REPORT ON NETHERLANDS NEW GUINEA FOR THE YEAR 1959

Presented to the Secretary General of the United Nations pursuant to Article 73(e) of the Charter

Ministry of Affairs Overseas
Ministry of Foreign Affairs
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INTRODUCTION

In accordance with the provisions of Chapter XI of the Charter of the United Nations, the Netherlands Government is promoting the development of Netherlands New Guinea as harmoniously as possible. The Netherlands Government has set itself the task of advancing the population of the Territory to such a stage of cultural, economic, social and political development that they will be capable of satisfying their own material needs, so as to enjoy the fruits of modern civilization, and will be able to decide their own political destiny in full freedom.

To this end fruitful co-operation has been established with agencies of the United Nations, at regional level with the countries represented in the South Pacific Commission, and with the Australian Administration in Papua and New Guinea.

The inaccessibility and impassable nature of the Territory, with its sparse natural resources, have meant that initially contact with the outside world, except in a few coastal areas, had scarcely any beneficial effect on the social and economic structure of the Papuan community.

The difficult natural conditions in which the population have lived have also hampered the development of initiative on the part of the Papuan which might have led to social and economic progress.

Except for a few coastal areas, where outside influences have already been at work for some considerable time, part of the population still live in primitive fashion in a closed produce economy.

Having regard to these difficult and primitive conditions, it will be clear that lasting progress can only be achieved by a gradual acculturation. To this end the Civil Administration, the Popular Information Service, the Department of Education, the Department of Public Health, the agricultural extension services, as well as the Protestant and Catholic Missions, have been cooperating most closely for quite a number of years.

In the implementation of this development task mainly the same methods and techniques have been and are being applied in Netherlands New Guinea as in other underdeveloped regions.

In 1959 work continued on the creation of basic facilities, such as the construction of offices, houses, hospitals, harbours and airfields, the establishment of communications and the extension of the administrative machinery. To a large extent development in this field has been rounded off.

Reference should be made to the completion of the Central Hospital for Netherlands New Guinea at Hollanda. In the same town the new concrete ocean jetty with its ancillary works was practically ready at the end of the year under review. A start had been made with the construction of the new secondary school at Hollanda.

The extension and intensification of administration made steady progress in 1959, too. New administrative posts were opened in the southern highlands of the Vogelkop, as a result of which the last part of western New Guinea which had remained outside administrative control was placed under administration. In the Baniem Valley a second post was opened. Finally, administrative posts were opened in the Sibiq Valley at the foot of the Sterren mountain range and on the Casuarine coast. Thus the last coastal area which had remained outside administration, with a coast very difficult to navigate and a warlike population, has been brought under administration.

In the highly inaccessible eastern highlands of the Vogelkop, where there are few or no possibilities of economic development, a migration project was started for the population. South of the Carstensz mountain range, too, a start was made with a migration project for the mountain-dwellers, who have remained isolated from the mainstream of development in this inaccessible area. They can now move to the coastal plain, where they will be accessible by boat and where they can grow commercial crops.

Unceasing attention is being devoted to the participation of Papuans in the machinery of government and to the creation of representative bodies.

As more trained personnel become available, Papuans take their share in the implementation of the various tasks of the authorities. Simultaneously they receive further practical training for responsible positions.

Thus in 1959 the number of Papuan administrative officers again increased: at the end of the year there were 93. Of the 69 administrative districts into which the country is divided, 34 are
administered by Papuans. The number of Papuans in Government service increased from 1,568 at the end of 1958 to 1,856 at the end of 1959; these figures do not include the employees on monthly and daily pay, whose number was around 2,200 (1958: 1,900).

In various subdivisions more informal village councils were formed, for an important part on the initiative of the population. These village councils consist of a number of elders under the chairmanship of the village headman, the head of the village school acting as adviser. From the social point of view it is important that the village councils contribute to the integration of the various genealogical groups from which the villages are as a rule built up. Moreover, these councils give a certain degree of training in democratic methods. To an increasing extent village councils have recently been taking the initiative in the introduction of perennial crops or the extension of existing plantations.

An important milestone in the political development of the population of the Territory was reached during the year under review with the election and the installation of the first regional community council for Biak-Noemfoor, which covers an area with more than 30,000 inhabitants. The council consists of thirteen members, ten of whom were elected by the population, both men and women having the vote and being eligible for election. Three members were appointed by the Governor, thus making it possible to have groups from which no representative was chosen in the election represented on the council all the same. In the first elections ten Papuans were elected. The three appointed members also include two Papuans.

The institution of a second regional community, for the subdivision of Japen, is to be expected in the course of 1960.

In 1961 a central representative body, the New Guinea Council will be instituted. Through their representatives in the Council the population will have a say in the legislation and administration of the Territory as well as in the policy to be pursued in respect of the Territory’s further development. The pertinent statutory regulations were submitted to the Netherlands Parliament for approval in June 1960. From its very inception this representative body will be mainly composed of Papuans, of whom at least 50% will be elected.

With regard to economic development, the results of the agricultural research performed in recent years and the intensive extension work in the field of farming are beginning to make themselves felt. The planting of commercial crops such as cocoa and coffee, together with the more traditional coconut palm and nutmeg, is on the increase. Exports of native produce are growing and, viewed over the years, display a substantial rise. New products such as timber and cocoa have widened the range of export products and in future will probably become more important. Consequently, an improvement of the balance of trade is to be expected in the years to come.

Experience with the experimental project set up some years ago in southern New Guinea for the cultivation of rice is of such a nature that it may be accepted as a fact that certain areas along the south coast of Netherlands New Guinea are particularly well suited for mechanized wet rice growing.

Plans for the establishment of a large mechanized rice farm near Meaniu are now being worked out.

The production of the sawmill which came into operation at Manokwari in 1955 has steadily increased and has now reached a level of 850 cu.m of sawn wood a month.

At Manokwari an agricultural experimental station will be built; the construction and fitting-out of this station, which will demand the sum of f. 7.8 million, is being financed by the Development Fund for Overseas Territories of the European Economic Community.

In conjunction with this research centre a training centre will be set up at the same place, where education in agriculture, forestry, stock-breeding and fishing and the training of soil scientists will be concentrated.

It is the intention also to finance from the EEC Development Fund a general geological survey in the Territory, which will extend over a period of five years. (This project, which will involve the sum of approximately f 18 million was approved by the Commission of the EEC in March 1960.)

It is also intended to have a socio-demographic structural survey of the population financed from the EEC Development Fund. The purpose of this survey is to obtain a complete picture of the present-day structure of the Papuan community and of the socio-biological and social ties in native society. This picture is adjudged essential to the drafting of future development plans. (The project,
which will cost some f. 2½ million, spread over a period of four years, was likewise approved in March 1960 by the Commission of the EEC.)

A number of other projects, partly in the economic field and partly in the field of public health, also to be financed from the EEC Development Fund, are in an advanced state of preparation.

The only major industrial enterprise in Netherlands New Guinea is the Nederlandsch Nieuw-Guine Petroleum Maatschappij. However, production from the wells is declining, as a result of which the company was obliged during the year under review to reduce its staff considerably.

It is hoped that the decline of oil production will be compensated for by the development of other mining possibilities. With a view to this the Geological Survey Foundation in Netherlands New Guinea was set up in March 1959 to foster geological surveys in the Territory. A team of geologists in the service of this Foundation has already started with investigations. Further, a number of permits for mining exploration were granted to various companies.

As regards public health, further progress was made in the control of endemic diseases such as malaria, tuberculosis, yaws and leprosy. Likewise, the work of the maternal and child welfare control section was considerably expanded, with favourable results.

By the opening of the new Central Hospital at Hollandia, with good facilities for specialist work, the quality of medical treatment was considerably improved. The training of Papuan medical personnel was centralized to a considerable extent in this hospital.

Existing hospitals and leproseries were renovated or extended, whilst much care was devoted to improving their equipment.

As for social conditions, the drift to the urban centres forms a problem in some regions. On the one hand the authorities try to reduce this drift by development projects in the countryside, and on the other hand restrictions are imposed on residence in the urban centres by persons who are without sufficient means.

Efforts are made to render social conditions for town dwellers as favourable as possible. By the construction of good houses, the foundation of social centres, by educational courses and the formation of district councils the creation of an uprooted urban proletariat is prevented as much as possible.

Relations between employers and employees remained in general favourable; there was no loss of man-days as a result of labour conflicts.

Neither employment nor wages underwent any significant change during the year under review. Some increase in unemployment was, however, noticeable in the urban centres, especially among non-Papuan employees. This was the result of the fact that Papuans are beginning to fill jobs which were formerly occupied by Europeans. The reduction in oil company personnel already mentioned is being mitigated as much as possible by the company concerned by appropriate financial transitional measures for the redundant personnel.

The development of education is steadily continuing; in this, too, the Papuan population is increasingly concerned. The number of Papuan teachers of both sexes in public and subsidized village education increased during the year under review from 534 to 610. (The total number of teachers in public and subsidized village education is now 965). The participation of Papuan girls in education is satisfactory; the percentage of Papuan girl pupils at the village schools in 1959 was 44% and at all educational establishments together 42% of the total number of Papuan girls.

In the field of scientific research interest in the past year centred on the Dutch expedition to the Stretten mountain range in the Eastern part of the Central Highlands, an area difficult of access and as yet unexplored. Important information was collected on physical and cultural anthropology, linguistics, zoology, botany, physical geography, geology, agricultural geology and medicine.

The close collaboration with the specialized agencies of the United Nations was continued in the year under review. The WHO and UNICEF gave considerable assistance to the Territory in the fields of malaria and TB control and maternal and child welfare.

As usual, in the course of 1959 various specialists of the South Pacific Commission visited the Territory for consultation with and to give advice to the local authorities.

A Papuan delegation of five members took part in the Fourth South Pacific Conference held at Rabaul from 29 April to 13 May, 1959.
Netherlands New Guinea was represented at the Regional Seminar on Education organized at Brisbane in November 1959 by the South Pacific Commission and the Study Group Meeting on Filariaasis and Elephantiasis held in the same month at Noumea.

Administrative co-operation between the Australian and Netherlands administrations in both parts of the island was further extended and intensified during the year under review. This co-operation was facilitated by the improvement of air, shipping and telecommunication links between the two Territories. Study tours were arranged for Dutch and Australian officials, often accompanied by Papuan colleagues. Technical reports and data in many fields of Government concern are exchanged on a wide scale. Considerable mutual benefit is derived from this exchange of data on organizations and working methods used in the two halves of the island. One of the results of this practical co-operation will be that possibilities for joint training will be created. An actual start with the implementation of this plan has already been made.

In the course of the year Netherlands New Guinea was visited by various specialists in many spheres, including Professor Barnes of the Australian National University, who in the months of May and June paid an exploratory visit in connection with a proposed ethnological survey in the Bajoem Valley, to begin in 1960. Further, various WHO experts visited the Territory once again and advised on malaria control, maternal and child welfare and environmental sanitation.

During the year under review Netherlands New Guinea was further represented at the Third Conference of the FAO Plant Protection Committee at New Delhi in December, at the FAO Working Party on Copra Quality and Grading meeting at Colombo in August, various ICAO meetings, the Third Congress of the World Meteorological Organization at Geneva in April, the First Interterritorial Malaria Conference for the South-West Pacific held at Port Moresby in November and various other meetings of the WHO in the field of public health.

Fellowships were awarded in the field of malaria control for visits to India, Ceylon, Malaya and Cambodia, for obtaining the diploma of Public Health at the University of Singapore and for a course in Public Health Nursing at Boston, USA.

For the first time in history a delegation of Papuan Scouts from Netherlands New Guinea attended a World Jamboree, viz. the Tenth World Jamboree held at Manila during the year under review.
CHAPTER I

GENERAL INFORMATION

A. GEOGRAPHY  1. LOCATION

The part of New Guinea administered by the Netherlands lies approximately between long. 130° E in the west and long. 141° E in the east. In the north it stretches as far as the Equator and in the south it extends just below lat. 9° S.

The territory of Netherlands New Guinea includes a number of islands. Of these islands, Komoran, Frederik Hendrik Island and Poelau Adi are the best known in the south. To the west all the islands are included which lie east of a line that starts north of the Aroe Islands, runs in a northwesterly direction between Ceram and Misool and, beyond this latter island, curves to the north in such a way that the Boo Islands, Poelau Gag and Poelau Sajang come within Netherlands territory. The principal islands thus enclosed by this line are Misool, Waigeo, Batanta, Kofiau and Salawati (better known as the Radja Ampat Islands). To the north the Ajoie and Asia Islands, the Mapia Islands and all that lies south thereof form part of the territory of Netherlands New Guinea. The most important of the islands thus enclosed, the Schouten and Padaido Islands, Noemfoor and Japen, lie in Geelvink Bay (see Appendix I).

2. AREA AND POPULATION

The area, including the islands, is 416,000 square kilometres. From east to west Netherlands New Guinea stretches in a straight line for more than 1,200 km. The greatest width along the eastern frontier is 730 km. The distance between Sorong and Merauke, measured across the island, is 1,300 km.

For the area brought under administration relatively accurate population figures, based on censuses, are available. As regards the patrol areas, or in other words those districts of the various subdivisions which have not yet been brought under effective administration, the number of inhabitants can only be estimated. Little is known so far about the density of population in the Central Highlands, except in the Wissel Lakes subdivision; from observations made during reconnaissances it is assumed that some 300,000 persons are scattered about this area.

Including these, the number of inhabitants is estimated at about 700,000, which amounts to a density of population of approximately two persons per square kilometre. The density varies very much from region to region, however. Biak, Noemfoor, Japen, the Nimboran plain, many valleys in the Central Highlands and a number of urban centres are more densely populated. Other regions, such as the Meervlakte, are sparsely inhabited. The chief centres of population are Hollandia (the seat of government) Sorong (centre of oil production), Biak (central airport), Manokwari, Merauke and Fak-Fak.

3. TOPOGRAPHY

See 1957 Report.

4. CLIMATE

See 1957 Report.

Statistical data on rainfall, and also on temperature and humidity, are given in Appendices II and III respectively.

5. PRINCIPAL NATURAL RESOURCES

Nature of the soil

The nature of the mother rock and the predominantly rainy tropical climate form a combination of factors as a result of which in general only moderate to poor weathering soil has been able to form. This soil derives the greater part of its fertility from the humus which has developed on it. Soils richer in chemicals are encountered in Ransiki, Manokwari, Nimboran, Japen and Kebay, whilst the marshy young sea clay soils near Merauke may also be included in this category.
Whilst these chemical and physical properties in themselves form a considerable handicap to the use of the soil for cultivation, an even greater obstacle is formed by the nature of the terrain and the hydrological situation: the mountain regions are predominantly steep and highly dissected, and the plains are preponderantly swampy to marshy. A general phenomenon is that the soils that can be described as being suitable for cultivation without any treatment occur only in scattered form, which among other things implies that any attempt to put large continuous areas in the plains of for instance 1,000 hectares or more into use for cultivation would have to be preceded as a rule by more or less costly drainage measures.

General factors

Apart from the above pedological factors affecting the possibilities of using and developing the natural potential of soil and vegetation in the Territory, there are a further number of restrictive factors. These include the following:

the poor accessibility of the Territory and the great cost which opening it up thus entails;
the relatively sparse population, who moreover live scattered in small groups and to a considerable extent in the interior, which is difficult of access, or in coastal swamps, which are of little use from an agricultural point of view;
the only very slowly increasing pattern of wants of the population.

Agriculture

In the production potential of the Territory the very widespread presence of sago forests (Metroxylon sp.) in the marshy lowlands is a factor of importance. The extent of the sago stands cannot be estimated, but about a quarter of the total Papuan population make use of this natural source of food for their main item of diet, sago starch. Recent investigations into the sago stands on the south coast of the Vogelkop revealed favourable prospects of profitable production of sago starch on a large scale. A private experimental farm on the island of Salawati concluded in 1959 its experimental investigation into the most remunerative method of production. Although the results obtained are satisfactory in many respects, supplementary investigations are required in the area on the Meramani river near Inanawan selected for production, before a decision can be taken regarding the set-up of a large sago farm aiming at export.

Besides sago, a great variety of edible fruits and vegetables occur in nature which play a part as supplementary items on the native menu.

The system of farming generally encountered is that of the intermittent use of the soil. There can be little objection to this extensive form of soil utilization under the given circumstances, as long as sufficient land is available and provided that a sufficiently long rotation period is observed. The crops cultivated are mainly tubers and bananas, together with small quantities of vegetables and legumes, all practically entirely for consumption by the grower and his family.

Further, the occurrence of coconut in the lowlands is of great importance, both for food and for the earning of a money income. The area under coconut, which is steadily increasing, is at present about 14,000 hectares, of which 11,000 hectares are producing trees and 3,000 hectares young plantings. A considerable expansion of this area is a possibility for the future.

Around Fak-Fak lies an area of about 2,000 hectares of Papua pala nutmeg (Myristica argentea), which likewise forms an important source of money income for the population concerned. Efforts are being made gradually to replace the Papua pala nutmeg by the superior Banda nutmeg (Myristica fragrans). The area under this latter variety is now about 265 hectares.

In various regions cocoa growing has been introduced among the population in recent years. The area under cocoa is now 926 hectares.

It has recently proved that the cultivation of coffee by the population holds out possibilities for the Central Highlands.

The growing of rubber in Netherlands New Guinea is still in the experimental stage.

The investigation into large-scale mechanized rice-farming near Merawae, which is meant to make the Territory self-sufficient as regards rice, and as a precursor of which an experimental polder with an area of 400 hectares was laid out in 1955/1956, is nearing completion.

Forestry

The area covered by forests is estimated at more than 32 million hectares, but economic exploitation is hampered by the heterogeneous composition of the forests and the inaccessibility of the terrain.
The nature of the area and climatic factors mean that about 40 to 50% of the total area will have to be permanently afforested.

Stock-breeding

The possibilities of stock-breeding are relatively small. Apart from a few exceptions, of which the Merauke plain is the principal one, natural sources of suitable fodder are lacking. Moreover, the population are in general not yet of a suitable mentality for stock-breeding, except as pig-keepers. The cattle stock still numbers only 2,750, concentrated for the greater part in Merauke and Manokwari. Pigs are very generally kept by the native population for consumption on certain festive occasions and for payment of marriage portions.

Hunting and fishing

Hunting is generally practised by the population and, depending on the region, contributes towards the native diet to a greater or lesser degree. The savannah area near Merauke is rich in game, viz. deer, kangaroos and birds; on the other hand, the Central Highlands are poor in game. Crocodile hunting on the coast is also important.

The inland waters are in general rather poor in fish. Attempts are being made to obtain better fish- stocking. Fish ponds have been laid out for the breeding of imported species of fish and for instruction of the population.

The population on the coast fish for sea fish and shells.

Mining

Petroleum is the most important mineral and the principal export product. However, production has been declining in recent years.

Nickel- and cobalt-bearing ore deposits have been encountered in the Cycloop Mountains and also on Waigeo and a number of other islands in the Radja Ampat group. It is expected that a syndicate will make a start with exploration and production in the foreseeable future.

Further investigations have shown that the lead, zinc and copper ores found in the north of the Vogelkop must be regarded as unexploitable in view of their low contents, limited extent and remote location.

With a view to possible gold mining by the Papuan population a start was made with an extensive search for the occurrence of gold.

B. HISTORY

See the 1957 Report.

C. POPULATION 1. BRIEF DESCRIPTION

The population consist almost exclusively of Papuans. Anthropologically they belong to one of the principal races of mankind, the melanodemic, of which they form a separate branch (race). They may be divided into two subraces, the pygmy brachycephalic mountain dwellers and the frequently sturdy, dolichocephalic Papuans of the coastal regions and the plains. Later research has shown that the mountain population does not consist exclusively of pygmoids, and brachycephals are also to be found outside the mountains.

It is assumed in scientific circles that the representatives of this race populated a much more extensive area than New Guinea in the past. Interbreeding with Austronesian immigrants belonging to another of the main racial groups of mankind led to the pure Papuan population being driven out to New Guinea. Outside New Guinea, interbreeding led to the creation of the Melanesian race, encountered in Netherlands New Guinea (in contrast to the Australian Territory of New Guinea, where Melanesian influence penetrated further) only along the north and northwest coast, though the Papuan element prevails even there.

Linguistically a frontier runs between the Austronesian languages and the non-Austronesian ones. Languages belonging to the great Austronesian (or Malay-Polynesian) family of languages are encountered in small enclaves along the north coast, in the Geelvink Bay area on islands and along the coast in the west. The other languages are grouped together under the name of Papuan languages, but their interrelationship is not yet certain at the present stage of research.

A striking feature of all the groups of languages is the large number of them spoken by only a
small number of people. Only a handful of the languages are spoken by more than a few thousand persons, and most of them have only a couple of hundred or even a few score speakers.

Examples of languages spoken by several thousand are found in the Central Highlands, the Sentani area and the Nimboran area in the north, on Biak, West, Central and South Japen, on the Waropen coast and in the Wandammen region in the area of Geelvink Bay, in the Ajararoe region in the Vogelkop and in the south in the Asmat, Mapi and Moejoe area, as also in the Marind region.

The occurrence of numerous small linguistic areas may be partly explained by the isolation in which some groups of the population live or have lived, but on the other hand reflects the differentiating effect of intermingling and contact between speakers of different languages.

The total of the Papuan population in the area under administration at the end of 1959 was about 403,000 (1958: 389,500), including a registered number of 374,800 (1958: 350,900) and an estimated number of about 28,200.

The number of registered Papuans therefore increased by more than 23,900 in 1959. The number of registered Papuans under administration has increased in the last five years from 288,350 (1955) to 374,800 (1959), a rise of 86,450. It is estimated that some 300,000 persons live in the regions which are so difficult of access that they have remained as good as untouched, which include large areas of the Central Highlands.

The density of population varies greatly. There are great differences from subdivision to subdivision: side by side with averages per square kilometre of 0.4 (Samari and Mimika), 2.6 (Teminaboean), 8.9 (Japen) and 10.1 (Schouten Islands) are found.

The number of Asians is about 18,200, and that of the European section of the population about 18,100.

A survey of population figures is given in Appendices IV A to G incl.

In the Sentani district (about 9,600 inhabitants) a pilot project was started in 1958 for the purpose of investigating to what extent it would prove possible in the more developed areas of Netherlands New Guinea to keep elementary vital statistics from which data on the numbers and trend of the population could be drawn. After conclusion of the first year of registration in 1959 it was found that only 5% of the births and deaths had not been included in the vital statistics — in the villages kept by the village heads — a result which justifies the conclusion that this pilot project may in the first instance be regarded as successful.

A socio-demographic structual investigation into the population has been instituted in order to have a full picture of the present-day structure of the Papuan community, and also of the socio-biological and social ties in native society. In September 1959, after extensive preparations, a start was made with this survey on the island of Biak. At the same time the survey will be used as much as possible for the introduction of permanent population statistics.

(The implementation of this project which, spread over a period of four years, will involve the sum of £ 2½ million, will be financed by the Development Fund for the countries and territories overseas of the European Economic Community. The project was accepted in March 1960 by the Committee of the European Economic Community).

2. CULTURE

The natural surroundings in which the Papuan lives offer him few possibilities. The technical means at his disposal from of old are extremely simple and few in number.

For instance, the Mountain Papuan has nothing else with which to lay out and tend his garden than a dibble and stone implements.

In the extensive swamps of the lowlands the Papuan is obliged to keep on the move all the time in search of his food between the upstream sago and hunting land and the downstream fishing grounds. In the hills and mountains shifting cultivation, coupled with extensive use of the soil, is the only possibility. And added to this is the fact that the fertility of the soil is mainly dependent on the layer of humus. Methods of soil conservation are barely known, except in the Wissel Lakes area and in the Baliem Valley. The poor accessibility of many regions and the highly dissected nature of the hilly and mountainous areas are other unfavourable factors.

Adaptation to these conditions requires the population to live in a very scattered fashion and so to spread themselves over a large number of sometimes extremely small settlements.

The following table, compiled from demographic data of 1957, shows that the small local group with a maximum of 300 inhabitants is the most common one. Within this category the number of settlements with less than 100 inhabitants even predominates: 55% of the number of villages have less than 100 inhabitants.
In this latter group the average number of persons per village is 58.

<table>
<thead>
<tr>
<th>Division</th>
<th>under 100</th>
<th>100 to 300</th>
<th>300 to 500</th>
<th>500 to 750</th>
<th>750 to 1000</th>
<th>more than 1000</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hollandia</td>
<td>277</td>
<td>117</td>
<td>9</td>
<td>5</td>
<td>–</td>
<td>–</td>
<td>408</td>
</tr>
<tr>
<td>Geelvink Bay</td>
<td>205</td>
<td>243</td>
<td>24</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>483</td>
</tr>
<tr>
<td>West New Guinea</td>
<td>517</td>
<td>213</td>
<td>26</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>788</td>
</tr>
<tr>
<td>Fak-Fak</td>
<td>129</td>
<td>71</td>
<td>6</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>208</td>
</tr>
<tr>
<td>South New Guinea</td>
<td>131</td>
<td>208</td>
<td>41</td>
<td>16</td>
<td>3</td>
<td>2</td>
<td>401</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1259</strong></td>
<td><strong>876</strong></td>
<td><strong>106</strong></td>
<td><strong>30</strong></td>
<td><strong>10</strong></td>
<td><strong>7</strong></td>
<td><strong>2288</strong></td>
</tr>
</tbody>
</table>

This table does not take into account the Central Highlands, the regions not yet under effective administration and the urban centres.

It is the small local group that leaves its mark on society and culture, even to the extent that at places where larger groups are possible, smaller ones are still preferred. The predominance of the small local group in society has led to great stress being laid on the importance and function of the family. In the whole territory the tight bonds and the close cooperation between members of a family, even after marriage, are particularly striking.

In a wider connection this has the consequence that the relationship with relatives of both the father and the mother, as well as the relationship with the progeny of brothers and sisters, is of great functional importance. The larger groups of relatives are often not closely defined and frequently have vague functions, or none at all. Really functional groups, extending over a larger area, such as sibs or clans, are few in number. Closely connected with this is the fact that regional political ties and regional leaders are rare. Within the small local group, where everyone knows everyone else, and where rank and class are absent for the greater part, there is little need for formal authority and formal dispensation of justice.

The Papuan’s attitude towards persons who do not belong to his own small group is one of reserve and distrust. This has led in the past and still leads even today to insinuations, arguments, feuds and bloodshed, even among members of one and the same group of relatives who belong to different local groups. On the other hand, the very smallness of the Papuan’s own community makes him dependent on the outside world, particularly when he is looking for a wife. As a result relations with other communities are ambivalent in nature; on the one hand, there is a certain measure of intimacy as a result of and with a view to intergroup relations in the field of barter, family alliance and marriage, and on the other hand reserve and distrust in the presence of an outsider.

A final phenomenon connected with the dominant position of the small local group which may be mentioned is that there is a great diversity of culture.

Although certain resemblances of culture may be pointed to, it is the differences that are the more striking. This is clearly demonstrated in the attributes and the manners of dancing, in which the way of life differing from tribe to tribe finds expression. It is therefore difficult to give a general characteristic of these cultures.

Nevertheless, the fact that there is a considerable diversity of culture does not mean that there is any great difference in the field of material culture. In this respect all these native cultures are among the most primitive in the world. In those parts of the interior where contact with modern civilization has not been possible, the stone axe is still in use.

Previously metals were unknown, except in Geelvink Bay and on the coast of West New Guinea; apart from one insignificant exception weaving did not occur in these areas. Consequently clothes were hardly worn. Cereals were unknown and in the greater part of this region even the art of pottery did not exist. Food was not boiled but baked between leaves on stones which had been heated beforehand, a method of cookery still used by many.

Religious life was characterized by the absence of any ideas about a Supreme Being in the sense of the Creator and Guardian of the world, and of conceptions of a dogmatic nature in general.

Religion here was mythical; its actual form differed from tribe to tribe, with sometimes animistic motifs prevailing, and sometimes totemistic. The most extensive forms of religion were usually to be found among the tribes living on sago, who had more spare time and so had a greater opportunity to develop cultural forms. In such cases an important role was played by lengthy mask dances, communal men’s houses which were regarded as sacred, and secret ceremonies.
In the tribes living on tubers this was usually much less the case. There the festivals were on a smaller scale, whilst economic aspects often formed the basis. For instance, in the Central Highlands an extensive trade in shells developed in connection with these festivals. These shells were used as money, and so much value was attached to them that even the importation of iron articles of use as objects of barter has not been able to rob them of their value. A typical example of devotion to ceremonial objects is to be found in the highly modernized Sentani area, where the payment of a bride price in these articles (polished axes of green stone and beads of great antiquity) is still necessary before a man can marry.

Magic everywhere played an important part in spiritual life. A widely held belief was that a death — except that of a very old person — was the result of inimical action by a wizard. The Papuans felt themselves surrounded by enmity, and had a feeling of security only within the very small group.

In the cultural life of the Papuan communities more and more changes are occurring as a result of the influence of the administration and the Protestant and Catholic Missions, and in general through contacts with the West. This is a process which does not take place entirely without disturbances.

A phenomenon also noted elsewhere is that the Papuan adopts the form of Western culture fairly quickly, but the substance only very gradually. It has as yet insufficiently penetrated to the Papuan that self-activity is one of the mainsprings of Western culture.

A more specific reaction is that attempts are made to achieve Western prosperity via supernatural means, i.e. by means of messianic movements, or cargo cults. Even in some cooperatives this element is not absent.

Now that the old culture is losing more and more of its value as a result of contact with the West, very many are finding a new basis for their life in Christianity.

The number of Christian Papuans is now about 200,000. Furthermore, some 10,000 inhabitants are practising Moslems. However, the influence of these religions extends further than these numbers indicate, and the same may be said of the influence of contact with the outside world in general. As a result, much of the old, primitive culture is making way for new values, a process giving a new meaning to life, without which no adjustment and no progress can be possible.

3. IMMIGRATION STATISTICS

In Appendices V A and B data appear regarding private persons and Government officials entering and leaving the Territory during the year under review.

1. GOVERNMENT

1. THE POLITICAL SITUATION, FORM OF GOVERNMENT AND NATIONALITY

Sovereignty over Netherlands New Guinea is vested in the Kingdom of the Netherlands.

Insofar as the residents of Netherlands New Guinea are not aliens, they have the status of Netherlander or Netherlands subject.

2. THE ADMINISTRATIVE ORGANS

1. CENTRAL ORGANS

A. The Governor

The general administration of Netherlands New Guinea, in accordance with the provisions of the Decree for the Regulation of the Administration of New Guinea, and with due observance of the instructions of the Crown, is exercised in the name of the Queen of the Netherlands as Her Majesty's Representative by a Governor appointed by the Crown. He is responsible to the Crown for the exercise of his office.

At the immediate disposal of the Governor is the Government Secretariat, which is under the direction of the Government Secretary, aided by an Assistant Government Secretary and a number of graduate officials.

In the year under review an administrative reorganization was carried out, which led to the abolition as independent offices of the Bureau of Legislation and Legal Affairs, the Office of Native Affairs, the Office of Information and Broadcasting and the Office of General Affairs of Personnel.
The Bureau of Legislation and Legal Affairs, under the name of Justice Branch, and whilst retaining its duties, become a separate branch of the Department of Social Affairs, now known as the Department of Social Affairs and Justice.

The Office of Native Affairs became a separate branch of the Department of Internal Affairs. It retains its duties and activities – carrying out ethnological, demographic, linguistic and archaeological research.

The task of the Office of Information and Broadcasting was transferred to various departments. As part of the Government Secretariat a new bureau was set up, the Government Information Bureau, with the function of providing information for the press and the public. Visual information became the task of the Department of Internal Affairs and the Broadcasting System that of the Department of Cultural Affairs.

The Office of General Affairs of Personnel retained its functions and activities and became a separate branch of the Department of Finance.

B. The Departments of General Administration

In the exercise of the general administration entrusted to him the Governor is aided by eight heads of Departments of General Administration. Like the Public Prosecutor and the President and members of the Court of Justice, they are appointed by the Crown.

The abolition described above under A of the independent offices not coming under any department of general administration led to a change in the field of activities and the internal organization of a number of the departments of general administration. Further, the name of the Department of Social Affairs was changed into Department of Social Affairs and Justice, and that of the Department of Waterways and Construction into that of Department of Public Works.

The eight Departments of General Administration are the following:

I. The Department of Internal Affairs, consisting of the following branches: General Affairs, Administrative Affairs, Land Affairs, Prisons, Immigration, Police, Native Affairs, Education of the Population and Visual Information.

Under this Department also come the Training Institute for officials of the administrative service, the Training School for indigenous administrative officers and the Central Training School of the General Police.

II. The Department of Finance, consisting of the following branches: General Management, Inspection, General Treasury, Budgetary Affairs, Bookkeeping and Accounts, Accountancy, General Personnel Affairs, Monetary Affairs, Revenue, Organization and Efficiency, Travel Office, Central Provisioning and Government Stores and the State Printing House, and the Purchasing Office.

III. The Department of Social Affairs and Justice, consisting of the following branches: General Affairs, Justice, Labour Affairs, Social Welfare, Hotels and Lodgings and Provision of Workpeople.

IV. The Department of Public Health, with sections for Malaria Control, Yaws Control, TB Control, Leprosy Control, and Maternal and Child Welfare, Health Education, Environmental Sanitation, Hospitals (including dental care and care of the mentally deficient), Pharmaceutical Supplies, Central Medical Laboratory, Training of Auxiliary Medical Personnel, and Documentation and Statistics.

V. The Department of Cultural Affairs, consisting of the following branches: General Affairs, General Inspectorate and Educational Affairs. Under the first branch come educational legislation, finance, statistics, public worship, arts and sciences, and the Broadcasting System.

The Educational Affairs Branch deals with planning and education research.

VI. The Department of Economic Affairs, consisting of the following branches: Agriculture and Stock-Breeding (with sections for Food Production and Agricultural Education, Agricultural Export Production and Plant Quarantine, Agronomic Research, Inland Fisheries and Stock-Breeding), Forestry, Sea Fisheries, Mining and General Economic Affairs.

VII. The Department of Transport and Power, consisting of the following branches: the Post Office, the Post Office Savings Bank, Electricity, Shipping, Road Transport, the Meteorological and Geophysical Bureau and the Air Transport Bureau.

VIII. The Department of Public Works, consisting of the following branches: Buildings and Town Planning, under which come house-building, housing, utilitarian construction, town planning and health engineering, Waterways, under which come matters relating to roads and bridges, airfields and harbours, sanitation, heavy equipment, hydrographic surveys and hydro-electric stations, as also the Government workshops and the Land Registry and Mapping Branch.
C. The Council of Heads of Departments

The Council of Heads of Departments is formed by the eight heads of the Departments of General Administration as ordinary members and the Public Prosecutor attached to the Court of Justice and the Officer Commanding Naval Forces New Guinea as extraordinary members. The latter is appointed as such by the Crown; the rest are ex officio members.

The Governor may act as Chairman as often as he deems necessary, and then has an advisory voice. The Vice-Chairman of the Council is appointed by the Crown from among the members and extraordinary members.

The Government secretary acts as secretary of the Council.

By virtue of Section 66 of the Decree for the Regulation for the Administration of New Guinea, the Governor consults the Council of Heads of Departments concerning draft ordinances, decrees containing general provisions, draft budgets, matters where this is laid down by general regulations, special cases of an important nature and other matters concerning which the Governor wishes to know the feelings of the Council. The Council is entitled to advise the Governor of its own volition in cases where it judges this to be advisable in the interests of the Kingdom or of Netherlands New Guinea.

On the ground of Transitional Provision 4 of the Decree for the Regulation of the Administration of New Guinea ordinances shall, until such time as the New Guinea Council has commenced its activities, be decreed by the Governor with the concurrence of the Council of Heads of Departments, and also the remaining functions transferred to the New Guinea Council shall be performed by the Council of Heads of Departments.

For a list of the ordinances enacted during the year under review with the cooperation of the Council, reference may be made to Appendix VI.

D. Representative Bodies

The Decree for the Regulation of the Administration of New Guinea contains in Section 72 the possibility of the institution of a central representative body, a New Guinea Council. Owing to great practical difficulties, this has not yet proved possible.

In past years a thorough investigation has been instituted into the manner in which such a body could be brought into being. In the course of this investigation representatives of the inhabitants of Netherlands New Guinea were also consulted. It is only considered of positive value in such an important matter as the institution of a central representative body, which most closely concerns the inhabitants of this area, that this should not be done without consulting them; on the contrary, their representatives should be brought into the matter as soon as possible. A further guiding factor was the provisions of Section 73b of the Charter of the United Nations: "to take due account of the political aspirations of the people".

An amendment for this purpose of the Decree for the Regulation of the Administration of New Guinea has been drafted and the pertinent bill was submitted to the Netherlands Parliament in June 1960.

This bill aims at an acceleration of the political development of Netherlands New Guinea, directed towards a rapid realization of the objectives of Chapter XI of the Charter of the United Nations.

The starting point for the proposed regulations is that a new Guinea Council will give satisfaction only if it is adequately representative of the entire population and, moreover, has a real content through the powers granted it.

In connection with the political development of the population and the fact that part of the Territory has not yet been brought under administration, and other parts are as yet subject to a not very intensive form of administration, whilst on the other hand it must also be possible to have such areas represented in the Council in the future, the number of members of the Council is not fixed, but has been put at not less than 24 and not more than 48. For the first Council, the institution of which can be expected in 1951, the number of members will probably be 28.

In order to give the maximum of expression to the representative nature, the aim is to have the largest possible number of members elected when forming the first Council; in the first instance it is hoped to have at least half of them elected.

Suffrage is to be further regulated by ordinance. The fundamental principle in this is that no distinction is made according to sections of the population. Where possible (in the urban centres) direct elections will be held, and elsewhere elections in stages, whilst in areas where elections can
as yet not be held, representatives of the population will be appointed as members of the Council by the Governor. In certain regions recommendations by the population will be sought, as a transition to elections. The number of members to be elected and to be appointed will be determined by the Crown for every session of the Council.

The system devised will lead to the greater majority of the members of the Council consisting of Papuans.

The New Guinea Council will, when instituted, be granted a number of concrete powers, viz. the right of petition, the right of interpellation, collaborating in the establishment of ordinances with the right of moving amendments and the right to initiate ordinances – which covers normal legislation in the whole field of internal affairs of the area concerned – and also collaborating in the drafting of the budget. Furthermore, the Council will have the right to advise on bills of Dutch laws and on draft general administrative orders which will also be binding on Netherlands New Guinea.

As the New Guinea Council will not be able to sit continuously, the regulations devised for it allow of the institution of an executive committee within the Council. Whilst the Council is not sitting, this executive committee will perform the duties of the Council, with the exception of a number of powers which are confined to the full Council, such as collaborating on the drafting of the budget and the right to initiate ordinances. The Council is, moreover, empowered to reserve the right to deal in plenary session with certain drafts of statutory regulations and can on the other hand authorize the executive committee to exercise certain powers on behalf of the Council.

E. Advisory bodies

Besides the local advisory councils, which will be dealt with in the following section, the Council for Native Development operates as an advisory body.

The Council has the task of advising – also of its own volition – on subjects of importance to the social and cultural development of the Papuan.

The Council consists of civil servants, representatives of the Protestant and Catholic Missions and other persons who are not civil servants. The members are not appointed in their official capacity but on the strength of their personal expert knowledge.

Needless to say, a number of Papuans are among the members.

II. Local bodies

A. Local advisory councils

In 1955 a number of advisory councils were set up at local and regional level to prepare the way for the institution of independent communities with their own financial resources on the basis of Section 122 of the Decree for the Regulation of the Administration of New Guinea, viz. for the urban centres Hollandia and Manokwari and for the more rural areas Schouten Islands, Japen and Sorong-Doom. In 1958 an advisory council was set up at Fak-Fak.

In the year under review it proved possible, thanks to the institution of the Biak-Noemfoor regional community, to abolish the advisory council for the Schouten Islands.

The advisory council for Japen submitted an advisory report regarding the formation of territorial village communities in its area and the form which the administration of these communities should take. It is being investigated whether the coastal area of the Waropen subdivision, together with the island of Japen, can form one regional community.

B. Regional communities

In the year under review it proved possible to institute for the area of the Schouten Islands subdivision an independent regional community with its own resources on the basis of Section 122 of the Decree for the Regulation of the Administration of New Guinea, the Biak-Noemfoor regional community, and to set up the regional council of the same name as the official body of this community. The Council has ten members elected in accordance with the system of elections in stages and three appointed members.

The function of the Council is to regulate and administer the community’s own economy. For that purpose it can lay down by-laws and levy taxes.

The Council has also been entrusted with the task of preparing the formation of territorial village communities and of instituting an independent administration there. In anticipation of the
introduction of these village communities the Council has the task of looking after the interests of these communities until the village councils to be set up can take over this function.

C. Village communities

As already explained above, in the area of the Biak-Noemfoor regional community the organization of village communities is being prepared by the regional council. The advisory council for Japen submitted an advisory report relating to the formation of village communities.

In almost all subdivisions of the Territory progress was made during the year under review with the institution of informal village councils. In the Radja Ampat subdivision two informal district councils were set up. In the Fak-Fak subdivision seven informal village councils have been formed for the areas of the former rajahships.

3. LOCAL ADMINISTRATIVE AND POLICE ORGANIZATION

Administrative organization

At the end of the year under review the administrative breakdown was as follows:

I. Division of Hollanda, with Hollanda as the chief town;
   Subdivisions:
   1. Hollanda with Hollanda as the chief town;
   2. Nimboran with Genjem as the chief town;
   3. Sarmi with Sarmi as the chief town;
   A. Exploration district of East Highlands, with the Wamena and Bokondini exploration posts.

II. Division of Geelvink Bay, with Biak as the chief town;
   Subdivisions:
   4. Schouten Islands with Biak as the chief town;
   5. Japen with Seroei as the chief town;
   6. Waropen with Waren as the chief town;
   7. Wandammen with Wasior as the chief town;

III. Division of Central New Guinea, Temporarily under the resident of the Geelvink Bay division.
     Subdivision:
     8. Wissel Lakes with Enarotali as the chief town;
     B. Exploration district of Central Highlands.
     C. Exploration district of West Highlands.

IV. Division of South New Guinea with Merauke as the chief town;
    Subdivisions:
    9. Merauke with Merauke as the chief town;
    10. Mappi with Kepi as the chief town;
    11. Upper Digoel with Tanah Merah as the chief town;
    12. Asmat with Agats as the chief town;
    13. Moejoe with Mindipranah as the chief town;

V. Division of Fak-Fak, with Fak-Fak as the chief town;
   Subdivisions:
   14. Fak-Fak with Fak-Fak as the chief town;
   15. Kaimana with Kaimana as the chief town;
   16. Mimika with Kokonao as the chief town;

VI. Division of West New Guinea, with Manokwari as the chief town;
    Subdivisions:
    17. Sorong with Sorong as the chief town;
    18. Radja Ampat with Doom as the chief town;
    19. Manokwari with Manokwari as the chief town;
    20. Ransiki with Ransiki as the chief town;
    21. Teminaboean with Teminaboean as the chief town;
    22. Binetoeni with Steenkool as the chief town.
In the year under review all 11 of the candidate administrative officers entered for the 1958–1959 course passed the examination for assistant administrative officers at the Institute for the training of officials for the administrative service in Netherland New Guinea. They were then placed at the disposal of the divisional heads for further practical training.

16 candidate administrative officers were accepted for the 1959–1960 course.

The training school for indigenous officials in the administrative service now has 28 pupils in Departments A and B, viz., 16 in Department A and 12 in Department B.

Department B is open to graduates of the advanced primary school and the intermediate secondary school. In connection with the insufficient supply of graduates from the above educational institutions, a Department A was attached in preceding years to the training school, the aim of which was in a two-year course to give continued general education to graduates of continuation schools and general primary schools. The leaving certificate of this Department A gives access to the administrative course proper (Department B), which is also two-year.

As the number of intermediate secondary schools has meanwhile increased to four, a sufficient supply of graduates of these schools is expected in the near future. It has thus been decided to do away with the A Department, whilst in the year under review no new pupils were accepted for this department.

In 1959 12 pupils passed the examination for candidate administrative assistant.

Organization of the police

Pursuant to Section 140 of the Decree for the Regulation of the Administration of New Guinea, the Public Prosecutor attached to the Court of Justice is the head of the legal and administrative police throughout Netherland New Guinea.

In consequence of Government Gazette No. 5 of 1950, the Director of Internal Affairs is entrusted with the administration of the police.

In every chief town of a division there is a divisional commander, who is under the immediate orders of the resident-head of the division. Detachments or subdetachments of police are stationed in every chief town of a subdivision. For matters of police policy the detachment commander is immediately subordinate to the head of the subdivision.

Independent of the police units scattered throughout the divisions is the Mobile Police, which has the following tasks:

a. to step in in emergencies requiring extra police;
b. to aid in the extension of administration and to protect scientific and economic exploration parties, particularly in areas not yet brought under administration.

The Central Training School of the General Police is situated in Hollandia. For details of the training see Appendix XLII.

4. PARTICIPATION OF THE PAPUAN POPULATION IN ADMINISTRATION

The introduction of the Papuan population into administration of the country was again continued by the various Government departments according as suitable persons became available. The annually increasing degree to which Papuans are appointed in various functions is reflected in the following figures.

In the last five years the number of Papuans in the administrative service has risen from 63 to 93. Of the 69 districts into which the country is now divided, 34 were administered at the end of 1959 by Papuan district heads, who have administrative powers in respect of all inhabitants of their district, irrespective of their nationality.

The total number of Papuans with established posts in Government service rose between the end of 1954 and the end of 1959 from 890 to 1,857. This increase may be seen in almost all departments. For instance, in this period the number of Papuan police officials rose from 250 to 443, the number of Papuan officials in education from 266 to 551, in the Department of Public Health from 48 to 172, in the Forestry Branch from 4 to 46 and in the Meteorological Service from 8 to 48.

Naturally the majority of these officials are as yet in junior and lower executive functions; however, the possibility of reaching more senior posts in the future is fully open to all who have sufficient education and training. For details see Appendices VII and VII A.

Besides the Papuans in established posts, there are a further 2,200 Papuan employees of the
Government on daily and monthly pay. (For a survey of the total numbers of Pauans employed by the Government and private employers see Chapter III D. 3.)

The various courses run by the different departments are qualifying more and more Pauans to occupy both technical and administrative posts.

Various bodies, such as the Council for Native Development and the local advisory councils, have a number of Pauan members. In the advisory councils with a predominantly rural character they are in the majority.

The Biak-Noemfoor regional council instituted during the year under review consists almost exclusively of Pauan members.

5. JUDICIAL ORGANIZATION

A distinction is made between a Government administration of justice, or administration of justice in the name of the Queen, and b. indigenous administration of justice, by which is understood the administration of justice by the Pauan population who have been left in the enjoyment of their own dispensation of justice.

The Government administration of justice is regulated by the "Provisional Regulations for the Administration of Justice in Netherlands New Guinea". These regulations were amended to some extent by the ordinance of 16 December, 1955, which came into effect on 1 February, 1956. These amendments mainly concern the administration and dispensation of justice by the police court magistrates ("Politierichters").

In view of this the executive regulations have also been amended. Under these regulations, and having regard to the above amendments, justice is now administered on behalf of the Government by the following:

a. Police court magistrates for offences for which a prison sentence of at most three months or a fine not exceeding f. 500 may be imposed, and for misdemeanours. The Governor appoints law officers as police court magistrates. A police court magistrate sits at Hollandia for the area of the Hollandia and South New Guinea divisions.

The district judge at Manokwari discharges the function of police court magistrate in his district. Moreover, at each of the chief towns of the subdivisions an administrative official has been appointed to act as police court magistrate for the area of the subdivision.

b. District judges who, as ordinary judges, hear in the first instance all civil cases and all criminal cases which do not fall within the jurisdiction of a police court magistrate. District courts are established at Hollandia (for the area of the Hollandia division), Manokwari (for the area of the West New Guinea, Pak-Fak, Geelvink Bay and Central New Guinea divisions) and Merauke (for the area of the South New Guinea division). Two district judges have now been appointed, one for Hollandia and one for Manokwari; the district court of Hollandia is also charged with exercising the jurisdiction of the Merauke district court.

In certain cases an appeal against the decisions of the district courts can be made to the Court of Justice, which is the court of last resort.

c. The Court of Justice, which is the supreme court and at the same time deals with cassation proceedings for the time being.

All who are not subject to the indigenous administration of justice are under the jurisdiction of the above courts. Prosecutions are handled by the Public Prosecutor, who also acts as prosecutor in the Court of Justice. Since 1957 the Court of Justice has also been responsible for the administration of justice in tax cases.

The indigenous administration of justice

In the subdivisions of the division of South New Guinea, in the subdivisions of the Wissel Lakes (Central New Guinea division), Ransiki (West New Guinea division), Waropen and Wandammen (Geelvink Bay division) and in the exploration district of East Highlands (Hollandia division) a single judge is encountered. In the subdivisions mentioned this function is exercised by the head of the subdivision, whilst in the exploration district the head of the division and also an administrative official appointed by the former act as such. In the exercise of his function the single judge is required to consult the chiefs and elders as much as possible.

In each of the remaining subdivisions of the Territory there is a bench, with the head of the subdivision acting as adviser.
Starting from the principle that in Netherlands New Guinea the Papuan population are for the time being left to administer their own justice, the judges apply in the first place customary law.

In cases where it is not feasible to apply customary law, specifically in those cases where there are no rules of law or where the application of customary law would lead to a decision at variance with humanitarian principles, justice is administered in accordance with the principles of equity.

The general rule that justice is administered in accordance with local customary law has as background the idea that in the present stage of their development the legal requirements of the Papuan population are best met by such a dispensation of justice.

Where the legal requirements change or new ones arise as a result of modern developments, provision is, however, made for these to the greatest possible extent by declaring the appropriate general rules of modern law to be applicable in such cases.

In any case, adaptation to the spirit of modern law is in general being furthered where possible.

This introduction of new legal principles applies not only to the most primitive areas, where the first steps are being taken in developing a sense of justice among the population in the spirit aimed at, but also to the more advanced regions, where important changes in native society are likewise still taking place.

The decisions of the single judges and native courts concerning major cases are subject to review by the Director of Internal Affairs. Minor cases are referred in the last resort to the decision of the resident concerned.
CHAPTER II

THE ECONOMIC SITUATION

The General Economic Situation

Netherlands New Guinea is, from the economic point of view, still one of the most underdeveloped areas in the world. In some regions, particularly along the coast, the population are participating to a modest extent in Western transactions in goods and money.

However, in the interior the Papuan still lives for the greater part in a closed village economy.

The Government is endeavouring to further the economic development of Netherlands New Guinea in many ways.

In order to obtain an exact picture of the potentialities of the Territory a great attention is being devoted to scientific research, especially in the fields of agriculture, forestry and mining. To promote agricultural research and geological surveys two foundations have been set up, viz. in 1957 the Foundation for Agricultural Research on behalf of Netherlands New Guinea and in 1958 the Foundation for the Furtherance of Geological Surveys in Netherlands New Guinea. Both foundations are established in the Netherlands; they do their research work in close cooperation with the appropriate Government departments in the Territory.

Papuan agriculture is fostered by intensive agricultural extension and agricultural education, as also by the provision of selected planting material. These efforts are aimed at improving and extending the growing of food crops and of cash crops, and at the cultivation of new crops.

In three specially selected areas (Nimboran, Japen, Mappi), regional agricultural projects have been implemented. The aim of the authorities is to develop the regions concerned more quickly by the formation of nuclei of trained famers, who can provide themselves with some measure of money income by cultivating cash crops as well as food crops. The stress is laid on the introduction of cocoa-growing, for which it has been found that natural conditions in certain regions are favourable. In other regions the planting of coconut and Banda nutmeg is being encouraged by the authorities and a start has already been made with the introduction of rubber.

Growing interest has been shown from abroad in the possibilities of exploiting the natural timber resources in the Territory. During the year under review this led to some exports of timber.

Further, the authorities are paying special attention to the extension of copal production by the institution of what are known as key projects and by intensive information and advice to the population regarding the right tapping methods.

In past years a number of projects requiring considerable capital investment have been embarked upon which lie in the sphere of Western industrial activity. These projects - a sawmill and a shipyard, both located at Manokwari on the north coast, and a mechanized rice farm near Merauke in South New Guinea - are developing satisfactorily. These concerns are of great importance to the economy of Netherlands New Guinea.

In recent years progress has been made with the equipping of the Territory with the infrastructure essential to its economic development.

Work proceeded during the year under review on the further extension and improvement of these basic facilities (ports, airfields, roads, schools, hospitals, laboratories, offices, houses, etc.).

Much attention was also paid to the development of local coastal shipping, in order to ensure regular shipments of native products and to promote the widest possible distribution of imported goods over the producing coastal regions.

This coastal shipping, which was entrusted to the Royal Mail Steam Packet Company in 1958, whose ships also operate the scheduled services between the larger places on the coast, proceeded satisfactorily in the year under review.

The balance of trade for 1959 displays a drop in imports by more than f. 5 million, mainly as a result of reduced imports by the NNGPM, and a rise in exports by more than f. 3 million.

Neither the employment situation nor the wage level underwent any changes of great significance. The Papuan labour force employed in the various branches of Western-type activity displayed a slight increase in respect of 1958 (see also Chapter III, section D).

The cost of living also remained stable in the year under review, generally speaking. The price control on important foodstuffs and stimulants also contributed to this.

As in previous years, the authorities granted credits to Western and Papuan businesses in 1959 too. To meet the credit requirements of commercial enterprises which do not qualify for normal bank
B. AGRICULTURE AND STOCK-BREEDING

1. ORGANIZATION

The Government's tasks in the field of agriculture and stock-breeding are entrusted to the Department of Economic Affairs, in particular the Agriculture and Stock-Breeding Branch.

As from 1 January, 1959, scientific agricultural research was transferred from the Department of Economic Affairs to the recently created Foundation for Agricultural Research on behalf of Netherlands New Guinea.

The Agriculture and Stock-Breeding Branch consists of a central and a local service. The central service is divided into five divisions, viz: Food Production and Agricultural Extension, Export Production and Plant Quarantine, Statistics and Agronomy, Inland Fisheries and Stock-Breeding.

The establishment of the Agriculture and Stock-Breeding Branch in 1959 was 11 agricultural engineers, 3 veterinary surgeons, 118 executive and junior agricultural officers, 13 executive and junior stock-breeding officers and 50 technical and clerical personnel. In 1958 the establishment was 7 agricultural engineers, 2 veterinary surgeons, 98 executive and junior agricultural officers, 10 executive and junior stock-breeding officers and 34 technical and clerical personnel.

The estimates of the Agriculture and Stock-Breeding Branch for 1959 comprised the following:

\[
\begin{align*}
\text{Agriculture:} & \quad \text{staff} & \quad \text{f.} & \quad 961,300.- \\
& \quad \text{materials} & \quad \text{f.} & \quad 1,207,500.- \\
& & \quad \text{f.} & \quad 2,168,800.- \\
\text{Stock-Breeding:} & \quad \text{staff} & \quad \text{f.} & \quad 183,800.- \\
& \quad \text{materials} & \quad \text{f.} & \quad 212,500.- \\
& \quad \text{capital expenditure} & \quad \text{f.} & \quad 47,000.- \\
& & \quad \text{f.} & \quad 443,300.- \\
\text{Revenue:} & \quad \text{agriculture} & \quad \text{f.} & \quad 220,400.- \\
& \quad \text{stock-breeding} & \quad \text{f.} & \quad 56,000.- \\
& & \quad \text{f.} & \quad 276,400.- 
\end{align*}
\]

2. UTILIZATION OF LAND AND LAND TENURE

a. Utilization of land

On average the utilization of land is extremely extensive. More intensive farming methods are known only in the Central Highlands, where sweet potatoes are grown in small beds surrounded by deep gullies. Year after year the ground is given green manure by a special method of forking under the weeds that grow on the patch.

Elsewhere only primitive agriculture is encountered, consisting of ladang cultivation, the growing of bananas and root crops, keladi (taro), tapioca, sweet potatoes and yams. The gardens are scattered and are not permanent in nature.

For the greater part of the population living in the plains the main item of diet is sago. The sago palm grows wild in the swampy regions, but is also cultivated.

It is impossible to state the area of land planted with root crops or sago. The gardens are scattered here and there. Root crops are grown on higher ground, whilst the sago occurs solely in swampy areas. According to rough estimates, the number of persons for whom sago forms the main item of diet can be put at 200,000, whilst for some 500,000 the principal food consists of root crops.

In the urban centres rice is consumed in increasing quantities by the Papuan population as well. The demand for this is still met mainly by imports. The area under rice was 460 hectares.

The area under coconut is estimated at 14,000 hectares. The area planted with nutmeg trees is about 2,300 hectares.

Grazing land is found only in Manokwari (110 hectares). Around Merauke the extensive savannah forms natural grazing of indefinite size.
b. Protection of the soil

In a number of cases in which the presence of a relatively dense population makes it impossible to comply with the requirement that the ground must have a long period in which to lie fallow after ladang cultivation, the need arises for the authorities to take steps to protect the soil. This is the case, for instance, in the vicinity of Hollandia and Lake Sentani.

c. Land tenure

The Government’s policy with regard to land is directed towards protection of the rights of the Papuan population. This principle finds particular expression in Section 39, subsection 3, of the Degree for the Regulation of the Administration of Netherlands New Guinea, in which it is laid down that the Governor shall ensure that no form of assignment of land shall infringe the rights of the native population. These rights are also subject to the condition that land cannot be expropriated for public use without a prior declaration that the public interest demands expropriation and against compensation received or guaranteed beforehand. Rights which the Papuan population have to the use of land cannot be alienated to non-Papuans; all agreements envisaging such alienation directly or indirectly are null and void ipso jure.

Appendix VIII contains information on land occupied by non-Papuans. No data are available with regard to land tenure by the native population; this cannot be registered, owing to the system used by the Papuans of crop rotation on ladangs.

The forms of land tenure may vary greatly. There is land which is counted as belonging to the territory of a village without this implying any use of that land, or in which that use is confined to hunting rights. Then there is land that may be used only with the permission of the village community, and other land which is the property of a clan, family or individual. Rights to use land are granted to members or to families within the group, but also to outsiders in some cases; this right of use can be alienated and often is hereditary.

d. Occupation of land and the legislation relating to this

Occupation of land by non-Papuans is possible only when the right to do so has been granted by the Government. Only if the interests of the native population will not be harmed as a result, and after any native rights to the land have been relinquished voluntarily and against reasonable payment, is a property or personal right (depending on the purpose of the occupation) granted as described in the Civil Code.

Apart from a few minor exceptions, only uncultivated land can be issued for agricultural and stock-breeding enterprises, in which case a lease is usually granted. In urban centres land is granted to non-Papuans for building and for residential purposes with the right of building. At present land is not granted in ownership.

Illegal occupation of land by non-Papuans is an offence.

3. PRINCIPAL CROPS

a. Food crops

Sago (Metroxylon sp.)

Owing to the scattered and poorly accessible location of the areas under sago, which occur exclusively in the swampy lowlands, an itemized survey of these areas has not proved possible so far.

On a rough estimate the annual sago consumption is 90,000 tons* of sago flour, with a moisture content of about 35%. The population eat the sago flour in the form of porridge or cakes; it is the principal item of diet of the Papuan population of the lowlands. It is dealt in only on a modest scale and in limited areas.

Recent investigations have shown that the sago stands on the south coast of the Vogelkop offer possibilities for large-scale production of sago flour. The results of an investigation on the inland of Salawati, which began in 1957 and was provisionally concluded in 1959, have shown that it must be technically possible to produce sago flour of superior quality on a large scale. It is now being investigated whether this is economically possible.

*) Wherever the term „ton“ is used metric ton is meant.
Root crops

Where the sago palm does not occur, i.e. in the hills and mountains, root crops and bananas are the population's staple diet. The principal root crops eaten are keladi (Colocasia sp. - Xanthosoma sp. - Alocasia macrorhiza) and sweet potatoes (Ipomoea batatas). Besides these, the population eat yams (Dioscorea sp.) and tapioca (Manihot utilissima). As the gardens in which these root crops are grown are highly scattered, and the area mostly shifts every year (ladang cultivation) no exact figures of the area planted with root crops can be given.

Production is estimated at 180,000 tons a year.

Rice

The cultivation of rice assumes significant proportions only in South New Guinea. Two centres are located there a short distance away from each other, viz. the native paddy fields around Merawke, which are dependent on rain, and the technically irrigated trial polder near Koembe. In the 1958/1959 rice season the native paddy fields suffered greatly from drought, as a result of which there was a partial crop failure. The Koembe trial polder, on the other hand, gave a good harvest.

<table>
<thead>
<tr>
<th>Area</th>
<th>Area under rice (in hectares)</th>
<th>Production in tons of rice milled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Koembe trial polder</td>
<td>225.2</td>
<td>255.2 376.4</td>
</tr>
<tr>
<td>Native paddy fields at Koeprik, Merawke</td>
<td>188.3 168.0</td>
<td>116.4 14.9</td>
</tr>
<tr>
<td>Elsewhere</td>
<td>17.0</td>
<td>17.0 14.9</td>
</tr>
<tr>
<td>Grand total 1959</td>
<td>460.5</td>
<td>440.2 507.7</td>
</tr>
<tr>
<td>Grand total 1958</td>
<td>297</td>
<td>284 288</td>
</tr>
</tbody>
</table>

The investigations into the foundation of a large mechanized farm, which can make Netherlands New Guinea self-sufficient in the near future, were continued during the year under review.

Fruit and vegetables

In the course of the years there have developed around the chief towns of most divisions market subdivisions market gardening centres, in the main for the satisfaction of the demand for fruit and vegetables in those towns. A number of these centres, viz. Ransiki, the Anggi Lakes and Baliem, are of more than local importance. The production of the Ransiki market gardening centre is mainly directed towards supplying Manokwari and Biak; the production of the Anggi Lakes, mainly potatoes and brown beans, goes to Manokwari and that of the Baliem Valley (cabbage, legumes and tomatoes) to Hollandia.

The total area under fruit and vegetables can be very approximately estimated as follows:

<table>
<thead>
<tr>
<th>Division</th>
<th>Area (in hectares)</th>
<th>Fruit</th>
<th>Vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hollandia</td>
<td>45</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Geelvink Bay/Central New Guinea</td>
<td>32</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>West New Guinea</td>
<td>35</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Fak-Fak</td>
<td>30</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>South New Guinea</td>
<td>30</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>1959 total</td>
<td>172 ha</td>
<td>93 ha</td>
<td></td>
</tr>
<tr>
<td>1958 total</td>
<td>150 ha</td>
<td>80 ha</td>
<td></td>
</tr>
</tbody>
</table>

The production of the Bosnik market gardening centre on Biak in 1959 was 81 tons, to the value of f. 70,000, as against 53 tons to the value of f. 41,000 in 1958. The vegetable-producing centre in the Baliem Valley, which is of fairly recent date, flew out about 24 tons to Hollandia.

Maize and legumes are grown in small but gradually increasing quantities by the Papuan population, mainly for their own consumption. The area under these crops is estimated at 200 hectares of maize (1958: 250 hectares) and 250 hectares of groundnuts and other legumes (1958: 150 hectares).
b. Cash crops

Copra

The area under coconut is estimated at more than 11,000 hectares of producing trees and 2,821 hectares of young plantings, or in all about 14,000 hectares. In suitable areas the authorities are stimulating further planting of this crop; in 1959 a registered area of 821 hectares was added (1958: 445 hectares).

Copra exports 1958 and 1959

<table>
<thead>
<tr>
<th>Production area</th>
<th>Weight (in tons)</th>
<th>Value (in 1,000 guilders)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1958</td>
<td>1959</td>
</tr>
<tr>
<td>North coast of Hollandia</td>
<td>747.3</td>
<td>852.6</td>
</tr>
<tr>
<td>Geelvink Bay</td>
<td>535.7</td>
<td>591.0</td>
</tr>
<tr>
<td>West New Guinea</td>
<td>1963.2</td>
<td>1706.3</td>
</tr>
<tr>
<td>Fak-Fak/Kaimana</td>
<td>354.1</td>
<td>321.9</td>
</tr>
<tr>
<td>South coast of New Guinea</td>
<td>2051.5</td>
<td>1536.4</td>
</tr>
<tr>
<td>Total Netherlands New Guinea</td>
<td>5651.8</td>
<td>5008.2</td>
</tr>
</tbody>
</table>

Chiefly as a result of the long period of drought in 1957, from which the area on the south coast of New Guinea suffered particularly, copra exports in 1959 were 600 tons less than in 1958. As copra prices were considerably higher, the value of exports for 1959 was more than f. 300,000 greater than in 1958.

The average fob prices of copra in the last 10 years, expressed in guilders per ton of copra, were as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>572</td>
<td>675</td>
<td>375</td>
<td>541</td>
<td>487</td>
<td>452</td>
<td>468</td>
<td>436</td>
<td>516</td>
<td>646</td>
</tr>
</tbody>
</table>

Copra exports in the same period, expressed in tons, were:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>2844</td>
<td>3823</td>
<td>2945</td>
<td>3354</td>
<td>4370</td>
<td>3875</td>
<td>5094</td>
<td>5025</td>
<td>5652</td>
<td>5008</td>
</tr>
</tbody>
</table>

Nutmeg and mace

The species Myristica argentea, known under the name of Papua nutmeg, occurs in small scattered plantations, mainly in the Fak-Fak subdivision.

The total area under this nutmeg is estimated at 2,000 hectares gross. As this indigenous species is inferior to Banda nutmeg (Myristica fragrans), planting of the latter species is being encouraged as much as possible. Additional planting of Banda nutmeg for the year 1959 amounted to 189 hectares, as a result of which the area at the end of 1959 was 265 hectares, mainly young plantings.

The harvest of Papua nutmeg in 1959 was favourable, whilst prices also remained high. Through this, and also because of the fact that a considerable part of the autumn harvest of 1958 was not exported until 1959, exports during the year under review displayed a considerably more favourable picture than in 1958, both in quantity and in value.

The export figures for Papua nutmeg and mace for the years 1954 to 1959 incl. are as follows:

Nutmeg:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>in tons</td>
<td>192.7</td>
<td>239.5</td>
<td>264.5</td>
<td>353.7</td>
<td>248.3</td>
<td>377.6</td>
</tr>
</tbody>
</table>
| value  | 163.8 | 275.2 | 791.3 | 2069.2| 1680.1| 2527.9| (x f 1000)

Mace:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>in tons</td>
<td>49.9</td>
<td>67.1</td>
<td>90.8</td>
<td>62.8</td>
<td>82.0</td>
<td>110.2</td>
</tr>
</tbody>
</table>
| value  | 129.3 | 337.9 | 1106.8| 702.6 | 607.2 | 764.7 | (x f 1000)
Average price trend 1954–1958 (guilders per ton)

<table>
<thead>
<tr>
<th>Year</th>
<th>1954</th>
<th>1955</th>
<th>1956</th>
<th>1957</th>
<th>1958</th>
<th>1959</th>
</tr>
</thead>
<tbody>
<tr>
<td>nutmeg</td>
<td>980</td>
<td>1100</td>
<td>3000</td>
<td>5500</td>
<td>6760</td>
<td>6695</td>
</tr>
<tr>
<td>mace</td>
<td>2500</td>
<td>5035</td>
<td>12200</td>
<td>11200</td>
<td>7400</td>
<td>6951</td>
</tr>
</tbody>
</table>

Cacao

The area under cocoa has been steadily growing since 1954:

<table>
<thead>
<tr>
<th>year</th>
<th>area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1954</td>
<td>30 hectares</td>
</tr>
<tr>
<td>1955</td>
<td>100 &quot;</td>
</tr>
<tr>
<td>1956</td>
<td>267 &quot;</td>
</tr>
<tr>
<td>1957</td>
<td>430 &quot;</td>
</tr>
<tr>
<td>1958</td>
<td>642 &quot;</td>
</tr>
<tr>
<td>1959</td>
<td>926 &quot;</td>
</tr>
</tbody>
</table>

Cocoa exports for 1958 and 1959 were as follows:

- 1958: 3.2 tons, to the value of fl. 6,500
- 1959: 24.9 tons, to the value of fl. 55,500.

4. STOCK-BREEDING

The Government's tasks with regard to stock-breeding comprise the following: the prevention and control of diseases and pests; improvement of the country's stock by importing stud animals which are further bred or crossed with indigenous stock at the Government breeding stations, and the distribution throughout the Territory of breeding material from these stations; information and advice with regard to the care of stock and the use of cattle as draught animals.

Stock-breeding statistics (see Appendix)

*Cattle*. Centres of cattle-keeping are Merauke, Manokwari and, to a much lesser extent, Hollandia. The still relatively small stock is gradually expanding, even to other regions of the Territory. It now numbers 2,746 (1958: 2,463), of which 1,950 are in Merauke (1958: 1,900).

From the cattle centres 32 cattle were shipped in the year under review to other places in the Territory and issued to the population of those places to be shared for stud purposes. This method is used to introduce the population to cattle. There is growing interest in it in Seroei, Hollandia and Nimboran, so that it is the intention to issue such cattle on a considerably greater scale in the coming years, in particular in the more developed agricultural areas, with a view to the provision of draught animals.

*Pigs*. The pig stock around the urban centres, which is estimated at 2,000, stayed approximately at the 1958 level. The difficult feedstuffs problem hampers expansion.

Of greater size is the native stock of pigs in the interior, especially in the Central Highlands, where it is estimated at a minimum of 40,000 pigs. To improve this native stock 39 young stud pigs were supplied by the Government pig-breeding stations in 1959.

*Goats*. The goat stock is at present 2,150, as against 1,800 in 1958. For breeding purposes 30 goats were furnished to the population.

*Poultry*. Poultry-keeping at Hollandia and Manokwari greatly increased during 1959. For that purpose 24,000 day-old chicks were imported from Australia. As a result the prices of eggs fell.

Control of diseases and pests

In the control of diseases and pests there is close cooperation with the Institute for Tropical and Protozoan Diseases, Utrecht, the Netherlands. It was possible in 1959 to expand Government veterinary work owing to the appointment of a third Government veterinary surgeon. The three Government veterinary surgeons are stationed at Hollandia, Merauke and Manokwari.

Apart from an outbreak of an infectious pulmonary disease in pigs in the Baliem Valley and that of fowl pest at a poultry farm at Manokwari, no serious animal diseases and pests occurred. Local outbreaks of disease could be effectively combated or kept under control by the normal preventive and curative measures.
Improvement of the cattle stock

On the Experimental Stock-Breeding Farm at Merauke the stock of stud cattle was extended by 54 animals, including 30 progeny of the stud cattle imported from Australia in 1958. The pure Brahman progeny and also the products of crosses proved to grow considerably more quickly than the native cattle. The grazing was extended and improved. As a result of the protected dry season difficulties occurred with the provision of drinking water, which could, however, be solved. At the end of the year the Experimental Farm had 143 cattle, 4 stud pigs, 14 horses and 96 poultry.

The other Government stock stations, at Manokwari, Hollandia, Seroei, Biaik and Enarotali, had a joint stock of 25 cattle, 26 stud pigs, 17 horses, 72 goats, 36 sheep and 218 poultry.

The Stock-Breeding Branch acted as an intermediary, in collaboration with the agricultural extension officers, in the provision of cattle, horses, pigs, goats and breeding cocks to the population.

At the training centre at Kota Nica a course for junior stock-breeding officers was opened. This course consists of a training in stock-breeding and veterinary science, and will last eighteen months.

5. AGRICULTURAL INDEBTEDNESS

In general the state of affairs in this respect is favourable. Mortgaging of land or gardens hardly ever occurs. It is, however, the general custom that buyers of native produce give advances to the Papuan population in the form of goods. In general these advances do not become high.

Only in the Fak-Fak subdivision do debts of a more serious nature occur. The population sometimes incurs considerable debts with the Chinese traders, using the coming nutmeg harvest as security. A few cases of mortgaged gardens were discovered.

The Government is endeavouring to protect the interests of the native population with regard to trading in agricultural products by economic information and advice, the fostering of cooperative societies, the stimulation of home production of copra, the holding of public auctions of cash crops with payment in cash and the creation of markets for food crops.

Where considerable debts have come into being, supervision is exercised on repayment of the outstanding debts, whilst in the cases of mortgaged gardens which have been discovered the agreements in question have been replaced by simple IOU's.

6. ASSISTANCE FOR AGRICULTURAL PRODUCTION

a. Credit

Much less use was made in 1959 than in the two preceding years of the possibility for Dutch smallholders to obtain what are known as cocoa credits for the initial laying-out and upkeep costs of cocoa plantations. In all credits were furnished to four smallholders to a joint sum of f. 15,839 (1958: f. 28,000).

b. Marketing, storage, grading and processing

The assistance provided by the agricultural extension service in the buying, processing, storage and marketing of native agricultural produce was in 1959 given for the greater part to the cocoa producers near Seroei and Manokwari. In all 58 tons of cocoa pulp and 209,000 cocoa pods were bought up, for a total sum of about f. 38,000. The central cocoa processing plants at Seroei and Manokwari delivered 19 and 5.9 tons of market cocoa respectively, or together 24.9 tons to the value of f. 55,500 (1958: 3.2 tons to the value of f. 6,500). A third cocoa processing plant was built, viz. in the Nimboran, where the native cocoa plantations will begin to come into production in 1960.

Other products, i.e. cereals, legumes, fruit and vegetables, were bought up for a sum of f. 19,000. In the nutmeg producing area near Fak-Fak intermediary was given in voluntary fumigation of the product; in all 463 bags of nutmeg and 195 bags of mace were fumigated. The result of grading now being compulsory was that 27.5% of the nutmeg exported from Fak-Fak was shipped as ABC grade (top grade), whilst previously all the nutmeg left the country ungraded.

Mechanical assistance

The machinery pool at Kota Nica (Hollandia) worked 2,200 tractor hours for outsiders (1958: 1,204) and that at Wosi (Manokwari) 1,027 tractor hours (1958: 797).

The machinery pool of the Jawa Datum cooperative society at Genjem worked only 84 tractor hours (1958: 600). It is on the point of being written off, since it is not a paying proposition.
c. Supply of materials, seed and fertilizers

 Implements, artificial fertilizer, insecticides and imported seeds to the value of f. 51,190 were provided (including those for official use) as follows:

<table>
<thead>
<tr>
<th>Division</th>
<th>Implements</th>
<th>Artificial fertilizer</th>
<th>Chemical control agents</th>
<th>Vegetable seeds</th>
<th>Miscellaneous</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hollandia</td>
<td>7.20</td>
<td>2.85</td>
<td>(x f. 1000,--)</td>
<td>2.95</td>
<td>3.00</td>
<td>18.60</td>
</tr>
<tr>
<td>Geelvink Bay</td>
<td>5.73</td>
<td>0.15</td>
<td>0.32</td>
<td>1.38</td>
<td>0.59</td>
<td>8.17</td>
</tr>
<tr>
<td>West New Guinea</td>
<td>10.19</td>
<td>2.48</td>
<td>4.40</td>
<td>1.30</td>
<td>-</td>
<td>18.37</td>
</tr>
<tr>
<td>Fak-Fak</td>
<td>0.53</td>
<td>0.07</td>
<td>3.53</td>
<td>-</td>
<td>0.78</td>
<td>4.91</td>
</tr>
<tr>
<td>South New Guinea</td>
<td>0.89</td>
<td>-</td>
<td>-</td>
<td>0.08</td>
<td>0.17</td>
<td>1.14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24.54</strong></td>
<td><strong>5.55</strong></td>
<td><strong>10.85</strong></td>
<td><strong>5.71</strong></td>
<td><strong>4.54</strong></td>
<td><strong>51.19</strong></td>
</tr>
</tbody>
</table>

Supply of planting material and seeds

In all the following were provided in 1959:

- about 60,000 coconut plants
- about 7,000 cocoa pods
- about 36,000 Banda nutmeg plants
- about 35,000 fruit trees
- about 19,000 miscellaneous perennial plants
- about 71,000 miscellaneous annual plants
- about 6,500 kg of seed (legumes, etc.)

d. Control of diseases and pests

The investigation into control of the agate snail (Achatina fulica Fer) was continued. Besides the predacious snails Euglandia and Gonaxis the Lamprophores were introduced, and in this way biological control was continued. The results to date are hopeful.

Other pests periodically or continually present were caterpillars, locusts, birds, rats and wild pigs in the plantations. Control of these pests cannot be described as easy, although locally good results have been obtained.

In the cocoa plantations the following were encountered: pagoda caterpillars (Pagodia hekmeyeri Meyr.), bark-eating borers (Pansepta Teleurga Meyr.), longicorn beetles (Cerambycidae), the cocoa leaf beetle (Phyturus dilatatus Jac.), Cossidae, and root rot (Ustilina) and stem/pod rot (Phytophthora palmivora). For the first time Helopeltis antonii occurred in Netherlands New Guinea, in the experimental garden at Wosi. Immediate measures against these diseases and pests prevented their spreading to any considerable extent. In contrast to 1958, grub damage in the young cocoa plantations of the Mappi could be described as slight, thanks to intensive use of control means.

Deficiency diseases occurred in varying degrees. From the Department of Agriculture, Stock-Breeding and Fisheries at Port Moresby a number of flasks were received with vaccine from Rhizobium strains, occurring in Leucana glauca. Mineral deficiency diseases were combated with leaf spraying (Cu, Bo) or via dosages of artificial fertilizer (Ca and Mg).

7. AGRICULTURAL RESEARCH

Agricultural research is performed by the Agricultural Experimental Station of the Foundation for Agricultural Research on behalf of Netherlands New Guinea. At present this experimental station has two divisions, viz. an Agricultural Research Division, which is now established at Manokwari, and a Soil Science Division, which has its office and laboratory in Hollandia. In due course divisions for forestry and stock-breeding research will be added to the experimental station.

On behalf of this experimental station a modern centre for scientific research, consisting of laboratories, experimental gardens and houses for the staff, will be erected in 1961 in the vicinity of Manokwari. The construction and fitting-out of this agricultural research centre, which will demand a sum of f. 7.8 million, will be financed from the EEC development fund.
Agricultural research division

The agricultural research division was transferred in the course of 1959 to Manokwari, where temporary office and laboratory facilities were fitted out and a start was made with the laying out of a number of experimental gardens.

With regard to the cultivation of perennial crops, particular attention was paid to cocoa, specifically to selection, growing techniques, processing of the harvested product and storage of the finished product. Within the framework of selection, for instance, legitimate progeny were obtained by means of artificial pollination of promising parent trees. This progeny will be given a place in the generative pilot tests which are to be initiated. Further, preparations have been made for the laying out of a number of planting pattern trials. Processing trials have led to an improvement of fermentation. Storage trials clearly revealed that the use of damp-resistant packing material offered good prospects. There are collection plantations present of other perennial crops; these are regularly supplemented, and incidental research is done in them.

The collections of annual food and industrial crops were expanded. There are now present a large variety of sweet potatoes (Ipomoea batatas Poir), tapioca (Manihot utilissima Pohl.), yams (Diosacorea spp.), keladi (Colocasia, Alocasia and Xanthosoma spp.), groundnuts (Arachis hypogaea L.), kating idjo (Phaseolus aureus Roxb.), soya (Glycine max Merr.), maize (Zea mays L.), rice (Oryza sativa L.), sorghum (Andropogon sorghum Brot.), Job's tears (Coix lacryma jobi L.) and the castor oil plant (Ricinus communis L.). Trials were completed with tapioca and sweet potatoes, in which various methods of cultivation were compared with one another. The detailed investigation into the nutritional value of sweet potatoes, which is being conducted in collaboration with the Royal Institute for the Tropics, Amsterdam, continued.

In the field of entomology attention was concentrated on the maize borer (Pyrausta nubilalis) and the sweet-potato borer (Cylas formicarius), which cause a great deal of damage in Netherlands New Guinea.

Control tests with chemical agents gave good results, but a search was also made for possibilities of controlling these insects by means of parasites.

In 1959 trial introductions took place at Manokwari of Lamprrophorus tenebrosus (from Ceylon), Gonaxis sp. (from Australian New Guinea) and Euglandina sp. (from Hawaii), which in their own countries are very effective enemies of the agate snail (Achatina fulica). It is hoped that they will be able to contribute to a satisfactory suppression of the very harmful agate snail pest, which is particularly injurious in the vicinity of Manokwari.

In 1959 an expert was employed on the experimental rice farm at Koembe, with the task of devising means of combating the birds which in recent years have done some considerable damage to the rice crop in the field. Interesting data have already been obtained concerning the way of life and habits of the birds concerned, which will make it possible to tackle control intensively.

Soil Science Division of the Agricultural Experimental Station

This Division consists of three sections, viz.:
1. Soil Mapping Section;
2. Fertilization and Fertility Research Section;
3. Laboratory Section, on behalf of the first two sections, covering chemical, physical and mineralogical soil research.

1. Soil Mapping Section

In the course of 1959 the following soil science surveys were performed.

a. Reconnaissance of areas on the island of Biak of about 5,000 and 2,000 hectares on behalf of the Agricultural Branch of the Department of Economic Affairs (scale 1:100,000).

b. Detailed mapping of the Wararaf plain (1,400 hectares) south-west of Manokwari in the Upper Prafi area on behalf of the Agricultural Branch of the Department of Economic Affairs (scale 1:20,000).

c. A soil-depth mapping of the experimental station area at Amban near Manokwari, situated on a limestone plateau (scale 1:2,000). In this survey simple mapping was for the first time entirely entrusted to one of the Papuan experimental station officers trained by the Soil Science Division.
d. On behalf of nutmeg growing in the Fak-Fak Division about 850 hectares, spread over four areas, was mapped in detail or reconnoitred (scale: various).

e) Mapping of an area on the upper course of the Akimoega river in Mimika of about 10,000 hectares, with the purpose of investigating whether this area offers possibilities for the migration of mountain-dwellers from a number of valleys of the Central Highlands (scale: 1: 50,000).

f) Reconnaissance of the upper course of the Omanga river, also in Mimika, for the same purpose as under e) (about 8,000 hectares, scale 1: 100,000).

g) Sampling the Son area on Biak on behalf of the Forestry Division of the Department of Economic Affairs.

h) Mapping of about 20,000 hectares in the Holtekang-Tami-Skou plain near Hollandia to obtain a general impression of the agricultural possibilities (scale 1: 50,000).

The total area mapped since 1951 increased as a result to about 898,000 hectares (end of 1958: 851,000 hectares).

2. Fertilization and Fertility Research Section

Twenty reports were furnished to the agricultural extension services and other bodies. These were mainly reports on fertilization, based on soil sample investigations by the Laboratory Section.

Three pot trials were made, viz.
two pot trials with rice for the Koembe Rice Farm and
one pot trial with maize on Mojoe soil, for a fertilization report for cocoa.

An investigation at present continuing was instituted into the high P₂O₅ contents of limestone soil in the Ajarame area.

3. Laboratory Section

In the course of 1959 550 soil samples were dealt with in the laboratory. On these samples a total of about 6,000 analyses were performed. These were mineralogical and granular analyses, pH determinations, physical determinations, and further phosphorus, lime, magnesium, iron, sodium, potassium, sulphate and chlorine analyses.

8. AGRICULTURAL EDUCATION

At the village and continuation schools very simple practical instruction is given, for the purpose of making the young children familiar with the growth of plants and crops and of showing them the connection between this growth and the natural conditions, soil and climate, with if necessary the influence of fertilization. This instruction is confined to the cultivation of crops in the school gardens, in which, within the framework of diet improvement, attention is preferably given to high-grade annual crops and fruit trees which are rich in proteins.

The second form of practical agricultural education is directed towards certain facets of native agriculture, and is in fact a training of young people within the framework of agricultural regional development projects. Examples of this are the agricultural training centre at Kepi and the agricultural practical course at Seroei. The latter, however, had to be stopped in mid 1959 because of the disappointing results obtained with it; probably owing to the two-year stay in the boarding establishment, the boys found it difficult to readjust to the village environment after completing the course. In November 1959 a start was made with the holding of agricultural courses in two villages, in which instruction is given on one afternoon a week to local farmers. Since there is interest in these courses in various villages on Japen, the number of courses will be extended in 1960.

The third form of agricultural instruction is the vocational courses for Papuans, training them as junior agricultural and stock-breeding officers and as agricultural supervisors in the agricultural extension service.

Survey of the courses

Agricultural training centre at Kepi

At this centre young men who come to the fore in their own community are, together with their families, given a one-year course in the growing of cocoa and/or rubber (in particular the men) and of high-grade food crops (especially the women).
Since the centre's foundation in 1956 a total of 55 families from 12 villages have completed their training. In July 1959 20 families started their training.

On the agricultural practical course at Seroei, a two-year living-in course for young unmarried people of 17 to 20 years of age, 17 pupils gained their diplomas. After cessation of the course the training of 14 pupils from the first class was rounded off in practical form at the agricultural nuclei near Seroei.

The village courses were attended by 11 pupils (at Bosnik, Biak) and 33 pupils (at Wooi, Japen) respectively.

14 pupils on the two-year course for junior agricultural officers at Kota Nica were awarded their diplomas. At the end of 1959 there were 38 pupils on the course, viz. 23 pupils in class I and 15 pupils in class II.

The course for junior stock-breeding officers was attended by 7 pupils.

The course for agricultural supervisors which began at Kota Nica in 1958 was attended by 8 pupils, viz. 4 in class I and 4 in class II. The two-year theoretical training of the first four pupils will not be concluded until 1960, after which they will be required to serve a practical period of a further year as candidate agricultural supervisors.

9. AGRICULTURAL EXTENSION

a. Organization

The practical implementation of agricultural extension is vested in the five residency agricultural extension services in the divisions of Hollandia, Geelvink Bay/Central New Guinea, West New Guinea, Fak-Fak and South New Guinea. These residency agricultural extension districts are further subdivided into 16 subdistricts which coincide with those administrative subdivisions in which agriculture is being carried on, viz. Hollandia, Nimboran, Sarmi, Biak, Japen/Waropen, Wissel Lakes, Wandaumen, Manokwari, Teminaboean, Sorong/Radja Ampat, Fak-Fak, Kaimana, Mimika, Merauke, Mappi and Moejoe.

Technical and financial direction is given by the Agriculture and Stock-breeding Branch (central management) of the Department of Economic Affairs. The heads of the residency agricultural extension services are attached as advisers to the residents, who coordinate agricultural activities with general policy in the administrative divisions.

The establishment of the joint residency agricultural extension services at the end of 1959 was as follows: 4 agricultural advisers, 3 senior agricultural officers, 21 agricultural officers, 10 agricultural supervisors, 1 technical supervisor, 79 junior agricultural officers, 5 driver-mechanics and 23 clerks.

b. Aims and activities

The agricultural extension service sets itself the aim of increasing the productivity of agriculture and enhancing the possibilities of earning a living by farming. This applies in particular to native agriculture, which to a considerable extent is still in the initial phase of its development from the type of farming with intermittent use of the soil, which is almost exclusively directed towards satisfying the farmer's own needs and those of his family, to more established forms of farming, the production of which is also directed towards the market. In this connection the agricultural extension service is endeavouring on a wide scale to form small family farms, the main element of which consists of a combination of the growing of food crops to meet the farmer's own requirements (for the time being still in accordance with the usual ladang system with intermittent use of the soil) and the cultivation of cash crops (mainly perennial ones) to meet the developing need for money, whilst around this main element subsidiary elements in the form of stock-keeping and poultry-keeping and the breeding of fish may be grouped. Such a type of farm fits in best with the cultural level of the population and is only slightly vulnerable from the economic point of view, owing to the fact that the family at all times, including periods of economic depression, continues to have its main requirement, food, covered. The possibility of the cultivation of annual crops as a source of money income is limited to the existing demand in the urban centres, which is chiefly for fruit, vegetables, legumes, potatoes and rice. For the foreign market the annual crops cultivated by the population are not yet eligible, since with the present production system, among other things because of the absence of draught animals for tilling the soil, the return for the work involved is too low, whilst moreover the prevailing natural conditions (great rainfall and relatively poor soil) are in general more suitable for the cultivation of tree crops.

For the cultivation of rice by the population the return for the work is too low even in respect of the
market in the urban centres of population, for which reason the satisfaction of the demand for rice, which is about 9,000 tons a year, is being sought in the foundation of a large mechanized farm near Merauke. It is therefore for the time being only the perennial crops, such as coconut, nutmeg, cocoa, coffee and rubber, which lend themselves to large-scale cultivation by the population for export.

Besides the advantage of a relatively large return for the labour involved, the incorporation of perennial market crops in the native farming pattern is a usually easily accepted first step towards a permanent form of farming and a means of inducing the family, and in particular the man, to participate more regularly in agriculture, and thus is a means of increasing the productivity of the family’s work. The present exports of native agricultural produce, i.e. copra, nutmeg, mace and cocoa, amount to a value of some f. 6,600,000. For the period 1960 to 1963 incl. the aim is to extend the area under these crops as follows: 2,600 hectares of coconut, 850 hectares of nutmeg, 2,500 hectares of cocoa (including Government nucleus undertakings), 400 hectares of coffee and 800 hectares of rubber.

Besides the expansion of native cultivation of cash crops agricultural policy is also directed towards widening the assortment of food crops destined for the population’s own food, since the traditional diet, which consists for the greater part of food rich in carbohydrates, i.e. sago and/or tubers, is considered to be too unbalanced, i.e. too poor in proteins. It is true that the purchasing power created by the cultivation of cash crops gives the Papuan an opportunity to widen his diet by the purchase of supplementary items of food brought in from outside, which the farm cannot produce, or not as well, such as preserved fish, sugar, salt, etc., but besides this it is still desirable that a better diet is obtained as much as possible directly from the farmer’s own production. The difficulty here is that the population themselves do not realize the value of better food and take little trouble to acquire it. The stimulation of diet improvement is therefore interpreted as a joint task of the Departments of Public Health, Economic Affairs, Cultural Affairs and Internal Affairs. So far experience has taught that campaigns for improving food cropping have the greatest effect when they are accompanied by the introduction of perennial cash crops or when the food crops can be planted as cash crops. The latter has taken place particularly in the immediate vicinity of the urban centres of population and administrative posts, which are now supplied to a considerable extent with their requirements of fruit and vegetables by the surrounding nurseries.

Within the framework of farm development in general and in that of diet improvement in particular, attention is also being devoted to the encouragement of inland fisheries and stock-keeping and poultry-keeping as subsidiary elements of the family farm. This is being done by a better stocking of the natural inland waters, the laying out of fish ponds, the provision of stud cattle and breeding poultry and information and advice on these.

The activities of agricultural extension with regard to the above objectives are as follows:

1. Examination and production of planting material.
2. Information and advice with regard to food production (diet improvement and local food supplies).
3. Information and advice on agricultural production for export.
4. Agricultural education (training of Government personnel) and practical instruction in agriculture.
5. Agricultural assistance (intermediary in the marketing of agricultural produce, credits and the provision of mechanical assistance).
6. The control of diseases and pests.
7. The implementation of agricultural projects.
8. Work in connection with stock-breeding and inland fisheries (linked up with the activities and programmes of the Stock-Breeding and Inland Fisheries divisions).

Investigations into and production of planting material

As already stated, scientific pedological and agricultural research is vested in the Foundation for Agricultural Research on behalf of Netherlands New Guinea. The supplementary local research into the suitability of natural conditions for various crops, together with the propagation of planting material, is for the greater part done in a large number of widespread Government experimental gardens of the various residency agricultural extension services.

Depending on the purpose they are meant to serve, the gardens contain collection, trial, propagation and demonstration plantations of various crops, such as rubber, cocoa, coffee, nutmeg, fruit trees, legumes, cereals, vegetables, green-manuring crops and shade trees. They vary in size from a few hundred square metres to 30 hectares; they now total 31, viz. five in the Hollandia division (Kota Nica, Sami, Waris, Genjem and Baim), 10 in the Geelvink Bay/Central New Guinea division (Biak-Bosnik, Seroei, Noemfoor, Waisor, Enarotali, Erepararida, Bobairo, Akaitadi, Komopa and Edaratali), six in the West New Guinea division (Wosi, Ajamaroe, Eway, Kebar, Ransiki, Iray), five in the Fak-Fak
division (Fak-Fak, Pasir Poetih, Poelau Argoeni, Kaimana, Hiripau) and five in the South New Guinea
division (Merauke, Mindipanah, Kepi, Bade, Okaba).

Survey of planting material and seed furnished to the population

<table>
<thead>
<tr>
<th>Type of planting material</th>
<th>Quantity</th>
<th>Hollandia</th>
<th>Geelvink Bay</th>
<th>West New Guinea</th>
<th>Fak-Fak</th>
<th>South New Guinea</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>coconut 1) (1000) pieces</td>
<td></td>
<td>15.0</td>
<td></td>
<td>14.2</td>
<td>8.0</td>
<td>22.6</td>
<td>59.8</td>
</tr>
<tr>
<td>cocoa pods</td>
<td>&quot;</td>
<td>1.2</td>
<td>3.2</td>
<td>0.4</td>
<td>&quot;</td>
<td>2.1</td>
<td>6.9</td>
</tr>
<tr>
<td>numeg (Banda)</td>
<td>&quot;</td>
<td>2.8</td>
<td>0.6</td>
<td>32.8</td>
<td>&quot;</td>
<td>36.2</td>
<td></td>
</tr>
<tr>
<td>other perennial crops</td>
<td>&quot;</td>
<td>11.1</td>
<td>2.6</td>
<td>0.6</td>
<td>0.2</td>
<td>4.9</td>
<td>19.4</td>
</tr>
<tr>
<td>fruit trees</td>
<td>&quot;</td>
<td>3.0</td>
<td>28.5</td>
<td>0.8</td>
<td>2.0</td>
<td>1.2</td>
<td>35.5</td>
</tr>
<tr>
<td>miscellaneous</td>
<td>&quot;</td>
<td>4.0</td>
<td>60.4</td>
<td>0.4</td>
<td>0.1</td>
<td>6.4</td>
<td>71.3</td>
</tr>
<tr>
<td>total</td>
<td>(1000) pieces</td>
<td>34.3</td>
<td>97.5</td>
<td>17.0</td>
<td>43.1</td>
<td>37.2</td>
<td>228.1</td>
</tr>
<tr>
<td>seeds of food crops</td>
<td>(1000) kg</td>
<td>4.5</td>
<td>1.1</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>6.5</td>
</tr>
</tbody>
</table>

1) all of this material was bought up from native gardens.

Information and advice with regard to food production

As in preceding years, in 1959, too, the residency agricultural extension services in various regions of the Territory gave advice and offered assistance in the cultivation of food crops in general and fruit, vegetables and legumes in particular.

In this connection space has been reserved in the majority of Government gardens for demonstration and propagation plantations of various fruit trees and annual food crops; seeds, planting material, agricultural implements and chemical control agents are furnished; where possible mechanical aid is given in tilling the soil; advice is given on the planting of school gardens and assistance is given in marketing the produce.

Partly as a result of these efforts the demand for fruit and vegetables in the urban centres can be met to a steadily increasing extent. The supply of vegetables at Hollandia has since recently been supplemented by vegetables flown out of the Baliem Valley. The Bosnik vegetable centre near Biak produced in 1959 81 tons of fruit and vegetables, or 28 tons more than in 1958. Shipments of vegetables from Ransiki to Manokwari and Biak increased by 20 tons. In Solol and Jenenanes near the Sangei Straits native gardens were laid out to supply Sorong. In Seroei 79 tons of vegetables were produced to meet the town's demand.

With regard to improving the diet of the native population great attention was paid to the introduction of legumes and other high-grade food crops as catch crops to precede and be grown between the cocoa crops in the plantations which are being laid out under the guidance of the agricultural extension services. The best results with this were obtained in the agricultural nuclei in Japen, where the increased planting of legumes, maize and sorghum has already led to a marked widening of the diet. On a smaller scale the planting of legumes between the young cocoa was also followed in the Nimboran.

Information and advice on agricultural production for export

Coconut (copra)

The increasing of production is being encouraged by:

a. organization and propagation of the laying-out of new coconut plantations;
b. information and assistance in the processing, marketing and transport of copra where required;
c. improvement of plantation upkeep;
d. breeding and making available selected planting material;
e. control of diseases and pests.

In the year under review considerably more coconut was planted than in 1958, viz. 821 hectares
as against 445 hectares in 1958. This additional planting was divided as follows among the various divisions:
### Division

<table>
<thead>
<tr>
<th>Division</th>
<th>Added in 1959</th>
<th>Target according to programa and estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hollandia</td>
<td></td>
<td>80 ha</td>
</tr>
<tr>
<td>Geelvink-Bay</td>
<td>91 ha</td>
<td>80 ha</td>
</tr>
<tr>
<td>West New Guinea</td>
<td>412 ha</td>
<td>160 ha</td>
</tr>
<tr>
<td>Fak-Fak</td>
<td>118 ha</td>
<td>70 ha</td>
</tr>
<tr>
<td>South New Guinea</td>
<td>200 ha</td>
<td>210 ha</td>
</tr>
<tr>
<td>total</td>
<td>821 ha</td>
<td>600 ha</td>
</tr>
</tbody>
</table>

The best results of the publicity for coconut planting were achieved in those regions where there are few or no coconut palms, such as the districts of Teminaboan and Inanwatan in West New Guinea and in the Mappi subdivision in South New Guinea.

**Nutmeg**

With regard to the growing of nutmeg, the activities of agricultural extension were particularly concentrated on:

a. organization and encouragement of the laying-out of Banda nutmeg (*Myristica fragans*) gardens as a gradual replacement for the inferior Papua pala nutmeg, mainly in the Fak-Fak division;
b. furnishing superior planting material;
c. improving the quality of the existing market product, Papua nutmeg and mace, by means of better harvesting and storage methods, by fumigation and by making grading compulsory.

The prices of nutmeg and mace, which have risen steeply since 1956, have in a short time brought about so great a prosperity among the Papuan population engaged in the growing of this crop in the Fak-Fak subdivision, where the principal production area of Papua nutmeg is located, that great interest has now developed in other parts of the Territory in growing nutmeg, especially Banda nutmeg, which is a more rapid producer and which is also superior in quality.

**Survey of Banda nutmeg plantings**

<table>
<thead>
<tr>
<th>Region</th>
<th>Area</th>
<th>Added in 1959</th>
<th>Target for adding in 1959</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>End of 1958</td>
<td>End of 1959</td>
<td></td>
</tr>
<tr>
<td>Biak-Japen</td>
<td>– ha</td>
<td>34 ha</td>
<td>34 ha</td>
</tr>
<tr>
<td></td>
<td>64 ha</td>
<td>162 ha</td>
<td>98 ha</td>
</tr>
<tr>
<td>Fak-Fak</td>
<td>12 ha</td>
<td>57 ha</td>
<td>55 ha</td>
</tr>
<tr>
<td>Kaimana</td>
<td>– ha</td>
<td>2 ha</td>
<td>2 ha</td>
</tr>
<tr>
<td>Hollandia</td>
<td>– ha</td>
<td>– ha</td>
<td>– ha</td>
</tr>
<tr>
<td>West New Guinea</td>
<td>– ha</td>
<td>– ha</td>
<td>189 ha</td>
</tr>
<tr>
<td>Total</td>
<td>76 ha</td>
<td>265 ha</td>
<td>82 ha</td>
</tr>
</tbody>
</table>

**Cocoa**

The activities of agricultural extension with regard to cocoa growing consist of the following:

a. The introduction or extension of cultivation in suitable areas (choice of soils, trial plantations, provision of planting material, setting out the planting pattern and supervising planting and upkeep).
b. Giving intermediary in processing and marketing (setting up central processing plants, buying up pods, processing, storage and marketing).

So far the growing of cocoa has been introduced into Hollandia, the Nimboran, Sami, Japen-Waropen, Manokwari, Ransiki, Mappi and, in 1959, also Moejoe and the Vogelkop.
Survey of cocoa plantings

<table>
<thead>
<tr>
<th>Region</th>
<th>Area end of 1958</th>
<th>Area end of 1959</th>
<th>Added in 1959</th>
<th>Target for additional planting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hollandia-Nimboran-Sami</td>
<td>194 ha</td>
<td>234 ha</td>
<td>40 ha</td>
<td>95 ha</td>
</tr>
<tr>
<td>Japen-Waropen</td>
<td>281 ha</td>
<td>440 ha</td>
<td>159 ha</td>
<td>150 ha</td>
</tr>
<tr>
<td>Manokwari-Ransiki</td>
<td>68 ha</td>
<td>107 ha</td>
<td>39 ha</td>
<td>15 ha</td>
</tr>
<tr>
<td>Mappi</td>
<td>68 ha</td>
<td>113 ha</td>
<td>45 ha</td>
<td>100 ha</td>
</tr>
<tr>
<td>Experimental gardens</td>
<td>31 ha</td>
<td>32 ha</td>
<td>1 ha</td>
<td>-</td>
</tr>
<tr>
<td>total</td>
<td>642 ha</td>
<td>926 ha</td>
<td>284 ha</td>
<td>360 ha</td>
</tr>
</tbody>
</table>

Although the additional planting in 1959 of 284 hectares (1958: 212 hectares) was 35% greater than in 1958, it was still below expectations, particularly in Hollandia, Nimboran, Sami and Mappi.

In the Manokwari and Ransiki subdivisions, where cocoa growing had up to then been mainly done by Dutch smallholders, native growing began to get started locally. Preparations have been made here for extending the introduction of cocoa to the Warmaré plain and the Wamdammen region.

Coffee

The Robusta coffee stand near Ambaidiroe on Japen was extended by 10 hectares, as a result of which it reached 42 hectares at the end of 1959.

In the area of the Wissel Lakes, 1,700 metres above sea-level, it was decided in 1959 on the strength of the favourable development of the trial plantations of Arabica coffee, to proceed to introduce this commercial crop to the native population. However, the population have as yet displayed little interest.

Observation plantations of Arabica coffee have been laid out in the Baliem Valley and on the Anggi Lakes.

Rubber

The trial plantations of rubber laid out in Mappi and Moejoe will be able to give a definite answer in 1960 and 1961 respectively as to whether cultivation by the relevant population can be recommended. In view of the favourable development in the trial fields so far, the chances are good.

10. INLAND FISHERIES

The development of inland fisheries is still in the initial stage, since on account of difficulties in providing skilled personnel it was not until a comparatively recent date that a start could be made with the provision of information and advice. This latter work is done in collaboration with the various residency agricultural extension services.

An important gain in the year under review was the foundation of the inland fisheries station at Jabaso (Sentani), in which a breeding complex consisting of five series of three (hatching, provision and breeding) ponds is located. In these ponds a number of imported species of fish are being propagated for distribution, i.e. Tilapia mosambica, Osphronemus gourami, Gambusia affinis, Trichogaster pectoralis and four varieties of Cyprinus carpio, viz. the Canton carp (imported in 1958), and the European carp, the brown and white Japanese gold carp and the black and white Japanese gold carp received from the Netherlands in December 1959, which are specially intended for the Highlands.

Provision of fish fry, among other places at Hollandia, Tor, Baliem, Biak, Angi-Angi, Merauke, Mindiptuanah, Gentirt and Kaimana, took place in 1959 on a still modest scale, viz. 70 carp, 5,000 Tilapia and 2,500 Gambusia.

A trial catch from a fertilized native pond at Sentani with an 11-month-old mixed stocking of Tilapia, Trichogaster, carp and Gambusia gave a yield corresponding to 1.5 tons of fish for eating per hectare per year.

The trial with Canton carp in a pond near Enarotali at a height of 1,700 metres was disappointing in its results. Although the fish in question have already propagated themselves, they have stayed small. In the course of 1960 observation will be extended by progeny of the species of carp
recently received from the Netherlands, which are expected to be better adapted to the chill climate of the Highlands.

11. AGRICULTURAL PROJECTS

In a number of regions selected on their possibilities of further development a more concentrated form of agricultural extension is being applied to persuade the population to use more permanent and more productive farming systems. This applies particularly to Nimboran, Mappi and Japen. The general pattern consists of the formation of nuclei of farmers, who under expert guidance are induced to set up more productive family farms adjusted to the potentialities of the regional environment, in the expectation that these nuclei will gradually grow.

Nimboran project

Besides the introduction of cocoa into the existing pattern of crops grown by the population in suitable villages, a group of 14 model farms with more skilled farmers was set up at Blitoeing in 1955–1959; the fitting-out of these farms may now be regarded as practically complete. By the end of 1959 the group comprised the following:

- 3 farms, each of 4.25 hectares = 12.75 hectares
- 11 farms, each of 3.25 hectares = 35.75 hectares

<table>
<thead>
<tr>
<th>Area</th>
<th>Hectares</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 communal cattle pasture</td>
<td>7.50</td>
</tr>
<tr>
<td>area of yard and roads</td>
<td>7.0</td>
</tr>
<tr>
<td>spare land</td>
<td>11.0</td>
</tr>
<tr>
<td></td>
<td>25.5</td>
</tr>
<tr>
<td>total area of group</td>
<td>74.0</td>
</tr>
</tbody>
</table>

The area of these farms under cocoa totals 32.5 hectares, of which 8.5 hectares is planted as yet only with shade trees. The area for the cultivation of food crops (partly planted with soya, karjang idjo and green-manuring crops) covers 12.5 hectares, and the farmyard plantations (tubers, fruit trees and vegetables) cover a total of 3.5 hectares. Furthermore, there is an as yet very modest collection of livestock.

Outside the farms the farmers also have available sago forests, from which they still get part of their traditional (staple) diet.

The authorities have since 1955 invested the sum of f. 130,000 in laying out and fitting out the group of farms, or an average of almost f. 10,000 per farm.

A plan is being studied for the drainage of an adjoining area of 5,800 hectares and the establishment on that site of similar farms around a Government nucleus farm.

The situation regarding cocoa planting in the Nimboran was as follows:

<table>
<thead>
<tr>
<th>Farm groups</th>
<th>Situation at end of 1958</th>
<th>Added in 1959</th>
<th>Situation at end of 1959</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group of model farms</td>
<td>15.0 ha</td>
<td>9.0 ha</td>
<td>24.0 ha</td>
</tr>
<tr>
<td>Cooperative society</td>
<td>8.0 ha</td>
<td>–</td>
<td>8.0 ha</td>
</tr>
<tr>
<td>Native gardens</td>
<td>26.0 ha</td>
<td>19.0 ha</td>
<td>45.0 ha</td>
</tr>
<tr>
<td>Experimental garden</td>
<td>2.0 ha</td>
<td>–</td>
<td>2.0 ha</td>
</tr>
<tr>
<td>Total</td>
<td>51.0 ha</td>
<td>28.0 ha</td>
<td>79.0 ha</td>
</tr>
</tbody>
</table>

Mappi project

In the Mappi subdivision families selected from the villages have since 1956 been housed in groups for a period of about a year in an agricultural training centre. Here they receive training in the cultivation of a number of perennial cash crops and food crops, whilst the women are also given the necessary instruction in hygiene and domestic science. At the end of the course they return to their homes to give practical application to what they have learned, under the direction of the agricultural extension service, and to encourage others by their example and their ascendancy.
The agricultural training centre at Kepi has, since its opening in 1956, trained 55 families from 12 villages; in July 1959 20 families from 5 villages started their training. After returning to their villages these trained families have concentrated with their fellow-villages on the planting of cocoa and coconut in particular; the areas under these crops at the end of 1959 were 113 hectares and 752 hectares respectively.

The extensive method of cultivation originally practised in the planting of cocoa (planting in thinned-out forest) has not lived up to expectations. A considerably better development was displayed by the plantations laid out since the end of 1958 in accordance with the more intensive ladang system. The state of the latter plantations, as recorded at the end of 1959, can be described as reasonably favourable.

Meanwhile, the young experimental rubber plantations have displayed a favourable growth so far.

Japan

On the island of Japen and in Waropen groups of selected farmers are being induced by means of intensive information and advice to set up individual farms in groups on land reserved beforehand in the vicinity of the village. On these farms combined growing of cocoa and food crops forms the main element; as a subsidiary element stock-keeping and poultry-keeping are encouraged by the provision of stud animals for cash or to be shared for breeding purposes. The location of the site selected in the vicinity of the village makes it possible for the farmer to lay the new farm out entirely with his own resources, albeit in a slow tempo, without injuring his normal living (sago production and fishing).

By laying out every year 0.25 to 0.5 hectares of cocoa with temporary planting between this cocoa of food catch crops, the farmer is after four to eight years in the possession of 2 hectares of cocoa, thus completing the basis for his money income. The further development of the farm is then directed towards the gradual intensification of food cropping, by the introduction of green-manuring crops and draught animals.

During the period in which the cocoa plantation is being laid out, the agricultural extension service exerts influence on the selection of the temporary catch crop, in order on the one hand to arrive at a dietary improvement and on the other hand to provide the farmer in a short time with something of a money income in the meantime. In many cases farmers have been persuaded to leave more room than formerly for legumes, maize, onions and vegetables alongside the traditional staple food crops.

Since the beginning of the formation of the nuclei in 1955 the number of agricultural nuclei has grown to 29.

<table>
<thead>
<tr>
<th>number of agricultural nuclei:</th>
<th>end of 1958</th>
<th>end of 1959</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>19</td>
<td>29</td>
</tr>
<tr>
<td>number of farms being built up:</td>
<td>385</td>
<td>796</td>
</tr>
<tr>
<td>area under cocoa:</td>
<td>281 ha</td>
<td>440 ha</td>
</tr>
<tr>
<td>cocoa exports from Seroei:</td>
<td>3.2 ton</td>
<td>19 ton</td>
</tr>
</tbody>
</table>

In 1959 the agricultural extension service here bought up cocoa pods to the value of about f. 29,500 and further processed them to market product. Moreover, intermediary was given for the buying-up of fruit, vegetables, legumes, cereals, and other agricultural produce amounting to a value of some f. 10,000.

Other projects

The agricultural regional development project for Ajamaroe is still in the preparatory stage. In the first place the experimental gardens laid out at Ajamaroe and Eray must still supply an answer to the question of which perennial cash crop is suitable for the broken karst country here. Moreover, the population are still busy building the access road to the coast.

Investigations were started into a further three establishment projects for the Wamaraé plain (near Manokwari), the Upper Akimoega plain (Mimika) and the region of Sjabes-Wardo-Samber-Blak.
C. FORESTRY

1. FORESTRY POLICY

Forestry policy is directed towards protecting the forests against devastation, inventorying the area under forest and fostering suitable and efficient exploitation of timber and collection of forest byproducts.

The exploration and inventorying of the forest areas suitable for exploitation and the botanical examination of forest flora were backed to an increasing extent by the more rapid availability of the necessary aerial photographs on a scale of 1 : 20,000, on which preliminary topographical and vegetation interpretations could be performed.

Timber felling by non-Papuans is possible only after permission has been obtained from the Government, whilst at the same time the rights of the population have to be bought out.

Forest exploration permits can be granted for an area not exceeding 100,000 hectares; the holder of such a permit acquires a prior right to a timber concession in the area concerned if he submits a development and felling plan based on the reconnaissances made, and subject to Government approval.

To develop the timber industry in Netherlands New Guinea the Government are striving after a greater use of timber in house-building and utilitarian construction.

With regard to the collection of forest byproducts, mainly copal, a resinous product, the Government gives information and advice to the population. It also gives intermediary in grading and marketing. To protect the Agadhis against inefficient tapping methods which may result in the trees dying off, legal regulations are in force, the Danmar Tapping Ordinance.

2. ORGANIZATION

The Head Office of the Forestry Branch is established at Hollandia. The Branch consists of two sections, viz. the Forest Administration Section, divided among three administrative divisions, and the Forestry Planning Section, established at Manokwari.

The staff of the Branch consisted in 1959 of 9 graduate foresters, 42 intermediate personnel and 77 junior personnel (1958: 8, 39 and 68 respectively).

Financial results 1959

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>staff</td>
<td>f. 957,562.–</td>
</tr>
<tr>
<td>materials</td>
<td>f. 1,851,260.–</td>
</tr>
<tr>
<td>total</td>
<td>f. 2,808,822.–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>sale of forestry material</td>
<td>f. 2,654.–</td>
</tr>
<tr>
<td>intermediary in the buying-up and selling of forest products</td>
<td>f. 295,887.–</td>
</tr>
<tr>
<td>proceeds from goods procured to further the production of timber and the collection of forest products</td>
<td>f. 69,350.–</td>
</tr>
<tr>
<td>fixed charges and royalties</td>
<td>f. 3,529.–</td>
</tr>
<tr>
<td>proceeds from &quot;Sarmi&quot; key project</td>
<td>f. 34,286.–</td>
</tr>
<tr>
<td>other revenue</td>
<td>f. 334,761.–</td>
</tr>
<tr>
<td>total</td>
<td>f. 740,467.–</td>
</tr>
</tbody>
</table>

3. ACTIVITIES IN 1959

a. Forest exploration and inventorying

Exploration activities in the year under review were particularly directed towards the two Agadhis stands at Biak and Sarmi, whilst moreover two new non-Agadhis forest areas (Warjori and Sekoli plains) were placed under investigation.

As one of the preparations for the activities in 1960 vegetation mapping from aerial photographs of the hinterland of Nabire (35,000 hectares) was carried out, whilst for the detection of valuable forest areas four reconnaissance flights were made above the Mamberamo, Nabire, Waris, Karoon and Babo (in all about 3,000 km).
Survey of the activities:

*Vegetation and provisional mapping from aerial photographs*

<table>
<thead>
<tr>
<th>Area</th>
<th>Acres</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biak (expansion area)</td>
<td>1,000</td>
<td>(vertical photographs, scale 1 : 20,000)</td>
</tr>
<tr>
<td>Nabire</td>
<td>35,000</td>
<td>ditto</td>
</tr>
<tr>
<td>Tami Mosso</td>
<td>25,000</td>
<td></td>
</tr>
<tr>
<td>West Mamberamo</td>
<td>33,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>94,000</td>
<td></td>
</tr>
</tbody>
</table>

*Ground mapping*

<table>
<thead>
<tr>
<th>Area</th>
<th>Acres</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biak</td>
<td>3,000</td>
<td>(scale 1 : 10,000)</td>
</tr>
<tr>
<td>Sami</td>
<td>20,000</td>
<td>(scale 1 : 20,000)</td>
</tr>
<tr>
<td>Sekoli plain</td>
<td>6,000</td>
<td>(scale 1 : 20,000)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Ground inventories*

<table>
<thead>
<tr>
<th>Area</th>
<th>Acres</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biak</td>
<td>3,000</td>
<td>(intensity of inventorying: 2,000 hectares Agadis 100% 3,000 hectares other species 10%)</td>
</tr>
<tr>
<td>Sami</td>
<td>9,000</td>
<td>(intensity of inventorying: 1%)</td>
</tr>
<tr>
<td>Warjori plain</td>
<td>6,000</td>
<td>(intensity of inventorying: 1%, inventory not yet completed)</td>
</tr>
<tr>
<td>Sekoli plain</td>
<td>6,000</td>
<td>(intensity of inventorying: 1%)</td>
</tr>
</tbody>
</table>

*Botanical inventories*

<table>
<thead>
<tr>
<th>Area</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biak:</td>
<td>as a botanical collection in the group of trial beds</td>
</tr>
<tr>
<td>Sami:</td>
<td>as a botanical collection in the group of trial strips and beds</td>
</tr>
<tr>
<td>Moejoe Mountains:</td>
<td>as an approximate inventory in the area between Tanah Merah and the Sibil.</td>
</tr>
</tbody>
</table>

b. *Forest reservation*

The extension of the "Tafelberg" hydrological forest reserve near Manokwari and the "Remoe" forest reserve is only awaiting settlement of the administrative details.

c. *Production data*

As regards the production of rough and sawn timber see Appendixes XI and XI A.

The production of rough timber increased during the year under review by more than 8,000 cu. m, and that of sawn timber by around 1,000 cu. m.

The sawmill at Manokwari of the Foundation for Agricultural Concerns produced about 8,200 cu. m. sawn wood as against 5,100 cu. m. in 1958.

The marked increase in the production of rough timber is the result of the increasing foreign interest in round timber; the Japanese market is the largest customer, with a demand for many species of timber.

Copal production increased by 81 tons. The price of copal on the world market recovered somewhat. The average price for exported copal in 1959 was f. 129.40 as against f. 122.50 per quintal in 1958.

4. TRAINING AND RESEARCH

*Training*

In 1959 six pupils successfully concluded the two-year forestry course at Kota Nica, and 11 pupils the extension course for certificated junior forestry officers.

*Research*

Forest botanical research continued with the collection of 1,000 herbarium samples. Together with material from other sources the collection was as a result increased to almost 10,000 samples.

Contact is being maintained with scientific institutes in the Netherlands, Australia and
Australian New Guinea (the Royal Institute for the Tropics at Amsterdam, the National Herbarium at Leyden, the Timber Research Institute TNO at Delft, the Agricultural University at Wageningen, the Commonwealth Scientific and Industrial Research Organization at Canberra and the Division of Botany of the Department of Forests at Lae (Australian New Guinea). The cooperation with the Division of Botany of the Department of Forests at Lae was intensified and reorganized more efficiently on the occasion of the visit of the Forest Botanist, J.S. Womersley, of this body to Netherlands New Guinea in November 1959.

For informative purposes a description was compiled of the properties of 28 important species of timber. It is the intention to add further species to this booklet in the future.

5. DEVELOPMENT

For the development of forest exploitation a number of key projects have been embarked upon. These projects are the following:

1. Bosnjk key project (copal production and cultivation of Agathis)
   Agreement was reached with the population having ownership rights to the Agathis stand in this 3,300-hectare area on the transfer of their property to the Government. The agreement lays down that the Government will transfer the rights and obligations obtained in a manner to be determined later to the regional community of Biak-Noemfoor on behalf of commercial exploitation of the Agathis stand.

   The mapping and inventorying of this area is ready for the greater part. A start has been made with the building of a network of access roads. Tapping was started in the inventorized part of the area, which at the end of 1959 was about 900 hectares in size. Trials were made with the laying-out of Agathis plantations.

2. Sarmi key project (copal production and timber exploitation of Agathis)
   In the year under review arrangements were made regarding the rights of the population to 40,000 hectares. A start was made with tapping in the Bodem area. Over 26 tons of copal were produced, of which some 9 tons were exported. Preparations were made for reforestation with Agathis. Further, measures were taken to improve communications and to establish a forest industry.

3. Kebar key project (cultivation and exploitation of Araucaria as industrial timber and Agathis for copal production)
   In the year under review the planting of Araucaria continued. Thanks to a considerable extension of the nurseries it will be possible in the coming years to plant larger areas.

4. Teminaboeun key project (copal production and cultivation of Agathis)
   Here, too, the nursery was extended for the further planting of Agathis.

5. Hollandia hinterland key project
   This project has been set up on behalf of the reforestation of deforested areas, including the grassy slopes around Lake Sentani.

6. Nabire hinterland key project
   In anticipation of aerial photography of this area, which is to take place at the beginning of 1960, the reconnaissance and development work for this exploration project began in the last months of the year under review.

D. SEA FISHERIES

1. ORGANIZATION

Government efforts in relation to sea fisheries are principally directed towards advising and instructing the fishing population, to introducing new catching methods to the population, to improving the equipment of fishing vessels and to forming groups of fishermen for efficient fishing in fleets.

Besides these aspects, the authorities have for the time being the task of regulating the distribution among the population centres of the fish caught, until such time as the population themselves have sufficient experience in that field to be able to ensure regular landings.

The Sea Fisheries Branch of the Department of Economic Affairs has its head office at Hollandia and fishery stations at Hollandia and at Manokwari for fishery research and advice on fishing. For the distribution of the fish caught substations have been set up in the vicinity of fishermen's centres and fishing grounds.
Establishment

The Head Office at Hollandia is under an inspector, aided by a technical manager. To the fishery stations at Hollandia and Manokwari a technical manager is attached, together with a number of fishery experts.

The Branch has at its disposal four vessels, including the fishing cutter "De Goede Hoop". One of the vessels is in use with the population as a trial vessel.

Budget
The expenditure for 1959 was:

<table>
<thead>
<tr>
<th>Staff</th>
<th>f. 166,584.--</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>f. 360,789.--</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>f. 527,373.--</td>
</tr>
</tbody>
</table>

Revenue

| Sale of fresh fish | ) | f. 37,776.-- |
| Sale of dried salt fish | ) | |
| Sale of shells | ) | |
| Sale of fishing equipment | | f. 22,741.-- |
| Sale of inducement goods | | f. 8,097.-- |
| Intermediary in buying up and selling | | f. 895.-- |
| Other revenue | | f. 22,470.-- |
| **Total** | f. 71,979.-- |

2. PRODUCTION

Landings of fresh fish in the year under review totalled the same as 1958, viz. about 4,000 tons. The production of salt fish increased from about 30 tons to about 35 tons.

The shells landed consisted of troca, black lips and burgos. Catches during the 1959 season, compared with the 1958 season, are as follows:

<table>
<thead>
<tr>
<th></th>
<th>1958</th>
<th>1959</th>
</tr>
</thead>
<tbody>
<tr>
<td>weight (tons)</td>
<td>131.1</td>
<td>93.1</td>
</tr>
<tr>
<td>value (x f. 1,000)</td>
<td>386.8</td>
<td>207.4</td>
</tr>
</tbody>
</table>

(see Appendix XII)

3. RESEARCH

Shell investigation

The inventorying of shell beds located below the 10 m line was concluded.

Research into fishing methods

Soeploaro-Ranireef. On the Ranireef catching investigations were performed on lobster (spiny crayfish) with lobster traps. On the same reef catching investigations were also performed with permanent fishing gear (traps on the shallow parts of the reef) and deep-sea traps.

The investigation into the presence of shrimps along the Waropen coast is being continued.

Vessels

Within the framework of the investigation into suitable types of vessels a number of wooden fishing boats have been put under construction at the fishery station at Hollandia. The ships are to have a length of 8 metres, and are to be given insulated ice and fish holds and 18 HP Victor Vixer diesel engines.

4. DEVELOPMENT

On behalf of the preserving (salting) of fish a well-equipped workshop was set up at the Insobabi substation (Korido coast, Soepiori Island).

The Mios Acezi area (West Geelvink Bay) has been taken into production by groups of fishermen from Mios Waar with the aid of the Sea Fisheries Branch. Attention was paid to the further development of reef fishing in this area.
1. ORGANIZATION

The Office of Mines comes under the Department of Economic Affairs. The staff of the Office consists of four geologists and mining engineers, eight chief supervisors and supervisors and two clerks.

Since the year under review experts of the Foundation for the Furtherance of Geological Surveys in Netherlands New Guinea have also been taking part in geological research in Netherlands New Guinea. The Foundation does its research in collaboration with the Office of Mines; however, both bodies operate quite separately and independently.

On behalf of a general geological survey of Netherlands New Guinea, which will extend over a period of five years, a project has been submitted for financing from the Development Fund for the Countries and Overseas Territories of the European Economic Community. (This project, the implementation of which will involve a sum of approximately f. 18 million, was accepted in March 1960 by the Committee of the EEC.)

2. MINING LEGISLATION

To replace the out-of-date Mining Act of 1899, a new mining act has been drawn up for Netherlands New Guinea.

In the bill, which was submitted to the Netherlands Parliament in the year under review, the title of the body corporate Netherlands New Guinea to all minerals is explicitly laid down, thus giving expression to the principle that the minerals present in the soil of a country belong to the community concerned and should be mined for the benefit of that community.

The body of provisions is directed towards ensuring that on the one hand the community of Netherlands New Guinea receives a reasonable share of the proceeds from the minerals mined and that on the other hand conditions are sufficiently attractive for private enterprise to make the necessary investments.

3. MINING ENTERPRISES

The only producing mining enterprise is the N.V. Nederlandsche Nieuw-Guinee Petroleum Maatschappij, a joint venture of the Royal Dutch/Shell Group (40%), and the Standard Vacuum Oil Company and the Far Pacific Investment Company (together 60%). In 1959 extensive explorations were made in the large concession area. However, these did not lead to the finding of new oilfields. Exploitation therefore continued to be confined to the existing fields in the Vogelkop, the production of which is gradually declining. For statistical data see Appendix XIII.

The permits applied for in 1958 for mineral prospecting were granted in 1959. They relate to part of the island of Misool and to an area near the Carstenz peaks in the Central Highlands. Prospecting will begin shortly.

Complete agreement has been reached between the Government and a syndicate of Dutch and foreign firms regarding an agreement to be concluded under Section 5a of the Mining Act for the prospecting for and mining of nickel and cobalt ores on the island of Waigeo and in the Cyclops Mountains.

4. RESEARCH

In the year under review the Government made a brief further investigation into the nickel and cobalt ore deposits in an area south of the Cyclops Mountains. The result was favourable. The nickel ore reserves and the average nickel content proved to be higher than originally calculated.

Further, extensive investigations were made into lead, zinc and copper ores in the north of the Vogelkop; these investigations were without success.

In an area near Lake Ajamaroe an investigation was made into the nature, extent and cause of the phosphorus occurrences in the soil; the data are still being processed.

Preparations were made for extensive explorations in areas north and south of the Sterren Mountains.
F. ELECTRICITY 1. ORGANIZATION

The Electricity Branch of the Department of Transport and Power is in general responsible for the supply of electric power.

Electricity is generated by means of Diesel sets. There are no hydro-electric power stations.

Most of the current supplied is used for lighting and for domestic purposes; power is also taken during the daytime by a number of workshops and firms. Much of the power generated at Manokwari is supplied to the shipyard, the sawmill and the oxygen plant and at Merauke to a local sawmill.

The Electricity Branch runs the power stations at Hollandia, Ifar, Biak, Sorong-Doem, Sorong-Remoe, Manokwari, Fak-Fak, Merauke and Tanah Merah, and is also concerned in the running of a number of small power plants, such as those at Enarotali and Seroei.

The number of sets is 33; the total output is 7,417 kVA. The voltage supplied by all stations is 220/380 V, 50 cycles.

There are no private electricity companies. A number of concerns, including the Nederlandsche Nieuw-Guinee Petroleum Maatschappij and the Koembe Rice Farm, have their own power supplies. Furthermore, electricity is supplied at a number of places on a limited scale for lighting by Post Office telegraph stations (Sarmi, Enarotali and Kokenao) or by power plants run on a cooperative basis (Seroei and Ransiki).

Development in 1959

The high-tension networks, transformer stations and distribution networks were, where necessary, extended in accordance with the increase in the number of consumers. The energy produced increased from 8,683,000 kWh to 9,623,000 kWh. The number of connections rose from 4,565 to 5,156.

2. STATISTICAL DATA

The number of power stations in use by the Electricity Branch at the end of the year under review was as follows:

<table>
<thead>
<tr>
<th>Number of power stations</th>
<th>Location</th>
<th>Output in kVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hollandia</td>
<td>1 x 1250 + 2 x 625 + 3 x 450 = 3,850</td>
</tr>
<tr>
<td>1</td>
<td>Ifar</td>
<td>3 x 75        = 225</td>
</tr>
<tr>
<td>1</td>
<td>Biak</td>
<td>4 x 200       = 800</td>
</tr>
<tr>
<td>1</td>
<td>Manokwari</td>
<td>4 x 385 + 1 x 200 + 1 x 100 = 1,840</td>
</tr>
<tr>
<td>1</td>
<td>Sorong-Doem</td>
<td>5 x 60 + 1 x 14 = 194</td>
</tr>
<tr>
<td>1</td>
<td>Sorong-Remoe</td>
<td>2 x 60        = 120</td>
</tr>
<tr>
<td>1</td>
<td>Fak-Fak</td>
<td>2 x 60        = 120</td>
</tr>
<tr>
<td>1</td>
<td>Merauke</td>
<td>4 x 60        = 240</td>
</tr>
<tr>
<td>1</td>
<td>Tanah-Merah</td>
<td>2 x 14        = 28</td>
</tr>
<tr>
<td>9</td>
<td>33 sets</td>
<td>= 7,417 kVA</td>
</tr>
</tbody>
</table>

All the power stations are Diesel-driven, supplying a mains voltage to the low-tension distribution system of 380/220 V, 50 cycles.

The high-tension grid and distribution system has a nominal voltage of 6.3 kV.
Survey of number of connections from 1954 onwards

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hollandia</td>
<td>1342</td>
<td>1559</td>
<td>1781</td>
<td>1979</td>
<td>2276</td>
<td>2381</td>
</tr>
<tr>
<td></td>
<td>199%</td>
<td>166%</td>
<td>132%</td>
<td>147%</td>
<td>169%</td>
<td>178%</td>
</tr>
<tr>
<td>Ifar</td>
<td>-</td>
<td>130</td>
<td>135</td>
<td>138</td>
<td>133</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>104%</td>
<td>106%</td>
<td>102%</td>
<td>89%</td>
<td></td>
</tr>
<tr>
<td>Biak</td>
<td>285</td>
<td>368</td>
<td>403</td>
<td>450</td>
<td>642</td>
<td>844</td>
</tr>
<tr>
<td></td>
<td>190%</td>
<td>129%</td>
<td>141%</td>
<td>157%</td>
<td>225%</td>
<td>297%</td>
</tr>
<tr>
<td>Manokwari</td>
<td>304</td>
<td>406</td>
<td>503</td>
<td>643</td>
<td>685</td>
<td>794</td>
</tr>
<tr>
<td></td>
<td>190%</td>
<td>133%</td>
<td>165%</td>
<td>211%</td>
<td>225%</td>
<td>262%</td>
</tr>
<tr>
<td>Sorong-Doom</td>
<td>197</td>
<td>236</td>
<td>259</td>
<td>242</td>
<td>251</td>
<td>258</td>
</tr>
<tr>
<td></td>
<td>190%</td>
<td>119%</td>
<td>131%</td>
<td>122%</td>
<td>127%</td>
<td>131%</td>
</tr>
<tr>
<td>Sorong-Remoes</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>76</td>
<td>172</td>
</tr>
<tr>
<td>Fak-Fak</td>
<td>-</td>
<td>-</td>
<td>130</td>
<td>140</td>
<td>181</td>
<td>222</td>
</tr>
<tr>
<td></td>
<td>190%</td>
<td>108%</td>
<td>127%</td>
<td>140%</td>
<td>171%</td>
<td></td>
</tr>
<tr>
<td>Merauke</td>
<td>106</td>
<td>135</td>
<td>190</td>
<td>245</td>
<td>278</td>
<td>322</td>
</tr>
<tr>
<td></td>
<td>190%</td>
<td>127%</td>
<td>179%</td>
<td>231%</td>
<td>252%</td>
<td>303%</td>
</tr>
<tr>
<td>Tanah Merah</td>
<td>-</td>
<td>-</td>
<td>35</td>
<td>35</td>
<td>43</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>2234</td>
<td>2834</td>
<td>3436</td>
<td>3872</td>
<td>4565</td>
<td>5156</td>
</tr>
<tr>
<td></td>
<td>190%</td>
<td>126%</td>
<td>153%</td>
<td>173%</td>
<td>204%</td>
<td>231%</td>
</tr>
</tbody>
</table>

For a statistical survey see Appendix XIV.

G. INDUSTRY

Industry is the concern of the General Economic Affairs Branch of the Department of Economic Affairs.

Besides the registration and documentation relating to industry and the provision of industrial information and advice, this Branch has the function of supplying the Committee for the Granting of Credits with information for the granting of credits under Government guarantee to industrial concerns (see Chapter II, section J. 2 - Banking and Credit Facilities).

Besides the oil production of the Nederlandsche Nieuw-Guine Petroleum Maatschappij, items of importance to the development of the Territory are the presence of a shipyard and workshop and of a mechanical sawmill, both at Manokwari.

The production of sawn wood by the Manokwari Sawmill rose from 5,100 cu m in 1958 to 8,180 cu m in 1959. The carpenter’s shop attached to this sawmill supplied prefabricated wooden dwellings for Papuan housing in 1959.

Also at Manokwari is an oxygen plant, set up in 1955 by the New Guinea Gas Company, which can fully meet the Territory’s requirements of oxygen. The Government operates a slipway for smaller vessels at Merauke, a State Printing House at Hollandia and electricity concerns in various places.

Furthermore, at a number of places small and medium-sized private industrial concerns are to be found, a shipbuilding and ship repair concern at Sorong, lemonade and soda water factories at Hollandia and Manokwari, a coconut oil plant at Nabire, a number of transport firms and some repair and service concerns for cars, engines and agricultural implements at Hollandia, Biak and Manokwari. These firms generally confine themselves to meeting local or regional demands.

Industry among the Papuan population is confined to some village crafts, mostly in the form of small-scale handicrafts and home industry.

Although in the main directed towards satisfying the maker’s own demands and other local requirements, products of village crafts such as wood carving, pottery, plastering, worked-bags made from palm leaves, floor mats and rattan furniture also find their way to the larger centres.

Small-scale craftsmanship is on the increase, thanks to progressive development and technical education. For instance, Papuans who have been trained at the junior technical schools establish themselves as joiners or carpenters and are capable of making all kinds of items in wood (windows, doors, etc.).
In wood carving use is made not only of traditional motifs, but also of more modern forms.

II. TRANSPORT AND COMMUNICATIONS

1. TRANSPORT

A. Roads and road transport

The road network for public traffic is administered by the Residency Waterway Services, which are established in the most important centres and come under the Department of Waterways and Construction.

Netherlands New Guinea is a country with very few roads. Both in and around a number of places there is a local network of roads (Hollandia about 135 km, Biak 176 km, Manokwari 70 km, Merauke 70 km, Tanah Merah 22 km and Kaimana 17 km).

The Nederlandsche Nieuw-Guinee Petroleum Maatschappij has built a fairly extensive road system in and around Sorong and the oil centres of Klamono and Steenkool. The total length of these roads, which are maintained by the above-mentioned company, is about 120 km.

In the year under review construction was continued of the road linking Teminaboce and Ajamaroe; at the end of 1959 25 km of the 72 km long route were finished, 7 km of which were through difficult mountain country.

In South New Guinea the Mindiptanah–Waroko road (40 km) was opened to light motor traffic. A start was made with the construction of a road from Tanah Merah to Mindiptanah; in the year under review about 12 km of the 100 km route were completed.

30 km were completed of the road on the island of Biak from the chief town to the north coast, the construction of which started in 1958.

In the Wissel Lakes subdivision some 10 km of existing road were improved and the road system for light traffic was further extended.

In the Baliem Valley, too, a further extension of the road network for light traffic took place, about 7 km of road being built in the vicinity of Bokondini.

The total length of the road system suitable for motor traffic is now about 650 km.

The Government runs a bus service at Hollandia. The service is operated with 25 buses and minibuses on 12 different routes with a total length of 449 km (1958: 193 km). In the year under review a total of 1,706,258 passengers were carried some 1,033,000 km (1958: 724,730 passengers and 854,000 km).

For a survey of the motor vehicles in Netherlands New Guinea at the end of 1959 see Appendix XV.

B. Aviation

Organization

Supervision of aviation and the maintenance and care of the ancillary ground services is the function of the Air Transport Bureau, which comes under the Department of Transport and Power.

In collaboration with this Bureau the meteorological duties which have to be performed for aviation are entrusted to the Meteorological and Geophysical Bureau of the same Department.

The Air Transport Bureau consists of the following inspection services:

- Air traffic control
- Airfields
- Aviation equipment and personnel, and also flights; there is also an administrative service and a library which at the same time looks after the ICAO files.

There are a number of stations for air traffic control, viz. at Biak, Hollandia, Manokwari, Sorong and Merauke.

The station at Biak is open 24 hours a day. The other stations are normally open only during the daytime and for a few hours at night; on request the hours during which they are open can be extended.

Domestic traffic

The Nederlands-Nieuw-Guinea Luchtvaart Maatschappij "De Kroonduif" N.V. is responsible for domestic air traffic. It operates with three C 47's (Dakotas), three DHC 2's (de Havilland Beavers), two Scottish Aviation Twin Pioneer aircraft and a Grumman Mallard amphibian. The last aircraft was only taken into service towards the end of the year.

38
The company flies a number of scheduled services, and also supplies areas difficult of access or accessible solely from the air.

The hinterland of Hollandia, as also that of the area of the Baliem Valley in the Central Highlands, is provisioned by means of Twin Pioneers.

The Wessel Lakes area and also the area of Lake Ajamaroe in the Vogelkop are supplied by means of Beavers, which are fitted with floats.

Up to the end of September 1959 air links with the exploration and exploitation fields of the Nederlandsche Nieuw-Guine Petroleum Maatschappij were maintained with three Company-owned aircraft, viz. two PBY's (Catalinas) and a Grumman Mallard. As from 1 October the flights by this company were stopped in connection with the cessation of the company's exploration activities.

World Wide Helicopters Ltd, who operate on charter for the Nederlandsche Nieuw-Guine Petroleum Maatschappij, still had three helicopters of the Bell S41 type in Nederlands New Guinea (1958: five) at the end of the period under review.

The various mission stations in the interior are mainly supplied by the Missions' Aviation Association, a body corporate in Netherlands New Guinea, which for its work now has four Cessna 180's (1958: three Cessnas and a Piper Pacer).

The various outposts of the Roman Catholic Mission are supplied by the Mission's own Cessna.

During the year under review the "Kroonduiif" flew the following scheduled services:

**DAKOTA**

<table>
<thead>
<tr>
<th>Route</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biak-Hollandia</td>
<td>at first 5, later 4</td>
</tr>
<tr>
<td>Biak-Manokwari-Sorong</td>
<td>times a week 3</td>
</tr>
<tr>
<td>Biak-Manokwari-Kebar-Manokwari-Ransiki-Manokwari-Biak</td>
<td>once a week</td>
</tr>
<tr>
<td>Biak-Manokwari-Kaimana-Ransiki-Manokwari-Biak</td>
<td>once every 14 days</td>
</tr>
<tr>
<td>Biak-Hollandia-Merauke-Tanah Merah and back</td>
<td>once a week</td>
</tr>
<tr>
<td>Hollandia-Lae (Australian New Guinea)</td>
<td>once every 14 days</td>
</tr>
<tr>
<td>Hollandia-Wamena (Baliem Valley)</td>
<td>once a week</td>
</tr>
</tbody>
</table>

The service to Lae has since 1959 been a weekly link, which is flown alternately by the "Kroonduiif" and the Australian "Qantas". The scheduled service to Wamena came into being towards the end of the year under review.

**TWIN PIONEER**

<table>
<thead>
<tr>
<th>Route</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biak-Seroei</td>
<td>twice a week</td>
</tr>
<tr>
<td>Hollandia-Sami</td>
<td>once a week</td>
</tr>
<tr>
<td>Hollandia-Wari</td>
<td>twice a week</td>
</tr>
<tr>
<td>Hollandia-Genjem</td>
<td>once a week</td>
</tr>
</tbody>
</table>

**BEAVER**

<table>
<thead>
<tr>
<th>Route</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biak-Steenkool-Fak-Fak-Kaimana-Fak-Fak-Inanwatan-Teminaboean-Sorong-</td>
<td>once a week</td>
</tr>
<tr>
<td>Steenkool-Sorong-Fak-Fak-Steenkool-Biak</td>
<td>twice a week</td>
</tr>
<tr>
<td>Biak-Wasior-Napan-Wessel Lakes and back</td>
<td>(Wasior is called at only once)</td>
</tr>
</tbody>
</table>

*International traffic*

KLM Royal Dutch Airlines now operate a service with four flights a week between Amsterdam and Biak. Twice a week the Pole route is followed (via Anchorage and Tokyo), whilst the remaining two flights are routed via Rome, Beirut, Karachi, Bangkok and Manila.

One of these flights has a scheduled continuation to Sydney, whilst the other plane which also continues to Sydney is on emigrant charter.

The weekly air link between Hollandia and Lae in Australian New Guinea is maintained every other week by the "Kroonduiif" and Qantas Empire Airways.

Various companies called at Biak on unscheduled flights. They included Transports Aeriens Intercontinentaux, Qantas, Skyways and Cathay Pacific Airways.

A number of Fokker F.27 (Friendship) aircraft ordered by Australian air companies flew to their destination via the Sorong or Biak airfields.

*Airfields*

Construction of the airfields at Inanwatan and Teminaboean was almost completed; it may be expected that these fields can be put into service in 1960.
The field being built near Wasiur is likewise almost ready. Construction of the airfield at Waren had to be postponed because the heavy equipment required for the purpose was needed elsewhere.

The construction of the field in the hinterland of Sami at Bodin was delayed, owing to the fact that it is difficult to hire the necessary labour in this sparsely populated area.

At the Kaimana airfield soil stabilization was performed, as a result of which this field is less subject to weather conditions.

The airfield at Manokwari was improved and given an asphalt surface.

In the Baliem Valley the Wamena airfield was opened for Dakotas, thus making good provisioning of this area possible.

The Oebebo airfield was put into service.

On the Hollandia-Baliem Valley route the Lereh airfield was constructed. This field only requires finishing, and is already available as an emergency landing ground on the above route.

The work on the airfields at Nabire, to be used as a base for shuplying the Wessel Lakes area, and Waghete on Lake Tigi were continued. These fields are being made suitable for DC-3 aircraft.

In the year under review the Missions’ Aviation Association built an airfield at Ibele, whilst the Catholic Mission constructed airfields at Eputo and Ajawassi.

Aerial reconnaissance was made in preparation for the airfield construction programme for 1960.

Work is being done on the preparations for making the Mokmer airfield at Biak suitable for DC-8 jets.

In Appendix XVI the number of landings at the principal airfields is given; Appendix XVI a gives a survey of the total domestic traffic.

Air traffic control

The output of the transmitters for the frequencies of domestic traffic was stepped up from 250 watts to 1 kilowatt.

Hollandia was given a second frequency for domestic traffic.

On behalf of international traffic a radio-telephony channel on 13,284 kc/s was taken into service.

The decisions taken by the ICAO Conference in Rome regarding the allocation of the various frequencies for aviation have relatively great consequences for Netherlands New Guinea, too. A practically complete switch to new frequencies, which has to be done by 7 March, 1960, is in an advanced stage of preparation.

Aeronautical information service

The second, considerably improved edition of the Aeronautical Information Publication for Netherlands New Guinea was completed and distributed internationally.

Aircraft inspection

In 1959 16 aircraft were inspected on airworthiness for renewal of the Certificate of Airworthiness.

Investigations were instituted into the cause of four aircraft accidents.

Flight personnel and ground staff were issued with six and three certificates of competency respectively.

Development

The activities of the Air Transport Bureau regarding the construction and upkeep of Government and private airfields and air strips display a regular increase. The operational conditions and the use of airfields will soon be subject to regulations. Supervision of airfields where there is no specialized aviation personnel is organized in collaboration with the administrative service. The supervisors appointed are given instructions regarding the upkeep and the serviceability of the airfields concerned. A detailed three-year plan forms the basis for the further construction of airfields in Netherlands New Guinea.

The proposed improvements in the air traffic control services will be realized for the greater part in 1960. The territorial part of the aeronautical information area of Netherlands New Guinea will be divided into four separate traffic regions, which will benefit the safety of local traffic and communications. Many smaller airfields located in the interior will be connected with the centres of the traffic regions mentioned above by means of a special aviation radio link.
By expansion of staff it will be possible in 1960 and following years to exercise a more intensive supervision of flights, aviation personnel and aviation equipment.

C. Shipping

a. Organization and task of the Shipping Branch

The Shipping Branch comes under the Department of Transport and Power, and has the task of furthering and supervising shipping, by which is meant the harbour and pilot services, beacons, and coast lighting, care of Government vessels, hydrography, and the administration of shipping legislation and supervision of compliance with the latter.

The Branch is divided into the following sections:

1. The Nautical Service, consisting of:
   - navigational matters, hydrographic matters, shipping legislation, measurement of ships, coast lighting and beacons.

2. The Technical Service, consisting of:
   - technical supervision and provisioning of Government vessels.

3. Financial administration and operations, consisting of:
   - supervision of the economic use and the coordination of Government vessels and supervision of the financial management, as well as statistics.

4. General affairs, under which come staff matters and the archives.

   Professional harbour masters are stationed at Hollandia, Biak, Manokwari, Sorong, and Merauke; the Heads of the Local Administration at Seroei, Steenkool, Pak-Fak and Kaimana have been appointed as acting harbour masters.

   The subdivision heads at Tanah Merah, Kepi, Agats, Kojona, Warem, Waisor, Teminaboead, Mindiptanah and Bade are responsible for the administration of Government vessels there.

b. Survey of shipping

1. Government

   For use in inland waters and harbours the Government has 58 ships (total tonnage 2,214.47 cu. m); the number of Government sea-going vessels is 39 (5,397.75 cu. m). In 1955 the number of ships was 42 (1,757.64 cu. m) and 27 (3,551.77 cu. m) respectively.

2. Private shipping

   a. The Royal Mail Steam Packet Company (Koninklijke Paketvaart Maatschappij)

      This company maintains communications between the places around Netherlands New Guinea with three ships of 2,152 gross register tons. A vessel of 556 gross register tons, on charter to Shell New Guinea, carried oil, and also general cargo and timber.

      A vessel of 115,33 gross register tons, chartered from the Government, is responsible for local transport in the vicinity of Merauke, whilst a vessel of 176,25 gross register tons sails between Pak-Fak/Macluer Gulf and Sorong, and the same type of coaster attends to local transport around Geelvink Bay to Sorong.

   b. The Nederlandsche Nieuw-Guinee Petroleum Maatschappij

      The fleet of this company is responsible for communications between the company's various locations in Netherlands New Guinea.

      The total gross tonnage of the company's fleet at the end of 1959 was 7,500 gross register tons (1958: 9,064.65 gross register tons).

   c. Local shipping

      Under this heading come the sailing vessels and mechanically propelled vessels which are registered (ships of 20 to 500 cu. m gross) and the smaller vessels which are registered and for which a certificate of registry has been issued (these certificates are known as "little passes" for ships of less than 20 cu. m gross).
Summary of ships registered in Netherlands New Guinea at the end of 1959

Inland waters and harbours

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Size in cu. m</th>
<th>Engine capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>58</td>
<td>2,214.47</td>
<td>varies from 5 to 165 HP</td>
</tr>
<tr>
<td>Private</td>
<td>146</td>
<td>4,344.94</td>
<td>varies from 5 to 160 HP</td>
</tr>
</tbody>
</table>

Sea-going shipping

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Size in cu. m</th>
<th>Number of registered ships</th>
<th>Size in cu. m</th>
<th>Number of ships sailing on &quot;little passes&quot;</th>
<th>Size in cu. m</th>
<th>Engine capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>39</td>
<td>5,397.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Varies from 20 to 240 HP</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
<td>21</td>
<td>890.45</td>
<td>213</td>
<td>2,071.28</td>
<td>Varies from 5 to 50 HP</td>
</tr>
</tbody>
</table>

Summary of total tonnage registered in Netherlands New Guinea from 1955 to 1959

Sea-going vessels

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Government vessels</th>
<th>Size in cu. m</th>
<th>Number of registered private vessels</th>
<th>Size in cu. m</th>
<th>Number of private vessels sailing on &quot;little passes&quot;</th>
<th>Size in cu. m</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955</td>
<td>27</td>
<td>3,551.77</td>
<td>22</td>
<td>973.56</td>
<td>58</td>
<td>487.78</td>
</tr>
<tr>
<td>1956</td>
<td>34</td>
<td>3,233.04</td>
<td>20</td>
<td>853.45</td>
<td>69</td>
<td>684.38</td>
</tr>
<tr>
<td>1957</td>
<td>44</td>
<td>6,134.33</td>
<td>21</td>
<td>891.08</td>
<td>206</td>
<td>1,733.79</td>
</tr>
<tr>
<td>1958</td>
<td>45</td>
<td>6,163.90</td>
<td>17</td>
<td>723.44</td>
<td>208</td>
<td>1,743.43</td>
</tr>
<tr>
<td>1959</td>
<td>39</td>
<td>5,397.75</td>
<td>21</td>
<td>890.45</td>
<td>213</td>
<td>2,071.28</td>
</tr>
</tbody>
</table>

*) The reason for the six vessels less in 1959 than in 1958 is that in 1959 five Government vessels were transferred to the Koembe Rice Farm and the Manokwari Sawmill. These vessels will be registered as private sea-going ones in 1960. Further, a Government vessel has been condemned and taken out of service.

Inland vessels

<table>
<thead>
<tr>
<th>Year</th>
<th>Government</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Size in cu. m</td>
</tr>
<tr>
<td>1955</td>
<td>42</td>
<td>1,757.64</td>
</tr>
<tr>
<td>1956</td>
<td>61</td>
<td>2,697.17</td>
</tr>
<tr>
<td>1957</td>
<td>53</td>
<td>1,731.05</td>
</tr>
<tr>
<td>1958</td>
<td>55</td>
<td>1,863.56</td>
</tr>
<tr>
<td>1959</td>
<td>58</td>
<td>2,214.47</td>
</tr>
</tbody>
</table>

Note: vessels of more than 20 cu. m are registered; vessels of 0 - 20 cu. m sail on "little passes".

c. International traffic

The direct link with the Netherlands is maintained by the Netherlands Steam Navigation Company (Stoomvaart Maatschappij "Nederland") and the Royal Rotterdam Lloyd (Koninklijke Rotterdamse Lloyd), which together operate a three-weekly service between six European ports and Malaya, British Borneo, Bangkok, the Philippines and Netherlands New Guinea. Preparations have been made to extend this link to a number of ports in Australian New Guinea.

The Royal Intercontinental Lines (the Koninklijke Java-China Paketvaart Lijnen) sail every month from Australia to Hollandia, Biak, Manokwari and Sorong en route for Bangkok.

The Royal Mail Steam Packet Company (the Koninklijke Paketvaart Maatschappij) operates
the line between Singapore and the ports of Netherlands New Guinea. Foreign tankers visited Sorong and Steenkool to take on crude oil cargoes with a frequency of one ship a month and one ship a year respectively.

As from 5 November, 1959, the Royal Mail Steam Packet Company has been operating a four-week service to Lae via Wewak and Madang from Hollanda with a vessel chartered from the Government, and a three-monthly service to Port Moresby from Merauke with its own ships.

The tankers of Shell Tankers Ltd., deliver oil derivatives in bulk from Singapore to the ports of Biak and Hollanda, where there are storage installations. The other places are supplied by Shell New Guinea from these ports by means of packed oil derivatives.

d. Shipping movements

See Appendix XVIII.

e. Shipbuilding, dock and repair facilities

The largest and best equipped shipyard in Netherlands New Guinea is the Konijnenburg Shipyard at Manokwari. Vessels up to a dock weight of 3,600 tons and a length of 120 m can be lifted out of the water here. The yard has a crane for ships of up to 50 tons weight. The concern is equipped to carry out all repairs and for constructional work.

The Government has a slipway at Merauke for the maintenance of smaller vessels.

The Nederlandse Nieuw-Guinee Petroleum Maatschappij has its own floating dry dock at Sorong for the upkeep of its own fleet.

At Karim (Sorong) there is further a private slipway where Government ships are also maintained.

f. Ports and harbours

In the various ports and harbours of the Territory improvements to the accommodation and facilities continued to be made during the year under review.

At Hollanda the construction of the 132-metre-long concrete ocean jetty and the 65-metre-long concrete berth for smaller vessels, plus a shed with a floor space of 2,200 square metres, which began in 1958, was almost completed. The replacement there of the wooden oil jetty of 40 metres' length by a concrete one of 33 metres' length is also approaching completion.

The new 40-metre concrete jetty on Sorong/Doom, for which tenders were invited in 1958, was completed.

At Manokwari the dock shed with a floor space of 640 square metres was completed.

For a survey of harbour facilities see Appendix XVII.

g. Buoys, beacons and coast lighting

Maintenance of the coast lights, buoys and beacons is carried out with a specially equipped Government vessel.

The gas buoy off the mouth of the Digoel has been replaced by a lighthouse on De Jong's Point.

A new light has been put into operation on Habeeke Island. In Flamingo Bay the beacons have been improved.

h. Hydrographic surveys

In the year under review the survey of the sea off the south coast by means of Decca equipment for accurate position-finding continued.

Surveys were made of the coastal area near Merauke, and also of the Digoel and Mamberamo rivers. New sea charts and tide tables were issued.

i. Training in navigation

The courses at the Elementary School of Navigation at Hollanda, which were suspended in June 1957 because the demand for junior shipping personnel had been met, were resumed in the year under review on a small scale (two seamen; five engine room hands).

In 1960 the training and reskilling of shipping personnel will again be resumed on a full scale.

In the year under review the following certificates were awarded to personnel trained on board:

- Master, local sailing: 4, of which 3 to Papuans
- Engine room artificer: 3, of which 2 to Papuans.

<table>
<thead>
<tr>
<th>Year</th>
<th>Ordinary Seaman</th>
<th>Engine room hand</th>
<th>Cook Mate, local sailing</th>
<th>Engine room artificer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955</td>
<td>46</td>
<td>29</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>1956</td>
<td>29</td>
<td>20</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>1957</td>
<td>18</td>
<td>12</td>
<td>–</td>
<td>9</td>
</tr>
<tr>
<td>1958</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>1959</td>
<td>2</td>
<td>5</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Certificates issued:

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Of whom Papuans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mate, local sailing</td>
<td>Engine room artificer</td>
</tr>
<tr>
<td>Mate, local sailing</td>
<td>Engine room artificer</td>
<td>Mate, local sailing</td>
</tr>
<tr>
<td>1955</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>1956</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>1957</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>1958</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>1959</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

j. Development of shipping

The number of Government vessels for inland waters and harbours was increased by a total of three, viz. a twin-screw Holland launch for the Department of Public Health and three other vessels, whilst one vessel was condemned and taken out of service.

2. COMMUNICATIONS

Postal, Telegraph and Telephone Service (the Post Office)

a. Organization

For the organization of the Post Office see Appendix XIX. At the end of 1959 the staff consisted of 362 (of whom 113 were Papuans) on the permanent establishment and 133 casual workers (of whom 123 were Papuans).

b. Post Offices

No important changes occurred in the postal services. Where necessary as a result of changed communications or otherwise, the service was adapted to the changed circumstances.

For the postal service the following new communications were of importance:

1. The Royal Mail Steam Packet Company communications which, as from November 1959, were maintained once a month between Hollandia, Wewak, Madang and Lae, and once every 12 weeks between Merauke and Port Moresby and

2. the doubled air link as from July 1959 between Hollandia and Lae, as a result of which this service was changed from a fourteen-day one to a weekly one, flown alternate weeks by Qantas and the "Kroondui".

A sub-post office was opened at Rore (Koror) on 16 March, 1959.

On 1 April, 1959, delivery houses were opened at Warna and Sibil and on 1 May at Wira.

Furthermore, on 1 December, 1959, a functioning sub-post office was opened at Wamena (Balem area); the service at this post office is almost identical to that at the delivery houses.

In the course of the year under review the post offices at Manokwari, Merauke, Tanah Merah, Teminaboea, Seroei, Ransiki, Kaimana, Kokonao, Enanotali, Sorong-Renoe, Steenkool and Sami were opened for post office savings business.

New 7-12- and 17-cent stamps in the "Kroondui" series came into circulation. On the occasion of the expedition to the Stretten Mountains a special 55-cent stamp was issued. On behalf of Social Welfare charity stamps with pictures of flowers found in Netherlands New Guinea were issued.

As from 1 October postal order traffic between Netherlands New Guinea and Australia was opened; at the same time the possibility was opened of postal order traffic between Netherlands New
Guinea on the one hand and Australian New Guinea and New Zealand on the other hand via Australia. During the year under review the staff situation remained more or less stationary. In the ranks of the junior technical officers three officials passed part 1 of the post office examination, whilst one candidate passed part 2 of that examination. As regards the course for junior technical officer in the postal and telegraph service, which started in 1957 with 18 Papuan pupils, of whom eight had to be taken off the course during 1958 because of unsatisfactory progress, all the remaining candidates passed the examination.

A summary of moneys handled by the post offices is given in Appendix XX.
For a summary of postal traffic see Appendix XXA.

c. Telegraphy

There was no change in the domestic telegraph network. Hollandia maintained the morse-radio-telegraphy links with Manokwari, Fak-Fak and Merauke, and also the radio teletype links with Sorong and Biak.

The smaller radio stations are in communication with one of the offices mentioned above.
The foreign telegraph links between Hollandia and Amsterdam and Sydney were maintained.
A radio-telegraphy link between Hollandia and Port Moresby was instituted during the year under review and opened to public traffic.

*Telegraphic traffic*

*Receipts from telegrams (in gilders, rounded off)*

<table>
<thead>
<tr>
<th></th>
<th>1955</th>
<th>1956</th>
<th>1957</th>
<th>1958</th>
<th>1959</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>564,000</td>
<td>569,000</td>
<td>608,000</td>
<td>590,000</td>
<td>600,000</td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>101%</td>
<td>108%</td>
<td>104%</td>
<td>106%</td>
<td></td>
</tr>
</tbody>
</table>

*Number of telegrams handled (rounded off)*

<table>
<thead>
<tr>
<th></th>
<th>1955</th>
<th>1956</th>
<th>1957</th>
<th>1958</th>
<th>1959</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic traffic</td>
<td>41,000</td>
<td>42,000</td>
<td>42,000</td>
<td>37,000</td>
<td>45,000</td>
</tr>
<tr>
<td>100%</td>
<td>102%</td>
<td>102%</td>
<td>90%</td>
<td>110%</td>
<td></td>
</tr>
<tr>
<td>Foreign traffic</td>
<td>25,000</td>
<td>32,000</td>
<td>34,000</td>
<td>32,000</td>
<td>32,600</td>
</tr>
<tr>
<td>100%</td>
<td>110%</td>
<td>117%</td>
<td>119%</td>
<td>112%</td>
<td></td>
</tr>
</tbody>
</table>

There are 19 telegraph offices.

d. Telephony

In Hollandia two automatic telephone exchanges were put into operation during the year under review, viz. one for the central Government office buildings and one for the new hospital.

In a number of local telephone systems, viz. at Hollandia, Biak, Manokwari, Merauke and Sorong, no change occurred. In Sorong-Remoe a start was made with the setting-up of the telephone network in its final form.

Interurban telephony links are in existence between the capital, Hollandia, and Biak, Sorong, Manokwari, Merauke and Fak-Fak. A number of smaller administrative centres are linked by radiotelephony with one of the above-mentioned radio-telephone offices. The international radio telephony link between Hollandia and Amsterdam can also be used for calls from Biak. The opening of the remaining interurban radio telephone offices to international traffic once again encountered technical and staff difficulties in the year under review.

To facilitate administrative cooperation between Australian and Netherlands New Guinea radio-telephony links were established between Hollandia and Port Moresby, Hollandia and Wewak, Merauke and Daru, Waris and Green River and Mindiptanah and Kiunga. These links are solely for official conversations between the authorities of Netherlands New Guinea and of Australian New Guinea.

45
Telephone traffic

Number of subscribers

<table>
<thead>
<tr>
<th></th>
<th>1955</th>
<th>1956</th>
<th>1957</th>
<th>1958</th>
<th>1959</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,030</td>
<td>1,181</td>
<td>1,434</td>
<td>1,530</td>
<td>1,780</td>
</tr>
<tr>
<td>100%</td>
<td>113%</td>
<td>139%</td>
<td>148%</td>
<td>173%</td>
<td></td>
</tr>
</tbody>
</table>

Receipts from subscriptions (in guilders, rounded off)

<table>
<thead>
<tr>
<th></th>
<th>1955</th>
<th>1956</th>
<th>1957</th>
<th>1958</th>
<th>1959</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>228,000</td>
<td>284,000</td>
<td>341,000</td>
<td>409,000</td>
<td>620,000</td>
</tr>
<tr>
<td>100%</td>
<td>124%</td>
<td>149%</td>
<td>179%</td>
<td>272%</td>
<td></td>
</tr>
</tbody>
</table>

Radio-telephony. Number of calls

Domestic

<table>
<thead>
<tr>
<th></th>
<th>1955</th>
<th>1956</th>
<th>1957</th>
<th>1958</th>
<th>1959</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,600</td>
<td>3,040</td>
<td>6,907</td>
<td>9,360</td>
<td>10,816</td>
</tr>
<tr>
<td>100%</td>
<td>190%</td>
<td>432%</td>
<td>584%</td>
<td>676%</td>
<td></td>
</tr>
</tbody>
</table>

Foreign

|       | 1,572  | 2,054  | 2,722  | 2,600  | 2,330  |
| 100%  | 130%   | 173%   | 163%   | 148%   |

Ship's radio traffic (coastal stations at Hollandia and Sorong)

|       | 1,200  | 928    | 1,126  | 1,360  | 1,400  |
| 100%  | 77%    | 94%    | 113%   | 117%   |

e. Equipment

Two single-wave 20 KW transmitters were installed at the Hollandia transmitting station.

3. METEOROLOGY

The Meteorological and Geophysical Bureau at Hollandia consists of three sections, viz. the Climatological Section, the Weather Service Section and the Geophysical Section.

The Climatological Section has the function of compiling the most comprehensive climatological description possible of Netherlands New Guinea and of publishing this.

In the year under review the network of observation stations was extended. The number of rain stations increased from 495 to 556; the number of sunshine stations is now 35, whilst air temperature observations are performed at some 20 places.

Further to the publications "Duration of sunshine (1953, 1954 and 1955)" and "Rainfall in Netherlands New Guinea", which appeared in March 1957 and October 1958 respectively, the following were published in 1959: "Rainfall Yearbook 1957" and "Duration of sunshine (1956, 1957 and 1958)".

Further a provisional chart with the average annual and monthly rainfall of Netherlands New Guinea was made.

As many bodies collect general climatological information out of these publications, the number of requests for special climatological surveys to be furnished on behalf of bodies concerned with agriculture, shipping, aviation and others fell from 60 to 45.

About June 1959 a Coordinative Committee for Climatology was set up - partly at the suggestion of the World Meteorological Organization - with the task of investigating what the needs are of climatological data by the branches of Agriculture and Stock-Breeding, Forestry and Fisheries. A number of important suggestions made by this committee have been included in the publications mentioned above.

The Weather Service Section has the task of providing meteorological information and protection for air traffic and shipping, and also of making available to foreign countries daily synoptic weather reports and upper wind observations. The synoptic weather reports are compiled at Sentani (Hollandia), Sami, Biak, Manokwari, Jefman (Sorong), Steenkool, Fak-Fak, Kaimana, the Wissel Lakes, Kokomo,
Meruake, Tanah Merah, Baliem and Mapia; the upper wind observations are performed at Sentani, Biak, Jefman, Kaimana, Meruake, Baliem and Mapia.

At Biak is the Main Meteorological Office, where weather maps are drawn and analysed four times a day.

In 1959, 10,500 weather forecasts were provided, mainly for civil aviation. An obvious increase may be noted in these figures from about 700 forecasts in January to about 1,100 in December.

Moreover, every day a special weather forecast for coastal shipping is broadcast by the Netherlands New Guinea Broadcasting System. These reports have proved to fill a definite want. Towards the end of the year a daily weather forecast was made for the Koembe Rice Farm by way of an experiment.

The Geophysical Section continued in the year under review the activities relating to the photographic recording of three components of the geomagnetic field at Sentani, the collection of earthquake reports and the taking of dust samples from the ambient air at Hollandia for radioactivity determinations in the Netherlands.

4. MAPPING

In the year under review 449 hectares were surveyed for the Land Registry on behalf of the public for the acquisition of a property right to the land, viz. 68 hectares for building leases and 381 hectares for leaseholds.

For the acquisition of a building lease 116 sketch maps and 137 surveyor’s certificates were drawn up and for leaseholds 13 sketch maps and 1 surveyor’s certificate. For or on behalf of various government or semi-government bodies 11,204 hectares were topographically surveyed in the year under review, of which 6,744 hectares were mapped and 4,500 hectares are still being mapped. Of this area, 64 hectares were for town planning, 642 hectares for sanitation, 375 hectares for airfields, 32 hectares for port installations, 12,331 hectares for regional development and 216 hectares for other activities.

For road construction 25 km were surveyed in the Hollandia division, 3 km in the Geelvink Bay division, 85 km in the West New Guinea division and 96 km in the South New Guinea division; 6 km were surveyed for the laying of a water main in the Geelvink Bay division.

For the mapping of Netherlands New Guinea the astronomic observations were continued during the year under review and 9 astro-stations were set up, seven in South New Guinea and two in North New Guinea.

To check and verify the accuracy of the existing maps, a polygon network of about 258 km was measured through various villages in South New Guinea. The data obtained are still being processed.

In the year under review a total of 696 deeds of established property rights to land were entered in the public registers, viz. 551 with building leases, 26 with leaseholds, 9 with the right of occupancy and 10 with the right of ownership.

1. PUBLIC FINANCE

1. THE BUDGET

The budget of Netherlands New Guinea for the year 1959 shows a total expenditure of f. 137,719,800. From the country’s own resources an estimated sum of f. 65,759,800 will be received, so that the contribution of the Netherlands will be f. 71,950,000. Of this latter sum f. 43,804,400 constitutes a contribution towards the deficit of the ordinary service, whilst f. 28,145,600 serves to cover capital expenditure.

For a detailed account see Appendices XXI and XXII.

The Netherlands Government contribution

For the years 1950 to 1953 incl. part of the capital expenditure was financed from the loan of f. 40 million furnished by the Netherlands. In total a sum of f. 26,932,100 was taken under this loan. It was later not considered desirable to burden the Territory with further loan debts. For the repayment of the money borrowed an additional contribution was given by the Netherlands, whilst capital expenditure is further met from contributions from the Netherlands.

The expenditure and revenue of Netherlands New Guinea, together with the contributions by the Netherlands, amounted to the following in the years 1950 to 1957 incl. (according to the provisional budget accounts):
<table>
<thead>
<tr>
<th>Year</th>
<th>Expenditure</th>
<th>Revenue</th>
<th>Netherlands Govt. Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>f. 36,224,461.46</td>
<td>f. 20,652,362.08</td>
<td>f. 15,572,099.38</td>
</tr>
<tr>
<td>1951</td>
<td>f. 47,066,064.10</td>
<td>f. 31,066,126.97</td>
<td>f. 15,999,937.13</td>
</tr>
<tr>
<td>1952</td>
<td>f. 58,669,117.94</td>
<td>f. 40,075,541.54</td>
<td>f. 18,593,576.94</td>
</tr>
<tr>
<td>1953</td>
<td>f. 77,724,723.58</td>
<td>f. 53,132,568.91</td>
<td>f. 24,592,153.67</td>
</tr>
<tr>
<td>1954</td>
<td>f. 93,923,590.59</td>
<td>f. 51,532,795.28</td>
<td>f. 42,390,795.31</td>
</tr>
<tr>
<td>1955</td>
<td>f. 145,118,556.58*</td>
<td>f. 78,177,313.01*</td>
<td>f. 67,941,232.57</td>
</tr>
<tr>
<td>1956</td>
<td>f. 130,089,395.20</td>
<td>f. 57,575,290.54</td>
<td>f. 72,415,104.66</td>
</tr>
<tr>
<td>1957</td>
<td>f. 125,486,117.47</td>
<td>f. 57,031,757.52</td>
<td>f. 68,454,345.95</td>
</tr>
</tbody>
</table>

As regards the above-mentioned figures of expenditure, it should be borne in mind that part of the expenditure in the years 1950 to 1954 incl. was not charged against the budget but, in anticipation of a further examination, was entered under the third party account and therefore was kept out of the budget for the time being. This expenditure was entered against the budget in following years.

The expenditure and the revenue include fairly considerable amounts relating to adjustments between the Government departments. According to figures available, the actual revenue of the Territory was as follows:

- 1950: f. 13,518,000
- 1951: f. 21,004,000
- 1952: f. 22,966,000
- 1953: f. 28,743,000
- 1954: f. 28,829,000
- 1955: f. 28,300,000
- 1956: f. 30,200,000
- 1957: f. 36,600,000

According to the estimates for the years 1958 and 1959, the expenditure, revenue and Netherlands Government contribution were as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Expenditure</th>
<th>Revenue</th>
<th>Netherlands Government Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>f. 133,022,100</td>
<td>f. 67,087,200</td>
<td>f. 65,934,900</td>
</tr>
<tr>
<td>1959</td>
<td>f. 137,719,800</td>
<td>f. 65,769,800</td>
<td>f. 71,950,000</td>
</tr>
</tbody>
</table>

The expenditure and the revenue for the years 1958 and 1959 also include amounts relating to the adjustment items. According to provisional information, the estimated actual revenue of the Territory for these years was f. 36,400,000 and f. 36,700,000.

2. TAXES

The proceeds of the various taxes in 1959, rounded off, were as follows:

- Income tax: f. 9,280,000
- Company tax: f. 2,430,000
- Property tax: f. 20,000
- Wages tax: f. 980,000
- Stamp duty: f. 200,000
- Transfer duties: f. 40,000
- Import duties: f. 6,830,000
- Statistical duties: f. 870,000
- Total: f. 20,650,000

In the year under review no changes in the tax system took place.

Income tax

This tax is levied on the inhabitants of Netherlands New Guinea, on their total net income, and also on non-residents as regards their net income proceeding from certain sources, such as immovables situated in Netherlands New Guinea. The tax is charged on a progressive scale, which is given in Appendix XXIII.

*) Including the above-mentioned redemption of f. 26,932,100.
The chief provisions for promoting economic activity are those concerning:

a. establishment exemption, under which newly established businesses are given a special allowance for a number of years;
b. investment reserve, which makes it possible for a firm just beginning its activities to use its profits tax-free for the acquisition of plant, etc.;
c. free write-off, which makes it possible to reduce taxable profit at one's own discretion by a generous write-off on plant, etc.

No distinction is made in this tax between Papuan and non-Papuan taxpayer. This principle, in fact, forms the basis of the whole tax system. The same provisions and the same scale apply to all. However, if the net income on the basis of outward appearances of prosperity is less than f. 3,000, the assessment is made in a manner which is adapted to practical possibilities. This of course means that this form of assessment, the 'minor assessment', is applied mainly to the Papuan population. In such cases scale B, given in Appendix XXIII, is used.

**Company tax**

This is levied on the profits of limited liability companies and the like established in Netherlands New Guinea and of bodies not established in the latter country, but in the latter case only as regards profits from certain sources.

The rate is 40% of these profits.

The facilities of investment reserve and free write-off mentioned under b. and c. of income tax apply also to company tax. In particular the free write-off, which makes it possible for a businessman to earn back free of tax from his profits the whole of his invested capital — which in view of the high initial investments often amounts to a complete exemption from company tax during the first years of the business — occupies an important place among the provisions for promoting economic activity.

Besides these facilities, company tax offers the possibility of tax reduction for concerns whose aim is the exploitation of natural resources and whose business entails more than the normal risks.

To promote Papuan cooperative societies such societies are exempted from company tax.

No distinction according to nationality is otherwise made for company tax.

**Property tax**

In view of the minor amount of this tax, it will suffice to state the following:

a. if the net property is worth less than f. 25,000, no tax is due;
b. if it is worth less than f. 120,000, 3/8% is levied after deduction of f. 24,000;
c. if it is worth more than f. 120,000, 3/10% is levied.

**Wage tax**

This is a tax on wages due or paid by employers to employees resident in Netherlands New Guinea. It has to be paid by the employer, who is empowered to retain from the employee's wage a sum equal to the tax. The scale is 4 to 15% of the wage.

The wage tax is planned as a real tax, but one which is ultimately intended as a simple levy of income tax on wage income. By certain adjustment facilities and exemptions wages are not doubly taxed by income tax and wage tax. Here too no distinction is made between Papuan and non-Papuan taxpayers.

**Stamp duty**

This duty forms a tax which is levied on certain documents listed in the Stamp Ordinance, for instance notarial deeds, receipts, permits, mortgage deeds, insurance policies, etc., whilst apart from the above documents papers drawn up as proof of private transactions, facts or conditions are also subject to stamp duty.

**Transfer duties**

Transfer duties are a tax on all agreements regarding the transfer of immovables situated or established in Netherlands New Guinea, on the deeds of entry and of transfer of ships and on all transfers by inheritance or legacy of immovables or registered ships bequeathed or devised by persons who had their last place of residence in Netherlands New Guinea.

In general the duties amount to 5% of the salable value of the immovable or the ship.
**Import duties**

The tariff of import duties is purely fiscal in the sense that no items occur in it that are of a deliberately protectionist nature.

In the main the duties are relatively low. The levying system is in broad outline as follows: 5% for means of production, semi-manufactures, etc., 12% for ordinary consumer goods, 20% for luxury consumer goods; raw materials are exempt from import duty.

As regards the technical background of the tariff, it may be stated that the basis is formed by the principles and distinctions on which the 1937 customs nomenclature of Geneva is based.

To reduce the cost of living and to stimulate the establishment of new firms, the levying of import duty on a large number of articles has been temporarily suspended in whole or in part. Articles on which it has been suspended entirely include prime necessities (such as a number of foodstuffs and textile goods, which according to the tariff ought to be taxed at the rate of 20% of their value) and a large number of building materials.

Besides the absolute exemptions, which are applied on the basis of the nature of the goods, there are the following relative exemptions and possibilities of exemption of a subjective nature.

The following are free from import duty: goods imported by travellers for their personal use whilst travelling; furniture being removed, provided that it is not new; goods imported by the Government, on the basis of considerations of a practical nature; goods imported for scientific or cultural purposes; goods for which international relations make exemption desirable; goods on behalf of public worship; goods imported for medical or educational purposes; gift shipments below a certain value or meant for certain purposes; parts and accessories of aircraft; objects destined for public museums and collections.

Exemption from import duty may be given for machinery, tools, apparatus, auxiliaries, raw materials or auxiliary materials for concerns in the field of industry, agriculture, forestry, stockbreeding, fisheries or mining, if and insofar as this is necessary in the economic interest of the country and for materials, objects and substances imported for the purpose of making and assembling therefrom goods for export.

**Statistical duties**

Statistical duties are levied at the rate of 1% of the value of imported goods and 3/8% of the value of exported goods. These duties are of the nature of a tax.

The relevant ordinance includes a number of grounds for possible exemption.

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**I. CURRENCY AND CIRCULATION OF MONEY**

No change occurred in the monetary system of Netherlands New Guinea during 1959. The Netherlands New Guinea guilder is tied to the Netherlands guilder on a parity basis and thus is at the same time linked to the West European payments system.

The Netherlands New Guinea guilder is divided into 100 cents. The Government issues notes in denominations of f. 50, f. 100, f. 25, f. 10, f. 5, f. 2.50, and f. 1. Besides these, Netherlands coins of 1/4 guilder (nickel), 1/10 guilder (nickel), 1/20 guilder (brass) and 1/100 guilder (bronze) are in circulation. The notes are legal tender up to any amount, the subsidiary coins to limited amounts.

Netherlands New Guinea does not possess any bank of issue. As banking is in the early stages of development - there are only four bank branches in the Territory - transfer business is similarly not very intensive. By way of accommodation the Government has made it possible to transfer by means of Government money orders larger sums of money than postal orders permit. This possibility does not apply to places where a bank branch is established.

The net extent of the money in circulation was as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>end of 1955</td>
<td>f. 17,000,000</td>
</tr>
<tr>
<td>end of 1956</td>
<td>f. 20,100,000</td>
</tr>
<tr>
<td>end of 1957</td>
<td>f. 21,600,000</td>
</tr>
<tr>
<td>end of 1958</td>
<td>f. 20,900,000</td>
</tr>
<tr>
<td>end of 1959</td>
<td>f. 22,700,000</td>
</tr>
</tbody>
</table>
The extent of cheque-book money was as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>end of 1955</td>
<td>£ 8,200,000</td>
</tr>
<tr>
<td>end of 1956</td>
<td>£ 6,700,000</td>
</tr>
<tr>
<td>end of 1957</td>
<td>£ 4,100,000</td>
</tr>
<tr>
<td>end of 1958</td>
<td>£ 4,600,000</td>
</tr>
<tr>
<td>end of 1959</td>
<td>£ 4,500,000</td>
</tr>
</tbody>
</table>

The total amount of money in circulation was therefore as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>end of 1955</td>
<td>£ 26,100,000</td>
</tr>
<tr>
<td>end of 1956</td>
<td>£ 26,800,000</td>
</tr>
<tr>
<td>end of 1957</td>
<td>£ 25,700,000</td>
</tr>
<tr>
<td>end of 1958</td>
<td>£ 25,500,000</td>
</tr>
<tr>
<td>end of 1959</td>
<td>£ 27,200,000</td>
</tr>
</tbody>
</table>

In the interior, where the money economy has so far won little ground, there is still a primitive form of barter in which use is made of shells or other coveted articles.

2. BANKING AND CREDIT FACILITIES

One general bank operates in Netherlands New Guinea, the Nederlandsche Handel-Maatschappij (the Netherlands Trading Society), with four branches, viz. at Hollandia, Sorong, Merauke and Manokwari.

As a result of the restricted development of the country, the field of activities of these branches is limited. It is in the main confined to the transfer of moneys to and from other countries, normal banking business, dealing with settlements arising out of import and export transactions and financing these transactions by granting credit facilities. All branches have direct current accounts with sister offices or correspondents in the Netherlands, the United Kingdom, the USA, Australia, Hongkong and Singapore, via which accounts foreign payments are made.

Besides the normal bank credits the Nederlandsche Handel-Maatschappij also grants credits under Government guarantee for those projects whose economic importance is recognized and desired by the Government but which, as a result of the conditions in Netherlands New Guinea, would cause a normal commercial bank to run more than the usual risk. Such applications for credit are evaluated by a Committee for the Granting of Credits, set up by the Government with a membership including representatives of both the authorities and private business.

Post Office Savings Bank

In 1958 the Post Office Savings Bank was opened for all residents of Netherlands New Guinea. In 1959 all postal establishments were opened for post office savings business.

To widen the possibility of saving, arrangements are being made to have administrative officers transact savings business at the small outposts.

It is expected that an agreement will shortly come into force regarding the transfer of balances on savings accounts with the Post Office Savings Bank to the Post Office Savings Bank in the Netherlands and in the opposite direction.

The interest, calculated on full amounts of £ 5, is 2.4% per annum. Both the payment of interest and the repayment of deposits are guaranteed by the Government.

Survey of deposits and withdrawals in 1958 and 1959

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Depositors</th>
<th>DEPOSITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P*</td>
<td>O**</td>
</tr>
<tr>
<td>1958</td>
<td>390</td>
<td>757</td>
</tr>
<tr>
<td>1959</td>
<td>466</td>
<td>719</td>
</tr>
<tr>
<td></td>
<td>856</td>
<td>1476</td>
</tr>
</tbody>
</table>

* P = Papuan
** O = others
*** T = total

51
### Withdrawals

<table>
<thead>
<tr>
<th>YEAR</th>
<th>P</th>
<th>O</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>7,054.44</td>
<td>152,385.85</td>
<td>159,443.29</td>
</tr>
<tr>
<td>1959</td>
<td>36,626.59</td>
<td>686,344.76</td>
<td>722,971.35</td>
</tr>
<tr>
<td></td>
<td>43,681.03</td>
<td>838,730.61</td>
<td>882,414.64</td>
</tr>
</tbody>
</table>

The balance on savings on 31 December 1959 was f. 1,214,198.98, of which f. 203,941.15 was held by Papians and f. 1,010,257.83 by others.

3. Bank Charges

The principal bank charges are:

a. for domestic payments:
   - remittances in writing and telegraphic transfers/sight drafts ½ o/o, with a minimum of f. 1.50 plus postage and telegraph charges, if any;

b. for foreign payments:
   - commission on foreign exchange 2 o/o up to and including f. 10,000; above f. 10,000 1 o/o with a minimum of f. 20;
   - transfer of bills: blank bills 1/8 o/o, with a minimum of f. 1.50; documentary bills 1/4 o/o, with a minimum of f. 1.50 plus 7% interest over the period of currency and airmail postage, if any;
   - blank irrevocable credits: 1/4 %, with a minimum of f. 2,50; documentary irrevocable credits: 1½%, with a minimum of f. 2,50 plus interest when settling any drafts drawn;
   - debit interest: approx. 6% (credit interest on current account or deposit balances is not paid);
   - exchange margin with the Netherlands ½%.

4. Balance of Payments and Foreign Exchange Control

Very few changes occurred in 1959 in the foreign payments of Netherlands New Guinea in comparison with preceding years.

A comparison with previous years gives the following picture:

<table>
<thead>
<tr>
<th>in millions of guilders</th>
</tr>
</thead>
<tbody>
<tr>
<td>from the country concerned</td>
</tr>
<tr>
<td>Credit</td>
</tr>
<tr>
<td>Direct transfers, incl. purchases of foreign exchange, to and from the Netherlands</td>
</tr>
<tr>
<td>Australia</td>
</tr>
<tr>
<td>Singapore</td>
</tr>
<tr>
<td>Hongkong</td>
</tr>
<tr>
<td>New York and London</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

According to the nature of the transactions, the balance of payments of Netherlands New Guinea can be broken down as follows:

<table>
<thead>
<tr>
<th>Balance of payments of Netherlands New Guinea in millions of guilders*</th>
<th>credit</th>
<th>debit</th>
</tr>
</thead>
<tbody>
<tr>
<td>current items merchandise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports</td>
<td>7.8</td>
<td>8.1</td>
</tr>
<tr>
<td>Imports</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

52
<table>
<thead>
<tr>
<th>Services and other current items</th>
<th>credit</th>
<th></th>
<th>debit</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping and aviation</td>
<td>-.</td>
<td>-.</td>
<td>-.</td>
<td>6.5</td>
</tr>
<tr>
<td>Other firms</td>
<td>8.1</td>
<td>10.3</td>
<td>7.2</td>
<td>1.8</td>
</tr>
<tr>
<td>Travellers</td>
<td>0.1</td>
<td>0.2</td>
<td>0.2</td>
<td>2.5</td>
</tr>
<tr>
<td>Other current items (incl. variousGovt. payments and revenue)</td>
<td>13.2</td>
<td>15.2</td>
<td>17.3</td>
<td>10.3</td>
</tr>
</tbody>
</table>

| Incidental items              |       |     |       |     |     |     |
| Savings, etc., incl. postal order business ** | 2.8   | 2.8 | 3.5   | 10.9 | 13.3 | 14.9 |
| Netherlands Govt. contribution | 57.4  | 58.3 | 65.  | -.   | -.   | -.   |
| Foreign exchange transactions and internal transfers | 53.1  | 51.8 | 52.3  | 54.7 | 48.3 | 57.7 |
| 152.5                         | 146.6 | 156. | 152.5 | 146.6| 156. |

*) Excluding payments by the oil company operating in Netherlands New Guinea which do not go through the Netherlands via the bank.

**) It is not known what share postal order business has in payments for imports.

The deficit on the balance of payments is made up by a contribution from the Netherlands Government. As far as necessary this contribution is paid in foreign exchange.

As regards imports, practically all import and related payments can be freely made to all countries. From the point of view of provisioning the country only three articles are still subject to an import permit (which at the same time is a voluntarily accepted obligation to import the articles in question). Payment for these articles, too, is not bound to any country of origin.

Other payments are still tied to a system of general and special permits which, however, have been made very broad or are applied very elastically.

There is a special arrangement with the largest private concern, the Nederlandsche Nieuw-Guinee Petroleum Maatschappij, under which this company is not subject to foreign exchange control but on the other hand never draws on the foreign exchange of Netherlands New Guinea.

K. TRADE

1. ORGANIZATION

The Government's task in the field of commerce is entrusted to the General Affairs Branch of the Department of Economic Affairs.

2. FOREIGN TRADE

The balance of trade for 1959, as compared with previous years, displayed the following picture:

<table>
<thead>
<tr>
<th>year</th>
<th>imports x f. 1,000</th>
<th>exports x f. 1,000</th>
<th>covering percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955</td>
<td>92,512</td>
<td>34,288</td>
<td>37</td>
</tr>
<tr>
<td>1956</td>
<td>94,788</td>
<td>30,067</td>
<td>32</td>
</tr>
<tr>
<td>1957</td>
<td>114,298</td>
<td>30,946</td>
<td>27</td>
</tr>
<tr>
<td>1958</td>
<td>85,860</td>
<td>28,063</td>
<td>33</td>
</tr>
<tr>
<td>1959</td>
<td>80,095</td>
<td>31,441</td>
<td>39</td>
</tr>
</tbody>
</table>

The passive balance of trade of Netherlands New Guinea clearly reflects the general economic situation in this very underdeveloped territory. It is characterized by a limited volume of foreign trade, imports directed above all towards the reinforcement of the infrastructure, and the implementation of productive activities which will not begin to influence the export side of the balance of trade more strongly until a number of years have passed.
a. Exports

The increase of the total exports from Netherlands New Guinea in value by about 3.4 million guilders in respect of 1958 is the balance of the following factors:

a. the increase of the export value of the joint native products by 1.5 million guilders
b. the increase in the exports of timber by 0.4 million guilders
c. the increase in the exports of war scrap by 0.3 million guilders
d. the increase in the re-export of goods by 3.8 million guilders
e. the reduction in the exports of crude oil by 2.6 million guilders

The total volume of the export of native products displayed a drop in 1959 as compared with 1958. This drop was caused by a decline of copra exports as the result of climate influences in 1957/1958, making their effect felt on the coconut harvest in 1959 (mainly South New Guinea).

Sharp increases in the price of copra in 1959 led to an increased export value for that product, despite the drop in the quantity exported.

The exports of high-grade products such as nutmeg and mace, resins and crocodile skins displayed a considerable rise in volume and value. For the first time cocoa was also amongst the exported products.

In 1959 as in 1958 Australia (6.8 million guilders) and Japan (5.1 million guilders) were the principal customers for products exported from Netherlands New Guinea. These exports relate mainly to crude oil.

The exports of native products were particularly directed towards the Netherlands, as in previous years (4.5 million guilders), the Federal Republic of Germany (2.4 million guilders) and Singapore (1.8 million guilders).

From the point of view of export value, nutmeg and mace (3.3 million guilders) were the principal native export products of Netherlands New Guinea in 1959, followed by copra (3.2 million guilders).

Exports of crude oil in 1959 were about 245,000 tons to the value of 13.7 million guilders (1954: 500,500 tons to the value of 26.4 million guilders).

More detailed information on the trend of exports in 1959 and the two preceding years is to be found in Appendices XXIV, XXV and XXVI.

Of the measures introduced in 1959 to improve the quality of Netherlands New Guinea's export products, mention may be made of the compulsory grading and fumigation of nutmeg and mace and the ban on the exporting of inferior copal. These measures were taken at the instigation of the Export Promotion Fund Foundation.

b. Imports

Imports into Netherlands New Guinea in 1959 were about 92,100 tons to the value of 80.1 million guilders, as against 92,600 tons to the value of 85.9 million guilders in 1958.

The drop in imports that set in in 1958 is mainly the result of the gradual retrenchment of activities by the NNGPM at Sorong.

In comparison with 1958, imports by oil companies therefore dropped by 9.2 million guilders in respect of 1958. However, Government imports also decreased by about 1.3 million guilders in respect of 1958 and gradually made way for private imports.

As against the reduction of imports by the Government and NNPGM by 10.5 million guilders together there was a rise in other imports in the private sector by more than 4.7 million guilders, so that the decrease in total imports into Netherlands New Guinea did not amount to more than 5.8 million guilders. The drop was most perceptible in the category of base metals and metal products and in the category of machinery, electrical equipment and transport material, being 35.6% and 17.5% respectively of the 1958 figures.

Imports of foodstuffs increased by about 2 million guilders, a rise of 8.8% in respect of the 1958 import value.

As regards country of origin, the reduction in imports related in particular to those from the United States, which decreased by 3.7 million guilders in 1959 compared with 1958.

The principal countries of origin of the imports in 1959 were the Netherlands with 39.5 million guilders, Singapore with 11.7 million guilders, Australia with 7.3 million guilders and Thailand with 4.8 million guilders.

Joint imports from countries in the European Economic Community were 45.2 million guilders, or 56% of the total import value.
More detailed information on imports is given in Appendices XXVII A and XXVII B.

3. IMPORT POLICY

On 25 September, 1959, new import regulations came into force. Whereas the old regulations were based on a general import ban, save those imports for which a permit had been granted, the new regulations leave imports free, with the exception of a number of goods designated by the Governor.

Permits are required for the importation of rice, flour and sugar, in order to ensure regular of these essential goods. The permits are granted solely to a few importers, who must take on themselves certain obligations such as the keeping of reserve stocks. This regulation does not imply any restriction of imports and is not aimed at any country.

The imports of the above-mentioned articles in 1959 represented an import value of 8.7 million guilders, or about 11% of the total import value. The other imports, to the value of 71.4 million guilders, or about 89%, are entirely liberalized. For completeness' sake it may be added that no foreign exchange permit is required for the importation of liberalized goods. The settlement of the financial part of the import transactions is fully governed by international commercial practice.
CHAPTER III

SOCIAL CONDITIONS

GENERAL PROBLEMS

The difficult natural conditions and the great isolation in which the population of Netherlands New Guinea have lived for centuries, the inaccessibility and impassability of the area and the — in general — poor fertility of the soil all led to the Papuan community being able to develop only slowly, in material and socio-cultural respects.

Only in a few coastal districts did contact with the outside world have some degree of fruitful effect.

The natural conditions were also a factor hampering the development of larger political units.

The Papuan community even today is characterized by a disjointed structure; nowhere have socio-political units larger than the territorial unit of the village been able to develop.

In these small, local groups, sometimes consisting only of a handful of families, persons in authority were hardly known. Acting on one's own authority was the rule in such small communities. There was rarely friendly contact between the various local groups; often suspicion and mistrust predominated, or there was open hostility. Warfare and headhunting played a major role in the old way of life.

In the now so strongly changing Papuan society various stages of development are discernible, depending on the one hand on the length of contact with the outside world, and on the other hand on the receptivity of the original way of life to new influences.

In the regions which were brought under administration relatively recently the population sometimes fall back on the old customs. There the old method of settling disputes on one's own authority is followed, which may lead to the death of a few people, but also to a war between a number of tribes.

In the Baliem Valley where, since the establishment of an administrative post in 1957, the administration had succeeded in persuading the various tribes to make peace, the method of settling one's own disputes was adopted during the year under review at the instigation of some conservative elements. This was followed by a chain reaction of murders in the whole valley, with dozens of victims, which threatened to lead to a real war. Thanks to rapid intervention by the administration peace could be quickly restored, but this incident showed how unstable the state of peace and order still is in such an area and how much effort and time social and economic progress still demands.

In areas where peace and order are already permanently established there is as yet in many cases an insufficient understanding of progress and its mainsprings, such as self-activity, the pursuit of prosperity and productivity. In some regions it is consequently still difficult to arouse the population's interest in modern activities, such as the growing of cash crops. Often it is only a few individuals who are prepared to make the effort and the sacrifices required for a greater prosperity. At the same time there is in these areas a certain discontent with regard to the traditional way of life. During the last world war and in the years that followed, the isolation of the Papuan community was disturbed in many regions. Making acquaintance with the Western way of life and with imported articles of use has opened to the population, even in the remote interior, a new field of interest and has aroused new expectations.

Where these expectations were too high, in particular in regions where through natural circumstances a rapid economic development is not possible, messianic movements, the cargo cults, have found a quick response. These movements, which are connected with traditional magic and religious conceptions, occur above all in South New Guinea. A striking example in this respect is provided by Frederik Hendrik Island, a very swampy area, where up to now no possibility has been found for the cultivation of cash crops, whilst the population, in particular the younger generation, have a pronounced urge towards progress. In the year under review the salvation movement revived very strongly in this area.

The fact that sometimes economic development lags behind the expectations of the population may bring about a lapse into the old customs.

This occurred during the year under review in the Mappi area of South New Guinea. In this area, which was definitively brought under administration immediately after the last war, an agricultural development project was implemented some years ago. Disease in the cash crop introduced as part of this project (cocoa) delayed the implementation of the project, which led to disappointment among
the population, whose expectations were too high in any case. The conservative elements among the population saw this as a good opportunity to revive the old customs. In secret a headhunting expedition was organized; dozens of members of a neighbouring tribe lost their lives as a result.

Only when social and economic development is more advanced may it be expected that such occurrences will have become a thing of the past.

In various other areas real progress is beginning to be evident, after a hesitant start.

The cultivation of cash crops, especially cocoa, is finding more and more acceptance in the subdivisions of Japen and Nimboran. The number of family farms is growing. Interest in these is also increasing in other subdivisions. The subdivision of Fak-Fak is developing favourably through the flourishing cultivation of nutmeg.

In many regions (subdivisions of Moejoe, Upper Digoel, Wissel Lakes, Teminaboean and the island of Biak) the population are helping to build roads, the immediate importance of which they are learning to realize. The population are also collaborating enthusiastically in the construction of airfields.

Where economic development is already further advanced, the population are proceeding to build permanent school buildings and churches.

For all the acceptance of modern forms, however, the Papuan population at the same time often cling to the old ideas, for instance with regard to dietary habits, obligations arising out of relationships, marriage settlements, causes of sickness and death. Changes concerning traditional values of life can never be expected within a short space of time, but the process of adaptation is underway.

Finally, there is the problem of the mutual adaptation and collaboration of the individual members of the various ethical and racial groups.

The authorities are deliberately countering any form of discrimination in the fields of employment, education, public transport and entertainment, and are fostering the participation of the native population in economic, social, cultural and political development. To an increasing extent specially trained and qualified Papuans are taking part in the administration of their country. As explained elsewhere in detail, large groups of Papuans are already working in Government departments.

B. HUMAN RIGHTS

The most important human rights as laid down in the Declaration of Human Rights are guaranteed by Law.

Slavery, as well as forced or compulsory labour to which the Convention of Geneva (1930) applies, is forbidden.

All persons in the Territory of Netherlands New Guinea have an equal claim to protection of their person and property (section 4 of the Decree for the Regulation of the Administration of New Guinea – the BNG – and articles 6, 7 and 8 of the Declaration of Human Rights – the DHR).

Expropriation of any property or right for public use can only take place after prior declaration by ordinance that the public interest requires expropriation and against compensation received or ensured beforehand (section 127 of the BNG, articles 17 and 29 of the DHR).

Any Dutch subject may be elected and appointed to any public office (section 7 of the BNG, article 21 of the DHR).

Nobody requires prior permission to express his ideas or feelings in printing. The responsibility of authors, publishers, printers and distributors and the safeguards to be afforded against abuse of the freedom of the press, in the interests of public order and morals, are regulated by ordinance (section 8 of the BNG, article 19 of the DHR).

Everybody has the right to submit petitions to the competent authority both in the Netherlands and in Netherlands New Guinea (section 9 of the BNG, articles 7 and 10 of the DHR).

The right of association and assembly is recognized and may be subjected to regulation and restriction by ordinance only in the interests of public order, morals or health (section 10 of the BNG, article 20 of the DHR).

Prosecutions can take place only before the appointed court (section 129 of the BNG, article 10 of the DHR).

Nobody may be arrested or taken into custody except on the orders of the competent authority (section 134 of the BNG, article 9 of the DHR).

No act constitutes an offence except by virtue of a legal penal provision preceding that act.

In the event of an amendment to the legislation after the time at which the act was performed, the provisions most favourable to the accused shall be applied (section 1 of the Penal Code, article 11, section 2, of the DHR).
Entry of premises or a house against the will of the occupant is only permitted on the orders of the competent authority (section 135 of the BNG, article 12 of the DHR).

The secrecy of letters entrusted to the post or to other public forms of transport is inviolable, except on the orders of the court in the cases provided for by ordinance (section 136 of the BNG, article 12 of the DHR).

The right of everybody to freedom of worship is recognized, subject to the protection of the community and its members against criminal offences (section 150 of the BNG, article 18 of the DHR).

All professing various religious opinions enjoy identical civil and civic rights and have the same claim to hold dignities, offices and employments (section 153 of the BNG, articles 18 and 21, section 2, of the DHR).

Public worship and the practice of religion are subject to no other restrictions than those which are laid down by ordinance in the interests of public order, peace and morals (section 154 of the BNG, article 18 of the DHR).

The giving of education is free, subject to supervision by the authorities (section 170, subsection 2, of the BNG, article 26 of the DHR).

Since it is important that these rights should not only be formally safeguarded but also materially realized, the Decree for the Regulation of Netherlands New Guinea lays down that the protection of the indigenous population in particular against arbitrary acts by whomsoever forms one of the most important duties of the Governor (section 37, subsection 1, of the BNG).

To perform these duties the Governor is granted far-reaching powers in the second subsection of that section: to protect the population persons may be forbidden to travel, stay or settle in certain parts of the interior, to import goods which are injurious to the population or to recruit workers in certain areas.

For instance, under the Inland Quarantine Ordinance 1951 it is forbidden to enter certain areas of the interior unless one is in possession of a health certificate, and under the Recruitment Ordinance the recruitment of workers in some regions is forbidden or made subject to certain conditions. For the same reasons the rights of the population to dispose of their land are restricted. Alienation of rights to land by direct transfer from Papuans to non-Papuans is not possible; all agreements aiming at such alienation are null and void by law.

The apparent contradiction with the spirit of article 17 of the Declaration of Human Rights which occurs here is a measure that in actual fact is necessary to prevent dispossession of the population. In this connection section 39 of the BNG is important. This lays down that the Governor shall ensure that no assignment of land infringes the rights of the native population. The assignment of land to non-Papuans other than in ownership has to be regulated by ordinance, whilst the regulation of the assignment of ownership is reserved to the Netherlands Legislature.

C. THE STATUS OF WOMEN

In the traditional Papuan society, where in many regions war and head-hunting formed a cultural focus, and in which disputes were almost invariably settled by taking the law into one's own hands, the status of women was on the whole low. This situation has changed in the areas brought under administration. There war and head-hunting have been things of the past for generations, whilst the population have become accustomed to organized dispensation of justice. It is in particular due to the work of the Protestant and Catholic Missions that new ethical standards are finding increasing acceptance. And yet it cannot be said that for all that the attitude of the Papuan community to women has radically changed.

For instance, even in present society the rules inherent in the social structure often restrict the woman in her freedom to enter into marriage. She is still very frequently regarded as the object of exchange par excellence. Everywhere the bride price still plays an important part.

Similarly, in the traditional division of labour between man and woman a change for the better has not yet integrally occurred. The woman still has to do a disproportionately large share of the work, especially in agriculture.

The most disturbing aspect for the community is the lack of care given to pregnant women. Not only is the maxim that a pregnant women should do as little heavy work as possible rarely observed, but there are also numerous injurious customs concerning the diet and care of pregnant women.

An improvement in the situation is possible only by information, advice and education, not in the last place of the women themselves. It may be said that the information and advice given by the Department of Public Health (the Maternal and Child Welfare Branch), education, particularly that at
the girls' continuation schools, the courses in domestic science and club work for women and girls all have a favourable effect in this respect. (The number of Papuan girls at the schools for primary and continued education now totals 14,142, as against 19,158 boys).

In the larger centres of population, such as Hollandia, Biak, Manokwari, Sorong and Merauke the beginnings of emancipation are already perceptible. In these places the social status of women is at a higher level than in the village communities, which are still strongly bound to tradition.

An increasing number of women and older girls are taking part in the work in Papuan women's associations and girls' clubs. At Hollandia a course was held for women Papuan club leaders in the year under review.

Factory work by women does not occur in the Territory. Paid employment of Papuan women, except in such professions as nursing, teaching, infant welfare nursing and clerical work, occurs almost only in the domestic sector.

D. LABOUR AND EMPLOYMENT CONDITIONS

1. LABOUR POLICY. GENERAL PROBLEMS

The Government is faced with a variety of problems in determining its labour policy within the framework of its general policy, which is directed towards a balanced development of country and urban centres.

The interests of this balanced development on the one hand demand that the Papuan be employed as much as possible in Government service and in private enterprise, which means working in and near the urban centres, but on the other hand care should be taken that too large a number of employable men are not attracted away from the countryside. If this were to happen the village community would be in serious danger of being disrupted, both economically and socially, and the development of the countryside would be hampered.

Consequently the Government has imposed restrictions on the recruitment of native workers in appropriate cases. For instance, recruitment in the subdivisions of the Wissel Lakes and the Schouten Islands is subject to limitations, whilst in 1955 the Wondammen subdivision was temporarily closed to recruiting.

Steps have also to be taken to ensure that, since employment in the urban centres is of course not unlimited, an urban proletariat does not come into being as the result of an unchecked, spontaneous drift to the towns. This can be prevented by implementation of the provisions of the Residence Ordinance, Urban Centres.

The productivity of the native worker, which is greatly influenced by his mental attitude, by social conditions, by his culture and his personal feelings is - by Western standards - generally low. Efficiency and labour discipline are concepts foreign to the Papuan.

By training and technical education, by information and advice from both the authorities and the trade unions, by instruction by the employer, such as the "training on the job" system, endeavours are being made to raise productivity to a higher level.

In the year under review, as in the past, registration took place as at 31 July of the Papuan labour force in Western-type employment.

The decrease in 1957 of the number of Papuan employees, which had not entirely ceased in 1958, owing to a further decline in building activity, changed into a rise in 1959. This was mainly the result of the work on the construction of airfields and roads in the interior. In all 16,746 Papuan wage-earners were registered. Of these, 11,000 worked in the urban centres of Hollandia, Biak, Manokwari, Sorong and Merauke.
Registration over the last five years gives the following picture:

<table>
<thead>
<tr>
<th>NUMBER OF REGISTERED WORKERS</th>
<th>1955</th>
<th>1956</th>
<th>1957</th>
<th>1958</th>
<th>1959</th>
</tr>
</thead>
<tbody>
<tr>
<td>in urban centres</td>
<td>11,178</td>
<td>12,101</td>
<td>11,715</td>
<td>11,567</td>
<td>11,100</td>
</tr>
<tr>
<td>outside urban centres</td>
<td>4,183</td>
<td>5,225</td>
<td>4,186</td>
<td>4,319</td>
<td>5,646</td>
</tr>
<tr>
<td>total</td>
<td>15,361</td>
<td>17,326</td>
<td>15,901</td>
<td>15,886</td>
<td>16,746</td>
</tr>
</tbody>
</table>

INDEX FIGURES (1955 = 100)

<table>
<thead>
<tr>
<th></th>
<th>1955</th>
<th>1956</th>
<th>1957</th>
<th>1958</th>
<th>1959</th>
</tr>
</thead>
<tbody>
<tr>
<td>in urban centres</td>
<td>100</td>
<td>108</td>
<td>105</td>
<td>103</td>
<td>99</td>
</tr>
<tr>
<td>outside urban centres</td>
<td>100</td>
<td>125</td>
<td>100</td>
<td>103</td>
<td>135</td>
</tr>
<tr>
<td>total</td>
<td>100</td>
<td>113</td>
<td>104</td>
<td>103</td>
<td>109</td>
</tr>
</tbody>
</table>

The following table gives the numbers of Papuans working inside and outside the urban centres, expressed in percentages of the total registered labour force.

<table>
<thead>
<tr>
<th>year</th>
<th>in the urban centres</th>
<th>outside the urban centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955</td>
<td>11,178 (73%)</td>
<td>4,183 (27%)</td>
</tr>
<tr>
<td>1956</td>
<td>12,101 (70%)</td>
<td>5,225 (30%)</td>
</tr>
<tr>
<td>1957</td>
<td>11,715 (74%)</td>
<td>4,186 (26%)</td>
</tr>
<tr>
<td>1958</td>
<td>11,567 (73%)</td>
<td>4,319 (27%)</td>
</tr>
<tr>
<td>1959</td>
<td>11,100 (66%)</td>
<td>5,646 (34%)</td>
</tr>
</tbody>
</table>

It emerges from the above figures that 1956 was a peak year, as a result of the temporarily intensified building activity in that year. Figures on the latter, in comparison with those for other activities, are as follows:

<table>
<thead>
<tr>
<th>year</th>
<th>building activity</th>
<th>other activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955</td>
<td>4,420 (29%)</td>
<td>10,941 (71%)</td>
</tr>
<tr>
<td>1956</td>
<td>5,759 (33%)</td>
<td>11,567 (67%)</td>
</tr>
<tr>
<td>1957</td>
<td>4,133 (26%)</td>
<td>11,768 (74%)</td>
</tr>
<tr>
<td>1958</td>
<td>3,832 (24%)</td>
<td>12,054 (75%)</td>
</tr>
<tr>
<td>1959</td>
<td>5,020 (30%)</td>
<td>11,726 (70%)</td>
</tr>
</tbody>
</table>

Of the total number of registered Papuan wage-earners, 66% were to be found in the year under review in the urban centres of Hollandia, Biak, Manokwari, Sorong and Merauke. A breakdown of these workers into unmarried, married who have left their families behind in the village, and married with their families in the town gives the following picture for the above towns:

| Places     | Unmarried | Married |               |               |               |               |               |
|------------|-----------|---------|---------------|---------------|---------------|---------------|
|            | from      | from    | from         | from          | from          | from          |
|            | vicinity  | elsewhere| vicinity     | elsewhere     | vicinity      | elsewhere     |
| Hollandia  | 709       | 1491    | 51           | 211           | 370           | 756           |
| Biak       | 865       | 152     | 193          | 45            | 1110          | 140           |
| Manokwari  | 183       | 592     | 20           | 36            | 113           | 510           |
| Sorong     | 229       | 1250    | 29           | 264           | 44            | 644           |
| Merauke    | 388       | 441     | 36           | 6             | 94            | 128           |
| Total      | 2374      | 3926    | 329          | 562           | 1731          | 2178          |

Of the total Papuan labour force registered in the entire Territory during the year under review 8,830 persons were unmarried (53%) and 7,916 (47%) married; of the latter 5,815 were living with their families at their place of work.

For further statistics see Appendix XXIX, Tables A, B and C.
2. ORGANIZATION

The Government's function with regard to labour matters is entrusted to the Labour Affairs Branch of the Department of Social Affairs and Justice. This department is headed by a jurist, with an engineer on his staff.

Under the Labour Affairs Branch come the Labour Inspectorate and the Industrial Safety Supervision Service. The Labour Inspectorate deals with the social and legal aspects of labour problems, whilst the duties of the Industrial Safety Supervision Service are evident from the Service's name.

For the purposes of the Labour Inspectorate Netherlands New Guinea is subdivided into two inspection districts. The territory of the Safety Supervision Service covers the whole of Netherlands New Guinea.

3. CHIEF CATEGORIES OF WAGE-EARNERS, WAGES

The total number of Papuans in Western-type employment rose by 5% in respect of 1958, mainly as a result of greater employment in the building trade, specifically the construction of airfields and roads in the interior.

In the other sectors of industry a drop of about 400 workers occurred, as a result of a marked decline of employment in the oil industry.

The number of female workers decreased slightly to 994 (5.9% of the total number registered) as against 1,058 (6.7%) in 1958.

In the following table the Papuan labour force is grouped according to the kind of work done. The 1958 figures are also given for ease of comparison:

<table>
<thead>
<tr>
<th>Employment</th>
<th>male</th>
<th>female</th>
<th>1958 total</th>
<th>male</th>
<th>female</th>
<th>1959 total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Agriculture, forestry, hunting, fishing</td>
<td>1,065</td>
<td>97</td>
<td>1,162</td>
<td>1,232</td>
<td>143</td>
<td>1,375</td>
</tr>
<tr>
<td>2. Mining of minerals, both above and below ground</td>
<td>166</td>
<td>-</td>
<td>166</td>
<td>18</td>
<td>-</td>
<td>18</td>
</tr>
<tr>
<td>3. Manual work in factories and/or workshops</td>
<td>516</td>
<td>9</td>
<td>525</td>
<td>465</td>
<td>5</td>
<td>470</td>
</tr>
<tr>
<td>4. Activity with or alongside machinery in factories and/or workshops</td>
<td>938</td>
<td>9</td>
<td>947</td>
<td>726</td>
<td>11</td>
<td>737</td>
</tr>
<tr>
<td>5. Building activity (housing, roads, power stations, waterworks, etc.)</td>
<td>3,827</td>
<td>5</td>
<td>3,832</td>
<td>5,016</td>
<td>4</td>
<td>5,020</td>
</tr>
<tr>
<td>6. Activity in the field of electricity and water supply, hygiene</td>
<td>448</td>
<td>-</td>
<td>448</td>
<td>649</td>
<td>6</td>
<td>655</td>
</tr>
<tr>
<td>7. Trade</td>
<td>126</td>
<td>10</td>
<td>136</td>
<td>127</td>
<td>7</td>
<td>134</td>
</tr>
<tr>
<td>8. Transport, storage and communications (telephone, radio, etc.)</td>
<td>1,547</td>
<td>6</td>
<td>1,553</td>
<td>1,395</td>
<td>5</td>
<td>1,400</td>
</tr>
<tr>
<td>9. Services (education, etc., medical care, domestic servants, shop assistants)</td>
<td>4,092</td>
<td>836</td>
<td>4,928</td>
<td>4,041</td>
<td>770</td>
<td>4,811</td>
</tr>
<tr>
<td>10. Activity not coming under categories 1 to 9</td>
<td>2,103</td>
<td>86</td>
<td>2,189</td>
<td>2,083</td>
<td>43</td>
<td>2,126</td>
</tr>
<tr>
<td>Total</td>
<td>14,828</td>
<td>1,058</td>
<td>15,886</td>
<td>15,752</td>
<td>994</td>
<td>16,746</td>
</tr>
</tbody>
</table>

Of the Papuan labour force, 9,508 persons were in Government service, as against 7,238 in private enterprise. In 1958 these figures were 7,884 and 8,002 respectively. As in 1958, a sum of about 20 million guilders was spent on wages, food and housing for Papuan workers.

Reference may be made to Appendix XXVIII for the wages and salaries paid to Papuans employed by the Government and private subsidized bodies.
4. THE LABOUR MARKET

An increase in the number of workers in Western-type employment was noted in the subdivisions of Hollandia, Sarmi, Wessel Lakes, Schouten Islands, Radja Ampat and Merauke, and a decrease in Sorong, Manokwari, Upper Digoel and the Asmat area.

During the year under review 365 persons availed themselves of the facility of registering for work with the Labour Affairs Branch in Hollandia and Manokwari. Approximately 40% of these could be found work.

5. WORKERS' ORGANIZATIONS

There are two trade unions, viz. the Christian Workers Union of Netherlands New Guinea (the CWNG/Perseking) and the General Catholic Officials Association (the ARKA), a regional division of the Dutch association of that name.

The CWNG/Perseking had at the end of 1959 about 2,400 members (1958 1,700), and the ARKA about 1,000 (1958 also about 1,000). The growth in the membership of the CWNG/Perseking is mainly the result of increasing interest on the part of Papuans.

The CWNG/Perseking, which formerly had a Dutch and a Papuan section, amalgamated during the year under review to form one organization with a mixed executive. The regional Netherlands New Guinea branch of the ARKA also has Papuan members; organizationally it makes no distinction either.

Under the union executive of the CWNG/Perseking come an Executive Council for the purely trade union side of the association's work and a Social Council which is mainly active in the social and educational field and organizes courses for combating illiteracy, as well as courses in Dutch and general education.

The ARKA and the CWNG/Perseking are represented in the Committee for Organized Consultation for Personnel Interests set up in 1958. By means of this Committee they, together with representatives of the authorities, are consulted about all matters of general importance to the legal status of civil servants in Netherlands New Guinea or of a certain group of the latter.

6. SETTLEMENT OF LABOUR DISPUTES

It proved possible to settle most difficulties between employers and employees by mediation. In a number of cases the courts were asked to arbitrate on disputes. Strikes did not occur during the year under review.

7. SOCIAL WELFARE IN INDUSTRY AND AGRICULTURE

See section g, Town Planning and Housing, of this chapter.

8. VOCATIONAL AND TECHNICAL EDUCATION

With reference to vocational and technical education reference may be made to Chapter IV, Education.

9. LABOUR LEGISLATION

New labour and safety legislation is in preparation.

COOPERATIVES

1. ORGANIZATION

Under the Regulations for Cooperative Societies 1949 the Adviser on Cooperatives is in charge of the Government's efforts in the field of cooperative societies. Efforts relating to native cooperatives are mainly of an advisory nature; these societies are assisted by word and deed, but the principle of self-activity is always foremost.

In the performance of his duties the Adviser for Cooperatives has at his disposal the Office for Cooperative Affairs, consisting of a graduate official as head of the office and two executive officers as inspectors.
During the year under review the Office for Cooperative Affairs was given the subsidiary task of furthering the development of a Papuan trading middle class.

2. TRAINING

Since mid-1956 a course in cooperative knowledge, administration and simple bookkeeping has been given every year at Manokwari for members of managing committees and staff of native cooperatives. This course has also been attended by persons who did not come from existing cooperatives.

In the year under review a diploma was awarded to 18 students (in 1957 and 1958 16 and 11 respectively).

Of the grand total of 45 who have successfully completed the course, 21 are working in cooperatives, 4 have started small private businesses and 15 are in the employment of the Government and private enterprise.

Four Papuans are attending a cooperative course at De Steeg, the Netherlands.

3. GRANTING OF CREDIT

Since 1957 it has been possible for the Government to grant credit to registered cooperative societies for capital expenditure to reinforce or expand their activities. In 1959 two cooperatives, viz. at Makaroro (Ternateoan subdivision) and Moereis Besar (Hollandia subdivision), made use of this arrangement.

The total outstanding amount of credits granted by the Government to the cooperatives was f. 90,407.20 at the end of 1959.

Since the year under review it has been possible to grant credits to individual small Papuan firms as well. In 1959 credits were furnished to two such firms to a total amount of f. 4,175.

4. COOPERATIVE SOCIETIES

The number of cooperatives entered in the "Public Register" at the end of 1959 was 8.

In the year under review the Wallytu Dokeka work community at Wania (Hollandia subdivision) acquired corporate rights under the Regulations for Cooperative Societies 1949. This village cooperative has a shop selling imported goods and has facilities for buying up native produce. The produce bought, chiefly sago, salt fish and horticultural produce, is marketed at Hollandia. This cooperative also runs two motorized outrigger proses which are used to carry persons and goods on the Demta-Hollandia run.

The "ERPING" cooperative at Moereis Besar (Hollandia subdivision) has purchased from the Export Promotion Fund Foundation a KPM launch with a 25 HP diesel engine. This launch is being converted at a small local shipyard into a seaworthy freighter to be used on the Demta-Hollandia run for freight carrying between the villages of the north coast. For these purposes the "ERPING" cooperative has opened a credit of f. 7,000 with the Office for Cooperative Affairs.

The "JAWA DATUM" cooperative at Genjem (Nimboran subdivision) has used part of its profits for 1958 to build a recreation building. In the mornings this building is used as a place for sale of vegetables.

The Export Promotion Fund Foundation has started the construction of a cocoa fermentation plant at Genjem. This plant will in due course be handed over to the cooperative.

The total number of gardens of the members of the cooperatives growing cocoa increased during the year under review from 110 to 134.

The "Weta Nangin Brat" copal tappers' cooperative at Makaroro obtained a credit of f. 10,000 for the construction of a copal grading and storage shed.

The total number of members of the eight registered cooperatives at the end of 1959 was 4,691.

The capital of these cooperatives was made up as follows:

\[
\begin{array}{ll}
a) \text{members' capital} & \text{f. } 158,493.30 \\
b) \text{reserve capital (undistributed profits)} & \text{f. } 143,983.11 \\
\text{total capital} & \text{f. } 302,476.41 \\
\end{array}
\]
The turnover was as follows:

1) native produce dealt in (190,000 kg to the value of) f. 196,966.45
2) sale of consumer goods in cooperative shops f. 712,373.94
3) rendering services f. 18,075.73

Total turnover: f. 927,416.12

Non-registered cooperatives and work communities

Besides the native cooperatives registered under the Regulations for Cooperative Societies 1949, there are a large number of non-registered cooperatives and work communities in various residencies.

These cooperative groups are particularly to be found in the divisions of West New Guinea and Hollandia. These forms of organization prove to play a fairly important role in the distribution of indument goods, particularly in isolated regions, whilst at the same time the participants are afforded the possibility of marketing their products in a simple manner.

As may appear from the following figures, these work communities are particularly active in the production sector. Efforts are above all directed towards encouraging the production cooperative groups. As, however, the producer must have the possibility of rationally spending the income available from production, most of these work communities run a shop. This latter activity is, however, secondary.

Summary of Non-registered Cooperatives and Work Communities

<table>
<thead>
<tr>
<th>Division</th>
<th>Number of Associations</th>
<th>Number of Members</th>
<th>Production Turnover</th>
<th>Shop Turnover</th>
<th>Total Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>South New Guinea</td>
<td>2</td>
<td>300</td>
<td>60,000,-</td>
<td>25,000,-</td>
<td>85,000,-</td>
</tr>
<tr>
<td>Fak-Fak</td>
<td>4</td>
<td>1099</td>
<td>44,537.68</td>
<td>19,964.89</td>
<td>64,502.57</td>
</tr>
<tr>
<td>West New Guinea</td>
<td>13</td>
<td>2738</td>
<td>184,709.75</td>
<td>96,636.09</td>
<td>281,345.84</td>
</tr>
<tr>
<td>Geelvink Bay</td>
<td>6</td>
<td>139</td>
<td>81,871.90</td>
<td>2,550,-</td>
<td>84,421.90</td>
</tr>
<tr>
<td>Hollandia</td>
<td>25</td>
<td>1108</td>
<td>49,183.87</td>
<td>83,469.31</td>
<td>132,653.18</td>
</tr>
<tr>
<td>Central New Guinea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td><strong>5384</strong></td>
<td><strong>420,303.20</strong></td>
<td><strong>227,620.29</strong></td>
<td><strong>647,923.49</strong></td>
</tr>
</tbody>
</table>

The total turnover in 1959 of all the cooperatives together, registered and non-registered, was f. 1,575,339.61.

STANDARD OF LIVING

The Papuan community, particularly outside the urban centres, is still for the greater part living in the stage of a low level of autarchy. This autarchy does not lend itself very well to statistical observation so as to determine the level of prosperity of the population by scientific methods.

In mid 1957 a preliminary survey was instituted at Hollandia into the way of life of 22 Papuan families. The data collected in this survey were given in the 1957 Report. However, since the survey was an exploratory one and therefore limited in scope, these data cannot be considered as representative of the way of life of Papuans living at Hollandia. Further investigations will have to follow before soundly based conclusions about the standard of living of the urbanized Papuan population can be drawn.

In Appendix XXX A index figures are given concerning the cost of living at Hollandia; Appendix XXX B gives retail prices and index figures of a number of important foodstuffs and stimulants, also at Hollandia.

The total cost of living on 1 December, 1959, was, as the figures show, the same as that on 1 December, 1958. Nor did the wage level of the urban Papuan undergo any important changes in 1959.
1. CONDITIONS AND PROBLEMS

During the first years of development the construction of the necessary administrative centres and the corresponding public works represented the main problem for the authorities.

There were no well-equipped contracting firms, whilst neither the necessary skilled labour nor the essential materials were available or obtainable in the Territory to a sufficient extent, so that in the beginning the authorities were faced with very great difficulties. Of necessity temporary use had to be made in those years of accommodation dating back to the war years for both housing and offices.

Gradually it proved possible to overcome these difficulties. Papuan workers were trained in the building trade. Thanks to the importation of machinery it became possible to embark locally on the manufacture of the bricks required for building. Supplies of wood were greatly improved by the opening of the sawmill at Manokwari, and owing to the assistance of a number of contracting companies the construction of houses, offices and other utilitarian structures could be tackled on a wider scale.

The increasing activity in the urban centres resulting from the implementation, of the housing programme and the continued construction of the necessary basic facilities for the Territory (harbours, airfields, offices, schools, hospitals, etc.) caused an increasing drift of labour from the country to the towns. The result of this was that provisions had to be made for housing Papuan workers, since gradually families were also concerned in this migration and they tended to settle more permanently in the towns. New residential districts had to be built, first in Hollandia, Biak and Manokwari, and later in Sorong, Seroei and Sami as well.

Although in general the worst of the housing shortage, both for personnel recruited from outside the Territory and for local workers, has been dealt with and, with the odd exception, satisfactory accommodation has been provided for the various Government services, housing still continues to be a difficult problem requiring the enemitting attention of the authorities.

In Hollandia several dozen houses have been built for Papuan workers on the Hamadi estate since 1955, and later also on the Polimac estate, as also in Biak and, on a more modest scale, in Sorong-Remoe, Seroei and Sami.

In Manokwari a new residential district has been built at Sanggeng, mainly to house Papuan labour from the sawmill and the shipyard. Elsewhere in this town a residential district for Papuan employees of other firms has been constructed. In the year under review this district was further extended.

In Hollandia all the central offices of the Government, with the exception of the Court of Justice and the Post Office, are now housed in newly built offices.

Good progress was made during the year under review with the construction of a building for the Post Office. Further, a start was made with the construction of the Public Secondary School.

2. ORGANIZATION

The Buildings and Town Planning Branch of the Department of Waterways and Construction is in charge of the construction of public buildings, utilitarian works and housing. Under this branch come the construction and upkeep of the offices and buildings required for Government departments, site drainage, sewerage and the provision of drinking water, together with town planning and the giving of directives for and the supervision of working-class housing.

The Waterways and Ports Branch of the Department of Waterways and Construction is in charge of those aspects of town planning relating to the construction, upkeep and administration of the urban road system and all engineering works forming part of this.

The projects are carried out in part under the Branch's own management and in part by contractors working under supervision.

Appendix XXXI gives a summary of projects completed in the year under review; Appendix XXXI A gives a survey of construction from 1953 to 1959 incl.

3. EXCHANGE OF RESEARCH AND EXPERIENCE IN BUILDING TECHNIQUES

Publications were regularly received from the South Pacific Commission.

Experience was exchanged with the Public Works Department at Port Moresby. In the year under review a number of officials of the Public Works Department visited Netherlands New Guinea for an exploratory visit and to exchange experience regarding the building of housing and utilitarian constructions, and also water power and electricity.
4. FINANCIAL AND TECHNICAL AID FROM THE AUTHORITIES

In the year under review a credit arrangement on behalf of private house-building was drawn up. This arrangement makes it possible to grant building credits to persons who have a reasonable income but not enough capital to finance the building of their own house.

The credit to be granted is not more than 3/4 of the building price. The estimated building price may not be more than $20,000. The interest is 3% per annum.

II. SOCIAL SECURITY AND WELFARE

1. PROVISIONS IN THE FIELD OF SOCIAL PROTECTION

a. Health

Private persons can enter into an agreement with the Department of Public Health for receiving medical attention; the contribution is 2% of their gross annual income. The impecunious receive free medical treatment.

Civil servants and their families are given full medical aid against a contribution of 1% of the civil servant’s salary.

The medical care of Papuan workers is covered by the labour legislation, which includes the obligation of the employer to grant free medical aid, including medicaments, also in the event of injuries not incurred in his service.

Needy recuperating TB patients are given financial assistance to enable them to convalesce at home for a few months after the conclusion of hospital treatment. The Social Welfare Branch of the Department of Social Affairs is responsible for the implementation of this scheme, in collaboration with the doctor treating the patient. In the year under review a sum of more than $32,000 was spent on this aid.

b. Unemployment

In the year under review a slight increase in unemployment was perceptible in the urban centres. This unemployment is of a structural nature and is partly caused by the replacement of European labour by Papuan workers becoming available for the first time, both in the civil service and in private enterprise, whilst furthermore the growth of the working population is more marked than the increase of jobs for them.

The decreased activity in the oil industry is also a contributory factor here.

c. Accidents and sickness

The employer is obliged to pay compensation in the case of industrial accidents.

The Labour Affairs Branch supervises the financial settlement of the consequences of an industrial accident. In the year under review 67 industrial accidents were reported. The consequences of industrial accidents during the years 1955 to 1959 incl. were as follows:

<table>
<thead>
<tr>
<th>year</th>
<th>number of accidents</th>
<th>minor injuries</th>
<th>serious injuries</th>
<th>fatal injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955</td>
<td>106</td>
<td>72</td>
<td>22</td>
<td>12</td>
</tr>
<tr>
<td>1956</td>
<td>102</td>
<td>90</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>1957</td>
<td>62</td>
<td>48</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>1958</td>
<td>94</td>
<td>80</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>1959</td>
<td>67</td>
<td>56</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

d. Old age and physical infirmity

The Social Welfare Branch of the Department of Social Affairs and Justice gives relief to the needy, in collaboration with the church organizations. At Hollandia and Manokwari special committees have been set up for granting social relief; for the other places aid is given under the supervision of the Heads of Local Administration.

Under the General War Injuries Regulations relief was paid during the year under review to 7 disabled war victims. Also under these regulations payments were made to 68 next of kin of war victims, viz. 44 widows, 3 mothers and 21 children.
e. Care of infants and expectant mothers

See section J, "Public Health".

2. ORGANIZATION OF SOCIAL WELFARE

The establishment of the Social Welfare Branch of the Department of Social Affairs remained unchanged during the year under review.

For the financial year 1959 a sum of f. 570,900 (of which f. 22,000 capital expenditure) was made available for this Branch on the budget. This money was intended among other things for social aid, TB after-care, sport and recreation and libraries. (For 1957 and 1958 the equivalent sums were f. 505,000 (of which f. 213,000 capital expenditure) and f. 658,000 (of which f. 177,000 capital expenditure).)

On behalf of social work among urban Papuans the Branch maintains close contact with three social workers of church organizations. Furthermore, many forms of direction and aid are given in all kinds of activities in the social field in the Territory.

Socio-cultural educational work

The Papuan women's clubs run by the Evangelical Church and the Christian Workers Union of Netherlands New Guinea have since their foundation enjoyed an increasing interest on the part of Papuan women.

In these clubs, which came into being in 1955 as a result of private initiative, the women are taught to sew and cook, and are also given instruction in hygiene, health, diet and child care. Much attention is paid to self-activity and to the training of Papuan-women leaders. In the year under review a training course of three months' duration for Papuan women leaders was held at Hollandia.

In the course of the years an increasing number of Dutch women have voluntarily directed the activities of these clubs.

As the result of the engagement of a social worker from the Netherlands by the Catholic Mission a start could also be made at Merauke in the second half of the year under review with group work within the framework of women's club activities.

Furthermore, at Hollandia a cookery course for Papuan women was organized, with a duration of nine months.

At Manokwari a social centre was opened during the year under review. Just like the social centre at Hollandia, which was opened in 1958, it is under Papuan direction.

Other bodies active in the field of social welfare are the Netherlands New Guinea Red Cross, the Green Cross Society and the St. Vincent Foundation.

The New Guinea Red Cross continued its activities, which relate among other things to the provision of reading-matter and welfare work in hospitals.

The Green Cross Society was founded at Hollandia in 1955. It is chiefly concerned with assisting in the nursing at home of bedridden patients. In 1957 it extended its activities to Manokwari. There, as at Hollandia, it runs a well-attended consultation bureau for infants.

The St. Vincent Foundation, a charitable institution, was founded in December 1954. It engages principally in alleviating the spiritual and material needs of individuals, for instance by furnishing them with food parcels or gifts of money and, in appropriate cases, by giving interest-free advances, and looking after minors. The Foundation also runs a number of infant schools.

In October of the year under review the Local Council of the St. Vincent Foundation, Manokwari, became a separate foundation. This independent foundation manages a children's home, in which a number of children from unfavourable social environments are accommodated.

Poor relief

During the year under review a sum of more than f. 142,000 was spent on poor relief (1958: over f. 98,000).

Infant welfare

During the year under review subsidies totalling f. 45,878 were paid to the private organizations running institutions for infant welfare, viz. the Foundation for Protestant Education, the St. Vincent Foundation and the Biak Infant School Association.
Sport and recreation

For purposes of sport and recreation the Department of Social Affairs and Justice made available the sum of f. 86,500. The number of registered sport clubs is 254, the number of members 6,879.

Passages to the Netherlands for emergency social cases

In the year under review 13 persons were sent to the Netherlands at Government expense as social and socio-medical emergencies, whilst two persons were given an interest-free advance for the costs of a passage from Netherlands New Guinea to the Netherlands.

Prostitution

Prostitution occurs only sporadically.

I. PREVENTION OF CRIME

1. CRIMINALITY

Crimes of violence and of morals from the majority of cases brought to trial. In the primitive Papuan society crimes involving property are rare.

For a survey of the criminal cases tried by the Government courts and by the Papuan judges during the year under review, and of the number of persons tried, see Appendices XXXII, XXXIII and XXXIV.

2. PENAL SYSTEM

a. Prison population

For this see Appendices XXXV and XXXV.

b. Organization of prisons

The prisons are divided into two categories, viz. central and local prisons. The general administration of the central prisons is in the hands of the Director of Internal Affairs, and that of the local prisons is the responsibility of the Divisional Residents. The requirements which these prisons must satisfy are laid down by the Director of Internal Affairs.

The same penal system, based on the Penal Institutions Regulations, applies in all prisons. See Appendix XXXV.

c. Penal system

Imprisonment and detention are served communally.

Discipline is maintained by the imposition of disciplinary punishments, viz. solitary confinement (for not more than 14 days) and curtailment of privileges. Corporal punishment is forbidden.

d. Remission, work, privileges

Prisoners work both inside and outside the prison.

In the event of good conduct various privileges are granted, including a bonus for work done.

As a reward for constant good conduct annual remission of three months' imprisonment is given.

In Hollandia Prison two vocational courses are given, one in carpentry and one in tailoring. Furthermore, in a number of prisons elementary education in reading and arithmetic is given to illiterates.

Reference should also be made to the existing institution of parole.

e. After-care of discharged prisoners

The Central Board for the After-Care of Discharged Prisoners and the local after-care committee are situated at Hollandia. Outside the capital administrative officers are responsible for this work.

The Central Board for the After-Care of Discharged Prisoners advises the Director of Social Affairs and Justice on paroling and on all matters of principle and important issues regarding after-care. The Central Board — in consultation with the Director of Social Affairs and Justice — promotes after-care of discharged prisoners in general.

The local after-care committee has the task of aiding discharged prisoners, for whom it helps to find work and housing as far as possible.

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The local after-care committee also has the duty of advising the Director of Social Affairs and Justice on proposals for parole and if necessary of submitting such proposals itself to the competent authority.

On request it advises and informs the competent authority on paroles and the special conditions which parolees may have to satisfy.

A person sentenced to imprisonment can be paroled when two-thirds of his sentence and at the same time nine months have elapsed. He is put on probation for a given period, during which he has to satisfy certain conditions.

In the year under review six Papuans were paroled, whilst the probationary period of two persons of Dutch nationality was shortened.

J. PUBLIC HEALTH

1. ORGANIZATION

Public health care is the responsibility of the Government. A number of missionary societies do medical work among the native population, for which they receive a subsidy from the authorities.

The Nederlandsch Nieuw-Guinea Petroleum Maatschappij has a separate medical service for its own organization.

The Director of Public Health is aided in the performance of his duties by a medical and an administrative staff. The task of the medical staff relates on the one hand to clinical medicine and on the other to preventive medicine, for which special sections have been set up.

The Inspector of Hospitals is responsible for supervision of clinical medicine, under which come the 19 hospitals, together with the sections for dental care, care of mental defectives and pharmaceutical supplies. The pharmaceutical supplies section is also responsible for the inspection of narcotics and for the supervision of drugstores. The heads of the sections are immediately subordinate to the Director.

The special sections are those for the control of endo-epidemic diseases (malaria, yaws, leprosy, tuberculosis) and the sections for maternal and child welfare, health education and nursing training.

At the Central Office the Director is assisted by two Government doctors, who are responsible for the following sections:

international health matters
quarantine
medical examinations
smallpox control
environmental sanitation
documentation and statistics
library.

The Head of the administrative staff is responsible for the following sections: general affairs, staff matters, financial and budget affairs, and technical matters.

The Department of Public Health has a Central Medical Laboratory for bacteriological and serological examinations and for inspecting drinking water and food.

Collaboration with other Departments takes place via the Nutritional Council, composed of experts in agriculture, education, public health and administration (see under 8, State of Nutrition and Health Education).

2. PERSONNEL

The number of doctors and dentists working in Netherlands New Guinea rose in the year under review by 5 to 85, 61 of whom are Government medical officers.
The job breakdown of the doctors in 1959 was as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Government</th>
<th>Other bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. General administration</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>B. Independent sections:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaria control</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Yaws control</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tuberculosis control</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Leprosy control</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Health education</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Environmental sanitation</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Central Laboratory</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>C. Other medical officers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Service</td>
<td>39</td>
<td>18</td>
</tr>
<tr>
<td>Surgery</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Internal medicine</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Dermatology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental surgery</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>24</td>
</tr>
</tbody>
</table>

For a full list of the medical personnel reference should be made to Appendix XXXVI and for a table showing staff directly available for the medical care of the population in the years 1954–1959 to Appendix XXXVI A.

3. EXPENDITURE ON PUBLIC HEALTH

The costs of medical services in recent years have been as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1953</td>
<td>f. 3,209,000,-</td>
<td>100</td>
</tr>
<tr>
<td>1954</td>
<td>f. 4,400,000,-</td>
<td>137</td>
</tr>
<tr>
<td>1955</td>
<td>f. 5,000,000,-</td>
<td>184</td>
</tr>
<tr>
<td>1956</td>
<td>f. 6,300,000,-</td>
<td>198</td>
</tr>
<tr>
<td>1957</td>
<td>f. 6,800,000,-</td>
<td>212</td>
</tr>
<tr>
<td>1958</td>
<td>f. 7,000,000,-</td>
<td>218</td>
</tr>
<tr>
<td>1959</td>
<td>f. 7,500,000,-</td>
<td>233</td>
</tr>
</tbody>
</table>

Private bodies were given Government subsidies totalling f. 266,000 (1958: f. 170,000) on behalf of medical aid to the population.

The aid received from UNICEF during the year under review was:

- for malaria control $26,536
- for yaws control $4,400
- for tuberculosis control $600
- for maternal and child welfare $102 plus $382.

UNICEF’s aid totalled f. 126,000 (1958: f. 72,000).

4. HOSPITALS

The number of Government hospitals decreased by one in the year under review to 19; the opening of the new Central Hospital at Hollandia meant that the old hospitals at Hollandia (Inland) and Ifar could be closed. The number of Government out-patient clinics increased from 77 (including 3 with admission facilities) to 80 (including 4 with admission facilities). The total of hospital beds in the Government hospitals and out-patient clinics is now 1,000 (1958: 925).

The Royal Netherlands Navy and the NNPMG each run a hospital of their own with 86 and 213 beds respectively.

On 3 July the new Central Hospital at Hollandia was opened. This hospital has a capacity of
360 beds, divided among 13 nursing units. The operating theatre, radiography department, kitchen and laundry possess the most modern equipment.

Also present are large homes for the male and female student nurses and classrooms for the course for male and female nurses which has now been centralized in this hospital for the whole region.

The Malaria Control Section was given a new office with laboratory. The out-patient clinic in Sentani was finished. Sami was given a new front building for its hospital. In Seroei a new out-patient clinic was opened. Some wards are still under construction in this hospital.

As a result of the increasing air traffic the hospital in Biak has to be moved further away from the airfield. The preparatory plans for this move have been worked out.

Ransiki was given an out-patient clinic and a delivery room.

The hospital at Ajamaroe was completed for the greater part.

In Kaimana a leprosy is being built.

The Merauke hospital was extended by a building for the chest clinic, a building for the Malaria Control Section and a building for the dental out-patient clinic. A pavilion for infectious cases and a leprosy are being built.

Improvements were made to the radiographic apparatus of various hospitals. At present 12 of the 19 hospitals have radiography facilities. Moreover, the Tuberculosis Control Section has at its disposal three mobile X-ray units.

The number of nursing days in 1959 was 273,815.

The number of treatments in hospital out-patient clinics was 639,898 in the year under review. Papuan nurses gave 316,244 treatments during tours and at their stations. Treatments thus totalled 956,142. This figures do not include activities relating to disease control campaigns and those of the Maternal and Child Welfare Section; these are mentioned separately in the appropriate sections of this chapter. For further details see Appendices XXXVII and XXXVIII.

In the "Irene" psychiatric clinic the number of patients undergoing treatment was 56 and the number of nursing days 12,362.

The work of the Central Medical Laboratory increased in the year under review. 18,305 determinations were performed (1958: 8,731). The greater number of these, 10,479, were examinations for tuberculosis.

5. TRAINING AND EDUCATION

There are now the following courses for medical staff.

<table>
<thead>
<tr>
<th>Nature of course</th>
<th>Length of course</th>
<th>Entrance requirement</th>
<th>Number of pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male or female nurse, Netherlands</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Guinea diploma</td>
<td>5 years</td>
<td>diploma of continuation school</td>
<td>150</td>
</tr>
<tr>
<td>auxiliary nurse, Netherlands New</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guinea diploma</td>
<td>2 years</td>
<td>ditto</td>
<td>300</td>
</tr>
<tr>
<td>mental nurse, male or female,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands New Guinea diploma</td>
<td>2 years</td>
<td>ditto</td>
<td>17</td>
</tr>
<tr>
<td>infant welfare nurse</td>
<td>2 years</td>
<td>ditto</td>
<td>80</td>
</tr>
<tr>
<td>laboratory assistant</td>
<td>3 years</td>
<td>ditto</td>
<td>3</td>
</tr>
<tr>
<td>junior pharmacist</td>
<td>3 years</td>
<td>ditto</td>
<td>4</td>
</tr>
<tr>
<td>malaria control assistant</td>
<td>3 years</td>
<td>ditto</td>
<td>7</td>
</tr>
</tbody>
</table>

Since 1954 the following diplomas have been awarded: 136 male or female nurses, 6 mental nurses, male or female, 97 infant welfare nurses, 22 laboratory assistants, 19 junior pharmacists and 10 malaria control assistants.

The course for auxiliary nurses, the aim of which is to reskill the nursing orderlies, was instituted in 1958. It is expected that in 1960 the first certificated auxiliary nurses can be appointed to their posts.

It is further the intention to begin a course for junior sanitary inspectors in 1960.
In the year under review the course for male or female nurses was further modernized. A three-year basic course is now followed by more specialized training of two years for one of the following functions:

- Nurse/midwife
- Male or female hospital nurse
- Public health nurse, male or female.

In the year under review a Dutch nurse with New Guinea experience was engaged. She was entered for a course for nursing instructors to be given in New Zealand in 1960. The WHO provided a scholarship for this purpose. Her future task will be above all to modernize the teaching curricula in the Central Hospital.

For further details of the courses reference may be made to Appendix XLII.

For 1962 application has been made for a second scholarship for a nursing instructor. The intention is to entrust to this second nurse supervision of the courses given at the other hospitals (auxiliary nurses and infant welfare nurses).

6. DEMOGRAPHIC DATA

Owing to the absence of birth and death records reliable demographic statistics are not possible for the time being.

In the Sentani area a start has been made by the Office of Native Affairs with a regular registration of births and deaths. The birth, death and infant mortality figures obtained from this registration may be considered representative of areas in Netherlands New Guinea where the Department of Public Health has been regularly active with campaigns in the field of malaria, yaws and tuberculosis control and of maternal and child welfare.

The areas which are not easily accessible for extensive preventive medical campaigns and activities display figures which, in view of the fact that they are based on the recollections of the local inhabitants, are without a doubt a little too low, but which demonstrate that the birth rate approaches that of the Sentani area, and that the death rate and the infant mortality rate are certainly twice as high (Ajamaroe, Tanah Merah, Baliem).

<table>
<thead>
<tr>
<th>Area</th>
<th>Birth rate °/oo</th>
<th>Death rate °/oo</th>
<th>Infant mortality rate °/oo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sentani</td>
<td>57</td>
<td>17</td>
<td>125</td>
</tr>
<tr>
<td>Ajamaroe</td>
<td>40</td>
<td>32</td>
<td>300</td>
</tr>
<tr>
<td>Tanah Merah</td>
<td>46</td>
<td>41</td>
<td>280</td>
</tr>
<tr>
<td>Baliem</td>
<td>40</td>
<td>40</td>
<td>300</td>
</tr>
</tbody>
</table>

7. ENDEMIC DISEASES

Malaria and filariasis

The year under review saw good progress made in the field of malaria control. The number of inhabitants of Netherlands New Guinea placed under the protection of insecticides rose to 170,000, whilst the combination of two methods of control, viz. house spraying and the distribution of medicine, in general gave good results. This combined control began in 1958. In that year more than 100,000 persons were given chloroquin and darpin on three occasions. In 1959 chloroquin and darpin were distributed twice in areas inhabited by 64,000 people and once in other areas inhabited by 47,000 people. On average more than 90% of the inhabitants took the tablets per distribution.

As a result of these campaigns the transmission of malaria was interrupted on the densely populated islands in Geelvink Bay, and the percentage of persons infected with malaria parasites declined to about 1.5%.

Before the house spraying this percentage was 25 to 30% on these islands, and before the combination of house spraying and the distribution of medicine it was about 8%.

In other regions the decline, though not inconsiderable, was less striking. Only in a few areas, inhabited by a relatively small number of people, could no improvement of the malaria indices be observed. In some of these areas the house spraying is now being experimentally performed three times a year instead of twice, and a little dieldrin is being added to the usual quantity of DDT. The result of this trial is still awaited.

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In the Arso-Waris area a start was made in November with the distribution of salt mixed with dapsone. This is a new method of malaria control, devised in Brazil. In 1960 the method will be extended to a number of districts in the Sarmi subdivision. In this subdivision the results of house spraying did not come up to expectations. The idea behind the method is to furnish together with the salt, on which the population are very keen, so much of the dapsone that it has the same prophylactic effect as regularly taking a tablet of the medicine.

During the sensitivity tests, which were regularly performed, resistance of anopheles mosquitoes to insecticides could not be established. The sensitivity of malaria parasites and in particular of P. falciparum to pyrémethione (dapsone) proved during an investigation in Waris not to be great in a number of cases. In Arso, on the other hand, no less sensitive parasite strains were seen. Nevertheless, in view of the findings at Waris allowance must be made for the possibility that in the long run resistance of malaria parasites to the prophylactic may develop. However, should this occur there are very good substitute agents available.

UNICEF again furnished material assistance in the form of insecticides, medicine, sprays and transport.

The regional malaria adviser of the WHO, Dr Roberts, and the WHO expert in the field of the distribution of medicated salt, Dr E. Paulini, visited Netherlands New Guinea.

In November the First Interterritorial Malaria Conference for the South-West Pacific took place at Port Moresby. At this conference representatives of Australia, Netherlands New Guinea, the New Hebrides, the Solomon Islands and the Territory of Papua and New Guinea discussed common problems.

It is the intention that in 1960 the number of inhabitants enjoying protection shall be extended by 30,000, so that the 200,000 mark will then have been passed.

The investigations into the vectors of filariasis and their relative importance were continued.

During the investigation in the Nimboran, which took place in collaboration with the SPC expert Dr M.O.T. Iyengar, it was possible to conclude that transmission had been interrupted by house spraying with DDT.

Important data were obtained from investigations in South and West New Guinea, where non-anophelines play an important part in transmission. The island of Pam was chosen as test area to evaluate the effect of house spraying on the transmission by Aedes kochi. This pilot project started in May 1959.

The preparations for the large-scale project at Inamwaran were completed. The control campaign will begin here in January 1960. In this project heparin will be given regularly to the population.

**Yaws**

In 1959 aid was again received from UNICEF in the form of penicillin and medical equipment.

The number of persons examined since the beginning of the campaigns in 1955 is 301,000.

Among these 20,000 cases of active yaws were found, so that the clinical index for that part of Netherlands New Guinea covered by the campaigns can be put at 5.4%.

In 1959 the initial treatment campaign was extended to 6,000 more persons, 4,200 of whom were examined and treated. Among them 360 cases of infectious yaws were found (9%).

In all 250,000 persons were subjected to a re-examination in the year under review. Attendance was 80%. 1,020 cases of infectious yaws were encountered (0.5%).

A pilot campaign in the eastern part of the Highlands had disappointing results as regards the attendance of the population.

Partly in view of experience gained at an earlier date in investigations in the Highlands, the time does not yet seem ripe for a mass control campaign there. Treatment of individual cases is still the appropriate control method.

The central team of the Yaws Control Section was principally employed in new areas, for serological examinations and, if necessary, for assisting in normal re-examinations.

As a rule, however, the routine examinations were performed by the district doctors, who once a year tour their entire district and combine the yaws checks with other activities.

**Tuberculosis**

After the rapid expansion of work in the field of tuberculosis control during the years 1955–1958 the stress was laid on consolidation in 1959. At several points it was possible to intensify the work, and progress of considerable qualitative value could be made.

In the year under review 286 cases of bacteriologically checked cases of tuberculosis were
entered in the central register; 228 of these were found among Papuans, and the remaining 58 among the non-Papuan population of Netherlands New Guinea. The cumulative total of registered TB cases rose as a result to 1,520 for Papuans and 237 for non-Papuans.

The majority of the cases of tuberculosis consisted of cases of pulmonary tuberculosis. In 1.9% of the cases the disease was combined with some form or the other of extrapulmonary tuberculosis, whilst of the total number of cases registered 35% consist of extrapulmonary tuberculosis uncombined with pulmonary tuberculosis.

The detection of tuberculosis by means of photofluoroscopy was continued; 38,026 persons have been fully examined. As in the past, supervision of the cases detected in this manner could be entrusted to existing or specially founded chest clinics.

The number of chest clinics increased from 5 to 8. A ninth clinic is being prepared. Between them, these clinics cover an area of some 48,000 inhabitants.

The number of consultations given by these clinics rose from 10,409 to 14,987.

The BCG vaccination campaign instituted with the aid of the WHO and UNICEF came to an end in the year under review. As further extension of the campaign must for the time being depend on the production of a dried thermostable vaccine, extension of the project has not been requested. Where possible the examinations and tests are still being continued.

Up to now an additional 30,993 persons beyond the planned number of 100,000 have been fully examined. In all 71,093 persons were vaccinated during the initial campaign.

Revaccination campaigns are performed every year.

The observations which were made during the pilot campaign carried out with the aid of WHO and UNICEF have been written up into a publication in the WHO Bulletin 1959, 20, 641–655.

During the period under review substantial aid was again received from private organizations at home and abroad. Special mention should be made of the contribution from the SIMAVI Association, which gave no less than f. 145,000 in buildings and in equipment.

Leprosy

A second doctor was engaged for the Leprosy Control Section.

The two Section doctors continued the initial investigations in combination with preliminary lepromine examinations. These investigations can be ended in 1961, by which time exact knowledge of the leprosy situation will have been obtained.

In all areas initially examined to date re-examinations have been performed by the local doctors.

Scientific investigations, among others in the field of serum reactions, were made in collaboration with other medical bodies in Netherlands New Guinea and the Netherlands.

A start was made with a publicity campaign in the villages by means of showing slides. A film was made of life in a leprosery. Several films have been applied for abroad.

The training of doctors continued, whilst in 1950 the training of nursing staff for field work will begin.

The latest anti-leprosy medicines were received. These will be tried on patients who react unfavourably to established therapy.

In a number of areas which seem ripe for the purpose preparations were made for the transition from general re-examinations to the clinic system, in which efforts will be made via publicity campaigns to entrust the responsibility for curing the disease to the population.

Further development of the leproseries at Sorong, Mieei and Serenai took place.

At Sorong a hospital ward with an out-patient clinic attached was completed, together with houses for native staff and 30 houses, each for 6 patients.

At Mieei a ward plus out-patient clinic, a church and 5 houses to replace the old houses were completed. A radiography building is under construction.

At Serenai a building was finished for the out-patient clinic, whilst a start has been made with the construction of permanent houses for the staff.

To replace the leprosery at Fak-Fak by a permanent establishment at Kainama the site was cleared in the latter place, and an order was placed for 10 prefabricated dwellings for patients and houses for native staff.

A start was made with the construction of a leprosery at Meri. Towards the end of the year four staff houses were ready, whilst the hospital was being built. It is expected that this leprosery can be opened about June 1960.

The leprosery at Mieei is run by the Protestant Mission, and the rest by the Government.
X-ray equipment became available for the leproseries at Sorong and Miei.
The number of known leprosy patients was 3,954 on 31 December 1959, of whom 655 were
borderline and lepromatous cases.
The leprosy index for the whole area of Netherlands New Guinea under administration was
9.7‰ at the end of 1959.
The leprosy index of the various areas displays great differences. A table was given in the
report for 1958. This table may also be regarded as representative of the 1959 situation.
A breakdown of the cases which have become known in the course of the years according to
sex, age and type gives the following figures:

<table>
<thead>
<tr>
<th>Age group</th>
<th>Total</th>
<th>Tuberculoid In determinate</th>
<th>Borderline Lepromatous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>0–19</td>
<td>1437</td>
<td>2239</td>
</tr>
<tr>
<td></td>
<td>19+</td>
<td>615</td>
<td>1336</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td>2773</td>
<td>1552</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>4190</td>
<td>3309</td>
</tr>
</tbody>
</table>

Tuberculoid and borderline and lepromatous cases in after-treatment are dealt with in the out-
patient clinics.
The number of patients treated in out-patient clinics by the end of 1959 was 545.
The leproseries are intended for the treatment of borderline and lepromatous cases and are
under the direction of the local doctors.
Owing to the low density of population, the great distance of one village from another and the
difficult accessibility of these villages, home treatment cannot be regarded as feasible for Nether-
lands New Guinea.
Only part of the south coast of the island of Biak qualifies for this. Preparations for a project
in this area, solely for tuberculoid cases, are in an advanced stage.
Nobody is ever compelled to enter a leprosery. It is almost always possible to persuade a
patient to take this step voluntarily.
The number of patients undergoing treatment in leproseries at the end of 1959 was 438.
The total number of nursing days in these leproseries was 149,301, and the number of nursing
days of the hospitals in the leproseries was 5,940.
The number of patients discharged after a bacteriologically negative period of one year, after
which further treatment was given in out-patient clinics, was 58. In all 181 patients have been dis-
charged from the leproseries since they were opened.
Great attention is paid to occupational therapy. There are schools in the leproseries at Sorong
and Miei. Patients are encouraged to take part in sport.
Considerable aid was received from charity. The ward and the out-patient clinic at Sorong, the
patients’ houses at Kaimana, the piped water system and the X-ray building at Miei, as also three
wards for TB patients for the leproseries at Sorong, Miei and Merauke are being or have been made
possible by donations from the National New Guinea Committee, the SIMAVI, and leprosy committees
at Sorong and Manokwari.
Material aid was also received from the Netherlands New Guinea Red Cross, the Medical
Mission Campaign, the Nederlandsch Nieuw Guinea Petroleum Maatschappij and church bodies.
The Tuberculosis Control Section continued with its BCG campaign in extensive regions of
Netherlands New Guinea. There is no certainty about BCG’s possible preventive value as regards
leprosy. It is expected that this campaign will in the long run provide important data on this.

Smallpox

In the year under review, too, no cases of smallpox occurred. Efforts were made to keep the
existing vaccination situation at the same level. The number of vaccinations was 80,455, of which
24.60% were for the first time.

Other Infectious diseases

During the year under review no cases of quarantinable diseases occurred. Sporadic cases of
poliomyelitis acuta anterior (2), meningitis (14), encaphalitis (4), typhoid (6) and mite-borne typhus
(1) were reported.
There was a mild epidemic of influenza from May to August along the coasts of Netherlands New Guinea.

8. STATE OF NUTRITION AND HEALTH EDUCATION

Ipomoea, or the sweet potato, is the staple diet of the greater part of the Central Highlands. Here the diet is supplemented by vegetables; the pandanus fruit is one of the few sources of fat. There is a shortage of animal protein.

The inhabitants of the foothills live mainly on tubers (taro, yams, tapioca), forest fruits, wild vegetables and small forest animals.

The inhabitants of the coast and the swampy lowlands eat sago. These areas often contain reasonable quantities of fish and wild pigs. The striking feature here is a shortage of vegetables. The coconut is the most important source of fat.

If intelligent use were made of the available foods, a just sufficient diet could be provided. In various regions, however, the population display symptoms of malnutrition and incorrect diet. Besides a diet with little animal protein, the following must be given the responsibility for that:

1. Food tabus, especially regarding animal protein, for the vulnerable groups such as mothers and infants.
2. Chronic intestinal infections such as amoebic dysentery and balantidiasis.
3. Inadequate utilization of natural possibilities, the primitive methods of farming and fishing and incorrect cooking of the food.

With a view to improving the state of nutrition of the population, in September of the year under review a study conference on diet and health education was held at the initiative of the Nutritional Council. This conference was attended by representatives of the Administrative Service, Economic Affairs and Agriculture, Cultural Affairs, Public Health and the Catholic and Protestant Missions.

This conference drafted a number of recommendations of a general administrative, agronomic, educational and medical nature.

The Agricultural Section is trying to introduce crops with a protein content on a large scale to improve the provision of protein. Efforts are being made to introduce a cheap and nutritious school diet by means of school gardens. Experiments are also being conducted with fish ponds and rabbit-breeding. Sales of salted fish by the Sea Fisheries Branch are being hampered by the fact that the population prefer imported tinned fish.

Legal regulations concerning the importing of vitaminized rice and iodized salt are being prepared.

9. PRINCIPAL CAUSES OF DEATH

On the strength of the available data, which consist in the main of hospital records, it may be concluded that principal causes of death in the group of Papuan infants are intestinal infections, pneumonia, disturbances of the alimentary system and incorrect diet. For the older age groups one of the principal causes of death is tuberculosis.

10. PREVENTIVE MEDICINE

a. Environmental sanitation

On the Schouten Islands a village hygiene project will be carried out in 1960 with the support of UNTAB and UNICEF. UNTAB will make a sanitary engineer available as project leader. UNICEF will provide equipment for simple sanitary provisions to a value of $ 16,500. It is the intention to use this study project as a means of collecting data on technique and cost price of hygienic provisions in the villages. By means of these data plans will be drawn up for gradually providing the most important centres of population outside the towns with a better water supply and sewage system.

The project will at the same time serve for the training of Papuans as junior sanitary officers.

The regional WHO office at Manila made available an expert to study the water supply problem of the town of Biak and to advise on this matter.
b. Maternal and child welfare

As in former years, the improvement of the health of mothers and children was entrusted to the Maternal and Child Welfare Section.

Towards the end of the year there were 69 infant welfare nurses employed on the programme, stationed as follows:

1. Merauke and vicinity 29
2. Hollandia and vicinity 9
3. Biak and vicinity 8
4. Seroei and vicinity 7
5. Genjem and vicinity 8
6. Manokwari and vicinity 2
7. Sami and vicinity 2
8. Waren and vicinity 1
9. Sorong and vicinity 2
10. Kaimana and vicinity 1

The activities in the last four years display the following picture:

<table>
<thead>
<tr>
<th></th>
<th>1959</th>
<th>1958</th>
<th>1957</th>
<th>1956</th>
</tr>
</thead>
<tbody>
<tr>
<td>consultations regarding infants</td>
<td>59,777</td>
<td>52,364</td>
<td>42,077</td>
<td>25,078</td>
</tr>
<tr>
<td>toddlers</td>
<td>88,317</td>
<td>47,422</td>
<td>37,055</td>
<td>22,807</td>
</tr>
<tr>
<td>deliveries</td>
<td>16,693</td>
<td>12,367</td>
<td>11,821</td>
<td>5,229</td>
</tr>
<tr>
<td>expectant mothers</td>
<td>1,710</td>
<td>1,397</td>
<td>1,374</td>
<td>1,146</td>
</tr>
<tr>
<td>home visits</td>
<td>48,142</td>
<td>24,000</td>
<td>12,000</td>
<td>4,782</td>
</tr>
<tr>
<td>population covered by Section</td>
<td>55,000</td>
<td>50,000</td>
<td>44,300</td>
<td>41,000</td>
</tr>
</tbody>
</table>

In the year under review an investigation was instituted into infant and child mortality in four areas where infant welfare nurses are active.

From this investigation the following data relating to infant mortality were obtained:

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of live births</th>
<th>Number of deaths</th>
<th>Death rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>newly born</td>
<td>infants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>babies</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maro</td>
<td>60</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>S.E. Biak</td>
<td>194</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>W. Sentani</td>
<td>97</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>E. Dema</td>
<td>88</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>459</td>
<td>17</td>
<td>31</td>
</tr>
</tbody>
</table>

The figures relating to mortality among infants (including newly born babies), toddlers and children of school age were:

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of deaths</th>
<th>Schoolchildren</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>infants</td>
<td>toddlers (1-6 yrs)</td>
</tr>
<tr>
<td>Maro</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>S.E. Biak</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>W. Sentani</td>
<td>14</td>
<td>–</td>
</tr>
<tr>
<td>E. Dema</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>17</td>
</tr>
</tbody>
</table>

It has proved that the infant welfare nurse in the villages is capable of approximately halving the original infant mortality rate, which is often 35%. For a further reduction of the infant mortality
rate more professional knowledge is required than the infant welfare nurses possess. For this reason replacement of the infant welfare nurses by fully qualified nurses/midwives will be necessary to achieve a further reduction in the death rates.

A start has already been made with the training of Papuan midwives (see Courses). Three pupils are now attending the course for nurse/midwife.

The food project (school milk) set up with the aid of UNICEF was considerably expanded in the year under review and will be continued in 1960 and 1961. The number of schoolchildren who received this item of diet has increased to 7,500.

In October 1959 a start was made in Hollandia (Inland) with the building of a maternity home which at the same time will serve as a training establishment for infant welfare nurses. The construction of this home is being financed by the SIMAVI. UNICEF is giving the instruments and training aids required in the home, whilst the New Guinea Red Cross is presenting the furniture and the sanitary equipment.

In the first week of September 1959 a very successful conference was held of all nurses concerned with maternal and child welfare, with the assistance and cooperation of Miss Turnbull, the Regional Maternal and Child Health Adviser of the WHO.

In the same month the head nurse left for the United States on a WHO scholarship to make a study of programmes concerning health care for mother and child.

K. COMMUNITY DEVELOPMENT

Community development is a method of approach forming a part of development policy. It is a means of improving by self-activity the standard of living of not only the individual but also a whole community. It makes use of measures in the social and economic fields coordinated with education in the widest sense of the word.

It is in essence training for self-activity and the fostering of a feeling of solidarity by furthering changes in the population's ideas and actions in such a sense that the Papuans themselves come to play an active part in promoting their own interests.

In Netherlands New Guinea efforts are being made in a variety of ways to put this idea into practice. Needless to say, an important part in this has to be played by education and the popular information service. Furthermore, the various departments give specific information in the fields of cooperatives, agriculture, fisheries, stock-breeding and public health.

Whilst the central administrative bodies of the Territory are responsible for the general coordination of the various activities in the field of the furtherance of prosperity, organizations such as the Nutritional Council and the Council for Native Education are called upon to coordinate subjects which are the responsibility of the Government and in which the element of popular education comes to the fore more specifically.

Separate aspects which relate more directly to community development are the development of local autonomy at village and regional level, the founding of social centres and clubs in urbanized places, cooperatives and regional agricultural projects, all subjects which are dealt with elsewhere in this report. Particularly promising results have already been achieved so far with the regional agricultural projects.
CHAPTER IV

EDUCATION

A. THE GENERAL 1. AIMS AND PROBLEMS

EDUCATIONAL SITUATION

Education policy is directed towards the improvement and expansion of primary education, of the continued and secondary education which follows on the primary, and of the vocational and professional courses.

The aims of this endeavour are the creation of these conditions and possibilities which enable the population really to participate in the widest possible development of the Territory in the economic, social, cultural and political senses and to acquire the requisite knowledge and skills without which no development is possible.

In the past ten years the level of education has considerably risen, whilst the number of schools has steadily grown.

As a result of the improvement of the training of village teachers the quality of village education has improved, which is reflected in the great increase in the number of Papuan pupils at the continuation schools (1951: 880; 1959: 2,531).

Efforts are directed towards a further improvement of village education by causing the three-year village school to expand into a six-year one. For the time being the educational level in the countryside is not such that a general six-year village education is feasible. A factor hampering this is also the highly scattered nature of the population, who are spread thinly in small groups throughout the Territory.

The more gifted pupils of village schools have the possibility of receiving more advanced education at the three-year continuation school, which opens for them the doors to continued education, technical education and various Government courses.

The continuation schools are as a rule situated at a considerable distance from the village schools from which they draw their pupils, so that a boarding establishment is attached to this type of school.

In more densely populated regions, where several villages lie close together, six-year village education can best be realized by founding central village schools, which offer the pupils of the surrounding village schools a chance to continue their studies (4th, 5th and 6th class). The first trial in this direction was made by the Government in 1958 by the foundation of a central village school on Lake Sentani (Hollandia subdivision).

In the urban centres primary education offers a six-year course. There are two types of six-year primary schools, the primary school A with Dutch as the language of instruction and the primary school B, where Dutch is a subject in the first years and the language of instruction from the third year onwards. The distinction is not based on racial differences but solely on the language which the pupils speak at home. The primary school A is meant for pupils from a Dutch-speaking environment and the primary school B for children from a non-Dutch-speaking one. However, non-Dutch children also have access to the primary school A. For instance, 14 Papuan boys and girls are now attending the primary schools A (1958: 10).

Primary education in the urban centres has also been greatly expanded in recent years. The number of primary schools A rose from 9 in 1951 to 15 in the year under review, and the primary schools B increased in number during the same period from 7 to 18.

The possibilities of attending courses of continued education have likewise been increased. The number of intermediate secondary schools rose in 1958 by three to a total of four; further expansion in the coming years is in preparation. The number of advanced primary schools increased during 1959 from two to three.

There is one secondary school, the private secondary school at Hollandia, the leaving certificate of which has been made equivalent to that of secondary schools of the same category in the Netherlands.

Of the total number of pupils at the schools for continued and secondary education (750), 223 are Papuans; 11 Papuans attend the secondary school.

There are many possibilities of receiving technical and vocational education. Apart from the course for village schoolteachers mentioned above (four schools) there are four junior technical
schools and a large number of Government courses such as those at the Elementary School of Navigation, those of the Department of Public Health, the Post Office and many others (see Appendix XLII).

Much attention is paid to the training of village teachers. Village teachers have now reached a qualitatively satisfactory level; during the year under review the last unqualified teachers in subsidized education were replaced by qualified ones. In the course of the years training has been so expanded that the turnover as a result of old age and ill-health can be satisfactorily dealt with.

The experimental teachers' training embarked on by the Baptist Foreign Mission in the Baliem Valley (Tiom) in 1957, in which a number of continuation school graduates from the coastal regions are trained as village teachers for the schools to be opened in that valley, with Ndani as the language of instruction, is working quite well, as is the experiment started in 1956 by the Catholic Mission on the Wissel Lakes, in which the first teaching at a number of village schools is given in the language of the region, after which Dutch is adopted as the language of instruction. For the "Baliem experiment" the Missionary Society of the Netherlands Reformed Church made available one of its general school managers to the Baptist Foreign Mission. A third educational experiment was started during the year under review at Wamena, likewise in the Baliem Valley, by the Catholic Mission. At the village school opened there in November 1959 Dutch is used from the start as the language of instruction.

2. THE SPREAD OF EDUCATION

The nature and the spread of education are mainly determined by the density of population, the extent to which the country has been opened up and the degree of development of the various groups of the population. As a result of these factors, the schools are mainly to be found along the coasts, with steadily deeper penetrations and ever-expanding enclaves in the interior, as in Moejoe, Mappi, Asmat and the patrol area of Upper Digoi in the south, the Wissel Lakes and the Baliem Valley in the Central Highlands, the Vogelkop in the west and Nimboran and Waris in the north.

Survey of the number of village schools

<table>
<thead>
<tr>
<th>Division</th>
<th>Subsidized</th>
<th>Total subsidized</th>
<th>Public B</th>
<th>Unsubsidized</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Hollandia</td>
<td>2</td>
<td>60</td>
<td>19</td>
<td>81</td>
</tr>
<tr>
<td>Geelvink Bay</td>
<td>7</td>
<td>130</td>
<td></td>
<td>137</td>
</tr>
<tr>
<td>Central New Guinea</td>
<td>15</td>
<td>7</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>West New Guinea</td>
<td>1</td>
<td>92</td>
<td>12</td>
<td>105</td>
</tr>
<tr>
<td>Fak-Fak</td>
<td>7</td>
<td>64</td>
<td>18</td>
<td>89</td>
</tr>
<tr>
<td>South New Guinea</td>
<td>2</td>
<td>96</td>
<td>68</td>
<td>166</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>457</td>
<td>124</td>
<td>600</td>
</tr>
<tr>
<td>1958</td>
<td>17</td>
<td>420</td>
<td>148</td>
<td>585</td>
</tr>
</tbody>
</table>

(For an explanation of what is meant by village schools A, B and C see Section C, "Structure of the Educational System".)

The marked decline in the number of unsubsidized schools in respect of 1958 is caused by a narrower interpretation of the legal concept "unsubsidized school".

The tiny mission "schools" in as yet unchristianized areas, where young people are taught about the Gospel, are no longer considered to be "unsubsidized schools". This missionary work is so essentially religious that the authorities do not wish to exercise any form of supervision of it, with the result that there is no obligation to register these "schools". They should therefore be kept outside the scope of education, which was, however, not done in former years.

Continuation schools

In the year under review the mixed continuation school at Epouso (Wissel Lakes) of the Apostolic Vicariate of Hollandia was subsidized. Of the 20 continuation schools, 8 are solely for boys, 7 exclusively for girls and 5 mixed.
The Missionary Society of the Netherlands Reformed Church manages 5 continuation schools for boys (one of which is a double school), and 4 for girls; the Molucca Protestant Church has a boys' continuation school and a continuation school for girls under its management, as does the Baptist Mission Council. The Apostolic Vicariate of Hollandia runs three mixed continuation schools. The Apostolic Vicariate of Merauke manages 1 boys' continuation school, 1 girls' continuation school and 2 mixed continuation schools.

The distribution of these schools among the administrative divisions is as follows:

<table>
<thead>
<tr>
<th>Division</th>
<th>boys' continuation school</th>
<th>girls' continuation school</th>
<th>mixed continuation school</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hollandia</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Geelvink Bay</td>
<td>3 *)</td>
<td>2</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Central New Guinea</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>West New Guinea</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Fak-Fak</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>South New Guinea</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
<td><strong>7</strong></td>
<td><strong>5</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

*) of which one is a double school.

Central village school

There is one public mixed central village school, situated on Lake Sentani (Hollandia subdivision). The school was opened in 1958 and now has 80 pupils.

Training schools for village teachers

The number of these schools has remained constant in respect of 1958 (4, incl. a double one). The schools are established at Seroci (1, with a complete parallel department, run by the Missionary Society of the Netherlands Reformed Church), Fak-Fak (2, one run by the Apostolic Vicariate of Hollandia and one by the Molucca Protestant Church) and Merauke (Apostolic Vicariate of Merauke). The number of registered pupils in the year under review was 438 (1958: 432). In the leaving examinations in July 1959 129 pupils were awarded their diploma.

Teachers' training schools

There are four subsidized teachers' training courses, viz. one combined course of the Missionary Society of the Netherlands Reformed Church and the Molucca Protestant Church, two of the Apostolic Vicariate of Hollandia and one of the Apostolic Vicariate of Merauke.

Junior technical schools

There are four junior technical schools, namely 2 at Hollandia (1 run by the Missionary Society of the Netherlands Reformed Church, 1 public), 1 at Biak (of the Missionary Society of the Netherlands Reformed Church) and 1 at Merauke (of the Apostolic Vicariate of Merauke).

Intermediate secondary schools

There are now four intermediate secondary schools, viz.:

at Hollandia: 1 of the Missionary Society of the Netherlands Reformed Church, 1 of the Apostolic Vicariate of Hollandia

at Manokwari: 1 of the Missionary Society of the Netherlands Reformed Church

at Sorong: 1 public.

The total of pupils at these schools increased to a marked extent. At the end of the year under review it was 273, of whom 196 were Papuans (1958: 205, of whom 155 were Papuans).
Primary schools A and B

The number of public and subsidized six-year primary schools is now 33, viz. 15 primary schools A and 18 primary schools B. The total number of pupils at these schools is 2,423 (1958: 2,122) and 4,368 (1958: 3,576) respectively.

Survey of primary schools A and B

<table>
<thead>
<tr>
<th>Location</th>
<th>Public</th>
<th>Subsidized</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Hollandia</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Sami</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Seroei</td>
<td>-</td>
<td>-</td>
<td>1 *)</td>
</tr>
<tr>
<td>Biak</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Manokwari</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Sorong</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Temboeni</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Fak-Fak</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Merauke</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Tanah-Merah</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>4</td>
<td>6 *)</td>
</tr>
</tbody>
</table>

*) A primary school A department is attached to the primary school B at Seroei.

The NNGPM runs a non-subsidized primary school A at Sorong.

Advanced primary school and secondary school

There are three public advanced primary schools, viz. at Hollandia, Manokwari, and, since the year under review, at Biak as well. Since 1957 the advanced primary school at Hollandia has had a transitional class. The purpose of this is to render possible for pupils of the primary schools B and of the continuation schools the transition to advanced primary schools and the secondary school, especially as regards the necessary command of Dutch.

The private secondary school at Hollandia is equivalent to a Dutch secondary school of the same category.

3. PUBLIC AND SUBSIDIZED PRIVATE EDUCATION

A survey of schools managed by the Government and by the various school boards is given in Appendix XL.

Public education comprises the following:
a. Village schools 2
b. Central village school 1
c. Primary schools B 4
d. Primary schools A 9
e. Intermediate secondary school 1
f. Advanced primary schools 3
g. Junior technical school 1

This list does not include the vocational training establishments that do not come under the inspectorate of education, such as the administrative institute and the school of administration, the police school, the elementary school of navigation, the agricultural school and the vocational training courses for the various Government services.

Subsidized education comprises:
a. Village schools 600
b. Continuation schools 20 (1 school has a complete parallel department)
c. Primary schools B 14
d. Primary schools A 6
e. Intermediate secondary schools 3
f. Secondary school 1
g. Junior technical schools 3
h. Training schools for village teachers 4 (1 school has a complete parallel department)
i. Teachers' training schools 4

4. UNSUBSIDIZED EDUCATION

Appendix XLI gives the data on unsubsidized education.

Both the Protestant and the Catholic Mission are extremely active in the areas newly brought under administration. This results among other things in the opening of small mission schools, which are important for the introduction and propagation of Christianity and civilization.

These little schools are in the initial stages directed solely towards accustoming the children to some measure of discipline and regularity. They learn to play, sing, play the flute and work in the garden together, whilst at the same time simple religious instruction is given. Gradually the pupils can be introduced to reading, writing and arithmetic.

In a more advanced stage the schools ultimately reach the level required for subsidization, i.e. for recognition as a full school.

If the other conditions are then complied with — such as a school building and teacher's house to be constructed by the population — the school can be registered and subsidized as a village school C.

During the year under review 16 such schools qualified as village schools.

If — in contrast to previous reports — those mission schools which are purely centres of catechization are left out of consideration, there are 261 unsubsidized village schools, all managed by one of the following school boards: the Missionary Society of the Netherlands Reformed Church (ZNHK), the Molucca Protestant Church (MPK), the Baptist Mission Council (DZR), the Christian and Missionary Alliance (CAMA), the Protestant Molucca Mission (ZPM) and the Apostolic Vicariate of Hollandia. In all these schools have 6,823 pupils, 4,363 of whom are boys and 2,460 girls.

The 271 teachers at these schools are almost all Papuans. Apart from the occasional exception, none of them is qualified to teach. They are for the greater part trained at the (Protestant) Evangelist School at Ransiki or at the (Catholic) Catechist Schools at Kepi and at Kenandega (Waris area).

The Evangelical Church also manages in collaboration with the ZNHK a course for Papuan ministers of religion (Theological School), which was transferred from Seroei to Hollandia during the year under review. There is also a course for ministers at Seroei.

The Apostolic Vicariate of Merauke runs three courses of a religious nature, viz. a course for catechists at Kepi, the Junior Seminary at Merauke and a course for nuns, also at Merauke. This Vicariate also provides three domestic science courses at Kepi, Mindiptarah and Kimaan.

The Apostolic Vicariate of Hollandia runs two junior technical courses, at Kokono (Mimika) and Epouto (Wissel Lakes) respectively. On these courses boys who have attended a village school are trained for two years in the use of simple carpentry tools. It also runs three domestic science courses for girls (at Fak-Fak, Kokono and Epouto) which last three years and are open to girls who have attended a village school.

The primary school B at Sentani (Hollandia), which was founded by the Apostolic Vicariate in 1958, was transferred during the year under review to the ZNHK. This school is now subsidized as a "branch" of the primary school B of this society at Hollandia-Joka.

The CAMA runs a continuation school at Tigi (Wissel Lakes) which cannot as yet qualify for subsidization, since it does not satisfy the requirements laid down in this respect by law.

The NNGPM runs its own primary school A and two infant schools at Sorong.

The Chinese section of the population often prefers its own schools, with Chinese as the language of instruction. There are now nine Chinese primary schools, viz. at Hollandia, Biak (2), Sorong-Doom, Fak-Fak and Merauke (2), run by Chinese societies, and one each at Sorong and Manokwari, managed by the Apostolic Vicariate of Hollandia, in collaboration with the local Chinese societies. The total number of pupils at these six-year schools is 357, of whom 194 are boys and 163 girls.

The St. Vincent Foundation manages seven infant schools, viz. 2 at Hollandia, 3 at Sorong, 1 at Manokwari and 1 at Biak.

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The Foundation for Protestant Education runs three infant schools, viz. 2 at Hollandia and 1 at Manokwari.

The Parents’ Association at Biak runs an infant school there.
The Christian Workers Union of Netherlands New Guinea (Persekding) manages a Papuan infant school at Hollandia.

The Government grants an endorsing subsidy to seven infant schools, and also to various junior technical and domestic science schools.

The following survey gives a picture of the development of unsubsidized education in 1959.

<table>
<thead>
<tr>
<th></th>
<th>number of schools at end of 1958</th>
<th>added in 1959</th>
<th>taken off list because: removed or closed down</th>
<th>subsidized</th>
<th>number of schools at end of 1959</th>
<th>remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>infant education</td>
<td>14</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>14</td>
<td>7 schools with endorsing subsidy</td>
</tr>
<tr>
<td>village education</td>
<td>461</td>
<td>–</td>
<td>184 *)</td>
<td>16</td>
<td>261</td>
<td></td>
</tr>
<tr>
<td>continuation education</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>primary education</td>
<td>9</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>continued education</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>vocational training</td>
<td>13</td>
<td>1</td>
<td>6</td>
<td>–</td>
<td>8</td>
<td>endorsing subsidy (Baliem experiment)</td>
</tr>
<tr>
<td>training of village teachers</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>training courses of a religious nature</td>
<td>6</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

*) removed because of a narrower interpretation of the concept "school".

5. VOCATIONAL TRAINING NOT COMING UNDER THE INSPECTORATE OF EDUCATION

Almost all vocational training courses not coming under the Inspectorate of Education are vocational training courses in the narrower sense of the word, often in fact Government courses. Exceptions are the practical agriculture courses at Seroei and at Kepi and the cooperative course. For further details of the current courses see Appendix XLII.

Full-time day schools are the Institute for the Training of Officials for the Administrative Service in Netherlands New Guinea, the Training School for Indigenous Administrative Officials, the Central Training School of the General Police, the Elementary School of Navigation, the Agricultural School (all at Hollandia) and the practical course in agriculture at Seroei which has already been mentioned.

B. ADMINISTRATION OF EDUCATION

1. THE ADMINISTRATION OF EDUCATION

a. During the year under review a reorganization was effected by which firstly the Popular Information Service was detached from the Department of Cultural Affairs and attached to the Department of Internal Affairs, and secondly the Netherlands New Guinea Broadcasting System was placed under the Department of Cultural Affairs. Thirdly, the internal organization of the Department of Cultural Affairs was revised.

The general management now comprises the following three branches:

I. General Affairs,
II. General Inspectorate,
III. Educational Matters.

The duties of the GENERAL AFFAIRS branch include the following:

1. Making the necessary regulations in the field of education;
2. activities of non-educational nature, such as statistical, financial and staff matters, promoting scientific research, cultural matters and public worship, and matters concerning the Broadcasting System.

84
The **GENERAL INSPECTORATE** Branch is concerned with all teaching given at public, subsidised and unsubsidised educational institutions, both general education and professional and vocational education.

The **EDUCATIONAL MATTERS** Branch has the task of determining the direction which will have to be followed by education. This therefore amounts to planning and research.

*a. Inspection coming under the General Inspectorate*

The inspectorate supervises compliance with legal provisions and the standard of education.

There are four inspection districts; it is the intention to increase their number to 5 as soon as this is materially possible.

At present the four existing districts coincide with the following administrative divisions:

I. Hollandia

II. Geelvink Bay and Central New Guinea

III. West New Guinea and — until a fifth district can be set up — Fak-Fak

IV. South New Guinea.

This coincidence means that each resident-head of the division has his own educational adviser.

Each district is in the charge of an inspector of education, who is aided by school supervisors for the inspection of village education. There are eight such supervisors, one of whom is attached to the General Inspector with the rank of chief supervisor. One of the other school supervisors is a Papuan.

*b. Administration of education by local authorities does not occur*

*c. The share of the missionary societies in education and their relations with the Government*

The share of the missionary societies in education is particularly great. Reference may be made to the survey given under A.3.

The societies have their own school administration, which is responsible for compliance with legal provisions and for the standard of the education given.

With regard to the supervision of private education the Government acts exclusively in consultation with the general school administration of the organization concerned. The Missionary Society of the Netherlands Reformed Church has a general school manager, stationed at Hollandia. District school managers have been stationed at Ifar (1958: Joka and Genjem), Sami, Biak, Seroei, Manokwari (1958: Miei and Manokwari) and Saoka.

(The second general school manager mentioned in the 1957 Report has been seconded by the ZNKH to the Baptist Foreign Mission for the Balem experiment described above.)

The general school administration of the Molucca Protestant Church, of the Baptist Mission Council and, since the year under review, of the Christian and Missionary Alliance has been entrusted to the general school management of the ZNKH.

The Molucca Protestant Church district (including the church's schools in South New Guinea) is under the direct management of a district school manager stationed at Fak-Fak, the district of the Baptist Mission Council is administered by a district school manager stationed at Teminaboan and the district of the Christian and Missionary Alliance is administered by a district school manager at Enarotali (Wissel Lakes).

The Apostolic Vicariate of Merauke has a general school manager at Merauke and district school managers at Wendo, Moeting, Okaba, Kimaan, Mindipranah, Kepi, Tanab Mera and Agats.

The Apostolic Vicariate of Hollandia has a general school manager at Hollandia, and district school managers at Kenandega, Enarotali, Sorong, Foegs, Steenkool, Fak-Fak and Kokomo.

The school administration of the Protestant Molucca Mission is located at Merauke.

The Protestant Education Foundation, which concerns itself particularly with the education of European children, is located at Hollandia.

The Private Secondary School Foundation, in which the Catholic Mission and the Evangelical Church cooperate, is established at Hollandia.

The costs of subsidized private education are fully reimbursed by the Government, whilst the missionary societies are moreover repaid a considerable percentage of their administration costs.
d. Participation of Papuans in the administration of education

The number of Papuans teaching at village schools in the year under review was 600 male and 10 female teachers (1958: 526 and 8). At the continuation schools these numbers were 12 and 6 respectively (1958: 16 and 2), and at the primary school B 12 and 5 (1958: 10 and 3), whilst 1 Papuan teacher gave instruction in 1959 on the teachers' training course in Merauke.

In total, and excluding the Papuan teachers in unsubsidized education, 625 male and 21 female Papuan teachers were employed in education in 1959 (1958: 552 and 13). The school supervisors include one Papuan.

e. School inspection

Reference may be made to what has been stated under a. of this section, Inspection. The private schools are further under the supervision of the school board concerned. In the non-educational field supervision is exercised by officials of the administrative service, whilst officials of Waterways and Construction, of Public Health and of Finance particularly supervise the material condition of the schools, health, and correct management and spending of the grants respectively.

2. EXPENDITURE ON EDUCATION

I. Government expenditure in 1959

a. Normal expenditure:

General Management and Inspectorate

<table>
<thead>
<tr>
<th>Staff</th>
<th>f.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>f. 62,235.84</td>
</tr>
<tr>
<td>Total</td>
<td>f. 463,468.33</td>
</tr>
</tbody>
</table>

Education of the Population

<table>
<thead>
<tr>
<th>Staff</th>
<th>f. 3,809,459.75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>f. 1,856,632.55</td>
</tr>
<tr>
<td>Total</td>
<td>f. 5,666,091.55</td>
</tr>
</tbody>
</table>

Western Education

<table>
<thead>
<tr>
<th>Staff</th>
<th>f. 2,054,060.16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>f. 488,942.02</td>
</tr>
<tr>
<td>Total</td>
<td>f. 2,543,002.18</td>
</tr>
</tbody>
</table>

Vocational Education

<table>
<thead>
<tr>
<th>Staff</th>
<th>f. 242,985.32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>f. 241,858.82</td>
</tr>
<tr>
<td>Total</td>
<td>f. 484,844.14</td>
</tr>
</tbody>
</table>

b. Capital expenditure:

| f. 1,722,274.03 |

cc. Total costs of education:

<table>
<thead>
<tr>
<th>Staff</th>
<th>f. 6,507,736.97</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>f. 2,649,669.23</td>
</tr>
<tr>
<td>Capital expenditure</td>
<td>f. 1,722,274.03</td>
</tr>
<tr>
<td>Total</td>
<td>f. 10,879,680.23</td>
</tr>
</tbody>
</table>

Survey of the total costs of education over the years 1950 to 1959:

1950 : f. 3,080,332.85
1951 : f. 3,114,000.85
1952 : f. 3,855,900.85
1953 : f. 4,128,842.85
1954 : f. 5,926,202.85
1955 : f. 6,555,010.85
1956 : f. 7,250,041.85
1957 : f. 9,840,345.85
1958 : f. 9,454,617.85
1959 : f. 10,879,680.85
The above figures incorporate only the expenditure on education chargeable to the budget of the Department of Cultural Affairs. They do not include the expenditure relating to the vocational training courses coming under other departments.

For the average costs per pupil per year for each type of school separately see Appendix XL. The amounts given in this appendix do not include the indirect costs of staff, the costs of the inspectorate, depreciation on the capital value of equipment and the costs of new buildings.

II. Expenditure by the private organizations in 1959

<table>
<thead>
<tr>
<th>Organization</th>
<th>Cost (f.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apostolic Vicariate of Merauke</td>
<td>95,000</td>
</tr>
<tr>
<td>Apostolic Vicariate of Hollandia</td>
<td>190,000</td>
</tr>
<tr>
<td>ZNHK/MPK/DZR/CAMA</td>
<td>210,000</td>
</tr>
<tr>
<td>St. Vincent Foundation</td>
<td>25,000</td>
</tr>
<tr>
<td>NNGPM</td>
<td>330,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>850,000</strong></td>
</tr>
</tbody>
</table>

C. STRUCTURE OF THE EDUCATIONAL SYSTEM

In education no distinction according to race is made. Every type of school is open to anyone who meets the qualifications for entry.

- **Primary education**
  - Village school (3-year)
  - Continuation school (3-year)
  - Central village school (3-year)
- **Professional and vocational education**
  - Junior technical school (3-year)
  - Training school for village teachers (3-year)
  - Teachers training course (3-year)
- **General education**
  - Intermediate secondary school (4-year)
  - Advanced primary school (4-year)
  - Secondary school (5-year)

The village school is the basis of the educational system in Netherlands New Guinea, whose inhabitants for the greater part live in the country.

There are three types of village schools, viz.

- The three-year village school C
- The three-year village school B
- The four-year village school A.

Teaching at the village schools C, which are mainly located in the less developed regions, lays more stress on knowledge by the pupils of their own environment, and also on singing, music, gardening and handicrafts, than on education in the three R's. Gradually the stress is shifted towards the latter subjects, as a result of which in due course the school can be converted into a village school B.

The village school A is meant for those areas where development is most advanced. The fourth class of this school serves above all to ensure that functional use is made of the subject-matter taught in the preceding three years. The ultimate aim is to expand the village school A into a six-year village school. The central village school, such as that at Sentani, is one of the forms envisaged for the realization of this.

At present the village school B is the most common type.

The continuation school, which follows on the village school B, has a quite individual character. It serves to train more gifted pupils and to prepare them for continued education and vocational training.

The regulation staff of the three-year continuation school consists of three Dutch teachers and one village teacher or graduate of the teachers' training schools. As the continuation school is attended by pupils from a large "catchment area", a boarding establishment is attached. It is not the intention that the continuation school should become the general superstructure of the village.
school. Teaching at the girls' continuation school has a twofold function; it is general, but at the same time makes allowance for the future function of the woman in the family and in the community.

The three-year central village school, the first of which was opened by the Government in 1958 in the vicinity of Hollandis, is an experiment. Like the continuation school, its aim is to extend village education to 6 years and thus to complete it. This type of school is possible solely in more densely populated regions, where the surrounding villages supplying the pupils lie at what is for children a short distance from the school. This school therefore has no boarding establishment, in contrast to the continuation schools. With the introduction of this type of school a step has been taken on the path to complete six-year village education.

The primary school A, which is the equivalent of the primary school in the Netherlands, is meant for the Dutch-speaking part of the urban population.

The primary school B is meant for that section of the urban population for whom Dutch is not the everyday language. Teaching begins in Malay, Dutch being a subject from the first year. As soon as possible — in any case from the third year — Dutch becomes the language of instruction. Education at the primary school B is equivalent to that given at the primary school A.

In continued education a distinction is made between the following types of schools:

The intermediate secondary school. This four-year school is meant for gifted graduates of continuation schools; pupils from primary schools B may also be admitted.

The advanced primary school is equivalent to the school of the same name in the Netherlands. The school is open to pupils who have completed the course at a primary school A. Continuation school and primary school B graduates also have access to the advanced primary school.

As mentioned above, for the pupils of the continuation school and of the primary school B the transition to the first class of the advanced primary school is as a rule too difficult, and therefore a transitional class has been opened for these graduates.

The secondary school has a curriculum equivalent to that of the same category of school in the Netherlands. The school has now developed into a five-year secondary school. Entry is via an entrance examination. It is the intention to make this school a six-year one.

The training school for village teachers gives a three-year course. Much depends on this course, since the quality of education is determined by the quality of the teacher.

The curriculum is adapted to modern ideas, considerable stress being laid on the practice of teaching. An additional member of the teaching staff has the task of acquainting himself with the education being given at the village schools and of furthering the skill of village teachers. In this way the training school stays in contact with its ex-pupils and thus also with the population for whom it is training the teachers.

A boarding establishment is attached.

The teachers’ training course gives a three-year continued training of village teachers. Graduates of the school are placed in the continuation schools and the primary schools B to attend to teaching in the lower classes.

The junior technical school is meant for pupils who have received six years' primary education. The school is two-year and consists of a metal-working and/or a woodworking department.

There are three junior technical schools run by the Catholic and Protestant Mission; these are specially intended for Papuan pupils from the continuation schools and from the primary schools B. There are boarding establishments attached to these schools. There is one public junior technical school.

Education for women and girls

With the exception of seven girls' continuation schools, there are no separate schools for the general education of girls; all other schools, except the boys' continuation school, are open to both girls and boys.
Survey of the number of girl pupils at the various types of schools

<table>
<thead>
<tr>
<th></th>
<th>Papuan girls</th>
<th>Non-Papuan girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Village schools</td>
<td>12,226 (11,122) *)</td>
<td>316 ( 199)</td>
</tr>
<tr>
<td>2. Continuation schools and central village school</td>
<td>823 ( 749)</td>
<td>45 ( 41)</td>
</tr>
<tr>
<td>3. Primary schools B</td>
<td>1,039 ( 814)</td>
<td>895 ( 803)</td>
</tr>
<tr>
<td>4. Primary schools A</td>
<td>9 ( 5)</td>
<td>1,163 (1,028)</td>
</tr>
<tr>
<td>5. Intermediate secondary school</td>
<td>14 ( 10)</td>
<td>17 ( 14)</td>
</tr>
<tr>
<td>6. Advanced primary school</td>
<td>5 ( 4)</td>
<td>173 ( 129)</td>
</tr>
<tr>
<td>7. Secondary school</td>
<td>- ( -)</td>
<td>53 ( 39)</td>
</tr>
<tr>
<td>8. Training school for village teachers</td>
<td>25 ( 22)</td>
<td>18 ( 16)</td>
</tr>
<tr>
<td>9. Teachers' training course</td>
<td>1 ( 1)</td>
<td>2 ( 1)</td>
</tr>
<tr>
<td></td>
<td>14,142 (12,727)</td>
<td>2,691 (2,270)</td>
</tr>
</tbody>
</table>

*) The figures between brackets relate to the year 1958.

This table does not include pupils on courses training for a special profession, such as the nursing courses.

At the girls' continuation schools domestic science training is given. Further, there are domestic science schools run by the Apostolic Vicariate of Hollandia and domestic science courses given by the Apostolic Vicariate of Merauke. This private domestic science training is partially subsidized.

In various villages and urban centres older girls and women furthermore receive domestic science training and sewing lessons from wives of village teachers, wives of ministers of religion, nuns and wives of local officials. There are also women's clubs which concern themselves with simple activities, such as sewing, needlework and other handicrafts. Help is received in running these clubs from ex-pupils of girls' continuation schools.

D. ADULT EDUCATION

In various regions of Netherlands New Guinea illiteracy is of little significance now, viz. in those regions where the children have already been able to attend school for two or three generations.

The situation is the most favourable in the subdivisions of the Schouten Islands, Japen, Wandammen, the northern districts of the subdivision of Hollandia, and the subdivisions of Nimboran, Sami, Sorong and Manokwari. In the other coastal regions of the divisions of Hollandia, Geelvink Bay, West New Guinea and Fak-Fak illiteracy does not form a problem dither, since in these areas there have been a large number of village schools for decades now.

In the less developed areas attempts to combat illiteracy among the older people have so far not met with much success, since these people are still too firmly attached to the old ideas and hardly, if at all, open to new ones, whilst moreover there is no immediate benefit to be gained from their being able to read and write at present in these regions. In such areas village education is in a certain sense a form of combating of illiteracy, since at the subsidized village schools C the age limit has been set very high.

Consequently the combating of illiteracy has not assumed a mass nature, but is rather local and incidental. The initiative is often taken by private organizations and persons. A striking feature is that the desire to learn to read and write is the strongest in those places and regions where the number of illiterates is small. Here illiteracy forms a definite handicap. The activities in this field proceed to a considerable extent from the Papuan community itself.

In the year under review subsidies were granted to 19 courses.


There is also considerable interest among the adults in the more developed areas in courses in Dutch, which courses are likewise supported by the authorities. In the year under review there were 18 such courses.

The percentage of illiterates varies greatly from region to region of the area brought under administration. On estimate it varies in the coastal regions of the north coast and the west coast from 15 to 40%, and in the other areas brought under administration from 30 to 70%.
Popular information

Popular information is provided by the Popular Information Service, which has come under the Department of Internal Affairs since mid 1959.

It is the first place directed towards teaching the Papuans something about themselves and their own country. Further, information is given when Government measures are taken in the fields of administration, public health, agriculture, stock-breeding and fisheries and in the cultural field. This work is done in close collaboration with the departments concerned.

Use is made of radio, films, film strips and slides in disseminating information. Furthermore, booklets and periodicals are published and lectures held.

Provisions of reading matter

The Popular Information Service publishes and distributes free of charge a weekly, entitled "Pangantara". Furthermore an illustrated monthly, "Triton", is published.

The weekly, Pangantara, has a circulation of 7,000; it is bilingual, Malay and Dutch, and contains reports from home and abroad.

The illustrated monthly "Triton" contains articles from home and abroad, short stories, a section for young people, a sports section and articles about public health, agriculture, etc. It can be obtained only on subscription. It has 1,000 subscribers.

In the field of popular reading matter numerous booklets and brochures have been published in recent years, in all about 80. In the year under review 18 new ones were published, with a total number of 28,750 copies printed. There are now 38 libraries for popular reading matter and 17 agencies.

In the Schouten Islands subdivision a local weekly, "Teropong Kampong", is published under the auspices of the Department of Internal Affairs.

Auditory information

The Popular Information Service provides a daily radio broadcast for the Papuan population. It runs these programmes itself.

The programme includes information on medico-hygienic and agricultural topics, broadcasts by the Protestant and Catholic Missions and by the Moslem group, and also broadcasts by the trade unions.

During the year under review the feature "Spoken Letter from the Netherlands" continued to be broadcast, together with, "Spoken Letter from Port Moresby"; furthermore, greetings programmes were broadcast as a link between workers employed in the capital, Hollandia, and their families in the interior.

Visual information

During the year under review 290 film evenings were held at various places, at which a total of 250 films were shown.

In collaboration with the Department of Public Health information was given on a total of 45 days by means of slides and other visual aids on behalf of malaria control.

E. SCHOOL BUILDINGS

The village schools and the teachers' houses attached are built by the village community concerned.

The construction of all other subsidized schools is financed by the Government, including the boarding establishments and teachers' houses belonging to certain schools.

In the year under review a total of f. 1,722,274 was spent on construction, extensions and major repairs.

F. YOUTH ORGANIZATIONS

Sporting activities by young people play an important part in club life.

Further, the Scouts form the largest youth organization. There are 1,500 members, and this number is still steadily increasing. In the year under review a Papuan group of Scouts from Netherlands New Guinea attended a world jambóree for the first time, namely the Tenth World Jamboree at Manila.
In the urban centres there are youth clubs, which are associations for spare-time activities. At such clubs instruction is given in handicrafts and needlework.

At Hollandia a number of clubs for Papuan girls have been founded. As a basis for the activities of these clubs, use is made of the setup of the rural girls' clubs in the Netherlands, since this form of youth work tallies closely with the requirements of Papuan girls. Owing to the simple structure of this form of youth work it may be expected that it will soon be possible for older Papuan girls to take charge of such clubs.

In practically every village there are associations which engage in flute playing, singing and sport. Youth work is done in particular via the churches.

G. CULTURAL INSTITUTIONS

Under the Department of Social Affairs come public lending libraries at Hollandia, Biak, Manokwari, Sorong-Remo, Fak-Fak and Merauke. Various smaller places are supplied with reading-matter by these public libraries.

The Office of Native Affairs of the Department of Internal Affairs has a scientific library containing mainly works in the field of social science.

Moreover, all the primary schools and continuation schools, advanced primary schools, intermediate secondary schools, training schools for village teachers and the secondary school have school libraries.

For further details see Appendix XLIV.

H. PROTECTION OF NATURE

The existing legislation relating to the protection of nature underwent no change in the year under review.

I. THE DEVELOPMENT OF EDUCATION

A complete survey of the state of education financed by the Government in 1959 is given in Appendix XL. A further elucidation of this survey follows.

Village schools

The number of public and subsidized village schools, which was 587 in 1958, rose during the year under review to 602.

The growth of village education is not only quantitative but, having regard to the increase in the number of village schools B from 422 in 1958 to 459 in the year under review, also qualitative.

The intensification of the supervision of education, both on the part of the missionary societies and by the Government, the improvement of the training of village teachers and the replacement of unqualified teachers by qualified ones – all village teachers in subsidized education are now qualified – are the principal factors that have brought about the improvement in the level of education.

The number of pupils at the village schools in the year under review was 28,156 (1958: 26,067), the number of teachers 967, of whom 610 (63%) were Papuans (1958: 914, of whom 534 (58%) were Papuans).

Continuation schools and central village school

These schools number 21 (1958: 20), this total consisting of 8 boys', 7 girls' and 5 mixed continuation schools and 1 mixed central village school.

Boarding establishments financed by the Government are attached to the continuation schools.

The parents of the pupils contribute towards the boarding costs if they are capable of doing so.

The total number of pupils at the continuation schools and the central village school was 2,627 (1958: 2,380).

The number of teachers at these schools in the year under review was 84, of whom 59 male and female teachers were Dutch (in 1958: 88 and 62).

Primary schools

The number of primary schools B grew in the year under review to 18.

The number of pupils in the year under review was 4,368, i.e. 800 more than in 1958, and more than three times the figure for 1952.
In 1952 the number of Papuan pupils of these schools was 34% of the total; by the year under review this figure had risen to 55%.

The number of teachers was 121, of whom 80 were Dutch male and female teachers (in 1958: 105 and 72).

The number of primary schools A in the year under review was 15, counting the primary school A department of the primary school B run by the ZNHK at Seroei.

The number of pupils in the year under review was 2,423 (in 1958: 2,122).

The number of teachers grew from 35 in 1952 to 75 in 1959.

**Continued education**

This consists of the following:

3 Government advanced primary schools: one in Hollandia, one in Manokwari, one in Biak.

4 primary secondary schools (2 of the ZNHK at Hollandia and Manokwari; 1 of the Apostolic Vicariate of Hollandia; 1 of the Government at Sorong).

There is one school for secondary education, the private secondary school at Hollandia.

The total number of pupils at these schools in the year under review was 750 (1958: 555), the number of teachers was 46 (1958: 38).

**Training schools for village teachers**

The number of courses remained the same (4). The number of pupils in the year under review was 438 (1958: 432), and the number of teachers was 18, all Dutch.

In the year under review the teachers' training courses of the Apostolic Vicariate of Hollandia and of the MPK were concluded by an examination. In all 14 students were awarded the diploma.

The course given by the Apostolic Vicariate of Meramee which started in 1957 with 6 students will be concluded by an examination in 1960.

In the year under review the Apostolic Vicariate of Hollandia began a new course with 6 students.

**Vocational training**

There are four junior technical schools.

The number of pupils in the year under review was 271 (1958: 322).

The teachers numbered 18 (1958: 19).

**Number of Papuan pupils**

The total number of Papuan pupils at the above schools was:

<table>
<thead>
<tr>
<th>Year</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952</td>
<td>15,602</td>
<td>10,815</td>
<td>26,417</td>
</tr>
<tr>
<td>1953</td>
<td>15,431</td>
<td>11,657</td>
<td>27,088</td>
</tr>
<tr>
<td>1954</td>
<td>15,506</td>
<td>11,354</td>
<td>26,860</td>
</tr>
<tr>
<td>1955</td>
<td>15,446</td>
<td>11,718</td>
<td>27,164</td>
</tr>
<tr>
<td>1956</td>
<td>16,143</td>
<td>12,130</td>
<td>28,273</td>
</tr>
<tr>
<td>1957</td>
<td>16,988</td>
<td>12,401</td>
<td>29,389</td>
</tr>
<tr>
<td>1958</td>
<td>17,828</td>
<td>12,727</td>
<td>30,555</td>
</tr>
<tr>
<td>1959</td>
<td>19,158</td>
<td>14,142</td>
<td>33,300</td>
</tr>
</tbody>
</table>

Placing of Papuan pupils who left continuation schools or primary schools B with a leaving certificate in the school year 1958–1959

Continuation schools

368 boys (1958: 365) and 182 girls (1958: 148) were given their leaving certificate.

63 boys (1958: 52) and 3 girls (1958: 4) went to a primary secondary school, two boys went to an advanced primary school (1958: none). 123 boys and 14 girls (1958: 123 and 8) went to a training school for village teachers; 74 boys (1958: 86) went to a junior technical school. 44 boys and 98 girls went to a course being given by the Department of Public Health (1958: 35 and 82 respectively); 24 boys and 7 girls (1958: 58 and 7) went to other Government courses (such as those given by the Agriculture and Forestry Branches, and the Post Office) and to private courses (such as those of the NNGPM). 18 girls went to help run various clubs for women and girls. The placement of 26 boys and 7 girls was unknown, whilst 10 boys and 35 girls returned to their villages after obtaining their leaving certificate. The reason why the number of girls who after continuation school do not follow any further education is proportionally so much greater than the corresponding number of boys is that the girls' continuation schools to a considerable extent give final education, directed towards the future task of the girl as a housewife.

Primary schools B

Of the 95 boys and 50 girls who were given their leaving certificates (1958: 98 and 41 respectively), 4 boys went to the secondary school (1958: 1 boy and 1 girl), 10 boys and 3 girls went to an advanced primary school (1958: 20 and 10) and 24 boys and 10 girls to a primary secondary school (1958: 22 and 13), 9 boys went to a junior technical school (1958: 5), 5 boys and 5 girls (1958: 13 and 1) to a training school for village teachers, 4 boys and 3 girls (1958: 2 and 3) went to a course organized by the Department of Public Health, and 17 boys and 7 girls went to other courses given by the authorities or private concerns (1958: 14 and 10). The placement of 22 boys and 22 girls was unknown.

In the year under review 22 Pauans studied in the Netherlands. Three of them returned to Netherlands New Guinea towards the end of 1959 after having completed their cooperative courses.

The 19 Papuans still studying in the Netherlands at the end of 1959 were attending the following courses:

- university: 1
- secondary school: 11
- agricultural course: 1
- cooperative course: 1
- technical course (technical college): 1
- nurse training: 2
- school for basket-making: 2

The study costs of six of them are paid fully, and of two of them partly by the Government, five are studying at the expense of the study fund of the Missionary Society of the Netherlands Reformed Church (Z.N.H.K.), three at the expense of the Roman Catholic Mission at Hollandia; the others are studying at the expense of their families, partly assisted by the study fund of the Z.N.H.K.

J. PUBLICITY

1. PROVISION OF NEWS, NEWSPAPERS AND PERIODICALS

At the beginning of the year under review the Office of Information and Broadcasting was abolished and the duties performed so far by this office were transferred to various departments.

A new bureau, the Government Information Bureau, was set up in the Government Secretariat. The task of this bureau is to provide information on Government policy to publicity media. The bureau drafts the daily news bulletin on behalf of the broadcasting system, and issues the "Mededelingen voor de pers" in Dutch and the "Press Releases" in English.

The Netherlands New Guinea Broadcasting System was placed under the Department of Cultural Affairs.

The Popular Information Service of the Department of Internal Affairs is responsible for the provision of news, information and broadcasts for the Papuan population.
In the Department of Internal Affairs a Visual Information Branch has also been set up. This branch has taken over the tasks in this field of the former Office of Information and Broadcasting (the making of films, photographs and other visual aids).

Since 2 January of the year under review an independent daily has been published at Hollandia, the Nieuw-Guinea Koerier (the New Guinea Courier). Publication has ceased of the stencilled newsheet published by the Government since 1952, "En hier is het Nieuws".

The Popular Information Service publishes two printed periodicals, a weekly called "Pengantara" and an illustrated monthly, "Triton". Both periodicals are bilingual.

With the collaboration of the Inland Administration the stencilled weekly "De Fak-Fak Bode" (The Fak-Fak Messenger) is published at Fak-Fak, whilst on the 1st and 15th of every month a likewise stencilled periodical, "De Lens", is published by the printers of the same name.

Furthermore, the Catholic Press Institute publishes at Hollandia a weekly newsheet printed in the Netherlands called "De Tifa".

The Netherlands New Guinea Christian Workers Union and the regional branch of the General Catholic Officials Association both publish monthly magazines.

See further Appendix XLV.

2. CINEMAS AND PROJECTION INSTALLATIONS

a. Cinemas

There are 19 permanent cinemas: 4 at Hollandia (viz. 1 at Hollandia-Inland, 1 on Ifar, 2 at Sentani), 1 in Sami, 1 on Biak, 3 at Manokwari, 4 at Sorong (2 of which are on Doom), 1 at Fak-Fak and 2 in Merauke.

b. Mobile projectors

The Popular Information Service has five projectors in use, intensively employed for disseminating information in the various villages in the interior.

c. Production of films and photographs

The production of films and photographs is the task of the Visual Information Branch of the Department of Internal Affairs. The films produced are both documentaries and newsreels. The films, photographs, slides and strips made are distributed in the Territory, in the Netherlands and in a number of foreign countries.

3. BROADCASTING

In the year under review it proved possible to put into practice the plans for the extension of the radio programme for the Papuan population. The total air time of the Netherlands New Guinea Broadcasting System has consequently been increased from 36½ to 43½ hours a week. Further extension of the Papuan radio programme is in preparation.

A start has been made with the employment of native staff in broadcasting.

The programme organizers devote great care to the informative and educational aspects of the programme. It has been found that the broadcasts are greatly appreciated by the Papuan population.

Programme policy is supervised by a Programme Advisory Committee, in which both officials and private persons, Papuans and non-Papuans, are represented.

The transmitter is at Biak and has an output of 5 kW (see Appendix XLV).