some 2,226 square miles, and has a coast line of about one hundred miles extending from Brunei Bay in the East to the boundary with Sarawak in the West.

The capital of the same name, or to give it its honorific Arabic title, Daru'l Salam (Abode of Peace) is situated on the Brunei River, about nine miles from its mouth and is distant by sea 759 nautical miles from Singapore. At the time of the last census in 1947 it had a population of 10,620. Prior to 1910 the town consisted entirely of Malay houses built on *nibong* piles on mud flats on the river, but it has now spread over a portion of the mainland, partly reclaimed, on which the Government offices and other public buildings and streets of shophouses have been built.

Set in a wide sweep of the river, this river town is in its way unique. At high tide under favourable conditions of light it takes on a quite remarkable beauty; viewed at close quarters it is even more remarkably ramshackle. The houses are grouped together in small villages, many being connected by precarious bridges, and there the inhabitants carry on their multifarious activities in much the same way as if they were on land. The only other town of any size is Kuala Belait at the south-western end of the State's sea-board with a population about 5,000. In the Seria area, which is the centre of a rapidly expanding oil producing district and the local headquarters of the British Malayan Petroleum Company, the population is approximately 12,000. At Kuala Belait with

municipal services, piped water supply, electric light, domestic gas, cold storage, cinemas and other amenities, it is difficult to realise that within living memory it has been the scene of human sacrifices and that only two hours upriver there are *pagan* tribes treasuring the grisly relics of head-hunting expeditions of not so long ago.

Climate:

The climate is of the tropical type and is characterised by uniform temperature, high humidity and copious rainfall. The heat is usually tempered by a slight breeze and the temperature rarely exceeds 90°F; the usual daily range is between 76° and 86°F.

The annual rainfall varies from 100 inches at the coast to over 200 inches in certain parts of the interior. There are no well defined seasons, but the rainfall tends to be heaviest from October to the middle of January during the period of the Northeast monsoon.

Local standard time is eight hours ahead of Greenwich time (meridian 120°E.). As the mean longitude of the State is roughly 115°E. there is a sort of natural daylight saving of about twenty minutes.

CHAPTER II

HISTORY

THE native name for the island of Borneo has always been Pulau Kalimantan, but a Mercator's chart of 1595 gives to the town of Brunei as well as the whole island, the name of "Borneo". Early writers spell the name of the island variously, Brunei, Brunnai, Brune, Borneo, Borney, Bornei, Borne and Burni; from these variations upon the theme of one word, two words eventually crystallised — "Brunei" and "Borneo". As recently as 100 years ago, Brunei territory was always referred to as "Borneo Proper". The fact is that at the time of the earliest cartographers and writers, the kingdom of Brunei was at its zenith; the terms "Brunei" and "Borneo" were synonymous and the whole island was subject to the dominion of Brunei.

Brunei has no discovered pre-history and no established early history, and the meagre written records do not go further back than the first Mohammedan Sultan, contemporaneous with the introduction of the Arabic script in or about the fifteenth century. For records of the pre-Muslim era we have to turn to Hindu and Chinese chroniclers. Chinese annals of the sixth and seventh centuries contain reference to a kingdom known as Poli or Puni which sent tribute to the Emperors of China in A.D. 518, 523 and 616. Similar references to a state of that name 45 days' sail from Java occur in the annals of the Sung dynasty which ruled over South China from about 960 to 1280 A.D., and there are strong grounds for identifying it with Brunei, though the authorities are not unanimous on this point. With the decline of the Sung dynasty Brunei transferred its allegiance to Hindu Majapahit in Java, then back again to China, and finally at the end of the fourteenth century, paid tribute to Mohammedan Malacca. With the coming of the Ming Emperors the ties with vassal states were strengthened and tributes were sent to China several times between 1405 and 1425. Thereafter there is no record.

Brunei must soon have thrown off all allegiance for by the early years of the sixteenth century it had risen to great power, and one of its rulers, Sultan Bolkiah, or Nakhoda Ragam (the Singing Captain) a renowned sea rover, voyaged to Java and Malacca and made conquests in Borneo, the Philippines and Sulu and even seized Manila. The names of many islands scattered throughout the archipelago are alleged to commemorate the circumstances of his voyages. One legend is that he set out on a cruise with a *gantang* of pepper seeds and was not content to return until he had given to each seed the name of one of the myriad islands encountered. His wife was a Javanese princess whose followers intermarried with the people of Brunei, and such, according to one tradition, is the origin of the Kedayans whom custom associates with the main bodyguard of the Sultan and who introduced in Brunei a system of rice cultivation greatly superior to local standards. It is related that in his declining years he carried with him on his exploits a band of artisans whose duty it was to prepare royal tombs in remote parts of the archipelago, it being his wish should he die at sea to be buried at the nearest site, the finest of these is said to contain his remains at Kota Batu, about 1½ miles downstream from Brunei Town. This tomb of exquisite workmanship in hard basaltic stone was damaged by Spanish round shot in the seventeenth century and is now in a sorry state of dilapidation and the engravings upon it remain a secret to posterity.

This was the golden age of Brunei. Her sovereignty extended over the whole island of Borneo, the sultanates of Sambas, Pontianak, Banjarmasin, Pasir Kotei and Bolongan being her vassals, as well as over the Sulu archipelago and over the islands of Balabac, Banggi, Balambagan and Palawan.

It was probably during the lifetime of Sultan Bolkiah that Pigafetta, the Italian historian of Magellan's voyage around the world, visited Brunei and wrote the first eye-witness account in which he bore evidence as to the splendour of the Court and the size of the town of Brunei, the population of which he estimated at 25,000 families.

Kublai Khan, the Mongol Conqueror, is known to have sent an expedition from China to the eastern archipelago in 1292 and it is more than probable that this was the origin of the Chinese

colony in northern Borneo which is commemorated in the nomenclature of Kinabatangan river and the mountain Kinabalu and which according to tradition provided Brunei with an early ruler.

In 1291, according to Marco Polo there was a considerable junk carried trade between Brunei and China.

In Brunei, the traditional ceremony, the royal procedure and the nomenclature of officers of State, all commemorate Hindu and Chinese influences. The Hindu influence emanated from the Empire of Majapahit in Java and according to Javanese records a force expelled Sulu marauders from Brunei in 1368 and Brunei is mentioned as one of the countries conquered during the reign of the Angka Wijaya who was the last king to reign over Majapahit before it was vanquished by Mohammedan Malacca.

The Portuguese visited Brunei in 1526 and confirmed the glowing account of Pigafetta. Further visits were paid by the Portuguese until 1530, and a trading factory and a Catholic mission were established at the beginning of the next century. Spain, too, having possession of the Philippines, evinced an active interest in Brunei affairs and twice attacked the capital. Later the English and Dutch in turn made sporadic appearance.

Towards the end of the sixteenth century the power of Brunei began to decline and the outlying territories gradually fall away. The Dutch, having established trading stations on the Southwest, South and East of Borneo rapidly extended their sphere of influence over the semi-independent but nominally vassal sultanates. This disintegration continued until by the beginning of the nineteenth century the Kingdom of Brunei had so dwindled in extent as to include only what is now Sarawak and part of North Borneo.

At this period the capital itself seems to have degenerated to the condition of a slave market for the sale of captives of Illanun and Sulu pirates. Anarchy was rife in the outlying districts and in 1841, in return for his services in assisting the Bendahara Raja Muda Hashim, Viceroy of Sarawak, to quell an insurrection at Kuching, Sarawak proper was ceded to Mr. James (later Sir James) Brooke, who was proclaimed Rajah of Sarawak. In 1846 the island of Labuan was ceded to Great Britain as a base for anti-piracy measures and for the watering and careening of ships, and in 1877 the whole of the northern portion of Borneo

was ceded to form the nucleus of what was to become British North Borneo. At various later dates further cessions were made to the Rajah of Sarawak and to the British North Borneo Company till the territories of the State were eventually reduced to their present circumscribed limits.

In 1847 the Sultan entered into a treaty with Great Britain for the furtherance of commercial relations and the mutual suppression of piracy with an additional clause providing for extra-territorial jurisdiction over British subjects in Brunei, which provision was modified by the Agreement in 1856. By a further treaty made in 1888 Brunei was placed under the protection of Great Britain, and the Sultan agreed that the foreign relation of the State should be conducted by Her Britannic Majesty's Government. Provision was also made for the setting up of consular courts with jurisdiction over British subjects and foreign subjects enjoying British protection. In 1906 a supplementary agreement was entered into whereby the Sultan undertook to accept a British Officer to be styled Resident, who should be the agent and representative of the British Government under the High Commissioner for the Malay States.†

The years between 1906 and 1941 were years of steady progress. Very shortly after the treaty a form of Government was set up under the Sultan in Council and the British Resident, and law and order was established. Roads were built, people were encouraged to become agriculturists and fishermen according to their way of life. Conditions of housing were improved and trade flourished. The discovery of a workable oilfield at Seria only 10 miles from Kuala Belait in 1929 gave added importance to the State and its revenue increased and Brunei became prosperous.

Period of Japanese Occupation:

In the early morning of 16th December, 1941, the first wave of Japanese Forces landed at Kuala Belait and occupied the oil-fields at Seria. Six days later on 22nd December, Brunei Town was occupied and all the British Government Officials were interned. Almost immediately the Japanese introduced their East Asia Co-Prosperity policy, but it had a bad effect on the people's morale when public thrashing had to be attended and later the

†The treaties and agreements relating to events described in this and the preceding paragraph were published as appendices to the Annual Report for 1946.

Japanese dropped that policy to a certain extent. People living near Kuala Belait were driven to work in the oilfields and the country folk were forcibly made to grow food.

Trade, of course, came to a standstill and only certain shopkeepers were allowed to remain as distributors. Luckily for the native population the Government in the years immediately preceding the outbreak of war had compelled traders to import large stocks of rice, the staple food, in case the European war disrupted shipping in the Far East. As a result of that policy the population had ample food for the first year and only slightly less in the second year, but by the end of 1943 the stocks had been used up and only a trickle of food was able to enter the country owing to Japanese shipping losses. Even the Japanese themselves lacked food, but not for long. As soon as the local harvest was in the majority of it was confiscated to feed the Japanese Forces and a serious state of starvation prevailed. Medicines were almost non-existent, malaria spread and the resistance of the population to disease was broken down.

The Japanese policy seems to have been one of neglect. No anti-malarial work was done and no maintenance of houses, roads, ditches or water transport was even contemplated.

In 1944 the Allied Air Force began to take an active interest in Brunei. There were almost daily raids somewhere in the State and later the main town areas were destroyed by bombing. All the shophouses were destroyed in Kuala Belait and Brunei Town and in the latter town the newly completed hospital with X-ray equipment was literally blown off the face of the earth. Luckily the famous River Kampong was spared but many houses have scars of machine gun bullets to bear witness to those frightful days. Most of the native population went into the interior to look for a piece of land to cultivate and live on until the coming of the Allied Forces.

Allied Re-Occupation:

On 10th June 1945, the Allied Forces landed at Muara and proceeded towards Brunei which they entered easily, having only encountered small activity. The Japanese in the meantime were busily destroying their installations in setting fire to the oilfields at Seria. Realising that the end had come the Japanese took out all

the civilians imprisoned for suspected anti-Japanese activities and executed them in their usual cowardly fashion. Their forces then moved upcountry and into the interior where many of them met untimely ends at the hands of the *Dyaks*.

Almost immediately a system of Government was set up under British control and so began the era of reconstruction under the British Military Administration. The population was found to be in a shocking state of health and it is no exaggeration to state that if the landing had not taken place when it did thousands of people would soon have perished through starvation and disease.

Free food and clothing were distributed as quickly as possible to the whole population and the sick were taken to hospital. Those Government servants who were still capable of work reported for duty and the gaps were filled by many wellknown members of the various communities.

Distribution of supplies was difficult because Japanese had allowed the roads to revert to jungle and grass was growing on many of the roads in the town area. Water transport was scrapped together from old hulls and Japanese engines were put into them. Rubble had to be cleared away in the town, bomb-crafters filled in and roads rehabilitated.

Temporary shophouses were built along the river bank and partly over the water from the beginning of *Jalan Stoney* up towards the Customs Wharf until such time as the shop area could be cleared and drained.

Gradually the health of the population improved and order was restored to something like normal. Trade began again though very slowly and prices, other than those goods distributed from the Supply Depot, were prohibitive at first.

On 6th July, 1946, the Government of the country was formally handed over to the Civil Authorities.

CHAPTER III

ADMINISTRATION

BRUNEI is a sultanate. The present Ruler, the twenty-eighth of his line, His Highness Sir Omar Ali Saifuddin, K.C.M.G., was born on 23rd September, 1916, and succeeded to the throne, on the death of his elder brother, on the 6th June, 1950.

The supreme authority in the State is vested in the Sultan in Council. The State Council consists of twelve members, including the British Resident with the Sultan as President. The assent of the Council required for the enactment of legislation and important questions of policy are referred to it. The following is a list of members of State Council during the year:—

His Highness the Sultan Sir Omar Ali Saifuddin Wasa'dul Khairi Waddin ibni Almerhom Sultan Sir Mohamed Jemal-ul Alam, D.K., S.P.M.G., K.C.M.G.

The British Resident Mr. J. O. Gilbert.

Duli Pengiran Bendahara Muda Hashim ibni Almerhom Pengiran Anak Abdul Rahman.

Duli Pengiran Pemancha Anak Haji Mohamed Alam ibni Almerhom Pengiran Anak Abdul Rahman, D.K.

Pengiran Maharaja Laila Anak Kahar ibni Almerhom Pengiran Haji Mohamed Yassin, S.M.B.

Pengiran Kerma Indra Mohamed bin Pengiran Piut, M.B.E.

Pengiran Haji Mohamed Salleh ibni Pengiran Haji Mohamed, S.M.B.

Pehin Dato Perdana Mentri Haji Ibrahim bin Mohamed Ja'afar, D.K., O.B.E.

Pehin Orang Kaya Di-Gadong Awang Haji Mohamed Yussof bin Jawatan Dalam.

Mr. E. W. Cousens.

Mr. R. E. Hales.

Mr. George Newn Ah Foott.

The general functions of administration are carried out by a British Resident under the supervision of the Governor of Sarawak as High Commissioner. By a Treaty of 1906 the Resident's advice must be asked and acted upon in all questions other than those affecting the Mohammedan religion. The seat of Government is in Brunei Town and there are Assistant Residents at Kuala Belait and at Headquarters.

The State is divided into four administrative districts, namely, Brunei and Muara, Temburong, Tutong and Belait, in each of which there are Malay District Officers who are responsible to the Resident.

At Brunei, Tutong and Kuala Belait there are Sanitary Boards whose members, of all nationalities, are appointed by Government. They are responsible for sanitation, conservancy, street lighting, rating and other municipal matters within their respective areas.

Government continues to control the distribution of commodities such as rice and sugar. For this purpose there are Supply Depots in Brunei Town and Kuala Belait, and prices are strictly controlled.

CHAPTER IV

WEIGHTS AND MEASURES

BOTH English and local weights and measures are used. The legal standard weights and measures from which all others are ascertained are the Imperial yard, the Imperial pound and the Imperial gallon.

The following are the principal local weights and measures and their English equivalents:—

The *chupak* equal to 1 quart.

The *gantang* equal to 1 gallon.

The *tahil* equal to $1\frac{1}{3}$ ozs.

The *kati* (16 *tahils*) equal to $1\frac{1}{3}$ lbs.

The *pikul* (100 *katis*) equal to $133\frac{1}{3}$ lbs.

The *koyan* (40 *pikuls*) equal to $5,333\frac{1}{3}$ lbs.

APPENDIX

APPENDIX "A"

TABLE SHOWING QUANTITY AND VALUE OF IMPORTS FOR YEARS 1954 AND 1955

Group No.	Heading	Unit	1954		1955	
			Quantity	Value	Quantity	Value
001	Live animals, chiefly for food	heads	39,016	\$ 1,004,016	43,737	\$ 1,677,036
011	Meat; fresh, chilled or frozen	lbs.	302,150	377,063	287,883	402,001
012	Meat; dried, salted or smoked (not canned)	"	382,894	772,959	511,236	1,004,432
013	Meat; canned, and meat preparations, canned and not canned	"	309,553	648,545	453,713	1,078,624
021	Milk; and cream; fresh	"	—	—	—	—
022	Milk and cream evaporated, condensed or dried	"	1,582,201	1,087,287	1,452,198	1,006,471
023	Butter	"	204,616	341,875	158,088	310,414
024	Cheese	"	35,073	57,961	46,685	83,186
025	Eggs	pcs.	1,262,015	399,081	1,431,651	305,243
026	Natural honey	lbs.	2,050	2,091	2,032	2,378
029	Miscellaneous dairy products	—	—	396,464	—	685,372
031	Fish; fresh or simply preserved	pk.	2,549	279,046	3,385	340,521
032	Fish canned and fish preparations	lbs.	341,095	447,659	528,686	651,315
041	Wheat unmilled	pk.	—	—	—	—
042	Rice	"	53,629	1,737,813	25,198	738,092
043	Barley, unmilled	"	—	—	—	—
044	Maize (corn), unmilled	"	—	314,603	—	331,017
045	Cereals unmilled, other than wheat, rice, barley and maize	"	—	—	—	—
046	Flour	lbs.	1,450,552	315,155	2,140,017	513,064
047	Cereals milled, except wheat flour	"	—	1,845	—	2,836
048	Cereal preparations	pk.	—	769,960	—	856,050
051	Fruits and nuts, fresh (not including oilnuts)	"	—	409,548	—	687,477
053	Fruits preserved and fruit preparations	lbs.	—	336,085	—	397,006

APPENDIX "A"—(Contd.)

Group No.	Heading	Unit	1954		1955	
			Quantity	Value \$	Quantity	Value \$
054	Fresh and dry vegetables, roots and tubers, not including artificially dehydrated ...	pkl.	—	800,153	—	798,975
055	Vegetables, preserved and vegetable preparations	lbs.	—	309,186	—	163,179
061	Sugar ...	"	4,162,722	918,141	5,136,573	1,051,647
062	Sugar preparations ...	"	—	409,087	—	595,785
071	Coffee ...	"	157,278	302,587	233,606	311,202
072	Cocoa ...	"	10,130	15,957	5,935	9,161
073	Chocolate preparations ...	"	—	420,394	—	573,699
074	Tea and mate ...	"	67,640	176,731	69,751	249,482
075	Spices ...	"	—	139,941	—	115,300
081	Feeding stuff for animals not including unmilled cereals ...	"	—	—	—	—
091	Miscellaneous food preparations ...	pkl.	—	472,124	—	442,751
099	Miscellaneous food preparations, n.e.s. ...	lbs.	—	642,528	—	753,225
111	Water and non-alcoholic beverages ...	"	—	630,825	—	716,907
112	Alcoholic beverages ...	gls.	—	190,802	—	229,709
121	Tobacco unmanufactured ...	lbs.	415,980	1,782,371	310,158	1,514,987
122	Tobacco manufactured ...	"	—	—	—	—
211	Hides and skins (except fur skins) undressed	"	386,464	2,249,442	346,758	2,085,936
212	Fur skins undressed ...	pkl.	—	5,091	—	190
221	Oilseeds, oilnuts and oil kernels ...	"	—	—	—	—
231	Crude rubber, including synthetic and reclaimed	pkl.	—	68,342	—	27,195
241	Fuelwood and charcoal ...	lbs.	—	—	—	2,152
242	Wood in the round ...	"	—	3,338	—	—
243	Wood shaped or simply worked	ton	10,233	1,248,550	16,818	18,465
244	Cork, raw ...	pkl.	—	—	—	1,034,347
251	Pulp and waste paper ...	"	—	17,081	—	27,992

APPENDIX "A"—(Contd.)

Group No.	Heading	Unit	1954		1955	
			Quantity	Value	Quantity	Value
				\$		\$
261	Silk	—	—	—	—	—
262	Wool and other animal hair	—	—	—	—	—
263	Cotton	—	—	147,301	—	197,607
264	Jute	—	—	15,081	—	—
265	Vegetable fibres except cotton and jute	—	—	92,463	—	78,830
266	Synthetic fibres	—	—	—	—	—
267	Waste materials from textile fabrics	—	—	33,170	—	21,995
271	Fertilizers, crude	lbs.	—	2,205	—	—
272	Crude minerals, excluding coal, petroleum fertilizer materials and precious stones	—	—	784,012	—	136,914
281	Iron ore	ton	—	—	—	—
282	Iron and steel scrap	—	—	—	—	—
283	Ore of non-ferrous base metals and concentrates	"	—	—	—	8,131
284	Non-ferrous metal scrap	"	—	—	—	—
285	Silver and platinum	"	—	—	—	—
291	Crude animal materials, inedible, n.e.s.	"	—	—	—	—
292	Crude vegetable materials, inedible, n.e.s.	—	—	—	—	960
311	Coal, coke and briquettes	—	—	—	—	—
312	Petroleum, crude and partly refined	—	—	—	—	—
313	Petroleum products	gls.	—	—	—	—
314	Gas, natural and manufactured	cu. ft.	6,031,102	6,106,411	2,014,412	2,770,990
315	Electric energy	—	—	41,478	—	50,060
411	Animal oils and fats	pkl.	—	2,470	—	7,448
412	Vegetable oils	pkl.	—	971,536	—	1,128,165
413	Oils and fats processed, and waxes of animal or vegetable origin	"	—	94	—	4,362

APPENDIX "A"—(Contd.)

Group No.	Heading	Unit	1954		1955	
			Quantity	Value	Quantity	Value
511	Inorganic chemicals	lbs.	—	\$ 1,310,536	—	\$ 862,156
512	Organic chemicals	—	—	4,582	—	42,092
521	Mineral tar and crude chemicals from coal, petroleum and natural gas	—	—	145,256	—	154,170
531	Coal tar and dyes	—	—	8,558	—	—
532	Dyeing and tanning extracts and synthetic tanning materials	—	—	—	—	—
533	Pigments, paints, varnishes and related materials	—	—	1,041,836	—	750,314
541	Medicated and pharmaceutical products	—	—	728,514	—	839,819
551	Essential oils, perfume and flavouring materials	—	—	—	—	—
552	Perfumery, cosmetics, soaps and cleansing and polishing preparations	—	—	412,864	—	404,504
561	Fertilizers, manufactured	—	—	3,305	—	2,387
591	Explosives	rds./pcs.	—	155,134	—	399,525
599	Miscellaneous chemicals materials products	—	—	3,720	—	330,620
611	Leather	pkl.	—	4,713	—	2,225
612	Manufactures of leather, n.e.s.	—	—	53,605	—	39,340
613	Furs, dressed or dressed and dyed	—	—	—	—	—
621	Rubber fabricated materials	—	—	90,531	—	180,485
629	Rubber manufactured articles, n.e.s.	pcs.	—	552,151	—	553,585
631	Veneers, plywood boards, etc.	—	—	38,310	—	41,202
632	Wood manufactures, n.e.s.	—	—	—	—	16,552
633	Cork manufactured	—	—	—	—	1,784
641	Paper and paperboard	pkl.	—	665,940	—	746,777
642	Articles made of pulp, paper of paperboard	—	—	320,463	—	454,788
651	Textile yarn and thread	lbs.	—	25,091	—	15,201

APPENDIX "A"—(Contd.)

Group No.	Heading	Unit	1954		1955	
			Quantity	Value	Quantity	Value
652	Cotton fabrics of standard type	yds.	1,121,235	\$ 853,470	1,087,223	\$ 835,389
653	Textile fabrics of standard type, other than cotton fabrics	"	235,963	250,274	184,954	163,814
654	Tulle, lace, embroidery, ribbons, trimmings and other smallwares	—	—	—	—	57,815
655	Special textile fabrics and related products	—	—	183,765	—	217,565
656	Made-up articles wholly or chiefly of textile materials, n.e.s.	—	—	772,942	—	503,422
657	Floor coverings and tapestries	pcs.	—	11,815	—	25,267
661	Lime, cement and fabricated building materials except glass and clay materials	ton	—	1,827,068	—	1,739,143
662	Clay construction materials and refractory construction materials	—	—	344,450	—	607,440
663	Mineral manufactures, n.e.s. not including clay and glass	—	—	357,730	—	453,714
664	Glass	—	—	246,480	—	241,068
665	Glassware	—	—	241,596	—	270,661
666	Pottery	—	—	183,177	—	195,491
671	Silver and platinum group metals	—	—	7,271	—	12,914
672	Precious and semi-precious stones and pearls unworked and worked	—	—	—	—	174
673	Jewellery and goldsmiths' & silversmiths' wares	—	—	328,910	—	655,999
681	Iron and steel	—	—	11,688,880	—	10,119,841
682	Copper	—	—	37,701	—	29,845
683	Nickel	—	—	7,245	—	—
684	Aluminium	—	—	46,206	—	68,669
685	Lead	—	—	3,385	—	2,981

APPENDIX "A"—(Contd.)

Group No.	Heading	Unit	1954		1955	
			Quantity	Value	Quantity	Value
686	Zinc	—	—	\$ 204,762	—	\$ 204,237
687	Tin	—	—	—	—	—
689	Miscellaneous non-ferrous base metals employed in metallurgy	—	—	—	—	—
691	Ordnance	—	—	30,252	—	—
699	Manufactures of metals, n.e.s.	pcs.	212	23,150	190	21,423
711	Power generating (except electric) machinery	—	—	6,666,116	—	2,263,456
712	Agricultural machinery and implements	—	—	4,337,685	—	2,950,409
713	Tractors other than steam	—	—	61,659	—	87,041
714	Office machinery	—	—	361,916	—	730,441
715	Metalworking machinery	—	—	193,434	—	59,906
716	Mining construction and other industrial machinery	—	—	—	—	1,203
721	Electric machinery apparatus and appliances	—	—	10,607,820	—	9,155,024
731	Railway vehicles	—	—	2,802,400	—	2,650,666
732	Road motor vehicles	—	—	25,317	—	26,633
733	Road vehicles other than motor vehicles	—	—	7,256,463	—	4,790,514
734	Aircraft	—	—	383,270	—	562,890
735	Ships and Boats	—	—	496,362	—	647,866
811	Prefabricated building & their assembled parts	—	—	1,367,700	—	90,466
812	Sanitary, plumbing, heating and lighting fixtures and fittings	—	—	1,077,858	—	700,991
821	Furniture and fixtures	—	—	173,380	—	150,852
831	Travel goods and handbags, etc.	—	—	1,226,850	—	520,715
841	Clothing except fur clothing	—	—	47,287	—	—
842	Fur clothing	—	—	521,623	—	434,621

APPENDIX "A"—(Contd.)

Group No.	Heading	Unit	1954		1955	
			Quantity	Value	Quantity	Value
851	Footwear	prs.	127,916	\$ 384,787	129,349	\$ 382,471
861	Scientific, medicals, optical, etc., instruments ...	—	—	663,238	—	259,355
862	Photographic and cinematographic supplies ...	—	—	118,024	—	110,338
863	Exposed cinematographic films ...	rls.	10,753	10,456,761	12,969	14,843,650
864	Watches and clocks	—	—	221,822	—	453,835
891	Musical instruments, phonograph & phonograph records	—	—	105,231	—	102,401
892	Printed matter	—	—	175,220	—	287,406
899	Manufactured articles, n.e.s.	—	—	2,225,570	—	2,354,860
911	Postal packages	—	—	—	—	—
921	Live animals other than for food	hds.	71	848	—	640
931	Returned goods and special transactions	—	—	3,616	—	119,554
	Notes	—	—	11,730,000	—	11,130,000
	Coins	—	—	55,500	—	107,500
	Gold	tahils	—	103,888	—	155,659
	Beacon's spotlight and spares	—	—	—	—	25,549
				111,666,394		104,621,593
	Re-exports			14,030,318		10,976,613

APPENDIX "B"
TABLE SHOWING THE QUANTITY AND VALUE OF PRINCIPAL EXPORTS FOR YEARS 1954 AND 1955

Heading	Unit	1954		1955	
		Quantity	Value	Quantity	Value
Crude oil	Long Ton	4,704,488	\$ 262,206,468	5,108,970	\$ 286,920,405
Firewood, mangrove	Ton	11,518	172,678	7,455	104,340
Jelutong rubber	Ton	161	311,760	191	360,664
Natural gas	1000 cu. ft.	2,353,826	588,458	2,617,359	654,364
Plantation rubber	Pound	1,995,026	1,180,896	3,229,151	3,569,958
			264,460,260		291,609,731

APPENDIX "C"

GLOSSARY OF VERNACULAR NAMES AND TERMS

Atap (leaf)	Roofing material made from palm leaves.
Ayer	Water.
Bapa	Father.
Belian	Borneo Ironwood.
Belukar	Secondary forest after shifting cultivation.
Bilis	Anchovy.
Bubus	Fish traps.
Bukit	Hill.
Damar	Rasin, obtained mainly from Dipterocarpaceae.
Getah	Rubber, latex.
Gula apong	Sugar obtained from the Nipah palm.
Hari	day.
Ibu	Mother.
Inche	Mister.
Istana	Residence of royalty.
Jalan	Road.
Jelutong	<i>Dyrea</i> spp. The latex is the principal ingredient in chewing gum.
Kajang	Matting made from leaves, used as walling or roofing material.
Kampung	Village.
Kapur paya	<i>Dryobalanops rappa</i> Becc. Medium hardwood considered inferior to the hill kapurs.
Ketua	Headman.
Kilongs	Fish traps made from bamboo.
Mata	Eye.
Mengkuang	Larger screwpine
Meranti	<i>Shorea</i> spp. Light hardwood.
Nibong	<i>Oncosperma filamentosa</i> Bl., a common palm producing a useful wood.
Nipah	<i>Nipa fruticans</i> Wurmb.; a palm common along the tidal reaches of rivers, and in mangrove swamps.
Padang	Field
Pandan	Smaller screwpine generally used for fine matwork.
Perahus	Dug-out boat.
Pikul	133½ lbs. weight.
Puteh	White.
Rambat	Casting net.
Ramin	<i>Gonystylus bancanus</i> (Miq) Kurz; light hardwood.
Resak	<i>Cotylelobium</i> and <i>Vatica</i> spp.; heavy and medium hardwood.

APPENDIX "C"—(Contd.)

Rumbia	<i>Metroxylon sagus</i> Rothb.; the sago palm.
Samsu	Arrack.
Selangan Batu	<i>Shorea</i> spp.; heavy hardwoods.
Seringawan	<i>Shorea albida</i> Sym.; a heavy red meranti.
Seringawan var bunga	A light variety of <i>seringawan</i>
Semayor	<i>Shorea inaequilateralis</i> Sym.; heavy hardwood.
Sungei	Stream.
Tikar	Woven mat of split material.
Tongkang	Large shallow-draft barge-like sea-going cargo-boat.
Towkay	Merchant.
Tugu	A kind of fish trap.
Ulu	Upper reaches of a river.

APPENDIX "D"

RAINFALL IN INCHES FOR VARIOUS STATIONS IN BRUNEI STATE, 1955

<i>Month</i>	<i>Brunei Town</i>	<i>Tutong</i>	<i>Kuala Belait</i>	<i>Tem- burong</i>	<i>Kilanas</i>	<i>Birau</i>
January	14.31	10.30	11.41	12.85	14.84	5.28
February	3.17	1.72	6.16	12.39	5.21	2.09
March	4.07	5.67	3.65	2.27	1.78	1.00
April	4.31	6.89	6.11	14.46	4.91	4.21
May	4.04	4.29	8.73	.22	5.69	5.30
June	15.21	13.38	10.09	12.98	13.52	12.10
July	8.54	4.30	4.15	17.19	8.65	7.11
August	9.28	12.20	13.47	25.08	11.82	10.82
September	12.40	14.39	21.43	17.27	14.30	13.40
October	14.58	9.77	13.85	18.76	15.16	1.95
November	14.96	13.82	11.71	27.77	17.60	19.71
December	10.16	16.43	21.76	15.39	13.24	10.13
Total 1955	115.03	113.16	132.52	176.63	126.72	93.10

PREVIOUS RECORDS (ANNUAL TOTALS) COMPARED WITH 1955

<i>Station</i>	<i>1950</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>	<i>1954</i>	<i>1955</i>
Brunei Town	91.49	124.35	104.40	84.28	109.53	115.03
Tutong	—	94.01	117.94	80.46	116.74	113.16
Kuala Belait	—	122.16	129.11	114.18	136.20	132.52
Kilanas	104.57	107.30	113.11	97.63	110.22	126.72
Birau	77.52	110.22	122.93	70.30	84.99	93.10

APPENDIX "E"

AREA IN *acres* OF CONSTITUTED AND PROPOSED FOREST RESERVES ON 31ST DECEMBER 1955

District	Name of Reserve	Finally Constituted Reserves		Proposed Reserves Preliminarily Notified	Number of Notification
		Area on 1.1.55	Added during 1955	Excluded during 1955	
Belait	Labi Hills	263,000	—	—	—
Belait	Anduki	2,264	—	—	—
Belait	Badas	65	—	—	—
Belait	Forest Nursery	27	—	—	—
Belait & Tutong	Andulau	30,690	—	—	—
Tutong	Ladan Hills	84,000	—	—	—
Brunei	Berakas	560	—	—	186/1955
Temburong	Batu Apoi	188,500	—	—	860*
Temburong	Selirong	6,175	—	—	—
Temburong	Labu	22,200	—	—	—
Temburong	Peradayan	2,650	—	—	—
		600,131		600,131	

*Includes part of the existing Berakas forest reserve and an extension thereto.

APPENDIX "F"

STATEMENT IN MILES OF DEMARCATION AND MAINTENANCE OF EXTERNAL BOUNDARIES

Forest Reserve	Length of boundary				Upkept during 1955			Remarks
	Rentis	Other demar-cated boundary	Undemar-cated	Total	Rentis	Other demar-cated	Cost \$	
Labi Hills	16½	50½	58½	126	—	—	—	
Badas	2	—	—	2	—	—	—	
Anduki	6½	6½	2½	15½	—	—	—	
Andulau	37	—	—	37	1½	—	—	By forest labourers in October.
Ladan Hills	36	—	40	76	—	—	—	
Batu Apoi	3	—	91	94	3	—	—	By forest labourers in March.
Selirong	—	14	—	14	—	—	—	
Berakas	4½	—	—	4½	—	—	—	4½ miles new rentis cut as provisional boundary for new Berakas F.R.
Forest Nursery	1	—	—	1	—	—	—	
Labu	8	—	25	33	5½	—	—	By forest labourers in March.
Peradayan	4½	—	3½	8½	—	—	—	
Total	118½	71	180½	370½	9½	—	—	

NOTE:— "Other demarcated boundary" means features such as roads and streams, demarcated by Forest Reserve notice plates, which require periodic inspection.

APPENDIX "G"

OUTTURN IN SOLID CUBIC FEET OF TIMBER AND FUEL UNDER LICENCES & PERMITS DURING 1955.

Forests	Heavy round	Hardwood sawn	Other round	Timber sawn	Total round	Timber sawn	Poles mangrove	other	Firewood mangrove	other	Charcoal	Boats
A. Forest reserves	3,083	6,300	144,019	122,262	147,102	128,562	21,221	—	314,232	—	38,844	—
B. Other reserves	4,366	55,596	419,744	58,255	424,110	113,851	26,109	4,417	81,888	62,371	—	6,670
								9,478 (B.M.P. Co.)				
	7,449	61,896	563,763	180,517	571,212	242,413	47,330	13,895	396,120	62,371	38,844	6,670

APPENDIX "H"

OUTTURN OF MINOR PRODUCE UNDER LICENCES DURING 1955

Forests	Getah Pikuls	Jelutong \$	Bamboos \$	Damar \$	Nibong \$	Rotan \$	Tikar & Kajang \$	Atap Nipah \$	Gula Apong \$	Misc. \$	Total \$
A. Forest reserves	719	6,128	—	—	—	—	—	—	—	—	6,128
B. Other Forest	2,971	33,509	20	—	655	123	557	393	—	74	38,302
	3,690	39,637	20	—	655	123	557	393	—	74	44,430

APPENDIX "I"
STATEMENT OF REVENUE WHOLE STATE (BY DISTRICT)
(Forest Department)

District	Timber & Poles \$	Firewood & Charcoal \$	Minor Forest Produce \$	Other Source \$	Compensation and fines \$	Total \$
Brunei	3,869.89	10,622.98	8,985.70	1.00	—	23,479.57
Tutong	13,330.22	2,470.51	2,668.88	13.00	—	18,482.61
Belait	47,843.63	36.20	29,689.53	88.00	—	77,657.36
Temburong	595.29	133.50	16.30	77.00	—	882.09
Total	65,639.03	13,263.19	41,360.41	179.00	—	120,441.63

APPENDIX "J"
EXPENDITURE OF WHOLE STATE 1955

Personal Emoluments	Annually Recurrent	Special Expenditure	Total
\$72,095.77	\$25,832.07	\$6,803.29	\$104,731.13

APPENDIX "K"

CRIME STATISTICS FOR THE YEAR 1955

1. *Seizable Offences—Penal Code*

True Reports	...	...	...	...	...	323
Manslaughter	...	...	...	...	...	3
House Breaking	...	...	...	...	...	15
Thefts	...	...	...	...	...	202
Criminal Trespass	...	...	...	...	...	22
Dangerous Driving	...	...	...	...	...	4
Other Offences	...	...	...	...	...	90
Convictions	...	...	...	...	...	88
Acquittals	...	...	...	...	...	5
Undetected	...	...	...	...	...	119
Pending	...	...	...	...	...	24

2. *Non-Seizable offences—Penal Code*

True Reports	...	...	...	...	...	343
Assaults	...	...	...	...	...	259
Mischiefs	...	...	...	...	...	29
Other Offences	...	...	...	...	...	55
Convictions	...	...	...	...	...	62
Acquittals	...	...	...	...	...	4
Referred to Magistrate	...	...	...	...	...	237
Pending	...	...	...	...	...	4

3. *Seizable Offences—Other Laws*

True Reports	...	...	...	...	...	232
Opium Enactment	...	...	...	...	...	29
Minor Offences Enactment	...	...	...	...	...	17
Gambling Offences	...	...	...	...	...	14
Arms & Explosives Enactment	...	...	...	...	...	1
Aliens Enactment	...	...	...	...	...	60
Immigration Enactment	...	...	...	...	...	60
Other Offences	...	...	...	...	...	59
Convictions	...	...	...	...	...	191
Acquittals	...	...	...	...	...	3
Pending	...	...	...	...	...	4

4. *Non-Seizable Offences—Other Laws*

True Reports	...	...	...	...	...	413
Minor Offences Enactment	...	...	...	...	...	129
Other Offences	...	...	...	...	...	284
Convictions	...	...	...	...	...	135
Acquittals	...	...	...	...	...	71
Referred to Magistrate	...	...	...	...	...	134
Pending	...	...	...	...	...	7

APPENDIX "K"—(Contd.)

5. *Traffic Offences*

True Reports	...	...	...	...	...	917
Traction Engines Enactment	...	...	...	...	...	543
Minor Offences Enactment	...	...	...	...	...	374
Convictions	...	...	...	...	...	519
Acquittals	...	...	...	...	...	5
Pending	...	...	...	...	...	32

APPENDIX "L"

PERSONS ENTERING AND LEAVING FOR THE YEAR 1955

<i>Nationality</i>	<i>Entering</i>		<i>Leaving</i>	
	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>
American	53	16	52	17
British Indigenous	1,662	544	1,617	512
British Dyaks	1,714	221	1,400	207
British Malays	9,642	4,934	8,545	4,427
British non-Indigenous	511	259	465	230
Burmese	41	36	35	29
Chinese (British subjects and aliens)	15,587	6,656	14,435	6,215
Dutch	265	122	334	126
French	15	4	11	2
Indian and Pakistani	1,330	194	1,276	164
Indonesian	129	57	155	42
Swiss	19	3	20	4
Others	1,796	618	1,364	500
Total	32,764	13,664	29,709	12,475

APPENDIX "M"

BUILDINGS COMPLETED IN THE BRUNEI, MUARA, TUTONG AND
TEMBURONG DISTRICTS DURING 1955

- 1 Block Senior Officers' Quarters 'Plywood'.
- 1 Block of 2 Senior Officers' Quarters.
- 6 Blocks of Senior Officers' Quarters 'Luyang Type'.
- 2 Blocks of Class "B" Quarters.
- 7 Blocks of Class "C" Quarters.
- 2 Blocks of Class "E" Quarters.
- 6 Blocks of 2 Class "F" Quarters.
- 8 Blocks of Barracks—67 doors.
Extension to Malay School Sinaut.
Annex to *Istana* Darul Salam.
- 2 Blocks of Garages at *Istana* Compound.
Wireless Station at Tutong Road.
V.H.F. Station at *Bukit* Sailelah.
Supply Godown (Arcon) at Tutong Road.
- 6 Nos. Electrical Substations.
Store and Granary at Kilanas.
Office and Store (Agricultural Department) at Biram.
Slaughter houses at Tutong Road.
Pork Market.
Extension to Rest House.
Extension to one Block Class "C" Quarters.
- 3 Nos. Boat Sheds.
P.W.D. Main Store.
P.W.D. Workshop.
Furniture/Road/Water Works Store.
Equipment Store.
- 3 Blocks of (3 pin-frame) Garages.
Workshop Office.
Tyre and Battery Shop.
High Commissioner's Lodge at Muara.
Benzine Store.

Temporary Buildings.

- Domestic Service Block and Hostel.
- 3 Blocks of Barracks.
Extension to S.M.J.A. Boys School.

APPENDIX "N"

BUILDINGS COMPLETED DURING 1955 IN THE KUALA BELAIT AND
SERIA DISTRICT

- 4 Senior Officers Quarters.
- 1 Temporary Senior Officers Quarters Sungei Liang.
- 11 Class "E" Quarters.
- 10 Blocks of 2 Class "F" Quarters.
- 2 Blocks 10 Door Temporary Barracks Quarters.
- 1 Block 10 Door Temporary Barracks Sungei Liang.
- Public Works Department Compound:
 - Workshop, Machine Shop, General Store and Furniture Store.
- New Customs Building.
- Panaga Field Force :
 - Drill Shed, Office, Stores and Garages.
- Pork Markets at Kuala Belait and Seria.
- Fish, Meat and Vegetable Market at Seria.
- 3 Room extension to Kuala Belait Resthouse.

BUILDINGS UNDER CONSTRUCTION AT END OF 1955

- Istana Panaga.*
- New Malay Schools Kuala Belait and Seria.
- Telephone Exchange Kuala Belait.
- Extension to District Office Seria.
- Garages for Electrical and Municipal Departments.
- Public Works Department Compound:
 - Service Station, Blacksmith Shop and Paint Shop.
- 2 Blocks 10 Door Municipal Barracks Kuala Belait.
- 3 Blocks 10 Door P.W.D. Barracks Kuala Belait.

APPENDIX "O"

ELECTRICAL DEPARTMENT

PROFIT AND LOSS

<i>Creditor</i>		<i>Debtor</i>
Electricity Supply		Electricity Supply
Excess Revenue over Expenditure	\$87,430.65	Interest on Capital \$919,129.85 @ 3½% \$32,169.54
Wiring		Redemption Fund Con- tribution on plant \$919,129.85 @ 5% 45,956.49
Excess Revenue over Expenditure	127.95	Hire of Electrical Appliances
Hire of Electrical Appliances		Interest on Capital \$121,305.37 @ 3½% \$ 4,245.69
Excess Revenue over Expenditure	\$23,670.17	Redemption Fund Con- tribution on applian- ces \$121,305.37 @ 20% 24,261.07
Interest on Redemption Fund \$66,224.15 @ 3½%	2,317.85	Profit 1955 6,913.83
	<u>\$113,546.62</u>	<u>\$113,546.62</u>

APPENDIX "P"

BRUNEI

BRITISH RESIDENTS

	1906/May	1907 — M. S. H. McArthur
May	1907/Dec.	1907 — H. Chevallier
Jan.	1908/April	1908 — M. S. H. McArthur
April	1908/Sept.	1909 — J. F. Owen
Sept.	1909/Nov.	1909 — B. O. Stoney (Acting)
Nov.	1909/Nov.	1913 — H. Chevallier
Nov.	1913/Dec.	1914 — F. W. Douglas
Jan.	1915/May	1916 — E. B. Maundrell
May	1916/Mar.	1921 — G. E. Cator
Mar.	1921/Mar.	1923 — L. A. Allen
Mar.	1923/Feb.	1926 — E. E. F. Pretty
Mar.	1926/Mar.	1927 — O. E. Venables
Mar.	1927/May	1928 — E. E. F. Pretty
May	1928/Jan.	1929 — P. A. B. McKerron
Jan.	1929/Aug.	1929 — R. J. F. Curtis
Aug.	1929/Sept.	1931 — P. A. B. McKerron
Sept.	1931/Oct.	1934 — T. F. Carey
Nov.	1934/Jan.	1937 — R. E. Turnbull
Jan.	1937/Dec.	1939 — J. Graham Black
Jan.	1940/Dec.	1941 — E. E. Pengilley
July	1946/Jan.	1948 — W. J. Peel
Jan.	1948/Aug.	1948 — L. H. N. Davis
Aug.	1948/June	1951 — E. E. F. Pretty
July	1951/June	1953 — J. C. H. Barcroft
June	1953/July	1954 — J. O. Gilbert
July	1954/Oct.	1954 — D. H. Trumble
Oct.	1954	J. O. Gilbert

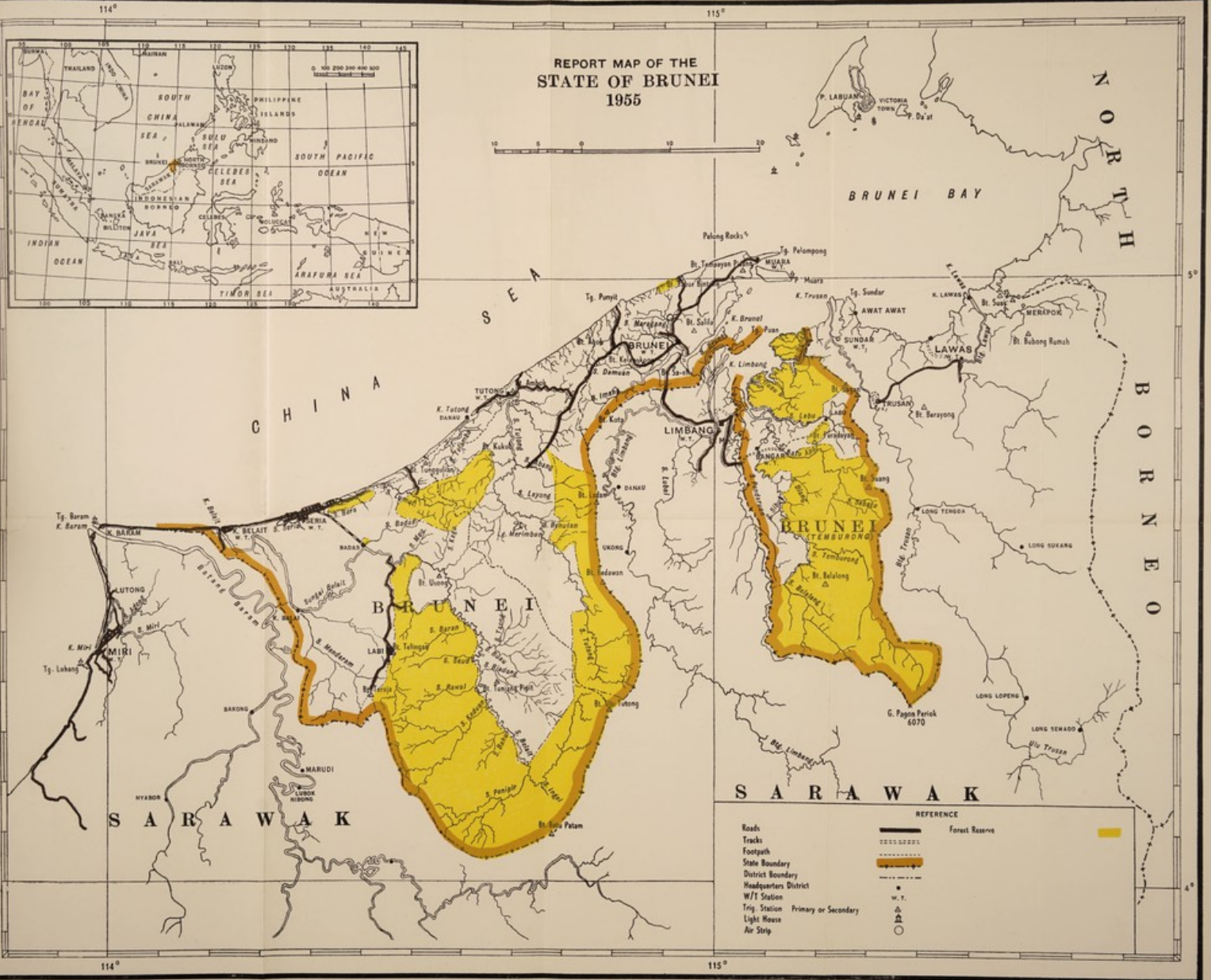
APPENDIX "P"—(Contd.)

ASSISTANT RESIDENTS

May	1905/May	1907 — F. A. S. McClelland
May	1907/June	1908 — J. C. Sugars
June	1908/Feb.	1910 — B. O. Stoney
Mar.	1910/May	1911 — W. H. Lee-Warner
Mar.	1911/Jan.	1913 — E. A. Dickson
Jan.	1913/1914	— W. H. Lee-Warner
	1914/1930	— Abolished
Jan.	1931/Sept.	1931 — T. F. Carey
Oct.	1931/Sept.	1933 — R. C. Gates
Aug.	1933/April	1935 — A. Glencross
April	1935/Mar.	1936 — D. A. Somerville
Mar.	1936/May	1938 — H. Hughes-Hallett
May	1938/April	1940 — E. C. C. Barrett
May	1940/Dec.	1941 — R. N. Turner
July	1946/Jan.	1947 — C. J. Briscoe
Jan.	1947/Dec.	1947 — N. H. Wood
Dec.	1947/Mar.	1949 — D. C. I. Wernham
Mar.	1949/Oct.	1949 — I. Harper (Kuala Belait)
Oct.	1949/June	1950 — I. Harper (Brunei)
Oct.	1949/Mar.	1951 — R. C. S. Bell (Kuala Belait)
Sept.	1950/Oct.	1951 — P. Scanlon (Brunei)
Mar.	1951/Nov.	1953 — G. A. T. Shaw (Kuala Belait)
Oct.	1951/April	1952 — R. G. Keech (Brunei)
April	1952/April	1953 — M. M. McSporran (Brunei)
Nov.	1953/Feb.	1954 — H. P. K. Jacks (Kuala Belait)
April	1953/Oct.	1954 — J. T. Weekes (Brunei)
Feb.	1954/	— P. A. Coates (Kuala Belait)
Oct.	1954/	— R. H. Morris (Brunei)

NOTE:— The appointment of Assistant Resident was abolished in 1915 and was not recreated until 1931 consequent upon the development of the Seria Oilfields, Kuala Belait. The appointment of Assistant Resident Brunei was created in October, 1949.

REPORT MAP OF THE STATE OF BRUNEI 1955



REFERENCE	
Roads	Forest Reserve
Tracks	
Footpath	
State Boundary	
District Boundary	
Headquarters District	
W/T Station	
Trig Station	
Light House	
Air Strip	

