

REPORT
ON
NETHERLANDS NEW GUINEA
FOR THE YEAR 1960

*

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

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Ministry of Affairs Overseas
Ministry of Foreign Affairs

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INTRODUCTION

As a member of the United Nations the Netherlands, which is responsible for the administration of Netherlands New Guinea, has recognized the principle that the interests of the inhabitants of this Territory are all-important and has accepted the obligation to further the welfare and the material prosperity of the inhabitants of this Territory to the best of its ability within the system of international peace and security created by the Charter of the United Nations.

Under this international regime the Netherlands Government has set itself the task of assisting the inhabitants of Netherlands New Guinea to pass as quickly as possible through the successive stages of development, which will culminate in their complete freedom of choice regarding their future place in the world.

For this purpose the Netherlands Government has outlined a *policy* which will permit of the most rapid possible completion of the process that is to lead to political maturity and to the exercise of the right of self-determination.

The Netherlands Government has in this respect adopted the principle that this objective can be realized in the near future only by systematically making representatives of the population participate in it, arousing their political interest and making them aware of their responsibilities.

These ideas are reflected in a revision of the Decree for the Regulation of the Administration of Netherlands New Guinea of 1955, which was accomplished by the Act of 10 November, 1960 (Government Gazette No. 454 of 1960), and in which the legal foundations are laid for the institution of a central representative body, the New Guinea Council, which was installed on 5 April, 1961.

In this representative body, most of whose members are Papuans (23 out of the 28), it is possible further to work out the future policy in close and constant cooperation with representatives of the population elected by a majority vote.

Such a representative body can operate satisfactorily only if it is given substance by the powers granted it.

Having regard to this, efforts have been made to grant the New Guinea Council the largest possible number of concrete powers, and at the same time scope has been given for a further political development. Right from its inception the Council has been given a co-legislative function, including the right of initiative and the right of amendment, and also a genuine say in determining the policy to be followed. The Council has the right of petition and the right of interpellation, and helps to draft the budget.

As a result, a partner has been created with whom the policy to be followed can be discussed in all its aspects, publicly and open-heartedly, in anticipation of and as a practical preparation for the application of the principle of self-determination. As regards the latter, the New Guinea Council has been requested to state its views on the way in which and if possible the period of time within which the right of self-determination is to be effectuated. It should do this within a year of its institution, i.e. before 5 April, 1962.

A further revision of the Decree for the Regulation of the Administration of Netherlands New Guinea, which will also give representatives of the population an opportunity to participate in the work of the executive at top level, is in an advanced stage of preparation.

Moreover, the policy of having the Papuans participate at all other levels of political and social life is being vigorously pursued, as is the further implementation of local decentralization.

With a view to the further democratization of the administration, also at local level, the above-mentioned revision of the Decree for the Regulation of the Administration of Netherlands New Guinea therefore also provides for the institution of further territorial communities, at village, town and regional level.

As in the New Guinea Council, the members of the administrative bodies of these territorial communities are elected by a majority vote in free and secret ballot, in which no distinction is made according to race or section of the population, and in which both women and men are equally entitled to vote and to be elected (the common roll system).

The first territorial community of this kind, which was instituted in 1959, the regional community for Biak-Noemfoor, covers an area with 33,000 inhabitants. The council of this regional community consists of thirteen members, ten of whom were elected. Three members were appointed by the Governor, thus making it possible to have groups which had not won a seat in the elections represented on the council all the same. The elected members are all Papuans. Two of the three appointed members are likewise Papuans.

At the end of the year under review the preparations for the institution of three other regional councils were in an advanced stage. These are the regional councils instituted with effect from 1 January, 1961, for the subdivision of Fak-Fak, the subdivision of Japen-Waropen and the non-urban area of the subdivision of Hollandia (Dafonsoro), with 12,000, 38,000 and 13,000 inhabitants. There are also plans for the institution in 1961 of regional communities for the subdivisions of Radja Ampat and Teminaboean.

The administrations of these communities cooperate in the implementation of general ordinances. Furthermore, they may be granted by ordinance the regulation and administration of certain matters or of their domestic affairs. They can lay down ordinances and can make infringement of them subject to penalties or means of coercion. They are empowered to levy taxes for the promotion of their affairs. In order to foster the further democratization of the administration, a Democratization and Decentralization Branch has been set up as part of the Department of Internal Affairs.

The measures directed towards the democratization of the administrative system have met with a pleasing reception from the Papuan community in Netherlands New Guinea. This growing political consciousness led during the year under review to the foundation of a number of political parties.

In order equally to stimulate the social, economic and cultural development which is a so necessary adjunct to the political development outlined above, the Netherlands Government, continuing to build on what has already been achieved in past years, drew up a coordinated *ten-year development and working programme* during the year under review.

This ten-year development and working programme is not meant to lay down a deadline for the achievement of self-determination.

The plan is divided into a number of phases and serves merely as a guide towards the best possible development and as a basis for Government policy in the years to come.

Considerable emphasis has been laid in the ten-year plan on the creation and training of a Papuan cadre by the extension of educational and training facilities. The aim is to have 90 to 95% of all official posts filled by Papuans by 1970 or thereabouts. At the end of the year under review 52% of these were already held by Papuans.

It may be expected that towards that time the junior executive functions will be entirely occupied by Papuans and the senior executive posts to a considerable extent. Furthermore, it will therefore also be possible for a number of university-trained or equivalent Papuans to be employed in the top ranks of the civil service. It may be expected that by 1970 only a small group of specialists will be required for technical assistance.

As the first phase of the ten year plan a three-year plan has been drawn up (1961 to 1963 incl.), which has as its primary objective acceleration of the political development of the population, widening of educational facilities, increasing the basis for material prosperity and expansion of the administrative influence over practically the whole Territory.

The *extension and intensification of administration* continued during the year under review. New administrative posts were opened in the inaccessible eastern highlands of the Vogelkop at Minjambouw (Manokwari subdivision), Merdei (Bintoeni subdivision) and at the site of the Agimoeaga migration project, south of the Carstensz mountain range. A start was made there in 1959 with the migration project for the population, who in this inaccessible area have remained outside modern development. They can now move the coastal plains, where they are accessible by ship, can have contact with the outside world and can grow cash crops.

As a result of the split of the Hollandia subdivision into two subdivisions, viz. Hollandia and Keerom, made up from the districts of Jafi, Waris and Wembi split off from the old subdivision of Hollandia, intensification of administration became possible in the hinterland of Hollandia. The new chief town of the subdivision, Oebroeb, is favourably situated for a further extension of administration to the south in the direction of the central mountain chain.

In the northern part of the Moejoe subdivision the administrative post of Waropko was opened after a 40-km-long motor road had been built between this place and the chief town of the subdivision, Mindiptanah, making it possible to transport goods.

The intensification of administration in the Eastern Highlands from the Wamena and Bokondi posts was systematically continued in 1960. Although complete pacification could not be achieved in the densely populated Baliem Valley, there were signs of a growing readiness to cease intertribal warfare and to submit the disputes to the authorities for arbitration.

In the South New Guinea subdivision extensive reconnaissances were made in the basin of the Wildeman river. At the junction of the Becking and the Wildeman rivers the initial establishment of an administrative post, which maintains adequate contact with the local population, proved possible.

To simplify the creation of the Japen-Waropen regional community already mentioned above, the former subdivision of Waropen was abolished, its territory being added to that of the Japen subdivision.

In the Central New Guinea division, which formerly covered the Wissel Lakes subdivision and two exploration districts, two subdivisions were formed, namely the Paniai subdivision, with Enarotali as its chief town and consisting of three districts: Aradide, East Paniai and West Paniai, and the Tigi subdivision, with Waghete as its chief town and consisting of three districts: Tigi, Kamoe and South Geelvink Bay.

The extension plans for the years 1961 to 1963 incl. aim at bringing the whole Territory under administrative influence, with a few minor exceptions.

As already stated, the Netherlands Government is vigorously endeavouring to form a Papuan cadre which, as it becomes available through training on courses or in service, will be employed in posts formerly occupied by non-Papuans.

It will be clear that the Inland Administration, i.e. the direct administration of the population themselves, is the first to be considered for transfer to the Papuans. With this aim in view about one hundred Papuan administrative officials have already been trained and put to work, thirty-four of whom hold the independent position of district head (at the end of 1960 there were 73 districts). Their administrative authority also extends over the non-Papuan residents of their district.

The plans provide for the training of Papuan administrative officials for the senior administrative functions.

The number of Papuans in Government service increased from 1856 at the end of 1959 to 2192 at the end of 1960; these figures do not include those on monthly and daily pay, who numbered around 2400 (1959: 2200).

In the economic field the results are becoming apparent of the intensification and expansion of agricultural extension and the progress of the pedological reconnaissances, in combination with the trial plantations laid out at a large number of places.

The planting by the population of perennial cash crops, in particular coconut, nutmeg and cocoa, is still increasing. In particular additional planting of coconut and nutmeg exceeded expectations during the year under review. The planting of cash crops will be further encouraged by the expansion and intensification of agricultural extension.

The Agricultural Experimental Station at Manokwari, the building and fitting-out of which are being financed by the Development Fund for the Countries and Territories Overseas of the European Economic Community, and involve the sum of f. 7,699,000, will particularly benefit agricultural development.

The Commission of the EEC furthermore gave their assent in December 1960 to the construction and fitting-out at the expense of the EEC Development Fund of a central training institute for agriculture, stock-breeding, inland fisheries and forestry, for which the sum of f. 2,581,000 has been made available.

Within the framework of the necessary improvement of the protein intake of the Papuan population, special attention is being paid to inland fisheries and better stocking of the natural inland waters and the laying-out of fish ponds.

Goods progress has been made with the expansion of the country's cattle and poultry stock. Favourable experience has been gained with the issue of cattle to be shared for stud purposes; there is increasing interest in these.

Since 1959 interest has grown from both Papuan and foreign sides in the Territory's possibilities as a source of timber. During the year under review a foreign company was for the first time given a concession for timber-felling.

Since 1955 production of crude oil has been declining. Further exploration for oil has been stopped.

It is expected that within the not too distant future other mining projects offering good prospects, e.g. in the field of nickel, cobalt, iron and copper ores, will have reached the development stage.

The Development Fund of the European Economic Community has made the sum of 18 million guilders available for a general geological survey. This has been entrusted to the Foundation for the Furtherance of Geological Surveys in Netherlands New Guinea, set up in 1959, and is being vigorously tackled.

The plans for general aerial mapping of the Territory, which project forms an essential complement to agricultural research and the drafting and elaboration of development programmes, will be financed from the Development Fund to the sum of approximately 11.8 million guilders.

Under the above-mentioned three- and ten-year plans special attention is being paid to the creation of the necessary *educational facilities*. This includes widening general and vocational education in the Territory itself and expanding the possibilities of study in the Netherlands and other countries. Moreover, an important part is played in this by the special Government courses and the possibilities of in-service training.

The regular growth which education in Netherlands New Guinea has so far displayed can best be demonstrated by means of the sums spent on this aspect of the Government's task. In 1953 4.1 million guilders were spent on education, and in 1957 9.8 million guilders, whilst for 1961 over 15 million guilders has been earmarked on the budget for education.

This period has seen a considerable annual increase in the number of primary schools, continuation schools and intermediate secondary schools, and also the foundation of a secondary school and of transitional classes to make it easier for Papuan children to move on to Dutch education at advanced primary schools and at the secondary school.

The number of intermediate secondary schools, which are directed towards more advanced study, has increased since 1957, when the first school of this type was founded, to four in 1958 and seven in the year under review. For the period 1961-1963 the opening of three further schools of this type is envisaged.

In 1961 a C department will be opened at the secondary school at Hollandia, following on the intermediate secondary school as substructure, and specially directed towards the requirements of Netherlands New Guinea. The leaving examination will be at the level of the leaving examination of the Dutch secondary schools, but a number of subjects, including French and German, will be dropped, whilst great attention will be paid to English, particularly to a practical command of this language. This will make it possible for graduates of this school to receive university or other advanced training in an English-speaking area.

In the field of vocational training reference should be made to the foundation in 1960 of a teachers' training college, which will yield its first graduates in 1963. This means that from that year onwards a decrease in the number of Dutch teaching staff will be possible.

It is planned to double the number of training schools for village teachers in 1961, bringing their number to ten, whilst at the same time the training will be improved by increasing its duration from three to four years.

In 1962 an advanced technical training school will be opened, thus making it possible to replace a number of Government training courses by a complete school training.

In Netherlands New Guinea there are thirty specialized Government and vocational training courses, some of which are living-in courses. They offer training for the administrative service, the police, public health, the Department of Finance, the Land Registry, the Topographical Service, the Post Office, agriculture, fisheries, stock-breeding and forestry, and for mates and engineers for local coastal shipping. The total number of pupils on these courses, which vary in length from one year to five, is over 1000. It is expected that in 1961 over 200 vacancies can be filled by graduates of these courses.

During the year under review the sum of 4.9 million guilders was made available from the Development Fund of the European Economic Community for the construction and fitting-out of a medical centre at Hollandia.

In 1960 Papuan students started a seven-year advanced secondary doctors' training course at the Medical School at Port Moresby. It is the intention regularly to send pupils to this doctor's course in the future.

Two Papuan youths from Netherlands New Guinea have also been studying at the Medical School at Suva since 1959.

During the year under review six graduates of the intermediate secondary school began training at the Technical Training Collège of the Post and Telegraphs Department at Port Moresby, where they are attending a five-year training course for telecommunications technicians.

A number of young people from Netherlands New Guinea are attending the practical courses for boat-building and simple printing organized by the South Pacific Commission.

There are now 35 young Papuans, including 13 girls, studying in the Netherlands. Of the boys, three are attending universities, nine secondary schools and two the Institute for Tropical Agriculture. Of the girls, six are training as nurses and five as domestic science teachers. The rest are on various practical courses. It is the intention considerably to increase the number of young Papuans to be sent to study in the Netherlands in the years to come; for instance, in 1961 at least 50 young men and women will be sent there for courses of varying length.

In 1960 a start was also made with the organization of working visits by Papuan officials to the Netherlands. The aim is to familiarize those concerned with the working methods used in their field in the Netherlands and at the same time to widen their general outlook.

The participation of girls in education may be described as satisfactory; the percentage of Papuan girls at the village schools in the year under review was 44%, and at all educational institutions together 42%, of the number of Papuan pupils.

In the part of the Territory under administration some 80% of all children of school-going age are now participating (voluntarily) in education.

In the field of *public health* progress was again made in the control of endemic diseases such as malaria, tuberculosis, yaws and leprosy.

As part of the struggle against malaria, 230,000 persons were placed under the protection of insecticides in the year under review.

Yaws control has already led to this disease having been practically eradicated in large parts of the area under administration.

Tuberculosis control underwent a considerable expansion. There are now chest clinics at all the larger places.

Work inside the leproseries was also extended. Furthermore, a start was made with the home treatment of non-infectious leprosy patients.

Special attention was also paid to infant and maternal welfare.

The steady growth of the Government's efforts in the field of public health may be derived from the figures of the financial resources placed at the disposal of the Department of Public Health in the course of the years. The costs of the measures in this field rose from f. 3,200,000 in 1953 to f. 6,800,000 in 1957. According to the draft budget for 1961, they will be f. 12,412,000 in that year.

During the year under review various hospitals and leproseries were renovated and extended, whilst much care was devoted to the improvement of the fixtures and fittings. In the coming years the number of hospitals, out-patient clinics and chest clinics will be further extended.

One of the most important projects that will be implemented in the coming years is the above-mentioned foundation – with money from the EEC Development Fund – of the Medical Centre, in which most of the branches of the Department of Public Health now scattered around Hollandia and district will be concentrated.

Socially the drift to the larger towns forms a problem in some regions. On the one hand the authorities are trying to reduce the inclination to do so by development projects in the countryside, and on the other hand restrictions are imposed on residence in the urban centres by persons with inadequate means of support.

The occurrence of an uprooted urban proletariat is being countered by the building of good houses for Papuan workers, the foundation of social centres and women's clubs, the organisation of educational courses and the creation of district councils.

An important feature in this respect is the social construction work embarked on by the churches. This work is supported by grants for social workers.

The authorities are opposed to any form of racial discrimination. Consequently this does not exist, either in education, or in employment, public transport, entertainment, or in any other field.

In order to obtain the most complete picture possible of the structure of the Papuan community, and also of the socio-biological and social ties in Papuan society, a start was made during the year under review with a socio-demographic structural survey of the population. This project, which is considered indispensable for the making of further development plans, is to cost 2.5 million guilders, and is being financed from the EEC Development Fund.

The Netherlands Government considers *international cooperation* of essential importance in developing Netherlands New Guinea and its population.

As will be known, the Netherlands Government has participated in the activities of the Committee on Information from Non-Self-Governing Territories since its institution in 1946. The Government attaches great value to the annual consultation in this committee, in which the many and varied problems occurring in the development of underdeveloped countries are dealt with. The Government uses the standards laid down there as a criterion for its own policy.

Fruitful contact and effective cooperation have developed with various specialized agencies of the United Nations, in particular WHO and UNICEF. These were continued and extended as much as possible in the year under review. Netherlands New Guinea profits from this particularly useful cooperation, which supplements its own activities, particularly in such fields as curative and preventive health care, e.g. malaria, tuberculosis and leprosy control, maternal and infant welfare and environmental sanitation.

As an associated territory, Netherlands New Guinea also profits from the Netherlands' international cooperation within the EEC.

Apart from the above-mentioned approved EEC projects, which involve the sum of 47.4 million guilders, a number of other projects are in various stages of preparation. Of these, reference may be made to a regional development plan for South New Guinea with a large mechanized rice farm between the Maro and Koembe rivers, the costs of which are estimated at about 47 million guilders, and also a number of other projects for agricultural regional development, road construction, port accommodation and educational and medical provisions, which will demand a joint investment of about 38 million guilders.

In all there is the entitlement to draw on EEC moneys to the sum of 35 million dollars over a period of five years. The sums made available will benefit the Territory over and above the sums made available on the annual budget, which according to the draft budget for 1961 are estimated at f. 156,114,400.

A further useful and fruitful cooperation is that within the framework of the South Pacific Commission with the other countries administering non-self-governing territories in the Pacific.

Delegations of inhabitants of Netherlands New Guinea have taken part in each of the South Pacific Conferences organized so far by the South Pacific Commission, in which autochthonous representatives of the South Seas territories meet together periodically for consultation on common problems.

The Secretary-General, together with various specialists of the Commission, including the head of the health section and the fisheries expert, visited the Territory during the year under review to consult with and advise the local authorities.

The meeting of the health section of the Research Council of the Commission held at Noumea in July 1960, at which the subjects discussed included in particular problems relating to diet, health education, the training of medical personnel and maternal and infant welfare, was attended by the Director of Public Health at Hollandia.

Since mid 1960 four young people from Netherlands New Guinea have been attending the two-year course in boat-building and maintenance of marine engines organized by the South Pacific Commission in collaboration with the Government of the British Solomon Islands Protectorate and with the support of the FAO and the United Nations Bureau of Technical Assistance Operations.

Within the framework of international cooperation a special part is played by cooperation between the two parts of New Guinea – based on the ethnological and geographical relationship and the similar problems which are a result of this and which confront the authorities on both sides of the frontier.

This cooperation between the Governments of the Netherlands and Australia at territorial level, which is directed towards technical assistance and the exchange of experience in the administrative field, has already proved of great value. There is also collaboration in the field of training. For instance, as mentioned above, twelve graduates of the intermediate secondary school are now studying at medical and technical institutes at Port Moresby, while twelve young people from the part of New Guinea administered by Australia are training at the Elementary School of Navigation at Hollandia.

In the course of the year Netherlands New Guinea was again visited by various experts from the Netherlands and abroad, who included not only the officials of the South Pacific Commission mentioned above but also experts of WHO and FAO.

The Territory was represented at the annual session of the Regional Office of WHO for the Western Pacific, and also at a number of other meetings organized by WHO in the field of health care.

Fellowships were obtained by two doctors in the fields of public health and leprosy control respectively, and for a nurse in the field of the training of medical personnel.

With the full acceptance of the obligations arising out of Chapter XI of the Charter of the United Nations, the Netherlands Government is promoting such development in Netherlands New Guinea as may expedite the application of the principle of self-determination as much as possible.

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 at. 9° S.

The territory of Netherlands New Guinea includes a number of islands. Of these Komoran, Frederik Hendrik Island and Poelau Adi are the best known southern islands. To the west all the islands are included which lie east of a line that starts north of the Aroe Islands, runs in a north-westerly 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 Ajoe 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 Padeaido 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 1200 km. The greatest width along the eastern frontier is 730 km. The distance between Sorong and Merauke, measured across the island, is 1300 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.

No exact population statistics are as yet available on the exploration-districts located in the Central Highlands. It is assumed from observations and provisional estimates that more than 250,000 persons are scattered about this region.

Including these, the number of inhabitants is estimated at about 700,000, which amounts to a population density of about two persons per square kilometre. The density varies very much from district to district, 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

The structure of the country is dominated by extremes: endless swamps and enormous massifs. The swamps are some of the most extensive in the world, whilst the mountains reach a height which makes it possible for glaciers, a rarity in the tropics, to form. The snow line lies at a height of about 4500 metres. It is a region difficult of access for human beings and difficult to open up; geologically it is young: only at a few places, for instance in the Central Highlands and the Bougainville and Cycloop Ranges, do pretertiary formations appear at the surface.

Netherlands New Guinea contains the following chains of mountains:

1. Bougainville - Cycloop

This range is to be regarded as the oldest in Netherlands New Guinea; it consists mainly of metamorphic rock. The highest peak attains a height of 2160 m. This rock is also encountered on the Wondiwoi peninsula and the island of Roen.

II. The Northern Watershed Range

Little is as yet known about the structure of this chain, which reaches a peak of 2200 m.

III. The Central Highlands

These consist in the main of folded limestone formations. North of the lifted Central Highlands lies the Meervlakte graben. Some peaks which are above the snow line are:

Mount Carstensz	5040 m
Mount Wilhelmina	4750 m
Mount Juliana	4700 m

Physiographically the Central Highlands join on to the Kaimana system, which is connected to the Vogelkop range by a narrow isthmus.

IV. The Vogelkop range

The northern and northern-eastern part of the Vogelkop consists of igneous rock. The central part is occupied by folded Palaeozoic and Mesozoic rock. Folded tertiary sediments are found in the south.

In the case of all these mountain chains the direction of folding is in general east-west. The valleys are mostly deep and steep-walled, the ridges narrow. Even under conditions of optimum vegetation, erosion is considerable and, since the soil-forming rock is usually poor in chemicals and as there are no young volcanic rocks, land is to be expected which apart from a few exceptions, is only moderately suitable for agriculture.

In between these mountain chains and upfolds, valleys are to be found at a number of places, such as those of Kebar, Ransiki, Nimboran, Grimé-Sekoli and Dojo, whilst in the deeply dissected Central Highlands, too, plains of varying size occur, such as the Baliem Valley, the Ara, Edere and Ilaga valleys, all of which have a marshy floor.

The principal plains are:

I. The Northern Coastal Plain

This is relatively narrow and consists of folded tertiary sediments, which are covered by alluvia along the coast.

II. The Meervlakte

This area, some 15,000 square kilometres in size, sparsely populated and swampy, lies between the Northern Watershed Range and the Central chains. Its rivers are for the greater part not navigable by larger vessels. The area is drained by the Mamberamo, a river which is navigable by ships with a draught of up to 1.90 m as far as 170 km up from the coast.

III. The Southern Plain

In this plain, which widens towards the east, a large number of rivers occur, which discharge the enormous quantities of water precipitated in and near the Central Highlands. In the west the floor rises fairly quickly in a northerly direction, so that here the rivers are not navigable for any great distance. In the east, however, where extensive swamps occur, navigability improves. Along the Digoel ships of a draught up to 1.90 m can reach Tanah Merah, which is more than 300 km from the coast.

In the extreme south on a somewhat higher ridge there is savannah country, called the Merauke zone.

Finally, reference may be made to the existence of a number of lakes, the leading ones being Lake Sentani, the Wissel Lakes, Lake Jamoer, Lake Wam, the Anggi and Ajamaroe Lakes and Lake Rombekai.

4. CLIMATE

Wind

In general two seasons may be distinguished: that of the south-easterly winds from May to November, and that of the north-westerly winds from December to April. At most places these two seasons are clearly defined. Good examples are Merauke and Sorong.

Temperature and humidity

As regards temperature there is little difference between the various places on the coast. The mean temperature in the lowlands is 26° C, with a maximum of about 35° C and a minimum of about 20° C. Only around Merauke can the temperature drop to about 16° C in the period of the south-easterly winds. The relative humidity is in general high. Needless to say, it is cooler in the mountains, as emerges from the figures for the Baliem Valley, situated at about 1600 m above sea level (see Appendix III).

Rain

At most places rainfall, too, is seasonal, there being a connection between the air-currents and the seasons.

In the area around Merauke a markedly dry season prevails in the period of the south-easterly winds, May to November.

In Kokonao and Fak-Fak, on the other hand, considerable rain falls in the same period, partly owing to the clouds breaking against the mountains.

In Ajamaroe, Sorong and near the Wissel Lakes, too, most rain falls in this period.

In Manokwari, Steenkool and Hollandia a distinctly greater amount of rain falls in the period from December to April than in the remaining months of the year.

Furthermore, there are many transitional types (see Appendix II).

5. NATURAL RESOURCES

Nature of the soil

The nature and properties of the sedimentary rock that predominates in the Territory (mainly limestone and quartz) and the preponderantly rainy tropical climate form a combination of factors which mean that in general only moderately to poorly fertile weathering soils have been able to form. Where (mostly older) volcanic rock occurs, as is the case locally, this has had a favourable effect on the fertility of the soil.

In the mountains, which are predominantly steep and highly dissected, soil suitable for agriculture is encountered only in a number of valleys and on a few plateaux, though this soil usually derives its fertility from the humus that has developed on it (e.g. the Wissel Lakes area, the Baliem Valley, etc).

In the lowlands and the coastal strips better, alluvial, soils occur at several places, e.g. the Nimboran plain, the Grimé plain, the Ransiki and Momi plains, the plains on the island of Japen and the young sea clay soils in South New Guinea (Merauke, Koembe), which offer favourable possibilities for agriculture.

The lowlands however are often swampy, sometimes marshy.

Vegetation

The area under forest is estimated at more than 32 million hectares, or about 80% of the total area of the Territory. The enormous timber stands, which contain valuable species (such as Agathis, which is important for the production of copal, Araucaria and Intsia) form one of the principal natural resources of the country. However, economic exploitation is hampered by the heterogeneous composition of the forests and the difficult accessibility of the terrain.

In the salt-water swamps along the coasts the mangrove trees and the Nipa palm are to be found.

Characteristic of the salt-water swamps is the sago palm (*metroxylon* sp.). The extent of the sago stands is beyond estimation, but sago is the main item of diet for about one quarter of the total native population.

Natural grass plains do not occur, with a few exceptions, of which the savannah area near Merauke is the principal one.

Fauna

The fauna of New Guinea closely resembles that of the Australian continent. For instance, there are all kinds of marsupials, such as the kangaroo, the opossum and the phalanger.

The savannahs near Merauke are rich in game, i.e. deer, kangaroos and birds; the Central Highlands, on the other hand, are poor in game. Hunting is universally practised by the population and, depending on the region, contributes more or less to the menu.

The bird-world is characterized by the occurrence of the bird of paradise, of which more than eighty species are known. Also to be found are the cassowary, some forty different species of parrots and the crowned pigeon.

The waters around Netherlands New Guinea are rich in fish, including tunny, and shells which can be used for industrial purposes (troca shells).

In general the inland waters are rather poor in fish. Many crocodiles are to be found in the rivers. The export of crocodile skins provides a not inconsiderable money income for the population. An item worthy of mention is the occurrence of the sawfish in Lake Sentani, whilst in Lake Jamoer the fresh-water shark is encountered.

Minerals

Petroleum is the most important useful mineral, and the Territory's most important export product. However, production is declining.

In the Cycloop Mountains and on the island of Waigeo and a number of other islands of the Radja Ampat group nickel- and cobalt-bearing ore strata have been encountered.

Further investigations have shown that the nickel ore reserve and the average nickel content of the ore strata render economic exploitation possible.

Further, the ground contains various other valuable minerals, including gold, silver, copper, zinc and lead. However, it has not yet been demonstrated that these minerals occur in quantities allowing of economic exploitation.

B. HISTORY

Prior to the year 1900 practically nothing was known about the prehistory of Netherlands New Guinea. Only in the last decades has some idea been obtained of the ancient history of the country. Recent archaeological investigations, finds of bronze axes, discoveries of rock drawings and of remains of old fortifications have given indications of migrations in former times. However, we are very far from being able to obtain a well-rounded comprehensive picture of the prehistoric era.

From the beginning of the sixteenth century representatives of Western European countries often had contact with the country, but they found it as it remained until modern means came to the aid: barren, inaccessible, producing nothing for the markets outside the island.

Two Portuguese, Antonio d'Abreu and Francesco Serrano, are believed to have been the first to sight the coasts, without going ashore. Don Jorge de Menezes, who sailed in 1526-1527 from the Malayan Peninsula to the Spice Islands, drifted off course and was the first to set foot on the soil of New Guinea. The name Papua was already known then.

In 1545 the Spaniard Ynigo Ortiz de Retez sailed along the north coast. He gave the island the name "Nueva Guinea" because of the similarity between the inhabitants and the negroes of Guinea, on the west coast of Africa.

Various explorers, whose names live on in this part of the world in some geographical name or the other, called at the island. Luiz Vaez de Torres in 1606, Le Maire and Schouten in 1616, Jan Carstensz in 1623, Abel Jansz. Tasman in 1643, William Dampier in 1700, Captain Cook – who recorded the fact that he was received by the inhabitants in a particularly unfriendly fashion – in 1770, Shortland in 1788, and Hunter and MacCluer in 1791, on which occasion MacCluer charted part of the west coast.

The United East India Company was never immediately interested in New Guinea. It was only concerned that the island should not be used as a base for British or Spanish penetration, a danger to which its position – so close to the valuable Spice Islands – might give rise.

However, when in 1826 rumours went the rounds about a possible British settlement on the south coast, the State of the Netherlands proceeded officially to take possession of the island by

proclamation in 1828. For the first time the 141st degree of longitude was now stated as furthest eastern frontier in the south and in the north the Cape of Good Hope.

This proclamation was the beginning of an attempt to establish in fact Dutch rule over New Guinea, an attempt which was doomed to failure, since in those days man was still powerless against the tropical diseases raging on the island, the causes of which were not understood. In 1836 the high mortality rate made it necessary to abandon the settlement established in 1828 at Merkusoorde (on Triton Bay). From then on attempts at administration were confined for many years to keeping the peace on the seas around and on the fringes of the island.

In 1835 the Protestant Mission established itself in New Guinea for the first time on the island of Mainsinam, opposite Manokwari.

On the eastern half of the island increasing activity on the part of Europeans began to be noticeable, particularly after 1860. And yet, partly owing to the inhospitable nature of the country, it was not until 1883 and 1884 that the island came under German and British rule.

This led to the decision to establish actual Dutch administration. This came into being in 1898 at Manokwari on the north coast and Fak-Fak on the west coast, followed in 1902 by establishment at Merauke on the south coast, whilst the first Catholic Mission station was founded there in 1905. From then on administration was regularly extended.

In general it may be said that an effective exercise of administration did not become possible until after the beginning of this century, when progress in the medical and technical fields made it possible to cope with malaria and other common tropical diseases, and to tackle successfully the inaccessible terrain.

Besides the work of numerous scientific expeditions, separate reference should be made to the work of military exploration, which lasted from 1907 to 1915. As a result of this, the knowledge of the country and its people was greatly extended in a short time and a basis was laid for further investigations.

During the war the greater part of the Territory was occupied by the Japanese; only part of the south remained free. In 1944, after the advance of the American armies, headquarters were established at Hollandia, and this circumstance led to Hollandia being made the centre of Netherlands administration.

In July 1946 the area again became administratively a separate residency, after which the institution of the Government of Netherlands New Guinea took place on December 27th 1949.

In the years which have elapsed since then, the development of the country and its people has been systematically dealt with. This has been made possible by a substantial annual financial contribution from the Netherlands Government.

Scientific research has been carried out so as to obtain an idea of the possibilities in the fields of agriculture, forestry, stock-breeding, fishing and mining.

Basic facilities required for economic and administrative development have been created or improved. For instance, airfield and port accommodation has been considerably improved, the result being better communications and greater possibilities of transport, and a great many houses, offices, hospitals and schools have been built.

The cultivation of new crops, both food and commercial crops, has been introduced, and new methods of tilling the soil have found acceptance.

Education has been considerably extended and improved, not only general, but also technical and vocational education.

The missionary societies have extended their activities. An independent Protestant Church, the Evangelical Church in Netherlands New Guinea, was constituted.

Health care has been considerably extended, not only in the field of curative health care, but also and in particular in the field of preventive medicine. With the aid of and in collaboration with the WHO and UNICEF, important results have been gained in this latter field, in particular by the mass campaigns against yaws, malaria and tuberculosis.

Administration has been extended and intensified, for instance by the introduction of six administrative divisions and the creation of a number of new subdivisions, coupled with the founding of a large number of new administrative posts.

The policy has always been to bring the Papuan population themselves, both men and women, into this development, not only at an official level, but also by the institution of representative bodies in which they can promote their own interests.

On 5 April, 1961, a central representative body, the New Guinea Council, was set up. This body has 28 members, of which 23 are Papuans, including one woman. Its creation gives the population, through their representatives, a say in the legislation and the administration of the country and in deciding on the policy with regard to further development which is intended to lead to self-government and self-determination.

C. POPULATION

1. BRIEF DESCRIPTION

The population consists almost exclusively of Papuans. Their classification still confronts physical anthropology with many puzzles. However, during the year under review our knowledge has increased considerably, thanks to the study made by a physical anthropologist, who was a member of the expedition to the Sterren mountain range organized by the Royal Netherlands Geographical Society. He made numerous measurements on more than 1000 people living in the area between the coast and the central watershed in the Sterren mountains, and also around Lake Sentani.

It is very improbable that the Papuans form a separate race. Instead, they are probably a variant of the subrace of the Eastern or Melanesian negroids. However, this term is misleading, since this ethnic type has very little in common with the African Negro as regards its physical characteristics. This is definitely so in the case of the Papuan. In fact, he often displays striking similarities to representatives of the Caucasian race, which includes the West Europeans.

There are further indications that the Papuan is anthropologically related to two of the oldest known ethnic types, the Australoids and the Veddooids.

A remarkable and as yet unexplained fact is that as one proceeds further inland from the coast the physical height of the Papuans gradually decreases, until in many – but not all – regions of the Central Highlands a height of approx. 1.60 m is encountered, which has been taken as one of the characteristics of pygmies. However, the gradual decline in height, together with the resemblance to the coastal population, in other physical characteristics, are factors not in agreement with the notion of a distinct pygmoid type in the Central Highlands.

Along the north and north-west coast Papuans have probably interbred with people belonging to another variant of the Melanesian negroids which occurs particularly in the eastern part of the island of New Guinea, and which is known by the name Melanesian. In this mixture the Papuan element predominates.

The linguistic situation is also complicated, and runs more or less parallel with the anthropological one. The majority of the some 200 languages which may be distinguished are summarized under the collective name of Papuan languages. This designation has more of a negative than a positive meaning, viz. that none of these languages listed under one common name belong to the great Austronesian or Malay-Polynesian family of languages.

However, it is not yet certain how far the Papuan languages are interrelated and share characteristics, at least not at the present stage of the investigation, that is being performed by a Government linguist and a large number of Catholic and Protestant Mission linguists. Languages forming part of the Austronesian family of languages are encountered solely as small enclaves along the north coast, in the Geelvink Bay area and on the mainland and the islands off the west coast.

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 more than a few 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 Ajamaroe region in the Vogelkop and in the south in the Asmat, Mappi and Moejoe areas, and 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 interbreeding and contact between speakers of different languages.

The total of the Papuan population in the area under administration at the end of 1960 was about 461,900. About 71,000 Papuans were under administrative influence, whilst in the

unadministered area the number was estimated at about 169,000. The number of Papuans in the area brought under administration has risen in the last five years from 342,600 (1956) to 461,900 (1960), an increase of 119,300.

The number of Asians is about 18,600, and that of the European section of the population some 16,200.

A survey of population figures is given in Appendix IV.

In the Sentani district (about 10,000 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. The results of the registration years 1959 and 1960 have shown that only 5% of the births and deaths had not been included in the vital statistics – kept in the villages by the village heads – a result which justifies the conclusion that this pilot project may be regarded as a success.

A socio-demographic structural investigation of 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 ties in native society.

In September 1959 a start was made with this survey on the island of Biak, after intensive preparations. At the same time the survey will be used as much as possible for the introduction of permanent population statistics. This project, which over a period of five years will cost the sum of f 2½ million, is being 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 EEC.)

2. CULTURE

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

Division	Number of villages, with inhabitants						Total
	under 100	100 to 300	300 to 500	500 to 750	750 to 1000	more than 1000	
Hollandia	277	117	9	5	—	—	408
Geelvink Bay	205	243	24	6	3	2	483
West New Guinea	517	213	26	1	4	3	788
Fak-Fak	129	71	6	2	—	—	208
South New Guinea	131	208	41	16	3	2	401
Total	1259	876	106	30	10	7	2288

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 placed on the importance and the 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 both the relationship with relatives of the father and of the mother, and the relationship with the progeny of brothers and sisters, are of great functional importance. The larger groups of relatives are often not clearly defined and frequently have only vague functions. Really functional groups, extending over a wider area, such as clans and regional political federations, are scarce. Closely connected with this is the fact that regional political ties and regional leaders are rare in the Territory as a whole. However, this does not detract from the fact that in certain regions, especially in the mountainous areas, regional leaders are not infrequently of very great importance, because of their personal qualities, their wealth, their following of relatives, their knowledge of social standards and customs and of personal relationships. 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. However, it would be wrong to conclude that traditional authority is absent there. It is certainly present, but it is not clearly defined and hardly tangible.

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; 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 a stranger.

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 similarities of culture may be pointed to, it is the differences that strike the observer first.

In this region the most divergent types of social structure are encountered; the manifestations of magic are countless, and the themes of myths and stories, as well as of rituals and ceremonies based on these, are many and varied. New Guinea offers a variegated selection of patterns of culture, and though they show general tendencies and fundamental principles, it is still difficult, at least at the present stage of our knowledge, to give it a convincing general characteristic.

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 civilizations 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 cooked but stewed between leaves on stones which had been heated beforehand, a method of cookery still widely used.

Our knowledge of the native religious systems is still imperfect. Systematic studies of the religion of certain sections of the population are rare. It is therefore impossible to give a general characteristic of the Papuan religions. However, one thing that is certain is that the Papuan also tries in his myths and legends to consider the fundamental problems of life confronting him in this world of ours, such as the origin of man and his world, disease, death, shortage of food, war, natural phenomena, marriage, pregnancy and birth.

He too wonders about the meaning of things and tries to base some social rules on supernatural tenets. His myths even state exactly how a certain feast must be celebrated and how sago must be pounded. The origin of the foreigner and of his world also finds a ready explanation in the myths.

In the coastal regions in particular the myths were or still are staged, often in precisely elaborated rites and ceremonies, partly to preserve the present scheme of things.

Extensive masquerades, sacred houses, sacred objects such as flutes and bullroarers have extremely important functions here. The external forms of religious life in the Central Highlands are less spectacular. However, a striking feature of religion there is the ceremonial and religious significance of the pig, which plays an important part alongside shell money in socio-economic transactions.

In the mountains of the Vogelkop ceremonial tissues imported in former times take the central place occupied in the Central Highlands by the pig.

Magic, which must be regarded as an essential component of religion, is everywhere highly developed, and occurs in manifold forms. Very many christianized Papuans still believe in it. Only rarely are natural factors, the existence of which is known at least in part and is being learnt to an increasing extent from western agencies, regarded as the *ultimate* causes of disease and death. These are believed to be the result of infringement of certain taboos or the influencing of supernatural forces by persons who may or may not be members of one's own community. Needless to say, these views can very easily create a spirit of distrust, which does not further relations between individuals and groups. Wars, quarrels and homicide often have these suspicions behind them.

A real christianization of the population which extends more deeply than the external forms is rendered difficult by the survival of established views and practices such as those described above. These obstacles to a new way of life are all the more awkward now that many other elements of the old culture have lost their value, for the population as a result of the confrontation with the western world or are quickly losing their value. The old principles have been drawn into the maelstrom of rapid change, whilst the new principles are not yet functioning properly.

This applies in particular to one of the principal mainsprings of modern life: the steady, uninterrupted effort through generation after generation to arrive at a higher standard of living and towards progress. But all too often it is believed that greater prosperity can be obtained for nothing and sometimes literally by a miracle, instead of by unflagging personal effort and by gradual steps. It still repeatedly occurs that efforts are made to bridge the gap between poverty and wealth in radical fashion by persuading one's ancestors, who have the say over wealth and poverty, to empty the horn of plenty over their descendants (the cargo cults).

Finally, saving for investments and the increase of the Papuan's personal standard of living are hampered by the still prevalent demand for a series of gifts and counter-gifts, rapidly increasing in financial value, to be made in connection with a marriage. There is a discrepancy in the rate of development towards self-determination and that towards economic independence. Moreover, the still very concrete linguistic and tribal barriers form an obstacle to both development processes.

The number of Christian Papuans is now about 300,000. About 10,000 Papuans are Mohammedans. The influence of both religions extends further than these figures suggest, however, as is the case with that of contact with the outside world in general.

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.

D. GOVERNMENT

1. THE POLITICAL SITUATION, FORM OF GOVERNMENT AND NATIONALITY

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

The Act of 9 June, 1955 (Netherlands Bulletin of Acts, Orders and Decrees No. 247 of 1955), which confirms the form of government for the Territory (the Decree for the Regulation of the Administration of Netherlands New Guinea), was amended by the Act of 10 November, 1960 (Netherlands Bulletin of Acts, Orders and Decrees No. 454 of 1960).

This amendment partially revised the regulation of administration. The purpose of this revision is to accelerate the political development of Netherlands New Guinea, with due observance of the political aspirations of the population, in accordance with the principles and directed towards the objectives of Chapter XI of the Charter of the United Nations.

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

2. THE ADMINISTRATIVE ORGANS

I. 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 Netherlands 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 the Assistant Government Secretary and a number of graduate officials.

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 eight Departments of General Administration are the following:

I. *The Department of Internal Affairs*, consisting of the following branches: General Affairs, Administrative Affairs, Democratisation and Decentralisation, Land Affairs, Prisons, Immigration, Central Security Service, Police, Native Affairs, Education of the Population and Film and Photograph Production.

Under this Department also come 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, Organisation and Efficiency, Travel Office, Central Provisioning, 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, Tuberculosis 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.

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, working-class housing, utilitarian construction, town planning and health engineering; Waterways, under which come matters relating to roads and bridges, airfields, ports and harbours, irrigation and drainage works, heavy equipment, hydrometry and hydro-electric power, as also the Government workshops; and the Land Registry and Mapping Branch, which is responsible for civil-engineering surveying, topography, triangulation, astronomical position-finding and Land Registry inspection, together with the registration and transfer of all immovable property.

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 in that case 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 of the Administration of Netherlands 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, extraordinary 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 accord in cases where it judges this to be advisable in the interests of the Kingdom or of Netherlands New Guinea.

Under Transitional Provision 4 of the Decree for the Regulation of the Administration of Netherlands 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 entrusted 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 concurrence of the Council, see Appendix VI.

D. The New Guinea Council

The sixth chapter of the Decree for the Regulation of the Administration of Netherlands New Guinea, amended by the Act of 10 December, 1960 (Bulletin of Acts, Orders and Decrees No. 454 of 1960), lays down that there shall be a New Guinea Council to represent the inhabitants of Netherlands New Guinea (Section 72), and gives regulations with regard to the composition, institution, task and methods of the Council and of the executive committee which shall be appointed by the Council from among its midst.

In view of the political development of the population, the fact that part of the Territory has not yet been brought under administration and other parts are not yet being intensively administered, whilst such areas must also qualify for representation on the Council in the future, the number of members of the Council has not been definitely fixed, but has been put at not less than 24 and not more than 48 (Section 73). It has further been laid down that the members shall be elected or appointed by the Governor, the number of the members to be elected and those to be appointed being laid down for each session by general administrative orders.

For the first session, which began on 5 April, 1961, the number of members is 28, of whom 16 have been elected and 12 appointed.

The electoral system makes no distinction according to groups of the population, whilst men and women alike possess both the right to vote and the right to sit on the Council.

The franchise is further regulated by the ordinance of 10 December, 1960 (Government Gazette No. 71 of 1960).

In the urban centres of Hollandia and Manokwari direct elections have been held, and elsewhere, where this was not yet possible, indirect elections. In those areas where it was not yet possible to hold elections, the Governor appointed representatives of the population as members of the Council. In four areas – as a transition to elections – recommendations of the population were sought with regard to these appointments.

Of the 28 members of which this first Council now consists, the great majority (23) are Papuans.

The New Guinea Council possesses a number of concrete powers, viz. the right of petition, the right of interpellation, cooperation in the enactment of ordinances with the right of moving amendments and the right to propose ordinances (this applies to normal legislation in the whole field of internal affairs of the Territory) and also the right of co-operating in the drafting of the budget. Furthermore, the Council is consulted on bills of Dutch laws and of general administrative orders which will also be binding in Netherlands New Guinea.

As the New Guinea Council will not be able to sit continuously, the law provides for the institution of an executive committee which shall be elected by the Council from among its midst and which for the first session consists of seven members. During the period that the Council is not sitting, the executive committee performs the duties of the Council, with the exception of a few powers which are reserved for the full Council, such as co-operating in the drafting of the budget and the right of proposing new 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 accord – on subjects of importance to the social and cultural development of the Papuan.

The Council is formed by 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.

2. 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 the Decree for the Regulation of the Administration of Netherlands New Guinea, i.e. for the urban centres of Hollandia and Manokwari and for the rural areas Schouten Islands, Japen and Sorong-Doom. In 1958 an advisory council was set up at Fak-Fak.

In 1959, as a result of the institution of the Biak-Noemfoor regional community, the advisory council for the Schouten Islands was abolished.

During the year under review the advisory councils for Japen-Waropen and Fak-Fak could also be abolished, as a result of the institution of the regional communities for those areas.

B. Regional communities

Under the revised Decree for the Regulation of the Administration of Netherlands New Guinea uniform rules have been laid down with regard to the composition and organization, the functions and powers of the governing body of regional communities, the meetings of the councils and the executive committees of these communities, the administration and the accounts of the financial resources, and also the supervision by and right of appeal to the Governor.

Before the year under review had ended it had proved possible to institute three regional communities on the basis of these rules and with due observance of the advice of the advisory councils. These communities are for the area of the Hollandia subdivision, except the urban centre, and for the Fak-Fak and Japen-Waropen subdivisions. The respective names of these communities are Dafonsoro, Fak-Fak and Japen-Waropen.

The Dafonsoro regional council has twenty members, of whom sixteen were elected and four appointed by the Governor; the number of members of the Fak-Fak regional council has been fixed at twelve (nine elected and three appointed), and that of the Japen-Waropen regional council at thirteen (ten elected and three appointed).

The electoral regulations are based on the principle that no distinction is made according to sections of the population and that members shall be elected directly, unless otherwise specified upon the institution of the regional community.

It has been laid down for the Dafonsoro regional council that the members shall be elected directly; the other two regional councils are – for this first time – to be indirectly elected.

The elections have meanwhile been held in the first months of 1961.

To enhance the representative character of these councils representation can be secured to groups, which, as a result of elections, are hardly or inadequately represented; to this end membership of the council by appointment has been provided for.

C. Village communities

The regional councils can by ordinance institute village communities for areas which form part of the area of the regional communities, with due observance of rules to be laid down in a by-law.

The question whether there is a need for village communities in a certain area is therefore entirely up to the regional council. Relations between the regional and the village communities are regulated in a by-law.

The Biak-Noemfoor regional council has set up a total of eighteen local administrative committees in preparation for the village communities to be formed in the area of the regional community and for the institution of independent administration in these communities.

These committees are administrative bodies; they have no regulating powers. They consist of a chairman appointed by the regional council, who is at the same time a member and, depending on the number of inhabitants of the area concerned, of not less than five and not more than ten elected members.

In some regions of the Territory (Mimika, Fak-Fak) there are informal village councils (some covering one village, others covering several). However, these councils have no legal status and may be regarded as predecessors of statutory local communities to be instituted in the areas concerned and with their own bodies.

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 *Hollandia*, with *Hollandia* as the chief town.

Subdivisions:

Hollandia, with *Hollandia* as the chief town;

Nimboran, with *Genjem* as the chief town;

Sarmi, with *Sarmi* as the chief town;

Keerom, with *Oebroeb* as the chief town;

Exploration district of *East Highlands*, with outposts at *Wamena*, *Bokondini* and *Sibil*.

II. Division of *Geelvink Bay*, with *Biak* as the chief town.

Subdivisions:

Schouten Islands, with *Biak* as the chief town;

Japen/Waropen, with *Seroei* as the chief town.

III. Division of *Central New Guinea*. Temporarily under the resident of the *Geelvink Bay* division.

Subdivisions:

Paniai, with *Enarotali* as the chief town;

Tigi, with *Waghete* as the chief town;

Exploration district of *Central Highlands*;

Exploration district of *West Highlands*.

IV. Division of *South New Guinea*, with *Merauke* as the chief town.

Subdivisions:

Merauke, with *Merauke* as the chief town;

Mappi, with *Kepi* as the chief town;

Upper Digoel, with *Tanah Merah* as the chief town;

Asmat, with *Agats* as the chief town;

Moejoe, with *Mindiptanah* as the chief town.

V. Division of *Fak-Fak*, with *Fak-Fak* as the chief town.

Subdivisions:

Fak-Fak, with *Fak-Fak* as the chief town;

Kaimana, with *Kaimana* as the chief town;

Mimika, with *Kokonao* as the chief town.

VI. Division of *West New Guinea*, with *Manokwari* as the chief town.

Subdivisions:

Sorong, with *Sorong* as the chief town;

Radja Ampat, with Doom as the chief town;
Manokwari, with Manokwari as the chief town;
Ransiki, with Ransiki as the chief town;
Teminaboean, with Teminaboean as the chief town;
Bintoeni, with Steenkool as the chief town.

During the year under review all sixteen candidate executive officers entered for the 1959-1960 course passed the examination for assistant administrative officer at the Institute for the training of officials for the administrative service in Netherlands New Guinea. They were then placed at the disposal of the division heads for further practical training. In 1960 no new candidate executive officers were engaged, since it is expected that in the near future it will be possible to train a sufficient number of Papuan administrative officers. With effect from 1 October, 1960, the Institute ceased to exist.

The proposed reorganization of the Training School for Indigeneous Officials in the Administrative Service (consisting in the abolition of Department A, the three-year course, to which graduates of the continuation school and the primary school B had entry) was carried out during the year under review. Now only graduates of the advanced primary school and the primary secondary school are admitted to this course. The course lasts two years.

The number of pupils is now 29, 14 of whom are in the first year and 15 in the second. In the year under review no candidate administrative assistant graduated, as a result of the reorganization.

Organization of the police

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

The Director of Internal Affairs is, in consequence of Government Gazette No. 28 of 1959, 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 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 number of officials in Netherlands New Guinea in 1960 was over 8700, about 4600 of whom (2192 with established posts and about 2400 on daily and monthly pay) were Papuans, i.e. 52% (see Appendices VII and VII A).

The majority of these Papuan officials are indeed as yet in junior and lower executive functions; however, the number of them occupying more responsible posts formerly held by expatriate Dutchmen is steadily increasing, and will display a further considerable rise in the years to come.

Already over a hundred well-trained Papuan administrative officials are available; 34 of them are working as district heads, in which function they have a considerable degree of responsibility and independence, whilst their authority also extends to the non-Papuan inhabitants of their district.

One of the primary objectives of Government policy is systematically and as quickly as possible to make the Papuan suitable in all respects to play a part constantly increasing in importance in the further development of his country.

The ten-year development plan for the Territory in the political, social, economic and cultural fields, which has now been put into effect, building on the foundations laid in previous years, aims in the staffing field at the accelerated creation of Papuan cadres, so that by about 1970 the lower

executive posts will be almost entirely filled by Papuans, and the higher executive posts will be filled by them to a very considerable extent.

Furthermore, by then a maximum account of university-trained or equivalent Papuans must be employed in the top ranks of the civil service.

Implementation of this staff policy will mean that towards 1970 the group of expatriate Government officials will have declined from 48% to below 10% of the total number of officials.

In Netherlands New Guinea there are already a large number of specialist official courses, some of which involve living-in. These include courses for the administrative service, the police, the Department of Finance, the Land Registry, the Mapping Branch, the Post Office, agriculture, fisheries, stock-breeding and forestry, for mates and engineers for local shipping services, and also a variety of courses given by the Department of Public Health. The total number of pupils on all these courses is over 900 (see Appendix XLII).

On behalf of the administrative service a two-year extension course will begin in 1961 for older Papuan administrative officials destined to replace Dutch administrative officials.

Preparations are being made for an Academy for Social and Legal Sciences, at which lawyers will be trained.

The courses for medical personnel will be concentrated at the Medical Centre now being set up at Hollandia.

At Manokwari an Agricultural Training Centre is being fitted out, at which the courses for agriculture, stock-breeding, inland fisheries and forestry will be concentrated.

Several dozen young Papuans are now studying in the Netherlands or elsewhere outside the Territory (see Chapter IV, "Education"). It is the intention considerably to increase these numbers in the years to come.

Last but not least reference should be made, with regard to the creation of Papuan cadres, to the democratization of the administrative system by the institution of the New Guinea Council, which consists for by far the greater part of Papuans, and which has co-legislative powers, and of regional representative bodies, the regional councils, the majority of whose members are also Papuans. As a result, Papuan representatives of the population are directly concerned in the responsibilities of government.

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 Papuan 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 (Politie-rechters).

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 not exceeding 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 extraordinary 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, Fak-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 at Hollandia and one at 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. Since 1957 the Court has also been responsible for the administration of justice in tax cases.

All who are not subject to the indigenous administration of justice are under the jurisdiction of the above courts. The institution of legal proceedings is handled by the Public Prosecutor, who also acts as prosecutor in the Court of Justice.

The indigenous administration of justice

In the subdivisions of the division of South New Guinea, in the subdivisions of Paniai, Tigi (both Central New Guinea division), Ransiki (West New Guinea division), and in the East Highlands exploration district (Hollandia Division) there is a single judge. 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 local 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 the result of modern developments, provision is, however, made for these to the greatest possible extent by declaring the appropriate general rules of modern law applicable to 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

A. THE GENERAL ECONOMIC SITUATION

Netherlands New Guinea is, from the economic point of view, still one of the most underdeveloped areas of the world. In some regions, particularly along the coast, the population are participating to a gradually increasing 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 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 1959 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.

The association of Netherlands New Guinea with the European Economic Community is of great importance to the area's economic development. As a result of the conventions concluded, the Netherlands has the right to draw for Netherlands New Guinea on the Development Fund for the Countries and Territories Overseas of the European Economic Community up to the sum of \$ 35 million (f. 133,000,000).

The necessary money has now been made available from the EEC Development Fund for six development projects – designated as social projects, since they do not concern any immediately productive investments. These projects relate to the following:

1. Agricultural Experimental Station at Manokwari	f. 7,700,000
2. Geological survey	f. 18,000,000
3. Demographic survey	f. 2,486,000
4. Medical Centre, Hollandia	f. 4,902,000
5. Agricultural Training Centre, Manokwari	f. 2,581,000
6. General aerial mapping	f. 11,775,000

The demographic survey, also known as the structural survey of the population, has been underway for some considerable time now. The survey, which is being held on the island of Biak, will be concluded in 1961. It is expected that the results of this survey will give a better idea of the growth of the population and the economic and other complications for development work coupled with or proceeding from this growth. The experience gained will also be of use for the registration of the population elsewhere in the Territory.

The Agricultural Training Centre at Manokwari will offer combined educational facilities for the training of Papuans for agriculture, stock-breeding, forestry, inland fisheries and the Land Registry. The training institute, with its boarding establishment, trial farm and fish ponds, is being established in the immediate vicinity of the Agricultural Experimental Station, so that use can be made of the facilities of the experimental station in training.

The general aerial mapping forms an essential complement to the agricultural research and the drafting and elaboration of development programmes. The aerial photographs to be obtained will thus serve for interpretation in the fields of soil science, forestry, mining and others.

With the approval of the above-mentioned projects the sum of f. 47,444,600 was already made available, whilst approximately the same amount was requested from the Development Fund to finance a regional development plan for South New Guinea with a large mechanized rice farm between the Maro and Koembe rivers.

Other projects which concern agricultural regional development, road-building, port facilities and educational and medical provisions, and which will demand a total investment of some f 38,000,000, are still in the preparatory stage.

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

The greatest annual extension of the area under cultivation is to be found in the traditional coconut cultivation, followed by cocoa and Banda nutmeg. Coffee is being propagated as local farmyard crop. The favourable results achieved with trial plantings of rubber opened wide prospects in the year under review for the growing of rubber in Netherlands New Guinea, in particular in South New Guinea.

In various of the more densely populated areas with a progressive population, agricultural (regional) projects have been put into operation. The aim is to develop these regions more quickly by the formation of nuclei of trained farmers, who, whilst being subjected to a concentrated form of agricultural extension, are helped to set up more productive mixed family farms. It is hoped that in this way a real farming class will be created.

The main cash crop propagated in these projects is cocoa (Nimboran, Hollandia, Sarmi, Japen, Waropen, Manokwari). In a number of regions (Fak-Fak, Kaimana, Misool), preference has been given to the cultivation of Banda nutmeg.

The extension of the area under agriculture is often coupled with the construction of roads on behalf of economic opening-up of territory.

Foreign interest in the possibilities of timber exploitation in the Territory led during the year under review to the granting of one timber exploitation concession and various forest exploration permits. Domestic timber-felling firms also displayed a lively interest in timber export. The export of sawn merbau wood to the Netherlands, chiefly in the form of trial shipments, increased from 53 cubic metres in 1959 to 1313 cubic metres in 1960. Exports of round timber related chiefly to the medium-hard species. Most of these exports went to Japan. The total export volume increased from 8591 cubic metres in 1959 to 14.180 cubic metres in 1960. The development of the timber industry can as yet be insufficiently stimulated, owing to the fact that the country has not yet been opened up anything like enough in the economic sense. Making accessible and opening up suitable forest areas will still require the necessary investments for the construction of primary access roads and port installations.

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 are a sawmill and a shipyard, both at Manokwari on the north coast, and a mechanized experimental rice farm near Merauke in South New Guinea. These concerns could become of great importance in the endeavour to make Netherlands New Guinea less dependent on other countries in meeting its requirements in the sectors of foodstuffs, transport and building, and this makes them of great value to the economic system of Netherlands New Guinea.

In recent years much energy has been devoted to equipping the Territory with the infrastructure essential to its economic development. Work continued during the year under review on the further extension and improvement of these basic facilities (harbours, airfields, roads, schools, hospitals, laboratories, offices, houses, etc.).

Much attention is being paid to the development of local coastal shipping, i.e. coastal shipping with ships of less than 1000 tons, in order to ensure regular shipments of native products and to promote the widest possible distribution of imported goods over the producing coastal regions. During the year under review 15.000 tons of goods were carried by this local shipping.

The balance of trade of Netherlands New Guinea for 1960 displays a rise in imports by 6.7 million guilders, mainly as the result of greater imports of oil products, and a drop in exports of 3.7 million guilders, chiefly as a result of decreased re-exports.

Neither employment nor the wage level underwent any changes of great significance during the year under review. The general level of prices, in particular those of essential consumer goods, dropped somewhat. The price control on important foodstuffs and stimulants certainly contributed towards this. An increasing consumption of Western consumer goods may be noted among the Papuan population.

As in past years, the authorities granted credits to Western and Papuan businesses in 1960, too. To meet the credit requirements of commercial enterprises which do not qualify for normal bank credits but which are considered important for the economic development process, bank credits can be obtained under Government guarantee (see section J, Banking and Credit Facilities, of this chapter).

B. AGRICULTURE AND STOCK-BREEDING **1. ORGANIZATION**

The Government's task in this field is entrusted to the Agriculture and Stock-Breeding Branch of the Department of Economic Affairs. Scientific agricultural research is entrusted to a non-governmental body, which works in close cooperation with the Agriculture and Stock-Breeding Branch, viz. the Foundation for Agricultural Research on behalf of Netherlands New Guinea, which has started to set up a central experimental station in Manokwari. The construction and fitting-out of this agricultural research centre are being financed by the EEC Development Fund.

The Agriculture and Stock-Breeding Branch consists of a central and local service. The central service consists of the Agriculture and Stock-Breeding sections, the first of which has six subsections: Food Cropping, Export Crops, Agricultural Education, Socio-Agronomy and Statistics, Plant Quarantine and Inland Fisheries. The local service consists of five residency agricultural extension services, each of which is divided into subdistricts.

The establishment of the Agriculture and Stock-Breeding Branch in 1960 was 10 agricultural engineers, 3 veterinary surgeons, 155 executive and junior agricultural officers, 14 executive and junior stock-breeding officers and 68 technical and clerical personnel. In 1959 the establishment was as follows: 11 agricultural officers, 3 veterinary surgeons, 118 executive and junior agricultural officers, 13 executive and junior stock-breeding officers, and 50 technical and clerical personnel.

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

Agriculture:	staff	f. 1,168,900
	materials	f. 1,507,300
	1960 total	f. 2,676,200
	1959 total	f. 1,168,800
Stock-Breeding:	staff	f. 155,800
	materials	f. 300,300
	1960 total	f. 456,100
	1959 total	f. 443,300
Revenue:	agriculture	f. 367,800
	stock-breeding	f. 68,500
	1960 total	f. 436,300
	1959 total	f. 276,400

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. Keladi, yams and tapioca are found in the hills and lowlands; sweet potatoes are the chief food crop in the mountains.

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 about 200,000; for some 500,000 the principal food is root crops.

In the urban centres rice is consumed, also to an increasing extent by the Papuan population. The demand is still met chiefly by imports. The area under rice is about 500 hectares.

The area under coconut is estimated at 14,500 hectares; the extent of the land planted with nutmeg is some 2500 hectares, and that planted with cocoa over 1000 hectares.

Grazing land (laid out) is encountered only around Manokwari, whilst the extensive savannahs around Merauke offer 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. Furthermore, the agricultural extension service publicizes everywhere those farming techniques which, whilst fitting into the native system of agriculture, are directed towards preservation and improvement of the natural level of soil fertility.

c. Land tenure

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 of the group or to relatives within the group, but also the outsiders in some cases; this right of use can be alienated and is often hereditary.

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 the provisions of Section 39, subsection 1, of the Decree for the Regulation of the Administration of Netherlands New Guinea: "The Governor shall ensure that the rights of the native population to their land shall be respected". Expropriation is possible only in the public interest 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.

No data are available on the extent of land tenure by the native population; this cannot be registered, owing to the system used by the Papuans of crop rotation on ladangs.

d. Occupation of land by non-Papuans 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 and the Papuan community have consented to the curtailment of their right of disposition, may a property or personal right (depending on the purpose of the occupation) as described in the Civil Code be granted.

Apart from a few minor exceptions, only uncultivated land may 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.

Data on land occupied by non-Papuans are given in Appendix VIII.

3. PRINCIPAL CROPS

a. Food crops

Sago (Metroxylon sp.)

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

At 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.

The sago stands on the south coast of the Vogelkop offer possibilities for large-scale production of sago flour. Investigations made into this matter have shown that it is technically possible to produce sago flour of superior quality on a large scale. However, the large capital investments required would make the profit-earning ability of a large, well-equipped mechanized sago farm dubious, whilst it would provide work for only a relatively small number of people. Moreover, the nature of the area makes secondary activities of the population, e.g. in agriculture, practically impossible.

The establishment of a large, mechanized sago farm would therefore offer few prospects for the development and progress of the area concerned, so that the idea has been abandoned.

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., *Xantosoma* sp., *Alocasia* sp.) 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. The production is estimated at about 180,000 tons a year.

Rice

The cultivation of rice assumes significant proportions only in South New Guinea. In that area are to be found the native paddy fields around Merauke, which are dependent on rain, and the technically irrigated and mechanically farmed trial polder near Koembe. Rice is further grown in small quantities at a number of places on Argoeni Bay, along the Amberbaken coast and on the island of Japan. During the year under review the harvests in the south were somewhat better than in 1959.

Area	Area under rice (in hectares)		Production in tons of rice milled
	planted	harvested end of 1960	
Koembe trial polder	250	241.6	301.9
Native paddy fields at Koepruk and Merauke	217	206.0	261.8
Elsewhere	31.5	13.5	14.3
Grand total 1960	498.5	461.1	578.0
Grand total 1959	460.5	440.2	507.7

The investigations performed in past years by the Koembe trial farm have led to the planning of an agricultural regional development project for this area, in which considerable room has been made for the mechanized cultivation of rice, which offers good prospects here. This project will not only make it possible to promote the economic development of the area concerned, but will also mean that the Territory's entire requirements of rice can be met.

The planned area under rice will be about 4000 hectares, whilst there are further possibilities of extension. The project has been submitted to the Commission of the EEC for their approval.

Fruit and vegetables

The cultivation of fruit and vegetables is gradually spreading. Around the chief towns of most divisions and subdivisions market gardening centres have grown up in the course of the years, mainly directed towards satisfying the demand of the local population for fruit and vegetables. In the Baliem Valley vegetables are produced for delivery to Hollandia; during the year under review sales of vegetables to Hollandia were about 47 tons. Biak is supplied by the market gardening centres of Bosnik and Ransiki. The production of the horticultural centre in the area of the Anggi Lakes, where mainly potatoes and brown beans are grown, goes to Manokwari.

Area	Area in hectares	
	fruit	vegetables
Hollandia	48	25
Geelvink Bay (Central New Guinea)	35	20
West New Guinea	37	46
Fak-Fak	32	6
South New Guinea	35	15
1960 total	187 hectares	112 hectares
1959 total	172 hectares	93 hectares

Maize and legumes

These food crops are grown in small but gradually increasing quantities by the Papuan population, mainly for their own consumption. The area under these crops can be conservatively estimated at 550 hectares of maize/sorghum (last year 200 hectares) and 350 hectares of groundnuts and other legumes (last year 250 hectares).

b. Cash crops

Copra

The area under coconut is estimated at about 11,000 hectares of producing trees and 3500 hectares of young plantings, or in all about 14,500 hectares. In suitable areas the authorities are successfully encouraging the extension of coconut growing, with which the population are already familiar in many cases, and increasing interest is noticeable.

In the years 1955 to 1957 incl. 1055 hectares of coconut were planted by the population, whilst the extension in the period 1958 to 1960 incl. was 2004 hectares. In 1960 a registered area of 738 hectares was added.

Copra exports 1959 and 1960	Weight in tons	
	1959	1960
Production area		
North coast of Hollandia	852.6	898.7
Geelvink Bay	591.0	666.8
West New Guinea	1,706.3	2,673.1
Fak-Fak/Kaimana	321.9	340.5
South New Guinea	1,536.4	1,268.7
Total export volume	5,008.2	5,847.8
Total export value	f. 3,236,200	f. 3,072,100

In all production areas, with the exception of South New Guinea, copra production rose. In the area on the south coast of New Guinea a dry 1958, following on the long drought in 1957, again had an unfavourable effect on production. Despite the lower exports from South New Guinea, record copra exports were achieved. As a result of the drop in world market prices, however, the export value decreased by about f. 160,000. The average fob prices of copra in recent years, together with the export volumes, offer the following picture:

	1952	1956	1957	1958	1959	1960
average fob price in guilders per ton	352*)	468	436	516	646	559
export volume in tons	2,945	5,094	5,025	5,652	5,008	5,847

*) lowest average fob price since World War Two.

Nutmeg and mace

The species *Myristica argentea*, known under the name of Papua nutmeg, is found in small scattered plantations, mainly in the Fak-Fak subdivision. In recent years this growing of nutmeg has brought relatively great prosperity to this area, thanks to favourable pricing of the product on the world market. Interest in nutmeg cultivation is therefore growing, elsewhere in Netherlands New Guinea as well, especially as regards the more quickly producing and superior-quality Banda nutmeg (*Myristica fragrans*). Additional planting of Banda nutmeg for 1960 amounted to 208 hectares, about 20 hectares more than last year, when the extension was 189 hectares.

The total Banda nutmeg area is now about 470 hectares, mainly young plantings. The proportions assumed by Banda nutmeg cultivation in recent years is illustrated by the figures of additional plantings in 1955 to 1957 incl., viz. 50 hectares, and those for the period 1958 to 1960 incl., which were over 420 hectares.

Although exports of nutmeg and mace are far below those of copra in volume, in recent years they have exceeded them in value.

EXPORT VOLUME IN TONS

	1936 (prewar peak)	1956	1957	1958	1959	1960
nutmeg	503	264.5	353.7	248.3	377.6	459.2
mace	80	90.8	62.8	82.0	110.2	141.0
Total	583	355.3	416.5	330.3	487.8	600.2

EXPORT VALUE IN MILLIONS OF GUILDERS

	1956	1957	1958	1959	1960
nutmeg	0.79	2.07	1.68	2.53	2.58
mace	1.11	0.70	0.61	0.76	0.87
Total	1.90	2.77	2.29	3.29	3.45

The average fob price 1956 – 1960 (in guilders per ton) offers the following picture:

	1956	1957	1958	1959	1960
nutmeg	3.000	5.500	6.760	6.695	7.691
mace	13.200	11.200	7.400	6.951	7.245

Cocoa

The area under cocoa is growing steadily. In 1960 additional plantings by the population amounted to 179 hectares. In the period 1955 to 1957 incl. 400 hectares were added, whilst in the years 1958 to 1960 incl. the expansion of this crop amounted to 675 hectares. A total area of 1105 hectares has been planted with cocoa since this cultivation began in 1954. However, it seems as if about 90 hectares of cocoa in South New Guinea will have to be regarded as a failure, so that the total area under cocoa can now be put at 1015 hectares.

Since the first year in which cocoa was exported, cocoa exports have been as follows:

1958	-	3.2 tons to the value of f. 6,000
1959	-	24.9 tons to the value of f. 55,500
1960	-	52.0 tons to the value of f. 90,800

It is expected that exports will increase rapidly in the years to come, owing to the young cocoa trees coming into production.

The fob prices followed the gradual drop in world market prices, but still stayed at an acceptable level.

AVERAGE FOB PRICE IN GUILDERS PER TON OF MARKET COCOA

<u>1960</u>		
1st quarter	-	2.041
2nd quarter	-	2.012
3rd quarter	-	1.914
4th quarter	-	1.843

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 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.

a. Stock-breeding statistics (see Appendices X and Xa)

b. Survey of stock

Cattle

The stock of cattle grew during the year under review from more than 2700 at the end of 1959 to about 3300. This expansion occurred mainly at Merauke and at Hollandia, where the cattle stock increased to 2494 and 288 respectively (1959: 2100 and 177 respectively).

The number of stud-sharing contracts remained practically constant in the year under review, since the candidates for contracts had not made the necessary provisions for looking after the cattle in time. It may be expected that the agreements for 1960 will be able to come into effect in 1961.

Horses

The stock of horses increased to 649 (1959: 496). The interest in the use of horses as mounts, as beasts of burden and as draught animals is growing.

Goats

The stock of goats is now about 2380 (1959: about 2150). The Government issued six new stud-sharing contracts for the introduction of goats in areas where they are not yet found.

Pigs

The stock of pigs around the urban centres remains constant at 2000. The feed problem still continues to hamper expansion.

To improve the pig stock of the Papuan population, about which no exact data are available, but which is estimated at several tens of thousands, some 70 white stud pigs were supplied by the Government to the population.

The consumption of pork in the urban centres is estimated at 30 tons, and that of the rural population at about 2500 tons a year.

Poultry

Only slight changes occurred in the size of the poultry stock. The production of eggs is in equilibrium with the demand.

Control of diseases and pests

In the control of pests and diseases there is close cooperation with the Institute for Tropical and Protozoan Diseases, Utrecht, the Netherlands. The Government's veterinary responsibility is vested in three Government veterinary surgeons stationed at Hollandia, Merauke and Manokwari respectively.

In August/September suspected cases of swine plague (*Pertis suis*) occurred in the Central Highlands. However, the pathogen could not yet be identified. Swine fever (*Erysipalatrix rhusiopathiae*) was also identified in this area. As the total of deaths from these two diseases remained low, it is assumed that they are both endemic. 1400 pigs were inoculated against swine plague with crystal violet vaccine.

Control of cattle tick with Diazinon yielded obviously better results than control with DDT. The cattle on the island of Biak were freed from ticks.

In the year under review 55,000 treatments of poultry against avitaminosis, 10,000 treatments against intestinal parasites, 8175 treatments against fowl pox/diphtheria and 6500 treatments against Newcastle disease were performed.

In all 39 new pathogens of parasitical origin were found among cattle, poultry and domestic animals.

Improvement of the cattle stock

On the Experimental Stock-Breeding Farm at *Mopab* (Merauke) 70 calves were born as progeny of the Brahman and Santa Gertrude bulls imported in 1958. The population of this region are greatly interested in this progeny.

At the Kota Nica experimental farm (Hollandia) a feed trial was made with chickens in which Australian, Dutch and local laying feeds were compared. The laying percentage proved the highest with Australian feed (about 60%) and the lowest with the local product (at most 50%).

A manuring trial with pigs imported from the Netherlands led to a considerable improvement in growth.

On the experimental farm at Manokwari the use of imported feed from the Netherlands for a short period caused a noticeably faster growth of young weaned pigs.

5. AGRICULTURAL INDEBTEDNESS

In this respect the situation in Netherlands New Guinea may be regarded as favourable.

It is 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 higher than the estimated yield from the production. There is so to speak an account current between population and buyers.

Only in the Fak-Fak subdivision do debts of a more serious nature occur. The population sometimes incur debts with the Chinese traders, using the whole of the coming nutmeg harvest as security. Mortgaging of gardens also occurs.

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

Smallholders were paid f. 48,830 in 1960 for the laying-out and initial upkeep of cocoa plantations. The total sum of outstanding cocoa credits is now about f. 110,000.

In South New Guinea credit was given for the purchase of ploughing and draught cattle, and also to buy means of transport (10 ox carts with teams of draught cattle).

To promote the planting of cash crops a new method of granting credit has been devised. See for this section 9, Agricultural Extension.

b. Marketing, storage, grading and processing

The assistance provided in the buying, processing, storage and marketing of native agricultural produce was, as in 1959, given for the greater part to the cocoa producers on Japen, in Manokwari, in the Nimboran subdivision and at Sentani. In all over 120 tons of cocoa pulp and 310,000 cocoa pods were bought up for the total sum of f. 66,159. The central cocoa processing plants at Seroei, Manokwari and Genjem (Jacotim) delivered during the year under review 42,979 tons, 8,378 tons and 634 kg respectively of market cocoa, or together 52 tons to the value of f. 90,800 (1959: 24.9 tons to the value of f. 55,500).

The sum of f. 7300 was spent on buying up other products, such as cereals, legumes, fruit and vegetables. In the nutmeg-producing area near Fak-Fak assistance was given in the fumigation of the product. The result of grading being compulsory was that 29.2% (1959: 27.5%) of the nutmeg exported from Fak-Fak was shipped as ABC grade (top grade). In the past all the nutmeg left the country ungraded.

c. Mechanical assistance

The total number of hours worked by the joint machinery and tractor pools during the year under review was 5389 hours. Of these, about 500 were worked in the Nimboran, in particular on the experimental farm at Blitoeng.

The machinery pool at Kota Nica (Hollandia) worked 1849 tractor hours for outsiders and 1600 hours on internal work. The equivalent figures for Wosi were 455 and 210 respectively. Seroei used the tractors for 775 hours.

d. Supply of materials, seeds and fertilizers

Implements, artificial fertilizer, insecticides, fungicides and imported seeds to the value of some f. 49,000 were provided (including those for official use) as follows:

Division	Implements	Artificial fertilizer	Chemical control agents	Vegetable seeds	Misc.	Total
(x f. 1000)						
Hollandia	8.4	8.2	1.8	4.2	0.9	23.5
Geelvink Bay	4.0	0.1	0.6	0.8	0.4	5.9
West New Guinea	6.9	1.2	2.5	2.1	—	12.7
Fak-Fak	0.3	0.1	0.5	0.1	0.5	1.5
South New Guinea	1.3	0.7	0.6	1.2	1.7	5.5
Total	20.9	10.3	6.0	8.4	3.5	49.1

Supply of planting material and seeds

In all the following were provided in 1960:

- about 146,000 coconut seeds
- „ 11,500 cocoa pods
- „ 45,000 Banda nutmeg seedlings
- „ 9,000 fruit tree plantings
- „ 122,500 stumps of auxiliary crops
- „ 43,000 miscellaneous plants
- „ 4,400 kg of seed (legumes, etc.)

e. Control of diseases and pests

Serious diseases and pests covering the whole Territory of Netherlands New Guinea did not occur.

Plagues of army cutworms and other leaf-eating insects, rats and wild pigs were of some local and temporary importance. Control of these pests cannot be described as easy, but good results have been obtained locally.

The investigation into the control of the agate snail (*Achatina fulica* Fer), i.e. the introduction and propagation of predatory enemies, was continued by the Agricultural Experimental Station. With a subsidy and advice from the agricultural extension service the chemical control of the agate snail in the vicinity of Manokwari was intensified.

In cocoa plantations near Manokwari *Pseudoniella laensis* Mill was found for the first time. This bug has long caused damage in Australian New Guinea. So far the plague has been confined to a number of cocoa plots. An extensive control campaign has been instituted.

The cocoa bark-eating borer *Pansepta teleturga* Meyer was encountered in 1960 on Japan as well as in Genjem. Adequate control methods were already available and could be applied.

A control investigation has begun with regard to an unknown longicorn beetle which eats the bark of cocoa.

The species of case beaver caterpillar which damages young shoots of coffee and cocoa is gradually decreasing in importance, one of the reasons for this being that this insect is greatly parasitized by species of flies (*Tachinidae* not yet described).

Mineral deficiency diseases occurred locally in varying degrees, and also received the attention of the Soil Science Division of the Agricultural Experimental Station.

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. a Soil Science Division, which is established at Hollandia, and an Agricultural Research Division, which is at Manokwari. 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 1961-1962 in the vicinity of Manokwari. The construction and fitting-out of this agricultural research centre, for which a sum of f. 7.8 million is available, is being financed by the EEC Development Fund.

The year 1960 saw an increase in the activities of the Soil Science and Agricultural Research Divisions of the Agricultural Experimental Station.

Soil Science Division

1. Soil Mapping Section

The following were mapped in 1960:

- a. 4000 hectares of the Agathis stand near Bosnik on Biak;
- b. 30,000 hectares near Teminaboean;
- c. 12,000 hectares in the Kamboefatem-Fatase area;
- d. a number of areas in the Teminaboean-Ajamaroe district, viz.:
20,000 hectares along the Teminaboean-Waromge road, and
14,000 hectares, also in the Kaboefatem-Fatase sector;
- e. 18,000 hectares in the Prafi plain.

2. Fertility research

The following were studied:

- a. the land of the Merauke project, which was compared with the former nature rice land in the Mopah area;
- b. the nature, origin and distribution of soils with a high phosphate content in the Ajamaroe area;
- c. the salination of ground water and topsoil at Paal Poetih (Merauke) in the dry season;
- d. the mountain land around Lake Paniai;
- e. the systematic description and analysis of standard soil types from New Guinea, in collaboration with Professor Schuylenborgh, of the Agricultural University of Wageningen, the Netherlands;
- f. deficiency symptoms in cocoa, coffee, rubber and green manuring crops in the Ajamaroe area.

3. Rice cultivation near Merauke

The planning and implementing of investigations on behalf of the Koembe rice project, which relate to the mechanized (wet) cultivation of rice, were entrusted to the agricultural expert stationed at Merauke. The investigations relate to problems concerning nature of the soil, working of the soil, bearing capacity of the worked soil and salt content of the soil, of the irrigation water and of the varieties of rice.

4. Training

Much attention was paid to the training and general education of the Papuan staff. Behind this is the realization that junior personnel as well will gradually have to have more independent functions if the work expands further. This applies both to the surveyors and to the laboratory assistants.

The course, which has been made compulsory for all experimental station officers, consists of the following subjects: Dutch, technical drawing, soil science, geology, chemistry, aerial photography, surveying, nutrition and agricultural crops.

5. Laboratory

During the year under review about 6700 analyses were performed, and furthermore 227 soil samples, 76 extracts and 12 leaf samples were analysed by the Royal Institute for the Tropics in the Netherlands.

Agricultural research division

1. Crop research

With regard to perennial crops, the 1960 programme of work was almost entirely completed, selection work on cocoa being in the forefront.

The programme for annual crops and the control of insect pests was completed only in part, owing to the fact that the vacancies for agriculturalist for annual crops and for entomologist could not be filled until the second half of 1960.

The food crop research on behalf of the population came increasingly to the fore. Among other subjects, it related to the completion of ripening of the pods of katjang idjo (*Phaseolus aureus*), the selection of *Colocasia*, *Alocasia* and *Dioscorea* varieties, and the nutritional value of several varieties of sweet potatoes (*Ipomoea batatas*).

At present under investigation are the effect of storage on the carotene content of the sweet potato, the effect of the edaphic conditions on the composition and the effect of the time of harvesting on the yield of the sweet potato in various planting patterns.

2. Entomological research

The investigation into the control of the maize borer was continued. Dusting with Derris powder gave the best results, leading to a considerable rise in production.

Control of the sweet-potato borer with insecticides also led to larger harvests.

The *Helopeltis* did some quite considerable damage to the cocoa in Ransiki. In 1960 the insect was no longer observed around Manokwari.

In general the damage caused by insects to cocoa was negligible.

As in previous years, control of the agate snail was given full attention in 1960. Useful experience was gained with the breeding of snails in captivity. New imports of predatory snails from Hawaii are expected in 1961.

The *bird damage investigation* on the Koembe Rice Farm was continued. It has not yet been discovered where the most harmful bird, the mandar, nests. An inquiry covering the whole of New Guinea is in the course of preparation.

3. Other investigations and activities

Cocoa inspection. In the course of 1960 40 batches were offered for inspection, together amounting to almost 44 tons; of this, 32% was first grade and 64% second grade, whilst 4% was not put forward for export.

4. The *collection of crops* was made up as follows at the end of the year under review: 47 different varieties of sweet potatoes and 83 of keladi, 21 tapioca clones, 16 yams, 6 sugar-cane clones and 17 varieties of groundnuts, 9 varieties of katjang idjo, 6 varieties of soya, 12 sorghum varieties and a collection of less important crops.

Much aid and assistance in the expansion of the collection of crops was given by the Laboratory for the Cultivation of Tropical Agricultural Plants in Wageningen.

In this connection reference must be made to the useful cooperation which exists with the agricultural research division of the South Pacific Commission.

The collection of perennial crops and auxiliary crops was also extended in 1960. Cocoa cuttings and coffee plants were received from Wageningen and from the Negumij experimental farm in Ransiki. Padang cinnamon plants and Banda nutmeg plants were also received.

Seeds and planting material were supplied to the agricultural extension services at Merauke, the Wissel Lakes, the Anggi Lakes and the Baliem Valley.

At the request of the South Pacific Commission durian seeds were sent to the British Solomon Islands.

Publications and reports

Soil Science Division

A publication on the salt content of water and soils appeared as a Communication of the Department of Economic Affairs.

During the year under review 17 reports were completed. Furthermore, a large number of recommendations were given to various bodies in the Netherlands and in Netherlands New Guinea.

Agricultural Research Division

During the year under review 8 articles were published, which were combined into two half-yearly numbers of the Communications of the Agricultural Research Division. An article on the magpie duck, taken from the magazine *Ardea*, appeared as Communication No. 1 of the Agricultural Experimental Station.

8. AGRICULTURAL EDUCATION

There are three forms of agricultural education, viz. the agricultural teaching given at the village and continuation schools, the practical agricultural courses and the courses for junior/executive staff given by the Agriculture Branch.

Agricultural teaching at the village and continuation schools forms an integral part of the education at these schools. It is simple, and is confined in the main to practical teaching in the cultivation of annual food crops and fruit trees in the school gardens.

The practical agricultural courses serve the purpose, within the framework of regional development plans, of giving young farmers practical training in the growing of both annual and perennial food and cash crops. Examples are the agricultural training centre at Kepi, the village courses on Japen and the cocoa information course at Manokwari.

The third form of agricultural education consists of the Government courses for Papuans, training them as junior agricultural, stock-breeding or inland fisheries officers and as agricultural supervisors in the agricultural extension service. (See Appendix XLII.)

Survey of the courses

a. Training centres and village courses

Agricultural training centre at Kepi

At this centre young men who come to the fore in their own communities, together with their families, are given a one-year course in the growing of perennial cash crops (cocoa and/or rubber, in particular the men) and of (high-grade) food crops (in particular the women). See what is said below about the Mappi project (B.11).

Fak-Fak training centre

At this training centre leading farmers who are considered capable of taking command in their villages are trained for the cultivation and preparation of nutmeg, the main crop grown in this region. The course also pays attention to certain food crops, to promote an improved diet.

During the year under review 13 persons from the Fak-Fak subdivision attended this course, whilst at the end of the year 16 migrants from the Akimoe migration project (Mimika subdivision) were placed on this course (see section B. 11, Agricultural Projects, of this chapter).

Kamoe training centre (Moanemani)

During the year under review preparations were made for the foundation of a training centre at Moanemani, in the Kamoe area (Tigi subdivision). The population of this area will be trained here in the growing of Arabica coffee, which offers favourable prospects in these highlands. Attention will also be paid to the cultivation of high-quality food crops.

Village courses on Japen

Interest in agricultural courses in the villages of the island of Japen has greatly increased. Whilst in 1959 courses were given in a couple of villages only, in 1960 this grew to six courses with 155 pupils from nine villages. These six-monthly courses are given to farmers from the agricultural nuclei of this region.

Cocoa information course at Manokwari

In 1960 ten leading farmers from near-by villages were given a one-month cocoa information course. They will direct the planting of cocoa in their villages in the service of the Agriculture Branch.

b. Government courses

In the *Government courses for junior officers* in 1960 23 pupils passed the examination for junior agricultural officer, six for junior stock-breeding officer and two for junior inland fisheries officer. At the end of 1960 there were 43 pupils on the courses, viz. 24 pupils in Class I (general agricultural training), 15 pupils in Class II, agriculture section, and 4 in Class II, inland fisheries section.

Besides this two-year course, an *extension course* is given every year, which is open to unqualified junior agricultural officers with years of practical experience. This course, which is also given at Kota Nica, lasts four months. Its diploma has been made equivalent to that of the junior officer course. Of the 23 mentioned above, 8 passed this extension course.

The course for agricultural supervisors, which began in 1958, was passed by five pupils, who gained the certificate for the theoretical part of the course. For six months they will be given a practical training course in one of the agricultural districts.

At the start of the new school year this course had nine pupils, six in Class I and three in Class II.

One of the graduate supervisors made an exploratory trip to the Netherlands.

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 agricultural districts are further divided into subdistricts, 18 in all, which coincide with those administrative subdivisions in which agriculture is being carried on, viz. Hollandia/Sentani, Nimboran, Sarmi, Baliem, Schouten Islands, Japen/Waropen, Wissel Lakes, Manokwari, Sorong/Radja Ampat, Ajamaroe, Ransiki, Wandammen, Fak-Fak, Kaimana, Mimika, Merauke, Mappi, Moejoe. The 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 agricultural extension service at the end of 1960 was: 4 agricultural advisers, 26 senior executive, 16 junior executive and 105 junior agricultural officers, 10 technical and 32 clerical employees.

b. Aims and activities

The agricultural extension service sets itself the aim of developing and increasing the productivity of agriculture, and enhancing the possibilities of earning a living by farming. This implies the achievement of the greatest possible extension of the area under cash crops, besides the qualitative and quantitative improvement of food cropping. The fundamental importance of the cultivation of cash crops is that it penetrates to and makes its effect felt on the smallest units of this country, since the farming Papuan family can derive from it a considerable part of its money income which is required to break open the original closed economy.

In this connection the agricultural extension service is endeavouring to form small family farms, the main element of which consists of a combination of the growing of food crops to meet the family's own requirements and the cultivation of cash crops (mainly perennial ones) to meet the growing 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 at all times, even in periods of economic depression, the family 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.

It is therefore for the time being only the *perennial* crops (coconut, nutmeg, cocoa, coffee, 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 is thus a means of increasing the productivity of the family's work.

Meanwhile, besides the traditional method of agricultural extension work by persuasion and conviction, it has become possible to introduce a new element into this Government activity from which a rapid increase in the planting of cash crops can be expected. In suitable regions the construction of access roads is to be combined with the laying-out of native gardens for export crops, the whole of this being done as paid labour. The part of the wage costs incurred by reclamation and planting is in fact a kind of credit. Once the crop is in production, this money must be repaid in instalments from the annual harvest incomes. Thus the urge to earn a money income is satisfied immediately. A start has been made with the preparations for such projects in the Mappi, Moejoe and Upper Digoel areas.

Besides the expansion of native cultivation of cash crops, agricultural policy is also directed towards widening and improving 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 root crops, is considered to be too unbalanced, i.e. too poor in protein. 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, but besides this it is still desirable that a better diet be obtained as much as possible directly from the farmer's own production.

The activities of the agricultural extension service 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 regarding agricultural production for export.
 - a. organizing and publicizing additional planting;
 - b. giving advice and assistance in the processing of the market product, work relating to the quality;
 - c. information and advice aimed at improving the upkeep of gardens;
 - d. making better planting material available.
4. Agricultural education, both the training of Government personnel and practical instruction in agriculture.
5. Agricultural assistance, such as intermediary in the marketing of agricultural produce, credits and the provision of mechanical assistance.
6. Control of disease and pests.
7. The implementation of agricultural projects.
8. Work in connection with stock-breeding and inland fisheries.

c. 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. However, the supplementary local research into the suitability of natural conditions for various crops, together with the propagation of planting material, is almost entirely done in a large number of widespread Government experimental gardens and observation plantations of the various residency agricultural extension services.

Depending on the local purpose they are meant to serve, the gardens contain collection, observation, propagation and demonstration plantations of various crops, such as rubber, cocoa, coffee, nutmeg, fruit trees, legumes, cereals, vegetables, green manuring crops, shade trees and other auxiliary crops. They vary in size from half a hectare to 30 hectares; they now total 36 experimental gardens and 15 observation plantations. The experimental gardens are located in the following places:

Kota Nica, Nimboran, Sarmi, Waris (Hollandia division); Biak-Bosnik, Korim, Soepiori, Noemfoer, Seroei, Barapassay, Enarotali, Aikay, Erepakaride (Geelvink Bay/Central New Guinea divisions); Manokwari, Kebar, Saukorum, Ransiki, Wasior, Ajamaroe, Eway, Mos, Remoe, Iray (West New Guinea division); Fak-Fak, Kaimana, Hiripao, Akimoega (Fak-Fak division); Merauke, Badé, Agats, Mindiptanah collection, Mindiptanah rubber centre, Okaba, Kimaan, Tanah Merah, Getentiri (South New Guinea division).

The observation plantations are confined to one or two cash crops, and vary in size from a few hundred square metres to a maximum of half a hectare. They are to be found in all divisions, but chiefly in the Central Highlands (Arabica coffee).

d. Information and advice with regard to food production

As in past years, in 1960 the residency agricultural extension services in various regions of the Territory again gave advice and information and offered assistance in the cultivation of food crops in general and fruit, vegetables and legumes in particular. These activities are directed towards increasing productivity in food cropping, and also to the qualitative improvement of the native diet.

In this connection great attention is paid to the introduction of food crops rich in protein (legumes) and other high-quality food crops as catch crops to precede and be grown between the cocoa crops in the plantations being encouraged by and laid out under the direction of the agricultural extension service.

The best results were obtained in the agricultural nuclei on Japen, where the increasing planting of legumes and cereals has already led to a marked widening of the diet. This system is also being successfully applied elsewhere in Netherlands New Guinea. In most Government experimental gardens space has been reserved for observation, demonstration and propagation plantations of annual food crops and various fruit trees. Furthermore, seeds, planting material, 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 furnished in marketing the produce.

Partly as a result of these efforts, the demand for fruit and vegetables in the urban centres can be increasingly met.

SURVEY OF PLANTING MATERIAL AND SEED FURNISHED TO THE POPULATION

Type of planting material	Nature and quantity (1000 pieces)	Hollandia	Geelvink Bay	West New Guinea	Fak-Fak	South New Guinea	Total
Coconut	seed coconut	0.7	—	49.4	27.6	68.2	145.9
Cocoa	Pods	4.8	3.3	3.1	—	0.3	11.5
Nutmeg	seedlings	—	2.4	4.0	38.5	—	44.9
Fruit trees	grafts, seedlings	1.6	6.8	0.3	0.4	0.1	9.2
Auxiliary crops	stumps	115.1	6.4	—	—	1.2	122.7
Miscellaneous	seedlings, cuttings	1.1	36.6	—	5.5	—	43.2
Total	(1000 pieces)	123.3	55.5	56.8	72.0	69.8	377.4
Seeds, mainly of food crops	in tons	1.6	0.9	0.1	0.3	1.5	4.4

e. Information and advice with regard to agricultural production for export Coconut (copra)

Extension work with regard to this crop is concentrated on additional planting, with which particular success was gained in the Teminaboean and Inanwatan districts (West New Guinea) and in the Mappi subdivision (South New Guinea) and Kaimana subdivision (Fak-Fak). The Mimika and Asmat subdivisions were included in the programme as new projects.

Further, the thinning-out campaign, which tends to increase yields, was continued and attention was devoted to advice on processing, so as to get a better grade of copra.

Additional plantings of coconut display the following picture:

Division	1955 to 1957	1958 to 1960	added in 1960
Hollandia	40 ha	84 ha	—
Geelvink Bay	40 ha	133 ha	27 ha
West New Guinea	370 ha	810 ha	243 ha
Fak-Fak	50 ha	347 ha	169 ha
South New Guinea	555 ha	630 ha	299 ha
Total	1055 ha	2004 ha	738 ha

In the last three years about twice as much coconut has been planted in Hollandia and West New Guinea as in the three years before then. In Geelvink Bay the figure is over three times as much and in Fak-Fak no less than seven times as much.

Nutmeg

With regard to the growing of nutmeg, the activities of agricultural extension were particularly concentrated on the organization and encouragement of the laying-out of Banda nutmeg (*Myristica fragrans*) gardens as a gradual replacement for the inferior Papua pala nutmeg, mainly in the Fak-Fak division. Furthermore, efforts are being made to improve the quality of the existing market product of Papua nutmeg and mace, by means of better harvesting and storage methods, by fumigation and by making grading compulsory.

The good market prices of nutmeg and mace in recent years 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.

SURVEY OF BANDA NUTMEG PLANTINGS

Region	Area at end of 1957	Added in 1958	Added in 1959	Added in 1960	Area at end of 1960
Biak-Japen	—	—	34 ha	11 ha	45 ha
Fak-Fak	50 ha	14 ha	98 ha	105 ha	267 ha
Kaimana	1 ha	11 ha	55 ha	72 ha	139 ha
West New Guinea	—	—	—	20 ha	20 ha
Hollandia	—	—	2 ha	—	2 ha
Total	51 ha	25 ha	189 ha	208 ha	473 ha

Cocoa

The activities of agricultural extension comprise the introduction or expansion of cocoa growing in suitable areas, viz. choice of land, trial plantations, provision of planting material, supervision of planting, upkeep and harvesting, and also assisting in processing and marketing of the product (setting up central processing plants, buying up pods or wet beans, processing, storage, marketing and supervision of quality).

So far cocoa growing has been introduced in Hollandia, Nimboran, Sarimi, Japen, Waropen, Manokwari, Ransiki and the "neck" of the Vogelkop.

SURVEY OF ADDITIONAL PLANTINGS

Region	1955 to 1957	1958 to 1960	1960
Hollandia-Nimboran-Sarmi	144 ha	144 ha	54 ha
Japen-Waropen	165 ha	342 ha	77 ha
Manokwari-Ransiki	33 ha	100 ha	46 ha
South New Guinea	38 ha	77 ha	2 ha
Experimental gardens	20 ha	14 ha	2 ha
Total	400 ha	677 ha	181 ha

In South New Guinea rubber growing has proved to offer considerably better prospects than the growing of cocoa, so that additional cocoa plantings there, with the exception of an area in the Nambiomien region (Mappi), were at first cut back and then stopped altogether.

In the Nimboran and Sarmi subdivisions the existing native cocoa gardens required some cultivation measures in 1959/1960; the manpower which these required led to additional plantings being slowed down there temporarily. For the introduction of this crop in the Warmare plain (Manokwari subdivision) shade trees were planted and nurseries equipped for the issue of cocoa planting material.

Coffee

The population coffee stands were extended during the year under review by 8 hectares to a total area of over 50 hectares. In the Kaimana subdivision a start was made with the introduction of Robusta coffee growing. The Robusta stand at Ambaidiroe came into production; the first harvests (totalling over 700 kg) found a ready domestic market. The Arabica coffee growing in the area around the Wissel Lakes was slowly extended. The number of Arabica observation gardens in the Baliem Valley was increased.

Rubber

The trial plantations in the Mappi, Upper Digoel and Moejoe subdivisions displayed a very good growth development. On the strength of these favourable results, preparations for widespread introduction of this cash crop to the population have begun, among other things by moving planting material from Ransiki to Upper Digoel, where large nurseries were laid out.

10. INLAND FISHERIES

The development of inland fisheries has proceeded satisfactorily. From the inland fisheries station at Jabaso (Santani), in which there is a group of breeding ponds, fish fry was sent to large population fish ponds located in the Hollandia division, the South New Guinea division and in the Central Highlands, among other places. In the course of the year most of the fish ponds came into production. In 1960 the following numbers of fish fry were furnished or put out: *Tilapia Mossambica* (3850), Canton carp and Japanese gold carp (958) and *Osphronemus gourami* (25). It was possible to issue considerable more carp than in 1959.

A start has been made with inland fisheries education. Two Papuans passed the examination for junior inland fisheries officer. They were immediately placed at the disposal of the agricultural extension service. The course was continued with four candidate officers. The total duration of the course is one year's specialized training, following directly on the first class of the course for junior agricultural officers.

The group of ponds at the Jabaso inland fisheries station was considerably extended in order to make it possible to increase the provision of fish fry. In these ponds the following species of fish, among others, were bred: Japanese gold carp, European carp, Gourami Giant variety, *Tilapia Mossambica* *Helostoma Tenminchii*, *Gambusia affinis* (several thousand of these) and Canton carp.

In the South New Guinea division a publicity campaign took place and demonstrations were given in the technique of catching fish. Better fishing tackle made from native material was propagated.

In the Manokwari and Ransiki subdivisions and in the Central Highlands west of the Wissel Lakes the laying-out of population fish ponds was vigorously encouraged in collaboration with the agricultural extension service and the Protestant and Catholic Missions.

11. AGRICULTURAL PROJECTS

In a number of regions selected for their possibilities of further development a more concentrated form of agricultural extension can be applied to persuade the population to use more permanent and more productive farming systems, in particular in Nimboran, in Mappi, on Japen, on Biak, in the Warmare plain, in the Akimoea area and in Ajamaroe/Teminaboean. The general pattern of these projects consists of the formation of nuclei of farmers, who under expert guidance are induced to set up more productive family farms which are based on the combined growing of food and perennial cash crops and are adjusted to the potentialities of the regional environment, in the expectation that these nuclei will, by imitation, 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 model farms with more skilled farmers was set up at Blitoeng in 1955-1959. The Blitoeng pilot farm project is now practically completed, and may be regarded as a success. The 14 farmers involved (including their families, there are now 57 persons in the project) can now carry on farming without further financial aid.

The group comprises the following:

3 farms, each of 4.25 hectares	=	12.75 ha	
11 farms, each of 3.25 hectares	=	35.75 ha	48.5 ha
1 communal cattle pasture		7.50 ha	
area of yards and roads		7.00 ha	
spare land		11.00 ha	25.5 ha
total area			74.0 ha

The area of these farms under cocoa covers 25 hectares, of which the oldest plots are now coming into production. The area under cocoa will be extended in the coming year to a total of 32 hectares. The area meant for the cultivation of food crops (planted in part with katjang idjo, groundnuts and green manuring crops) covers about 12 hectares, whilst moreover a total of 3 to 4 hectares is available for farmyard crops (root crops), vegetables and fruit trees). There is a modest collection of livestock, including 14 cattle and 159 chickens.

Outside the farms the farmers also have at their disposal sago forests, from which they still tend to draw part of their traditional (basic) diet.

The situation regarding cocoa planting in the whole Nimboran subdivision presents the following picture:

Farm groups	Area at end of 1959	Added in 1960	Area at end of 1960
Group of model farms	24 ha	1 ha	25 ha
Cooperative society	8 ha	—	8 ha
Native gardens	45 ha	37 ha	82 ha
Experimental gardens	2 ha	—	2 ha
Total	79 ha	38 ha	117 ha

Mappi project

In the Mappi subdivision (South New Guinea) selected families from various 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 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 home villages to give practical application to what they have learned, under the direction of the agricultural extension service, and to encourage others by their example.

The agricultural training centre at Kepi has, since its opening in 1956, trained a total of 75 families from 17 villages. In June 1960 20 new families from 5 villages started training. The trained farmers have concentrated with their fellow-villagers on the planting of cocoa and coconut. It has meanwhile been found that rubber offers better prospects in this region, so that this crop will come more to the fore. At the end of the year under review the area under coconut was almost 1000 hectares, and that under cocoa 114 hectares, of which, however, about 90 hectares will probably have to be written off as a failure.

Japen/Waropen

On the island of Japen and in Waropen groups of selected farmers in various villages are being induced by means of intensive extension work to set up individual farms in adjoining groups on land reserved beforehand on the vicinity of the villages. On these farms a 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 farmers to lay out their new farms entirely with their own resources, though at a slow rate, without harming the traditional means of supporting their families (i.e. sago production and fishing). Every year 0.25 to 0.5 hectares of cocoa are laid out with temporary planting between this cocoa of food catch crops, as a result of which after four to eight years about two hectares are planted with cocoa, the basis thus being laid for a 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.

The development of this regional project has proceeded as follows:

	end of 1959	end of 1960
number of agricultural nuclei	29	32
number of farms being built up	796	880
area under cocoa	440 ha	517 ha
cocoa exports from Seroei	19 ton	43 ton

In 1960 the agricultural extension service here bought up cocoa pods and wet cocoa to the value of about f. 49,000 (1959: f. 29,500) and processed these into a market product. Moreover, assistance was given in the buying-up of fruit, vegetables, legumes, cereals and other agricultural produce amounting in value to about f. 4000.

Schouten Islands

On Biak a start was made in the vicinity of Sjabes with the establishment of farms as described above for Japen/Waropen. By the end of 1960 five families had cleared 1.5 hectares and had partly planted them with food crops and shade trees.

Warmare plain

In this plain, located southwest of Manokwari, a migration project has been embarked on for the much scattered and nomadic Moiree population from the Arfak mountains. A group of the population, numbering about 140, are already building more permanent dwellings and laying out food gardens, whilst

it is expected that the number of migrants will increase greatly. Each family will ultimately lay out alongside its food gardens two hectares of cash crops (cocoa, rubber). Possibilities of expansion for the settlement of these mountain-dwellers lie along the road to the coast and further in the Prafi plain.

Akimoeaga project

This project has been set up on behalf of the transmigration of two sections of the population now living on the south side of the Central Highlands to the plain bounded by the Akimoeaga and Akaro rivers (Mimika subdivision). It is the intention to guide this *spontaneous* migration in the direction of the formation of agricultural nuclei adapted to the level of development of the people concerned. The migrants receive assistance from the agricultural extension service in laying out food gardens, and also in the erection of temporary housing. The first food harvests have already been gathered. Furthermore, the Agriculture Branch is investigating in three observation plantations which perennial cash crop is suitable for the region concerned. Sixteen migrants are now on a course in practical agriculture lasting six months at Fak-Fak.

Ajamaroe project

The Ajamaroe regional development project, which relates among other things to transmigration from the locally relatively densely populated karst hills to farmland in the lowlands, is still in the preparatory stage. A pedological survey was made, whilst the Agriculture Branch has laid out observation plantations of perennial cash crops in three experimental gardens, viz. at Ajamaroe, Eway and Mos. Furthermore, the question of accelerated and improved ladang regeneration in the karst hills – like the transmigration, this is directed towards lightening the burden on the land which is to be expected locally in the future – is being investigated in collaboration with the Agricultural Experimental Station.

C. FORESTRY 1. FORESTRY POLICY

Forestry policy is directed towards developing the production potential of the natural forest resources of Netherlands New Guinea to foster the economic progress of the Territory, with due allowance for the soil-conserving capacity and the soil-protecting function of the forests.

Netherlands New Guinea abounds with forests; about 80% of the area is covered with forest. However, from the hydrological point of view a considerable part should stay covered with it, whilst the forests are highly heterogeneous and often difficult to open up.

The work of the Forestry Branch is conducted in the field of forest exploration, inventorying and mapping, developing forests and timber research, fostering the collection of forest byproducts, developing timber-felling and woodworking industries, instituting forest areas to be maintained for timber production and the collection of forestry byproducts and also to promote hydrological interests, laying out forests, reforestation and forest improvement, forestry education and forestry information.

2. ORGANIZATION

The Forestry Branch comes under the Department of Economic Affairs. The head office of the Forestry Branch is established at Hollandia. The Branch consists of two sections, viz. the Forest Administration Section and the Forestry Planning Section. The Forest Administration Section is divided among four administrative divisions; the Forestry Planning Section is established at Manokwari, together with the Development and Planning Brigade.

Forestry education is given at Hollandia. After the completion of the Agricultural Training Centre to be built at Manokwari, this education will be concentrated there.

SURVEY OF THE STAFF IN THE YEARS 1958 TO 1961:

	1958	1959	1960	1961
University graduates	9	11	11	13
Intermediate staff	38	53	61	72
Junior staff	66	81	90	106
Clerical staff	23	28	22	23
T o t a l	136	173	184	214

FINANCIAL RESULTS FOR 1960

Expenditure	
staff	f. 955,559.48
materials	f. 2,696,605.80
Total	f. 3,652,165.28
Revenue	
sale of forestry material	f. 2,773.18
intermediary in the buying-up and selling of forest products	f. 246,788.12
proceeds of goods procured to further the production of timber and the collection of forest products (inducement)	f. 104,596.63
fixed charges and royalties	f. 95,314.82
proceeds of "Sarmi" key project (copal)	f. 43,876.27
proceeds of "Bosnik" key project (copal and timber)	f. 9,776.40
proceeds of "Kebar" key project (idjuk)	f. 425.-
other revenue	f. 22,637.72
Total	f. 526,188.14

3. ACTIVITIES IN 1960

a. Forest exploration and inventorying

Exploration activities in the year under review were directed to a considerable extent towards the immediate need for data on behalf of applications for timber concessions by foreign timber companies, chiefly from Australia and Australian New Guinea. The inventories at Aisaoe (Japen), Warsamson and Poelau Adi were a direct consequence of this interest from abroad.

The activities performed consisted of reconnaissance flights, general and detail mapping, ground inventories and botanical inventories.

During the year under review two reconnaissance flights were made to locate valuable forest stands. These flights covered the Baliem Valley, Bokondini, Lereh and Tanah Merah, and in all a distance of about 1400 km was flown.

General maps were made from aerial photographs of the following areas:

Nabiré	41,500 hectares	(scale 1 : 20,000)
Warsamson	37,000 hectares	(scale 1 : 100,000)
Sarmi-East	65,000 hectares	(scale 1 : 100,000)
Japen-East	22,000 hectares	(scale 1 : 50,000)
T o t a l	165,500 hectares	

Detail maps were made of the following areas:

Biak	3400 hectares	(scale 1 : 10,000)
Kebur Centre	4500 hectares	(scale 1 : 10,000)
Andai-Maroeni	5800 hectares	(scale 1 : 10,000)
Manokwari	5000 hectares	(scale 1 : 20,000)
T o t a l	18,700 hectares	

Ground inventories

The following areas were inventorized in the year under review on their timber stocks:

Forest area	Area in hectares	Intensity of inventorizing
Masni/Warjorie	12,000	1% census of all species
Aisaoe	500	100% census of Agathis
		1% census of remaining species
Aisaoe	500	1% census of all species
Warsamson	31,000	0.4% census of all species
Poelau Adi	13,000	1% census of all species
T o t a l	57,000 (1959 : 24,000 hectares)	

The following botanical inventories were performed:

- Sekoli : as a botanical collection in the group of trial strips;
- Wissel Lakes : as an approximate botanical inventory in the area north and north-east of Lake Paniai;
- East Japen : as a botanical collection in the group of trial beds.

b. Forest reservation

In previous years two hydrological reserves were instituted, viz. the "Hollandia" forest reserve, located in the subdivision of the same name, and the "Tafelberg" forest reserve near Manokwari.

It was later considered necessary to extend the latter reservation. The technical provisions required (marking out and mapping) were undertaken and have meanwhile been completed. Furthermore, an area of forest near Sorong has also been designated for maintenance, likewise for hydrological reasons, the "Remoe" forest reservation, whilst an area of forest located near Sarmi has been designated as a production forest reservation. The necessary technical provisions for the institution of these forest reservations have also been completed.

The definitive legal institution of these three forest reservations is awaiting settlement of the administrative details.

c. Production data

For data on the production of rough and sawn timber see Appendices XI and XIa.

The production of rough timber increased during 1960 by over 30% (more than 15,000 cubic metres) in respect of 1959. This increase is mainly the result of felling for export to Japan and Australia.

Total copal exports in 1960 displayed a decline of 237.7 tons.

export of:	1960	1959
native copal	339.7 tons	529.2 tons
Forestry copal	212.9 tons	261.1 tons
T o t a l	552.6 tons	790.3 tons

The average price for the exported copal was f. 139 per 100 kg (1959: f. 129.40 per 100 kg). The average price of Forestry copal was f. 157 per 100 kg in 1960, as a result of the better quality and grading. In 1960 Forestry copal production was 274.1 tons as against 212.6 tons in 1959.

4. TRAINING AND RESEARCH IN 1960

Training

In 1960 two extension courses were held for forest supervisors; twelve supervisors were awarded diplomas. They included the first Papuan forest supervisor.

The engagement of young Papuans with continuation school diplomas for training as junior forestry officers is proceeding satisfactorily. There are now fifteen on the course. Preparations were made for a course in site measurement and mapping.

Research

Forest botanical research continued with the collection of 1500 herbarium samples. As a result of this, and also through gifts and exchanges, the total collection is now about 11,700 samples. For informatory purposes sets of timber samples of 28 economically important species were distributed.

Trials were made with the growing of coniferous species from seed imported from other tropical areas.

Contact with scientific institutions in other countries and in the Netherlands was continued and extended.

5. DEVELOPMENT PLANS

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

1. *Bosnik key project* (copal production and cultivation of *Agathis*)

The boundaries of the Bosnik area, which is 3300 hectares in size, have not yet been finally fixed. This will be done in 1961. The topographical map of the 2000-hectare *Agathis* area was completed. In the same area soil mapping was done by the Soil Science Bureau, Hollandia.

Furthermore, a storage shed, a copal-sorting shed, an office and a workshop, both with stores, and a number of houses were built in the Parieri yard. All the building was done in wood. The network of access roads was completed in 1960.

2. *Sarmi key project* (copal production and cultivation of *Agathis*)

In 1960 the number of trees regularly tapped in the Bodem production area reached more than 11,000. These trees yielded 102.5 tons copal. (In 1959 the production was just over 26 tons). The production could be increased still further if more manpower were available. The difficult terrain made transport of the product very difficult. A house for a junior forestry officer, a lodging house and a copal shed were built.

3. *Kebar key project* (cultivation of *Araucaria* as industrial timber)

In 1960 20 hectares of this project were planted with *Araucaria*.

Agreement was reached with the population on the relinquishment of an area of 1500 hectares of forest and grassland in the Kebar plain. Meanwhile, over 100 hectares of this area have been prepared for planting with *Araucaria* at the beginning of 1961.

Various buildings were completed in the yard.

4. *Teminaboean/Konda key project* (cultivation of *Agathis*)

In 1960 72 hectares of new *Agathis* cultures were laid out. In all, 116 hectares have now been planted with *Agathis*. Training began of tree-climbers for the collection of *Agathis* cones for the provision of seed. A Biak tree-climber who was given a training in Australian New Guinea at the end of 1959 in the climbing of 60 to 70 m high *Araucarias* to pluck seed cones was sent to the various key projects in 1960 to train climbers on the spot.

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.

In 1959 a start was made with the setting up of a nursery near Sentani on behalf of the improvement of forests in the Sekoli plain and the reforestation of suitable grass slopes and savannas round Lake Sentani with quick-growing species of industrial timber.

Of the area suitable for use as the nursery, which is about 10 hectares in size, one hectare has already been laid out as such and partly put into use.

By the end of 1960 various trial reforestations had been laid out, including about four hectares of *Araucaria cunninghamii*.

A number of houses were built, together with an office and a workshop, both with stores.

At the same time a system of water mains was laid out for the houses and the nursery, with an automatic spraying system.

6. *Nabire hinterland key project*

For this project the aerial photographs applied for but not yet made available are considered necessary for the drawing up of a development plan for the copal areas in the hinterland of Nabire. Photographic interpretation, followed by ground exploration and inventorying, will have to give a better insight and provide the necessary data before the development of this project, which is difficult of access, can begin.

D. SEA FISHERIES

1. ORGANIZATION

The Sea Fisheries Branch comes under the Department of Economic Affairs. Its head office is at Hollandia. The Sea Fisheries Branch consists of two districts, viz. the Hollandia district, with the Sea Fisheries Station at Hollandia as base, and the Geelvink Bay district, with as base the Sea Fisheries Station at Manokwari and the substations of Seroei for information on the Waropen coast, Insobabi for the development of the Soepiori coast and a substation on the Mios-Aœeri Islands for the development of fisheries in the area in question.

The head office at Hollandia is under an inspector, aided by a technical manager. The fisheries stations are under technical managers and the substations under assistant technical managers.

Government efforts in relation to sea fisheries are solely directed towards the development of native fisheries.

The Branch has at its disposal six vessels, viz. the fishing cutter "The Good Hope", which is also used for provisioning the various stations and substations, a Holland launch on behalf of fishery information along the Waropen coast, a 13-metre wooden motor fishing boat for fishery investigations and three 8-metre wooden motor fishing boats.

The above-mentioned wooden boats were built at Hollandia and were taken into service in the course of the year under review. The three 8-metre wooden fishing boats are being used in trial operation in collaboration with the native population. They have ice and fish holds.

Expenditure	
<i>The expenditure for 1960 was:</i>	
Staff	f. 116,573.-
Materials	f. 241,588.-
Total	f. 358,161.-
Revenue	
Sale of dried/salted fish	f. 40,819.-
Sale of fishing equipment	f. 26,461.-
Sale of inducement goods	f. 8,768.-
Other revenue	f. 12,711.-
Total	f. 88,759.-

2. PRODUCTS

Landings of fresh fish in the year under review totalled 4000 tons.

The production of dried/salted fish was 35 tons.

The landings of shells, including troca, black lips and green snails, during the 1960 season was as follows:

	1959	1960
weight x 1000 kg	93.1	77.4
value x f. 1000	207.4	181.8
(see Appendix XII)		

The shells came from the areas of Sarimi, Geelvink Bay, the Radja Ampat Islands and Fak-Fak.

3. RESEARCH

a. Technical catching research

This research covers the improvement of existing fishing methods and the location of new fishing grounds, either with existing or with new methods.

b. Trial operation research

This research covers the operation of the above-mentioned 8-metre wooden fishing boats in collaboration with the population. All shore facilities for the fishermen, together with the locating of the fishing grounds, are attended by to the See Fisheries Branch.

c. Preservation research

Investigations are being made with various proportions of salt into the keeping quality of the product.

d. Organization of groups of fishermen

The creation of groups of fishermen consists in the training of fishermen in groups for the catching of fish with mechanized vessels, in which both existing catching methods are used and new catching methods introduced.

Within the framework of Dutch-Australian collaboration a visit was received in February 1960 from Dr. Rapson, Director, Fisheries Division, Australian New Guinea, Mr. H. van Pel, Fisheries Officer of the SPC, was also present. The latter's visit related in particular to the mechanized wooden vessels being built. In the year under review a number of trawl and beam trawl nets were exchanged between Netherlands New Guinea and Australian New Guinea, with which various experiments were made in certain areas.

4. DEVELOPMENT

Along the whole Waropen coast an investigation will be made into fishing for shrimp and mackerel (*rastrelliger*) with trawl and ring nets.

The area of the Waropen Coast is being extended to include the Moor Islands.

Four young Papuans, graduates of the Primery Technical School, are attending the course in boat-building which started at Auki, Malaita, British Solomon Islands on 1 July, 1960, under the auspices of the SPC and UNTAB.

E. MINING 1. ORGANIZATION

The Office of Mines comes under the Department of Economic Affairs. At the end of 1960 the staff of the Office consisted of four geologists and mining engineers, one assistant geologist, two superintendents, one chief supervisor, three supervisors, two clerks and one technical employee.

Since 1959 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 the Development Fund of the EEC has made the sum of f. 18 million available.

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 has been submitted to the Netherlands Parliament, 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 remain sufficiently attractive for private enterprise to make the necessary investments.

The bill has not yet completed its passage through Parliament.

3. MINING ENTERPRISES

The Nederlandsche Nieuw-Guinee Petroleum Maatschappij has handed back the greater part of its concession areas. The activities of the company are now confined to oil production in the western part of the Territory.

In 1959 agreement was reached between the Government and a syndicate of Dutch and foreign firms concerning 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 Cycloop Mountains. (The legal authorization for the conclusion of this agreement, for which the necessary steps were taken in the year under review, has meanwhile been granted).

Explorations made by the Oost-Borneo Maatschappij NV on the island of Misool have not yielded any positive result. The explorations made by this company in the Carstensz range were, on the other hand, hopeful. The findings caused the exploration to be intensively continued in 1961.

4. WORK DONE

In 1960 the Government made a number of drillings on behalf of civil engineering projects. Furthermore, extensive explorations were made in the area of the Upper Digoel and in the area of the Upper Islands river. The concentrations of gold found in the latter area are now the subject of study. The search for minable gold in the Upper Digoel area was not successful. Extensive explorations in the area of the Poi River did not have any economically achievable results, either.

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-Shoreyard, Sorong-Doom, Sorong-Remoe, Manokwari, Fak-Fak, Merauke and Tanah Merah.

The number of generating sets is 40; the total output is 9397 kVA. The voltage supplied by all stations is 220/380 V, 50 c/s.

On 1 December, 1960, the electric power plant of the Nederlandsche Nieuw-Guinee Petroleum Maatschappij at Sorong was taken over by the Government (see statistics).

Small power plants, either privately or cooperatively owned, are located at Kaimana and Seroei.

The Post Office, the Department of Public Health and the Protestant and Catholic Missions have available throughout the Territory small sets for their own use and for supplying current to outsiders.

Development in 1960

The high-tension networks, transformer stations and distribution systems were, where necessary, extended in accordance with the increase in the number of consumers. The energy produced increased from 9,623,000 kWh to 10,770,000 kWh. The number of connections rose from 5156 to 6400, partly as a result of the NNGPM power plant at Sorong, with its 897 consumers, being taken over.

2. STATISTICS

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

Number of power stations	Location	Output in kVA
1	Hollandia	1 x 1250 - 2 x 625 - 3 x 450 - 3,850
1	Ifar	2 x 75 - 1 x 60 - 210
1	Biak	4 x 200 - 800
1	Manokwari	4 x 385 - 1 x 200 - 1 x 100 - 1,840
1	Sorong-Shoreyard	4 x 312,5 - 1 x 625 - 1,875
1	Sorong-Doom	3 x 60 - 1 x 14 - 194
1	Sorong-Remoe	2 x 60 - 120
1	Fak-Fak	3 x 60 - 180
1	Merauke	5 x 60 - 300
1	Tanah-Merah	2 x 14 - 28
10	power stations	40 sets - 9,397 kVA

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

The high-tension grid and distribution system has a nominal voltage of 6,3 kV.

Survey of number of connections from 1956 onwards

	1956	1957	1958	1959	1960
Hollandia	1781	1979	2276	2381	2454
Ifar	135	138	133	116	116
Biak	403	450	642	844	905
Manokwari	503	643	685	794	897
Sorong-Shoreyard	—	—	—	—	897
Sorong-Doom	259	242	251	258	239
Sorong-Remoe	—	—	76	172	229
Fak-Fak	130	140	181	222	258
Merauke	190	245	278	322	360
Tanah Merah	35	35	43	47	45
	3436	3872	4565	5156	6400
(index: 1954 = 100)	(153)	(173)	(204)	(231)	(286)

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-Guinee 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 in the year under review was 8207 cubic metres. The carpenter's shop attached to this sawmill has been supplying prefabricated wooden dwellings for Papuan housing since 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.

In a number of places small and medium-sized private 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 restricted 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 needs and other local requirements, products of village crafts such as wood carving, pottery, plaiting, 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.

H. TRANSPORT AND COMMUNICATIONS

1. TRANSPORT
A. Roads and road transport

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

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 140 km, Biak 123 km, Manokwari 90 km, Merauke 70 km, Tanah Merah 25 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 (total length about 120 km). This road system – insofar as it is still in use since the curtailment of the activities of the oil company – is also maintained by the Residency Public Works Service.

In the year under review work continued on the construction of the road linking Teminaboean and Ajamaroe, which began in 1958; at the end of 1960 40 km of the 72-km-long route had been completed, including a difficult mountain stretch.

In South New Guinea the Waropko-Mindiptanah road (40 km), which was opened in 1959 to light traffic, was continued to the south (about 30 km) to the Moejoe river.

The construction of the road from Tanah Merah to Mindiptanah, which was started in 1959, made good progress in the year under review; by the end of 1960 80 km of the 100-km route had been finished. It seems as if it will be possible to finish this road in 1961.

During the year under review work started on a road to open up the Warmare plain, an area which will offer a better way of life to and better possibilities of development for the surrounding mountain-dwellers. The road being built will link up with the existing road from Manokwari via Andai to Maroeni. About 6 km of the road was completed.

The road system round the Wissel Lakes has been further extended; now 48 km is suitable for light traffic.

A further extension of the road system for light traffic also took place in the Baliem area.

The total length of the road system suitable for motor traffic is now about 750 km.

The Government runs a bus service at Hollandia. The service is operated with 20 buses and 10 minibuses on 12 different routes with a total length of 449 km. In the year under review a total of 1,838,335 passengers were carried some 1,187,400 km (1959: 1,706,258 passengers and 1,033,000 km).

For survey of the motor vehicles in Netherlands New Guinea at the end of 1960 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, together with an administrative service and a library which at the same time administers 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.

The Bureau has at its disposal a Cessna aircraft for inspection purposes.

Domestic traffic

The Nederlands-Nieuw-Guinea Luchtvaart Maatschappij "De Kroonduif" NV is responsible for domestic air traffic. During the year under review the company operated with three DC 3's (Dakotas),

three DHC 2's (de Havilland Beavers) and two Scottish Aviation Twin Pioneer aircraft, whilst for part of the year a Grumman Mallard aircraft was also used.

The company flies a number of fairly intensive scheduled services; it also supplies the places and areas in the interior which are otherwise difficult or impossible of access. Until recently the Baliem area was supplied solely by Twin Pioneers, but now this is done entirely by a scheduled Dakota service from Hollandia to the chief town in this valley, Wamena. This supply service is flown twice a week, whilst moreover many extra charter flights are flown. The Wissel Lakes area is supplied by the DHC 2 Beavers, as is Ajamaroe.

As already stated in the 1959 Report, the flying activities of the Nederlandsche Nieuw-Guinee Petroleum Maatschappij were stopped. However, World Wide Helicopters Ltd still fly regularly with helicopters for this company.

The mission stations in the interior are supplied by the Protestant Missions' Aviation Association and the Catholic Missions' Aviation Department. The considerable expansion of the number of stations led to a noticeable increase in the number of flights, and consequently in the quantity of passengers and cargo carried. The Protestant Missions' Aviation Association has four Cessnas for this work, whilst the Catholic Missions' Aviation Department has two Cessnas.

For statistical data see Appendices XVI and XVIIa.

The "Kroonduif" flew the following domestic scheduled services:

DAKOTA

Biak - Hollandia, at first 4,	later	5 times a week
Biak - Manokwari - Kebar - Sorong		3 times a week
Biak - Manokwari - Ransiki - Kaimana		twice a week
Biak - Noemfoer - Manokwari - Ransiki - Kaimana		once a week
Biak - Hollandia - Merauke - Tanah Merah		3 times every 14 days
Hollandia - Wamena		twice a week
Hollandia - Genjem		once a week

TWIN PIONEER

Biak - Seroei	twice a week
Hollandia - Sarmi	once a week
Hollandia - Waris, at first twice a week but later changed to a service as and when required.	
All other flights from Hollandia are charter flights.	

BEAVER

Biak - Steenkool - Fak-Fak - Kaimana - Fak-Fak - Inanwatan - Teminaboean - Sorong - Fak-Fak - Sorong - Fak-Fak - Steenkool - Biak	once a week
Biak - Wasior - Napan - Wissel Lakes	twice a week
Wasior is called at only once;	
the number of flights between Bapan and the Wissel Lakes is about 14 a week.	

International traffic

KLM Royal Dutch Airlines operated for the greater part of the year four scheduled services a week from Amsterdam to Biak.

Twice a week the Pole route was flown with DC-7C's and twice a week the southern route via Karachi with Constellations L 1049. Later in the year the Constellations on the southern route were replaced by one DC-8 a week. It is the intention to extend this service in the near future to two DC-8 flights.

The route from Biak to Sydney was at first also flown with L 1049's, but was later operated with DC-8's. This year again various companies called at Biak on unscheduled flights.

There is a weekly air link between Hollandia and Lae (Territory of New Guinea), which in the year under review was flown in alternate weeks by the "Kroonduif" and Qantas Empire Airways (later in the year the Trans Australian Airlines).

Airfields

The Biak/Mokmer international airport was for a considerable time only open to international traffic on certain days and at certain times of the day in connection with extension work for the DC-8's.

During the year under review the runway was lengthened from 2200 m to 2700 m. The runway was reprofiled over this entire length and resurfaced. The ultimate length of the runway will be 3500 m.

The runway at Waris was also reprofiled.

The airfields at Inanwatan, Teminaboean and Nabire were also completed for Twin Pioneer. The airfield at Nabire was further improved; in the very near future it will also be made suitable for Dakotas.

The Enarotali airfield, built by the CAMA, was taken over by the Government, as was the Oebroeb airfield built by the Catholic Mission.

The Waghete and Moanemani airfields meant for Twin Pioneers were completed, but to protect the turf were for the time being opened only to light aircraft of the Cessna type. The same applies to the Lereh airfield, which must be regarded as an emergency field on the Baliem route. As regards its length it is suitable for Twin Pioneers, but is also used only by lighter aircraft.

The Pirimapoen airfield near the mouth of the Cook river was finished, but has not yet been put into official use. However, incidental permission was given for Cessnas to call at this field.

During the year under review a number of air reconnaissances were again made in preparation for the 1961 airfield construction programme, in particular for Fak-Fak.

A survey of the number of landings on the various airfield is given in Appendix XVI, whilst Appendix XVIa gives a survey of the total domestic air traffic.

Air traffic control

In accordance with the radio frequency plan laid down by the ICAO for the South-East Asia area, a number of new frequencies were taken into service, whilst a number of the old ones were relinquished. As a result the number of frequencies available increased by two. In general these channels are used by radio-telephony transmitters with an output of 1 kW.

Towards the end of the year under review a twin non-directional radio beacon with an output of 1 kW was installed at Sorong. Although this beacon was not demanded by the beacon plan drawn up by the ICAO, it offers a facility to international air traffic for which there has proved to be a considerable demand.

At Manokwari a low-strength locator was installed for domestic air traffic.

Aeronautical information service

An extensive amendment was issued to the "Aeronautical Information Publication Netherlands New Guinea, second edition", published in 1959.

Aircraft inspection

In 1960 five aircraft were entered in the Netherlands New Guinea aircraft register, whilst two aircraft were deleted.

Sixteen aircraft were inspected on airworthiness.

Flight personnel and ground staff were given three and two certificates of competency respectively.

Development

The activities of the Air Transport Bureau regarding the construction and upkeep of Government airfields are still displaying a regular increase.

The basis of development is formed by a detailed three-year plan. A communications plan for radio communications between the regional centres and the surrounding airfields was fully implemented during the year under review for the Hollandia Residency.

Communications were established between the Hollandia/Sentani airfield and the airfields at Sarmi, Genjem, Bokondini, Wamena, Oebroeb and Waris.

The first results of this communications system are already noticeable in a reduction of the number of flights started but not completed because of adverse airfield or weather conditions.

The staff situation was rather tight, but it is hoped that this can be improved in 1961.

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, jetties, warehouses, storage yards, port facilities and supervision of compliance with shipping legislation.

In 1960 this Branch was given the function of operating port facilities.

The Branch is divided into the following sections:

1. The Nautical Service, consisting of:
navigational matters, hydrographic matters, shipping legislation, coast lighting and beacons, courses at the Elementary School of Navigation and the registering of ships.
2. The Port and Harbour Service, consisting of:
the operation of jetties, warehouses, roadstead transport and other port facilities.
3. The Technical Service, consisting of:
technical supervision of the maintenance and provisioning of Government vessels, and also regulating the repairing on slipways of the ships of the Government fleet.
4. Financial administration and operations, consisting of:
supervision of economic use and the financial management of the Government vessels, and also statistics.
5. 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, Fak-Fak and Kaimana have been appointed as acting harbour masters. The subdivision heads at Tanah Merah, Kepi, Bade, Agats, Kokonao, Waren, Wasior, Teminaboean and Mindiptanah 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 64 ships (total tonnage 3281.13 cu. m); the number of sea-going Government vessels is 46 (6621.95 cu. m). In 1959 the numbers of ships were respectively 58 (2214.47 cu. m) and 38 (5397.75 cu. m).

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 2152 gross register tons. A vessel of 556 gross register tons, on charter to Shell New Guinea, carries oil, and also incidental cargoes of timber.

A vessel of 115.33 gross register tons, chartered from the Government, is responsible for local transport in the vicinity of Merauke, whilst two vessels, each of 176.25 gross register tons, provide local and long-distance transport between Fak-Fak, Maccluer Gulf, Sorong and Geelvink Bay and between Geelvink Bay, via Hollandia and the harbours on the north coast of Australian New Guinea, and Rabaul. The company also runs a three-monthly service to Port Moresby from Merauke with its own ships.

b. The Nederlandsche Nieuw-Guinee Petroleum Maatschappij

Owing to the cessation of exploration most of the fleet of this oil company has been sold. A few ships have still been retained on behalf of oil production in the Vogelkop. At the end of 1959 the total fleet had a tonnage of 7500 gross register tons (1958: 9064.66 gross register tons); at the end of 1960 this was 153.80 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 boats of less than 20 cu. m gross).

Summary of ships registered in Netherlands New Guinea at the end of 1960

Inland waters and harbours

	Number	Size in cu. m	Engine capacity
Government	64	3281.13	varies from 5 to 400 HP
Private	200	5029.85	varies from 5 to 160 HP

Sea-going shipping

	Number	Size in cu. m	Number of registered ships	Size in cu. m	Number of boats sailing on "little passes"	Size in cu. m	Engine capacity
Government	46	6621.95	—	—	—	—	varies from 20 to 240 HP
Private	—	—	26	1166.59	146	1732.42	varies from 5 to 50 HP

Summary of total tonnage registered in Netherlands New Guinea from 1956 to 1960

Sea-going vessels

Year	Number of Government vessels	Size in cu. m	Number of registered private vessels	Size in cu. m	Number of private boats sailing on "little passes"	Size in
1956	34	3233.04	20	853.45	69	684.38
1957	44	6134.33	21	891.08	206	1733.79
1958	45	6163.90	17	723.44	208	1742.43
1959	39	5397.75	21	890.45	213	2071.28
1960	46	6621.95	26	1166.59	146	1732.43

Note: ships of more than 20 cu. m are registered; boats of 0 – 20 cu. m sail on "little passes",

Inland craft

Year	Government		Private	
	Number	Size in cu. m	Number	Size in cu. m
1956	61	2697.17	118	1910.19
1957	53	1731.05	147	4210.39
1958	55	1863.56	146	4145.84
1959	58	2214.47	146	4344.94
1960	64	3281.13	200	5029.85

c. International traffic

The direct link with the Netherlands is maintained by the ships of the Netherlands Steam Navigation Company (Stoomvaart Maatschappij "Nederland") and the Royal Rotterdam Lloyd (Koninklijke Rotterdamsche Lloyd), which together operate a monthly service between six European ports via Curacao and Papeete (Tahiti), Honiara (Solomon Islands), ports in Australian New Guinea and ports of Netherlands New Guinea on the north coast as far as Sorong.

The Royal Inter-ocean 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 the ports of Netherlands New Guinea and Singapore.

A vessel of 176 gross register tons operates a six-weekly service between north coast ports of Netherlands New Guinea and Australian New Guinea.

Foreign tankers called at Sorong and Moetoeri Terminal to pick up crude oil with a frequency of one ship a month and one ship a year respectively.

The tankers of Shell Tankers Ltd. deliver oil derivatives in bulk from Singapore to the ports of Biak and Hollandia. 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 3600 tons and a length of 120 m can be drawn out of the water here. The yard has a crane for ships of up to 50 tons. 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.

At Karim (Sorong) there is a private slipway where Government ships are also repaired. The slipway can draw up ships up to 75 m in length and of a weight of 800 tons. Facilities for repair and construction are present.

There is further a floating dock at Sorong, once the property of the Nederlandsche Nieuw-Guinee Petroleum Maatschappij for the maintenance of its fleet, and in the year under review sold by this company to a private owner.

At Hollandia there is a yacht yard, privately owned, which builds, converts and repairs small wooden craft.

f. Ports and harbours

In the various ports and harbours of the Territory the completion of partially built jetties and the construction of new ones continued, whilst the port facilities were also improved.

At Hollandia a new concrete jetty 132 m long has been completed and put into service, whilst at the same time the 65 m concrete berth for smaller vessels going with this jetty has been completed. A new harbour warehouse with a floor area of 2200 sq. m, located near the 132-metre-long jetty, was also finished.

The 40-metre wooden oil jetty was replaced by a 33-metre concrete one, which was completed and put into service.

At Sorong two jetties, 113 and 40 m long, were taken over from the NNGPM.

For a survey of port 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. To replace the old coast lighting vessel a relatively new coaster of 175 gross register tons was taken over from the NNGPM and converted for the work on coast lighting and beacons.

h. Hydrographic surveys

In the year under review two survey vessels were used, one of which continued with the survey of the sea area of the south coast by means of Decca equipment for accurate position-finding. The other vessel was used for survey in other areas.

The Hydrographic Service in the Netherlands published a number of new charts and a number of revised reprints.

i. Training in navigation.

During the year under review the courses were stepped up in connection with the expansion of the fleet and the number of vacancies. In the year under review the following certificates were awarded to personnel trained on board:

mate, local sailing: to two Papuans;

engine room artificer: to three persons, two of whom were Papuans.

Summary of personnel trained at the Elementary School of Navigation, 1956 to 1960

Year	Ordinary seaman	Engine room hand	Cook	Mate, local sailing	Engine room artificer
1956	29	20	5	20	8
1957	18	12	—	9	5
1958	—	—	—	—	—
1959	2	5	—	—	—
1960	26	16	1	5	4

Certificates issued

Year	Total		Of whom Papuans	
	Mate, local sailing	Engine room artificer	Mate, local sailing	Engine room artificer
1956	15	14	7	7
1957	4	8	3	4
1958	10	10	6	3
1959	4	3	3	2
1960	2	3	2	1

Within the framework of Dutch-Australian collaboration, six ordinary seamen and six engine room hands (all Papuans) from Australian New Guinea were trained at the Elementary School of Navigation, Hollandia. A certificate was awarded to six ordinary seamen and five engine room hands.

In 1961 a group of young Papuans from Australian New Guinea will again be trained.

An introductory course of three months has been given to two deck crew members and three members of the engine room staff (all Papuans), who, after sufficient length of service, will be further trained for more advanced certificates in order to replace the European crew members of larger Government vessels sailing the coasts of New Guinea. Capable instructors have already been engaged for the purpose, and other will follow in 1961.

A start has been made with modernizing and extending the school building.

j. Development of shipping

In general private cargo-carrying has increased; the frequency of calls at smaller harbours has been stepped up and the number of scheduled services extended.

However, the cessation of exploration by the NNGPM has resulted in a decline in the numbers of sea-going and inland vessels.

It is expected that international traffic will increase somewhat, among other reasons because of the interest from abroad in the purchase of timber and the shipment of logs, whilst local traffic will in general decline a little.

The number of Government vessels from inland waters and ports and harbours was extended by ten.

The fleet of Government sea-going vessels was extended by seven.

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 1960 the staff consisted of 367 (of whom 190 were Papuans) on the permanent establishment and 162 casual workers (all Papuans).

b. Post Offices

No important changes occurred during the year under review in the postal services and the way in which postal communications were maintained.

On 30 September, 1960, an amendment to the Parcel Post Agreement concluded on 22 October, 1953, between the Kingdom of the Netherlands and the Commonwealth of Australia came into force, as

a result of which this agreement was extended to Netherlands New Guinea and the Australian part of New Guinea. In anticipation of this amendment entering into force, the parcel post service with the Australian part of the island was opened by way of experiment on 1 April, 1960.

Two new delivery houses started operations, viz. at Waghete and Pirimapoen.

In the course of the year under review a new post office was completed at Hollandia and put into service. The auxiliary post offices at Hollandia-Inland and at Kaimana were also housed in new buildings.

Within the framework of the World Refugee Year, instituted at the initiative of the UNO, a series of two special stamps were issued in the values of 25 and 30 cents.

Further, the special annual series of special stamps on behalf of Social Welfare was again issued. This time it consisted of four stamps with illustrations of butterflies found in Netherlands New Guinea.

In the month of September of the year under review a new course for postal and telegraph technical officers began with 24 Papuans.

In February 1960 a correspondence course for technical officer 3rd class began with 17 pupils, including 10 Papuans, scattered among various post offices in the country. One of the Papuan pupils was permitted to take an accelerated examination, which he passed.

A summary of moneys handled by the post offices is given in 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 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, Sydney and Port Moresby continued to be maintained. The morse-telegraph link between Hollandia and Amsterdam was converted into a teleprinting-on-radio system.

Telegraphic traffic

Receipts from telegrams (in guilders, rounded off)

1956	1957	1958	1959	1960
569,000	608,000	590,000	600,000	626,000
100%	107%	104%	105%	110%

Number of telegrams handled (in guilders, rounded off)

1956	1957	1958	1959	1960
Domestic traffic				
42,000	42,000	37,000	45,000	46,000
100%	100%	91%	107%	109%
Foreign traffic				
32,000	34,000	32,000	32,600	33,000
100%	106%	100%	102%	103%

There are 19 telegraph offices.

d. Telephony

At the end of the year under review there were local telephone systems at Hollandia, Biak, Manokwari, Merauke and Sorong.

In Sorong the private telephone system of the Nederlandsche Nieuw-Guinee Petroleum Maatschappij was taken over and placed under Government management.

The interurban radio telephony links between the capital Hollandia and Biak, Sorong, Manokwari, Merauke and Fak-Fak continued to be maintained.

The radio-telephony links between the above-mentioned radio telephony offices and the smaller administrative centres were extended by a link between Hollandia and Obroek.

A public radio telephony link was instituted between Sorong and Manokwari.

It continued to be possible to make calls from Biak on the international radio telephony link between Hollandia and Amsterdam.

The radio telephony links between Hollandia and Post Moresby, Hollandia and Wewak and between Merauke and Daru – solely for official calls between the Government bodies of Netherlands New Guinea and of Australian New Guinea – continued to be maintained.

Telephone traffic

Number of subscribers

1956	1957	1958	1959	1960
1,181	1,434	1,530	1,780	2,000
100%	121%	130%	151%	170%

Receipts from subscriptions (in guilders, rounded off)

1956	1957	1958	1959	1960
284,000	341,000	409,000	620,000	680,000
100%	120%	144%	219%	240%

Radio telephony, number of calls

	1956	1957	1958	1959	1960
	3,040	6,907	9,360	10,816	13,900
Domestic	100%	228%	307%	356%	456%
	1956	1957	1958	1959	1960
	2,054	2,722	2,600	2,330	2,670
Foreign	100%	134%	128%	114%	132%

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

1956	1957	1958	1959	1960
928	1,126	1,360	1,400	1,925
100%	121%	147%	151%	208%

e. Equipment

No change occurred in the equipment available during the year under review.

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 description possible of Netherlands New Guinea and of publishing this.

In the year under review the network of observation stations was again extended. The number of rain stations increased from 556 to 590, and the number of sunshine stations is now 35, whilst air temperature observations were made at 20 places.

In 1960 the following publications were distributed:

Rainfall 1958 (Publ. No. 5, in Dutch)

Rainfall 1959 (Publ. No. 6, in Dutch)

Diurnal Variation of Rainfall (Publ. No. 7, in English)

Extreme Rainfall Values (Communication No. 1, in Dutch).

Further, 57 special climatological surveys were furnished for agriculture, shipping, aviation, etc.

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 synoptic weather reports and upper wind observations. The synoptic weather reports are compiled at Sentani (Hollandia), Sarimi, Biak, Manokwari, Jefman (Sorong), Steenkool, Fak-Fak, Kaimana, the Wissel Lakes, Kokonao, Merauke, Tanah Merah, Baliem and Mapia; the upper wind observations are made at Sentani, Biak, Jefman, Kaimapa, Merauke, Baliem and Mapia.

At Biak is the Central Meteorological Office, where weather maps are drawn and analysed four times a day. In 1960 13,000 weather forecasts were provided, mainly for civil aviation.

Moreover, every day a special weather forecast for coastal shipping and a weather forecast for the Koembe Rice Farm is broadcast by the Netherlands New Guinea Broadcasting System. These reports have proved to meet a definite want.

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, the taking of dust samples from the ambient air at Hollandia for radioactivity determinations in the Netherlands and the storage of rain-water samples for which the radioactivity determination is still being regulated internationally.

4. MAPPING

In the year under review 991.06 hectares were surveyed for the Land Registry on behalf of the public for the acquisition of a property right to the land, viz. 94.56 hectares for building leases and 896.5 hectares for leaseholds.

For and on behalf of various Government and semi-Government bodies 1038.7 hectares were topographically surveyed in the year under review, viz. 318 hectares for town planning, 243.7 hectares for airfields, 12.5 hectares for port installations, 106 hectares for regional development and 358.5 hectares for other activities.

For road construction 66 km were surveyed in the Hollandia division, 4 km in the Geelvink Bay division, 20 km in the West New Guinea division, 20 km in the Fak-Fak division and 19 km in the South New Guinea division. Furthermore, a site measurement of 58 km was performed near Waris, in the Hollandia division, on behalf of geological exploration.

For the mapping of Netherlands New Guinea the astronomic observations were continued during the year under review and three astro-stations were established in North New Guinea.

During the year under review triangulation measurements were carried out on behalf of the making of topographical and cadastral maps of Hollandia and district.

For this purpose the Hollandia chain of triangles (second-order network) was calculated and established. This covers an area of 115 sq. km, of which 4.5 km were completed for the Sentani airfield network and 11.2 km for the Hollandia-Port and district network. At the same time work started on the laying out of a permanent town polygon network. Of this, 11 km was completed in Hollandia (Centre) and 6 km at Sentani airfield.

During the year under review a total of 863 deeds of established property rights to land were entered in the public registers, viz. 802 with building leases, 41 with leaseholds, 9 with the right of occupancy and 11 with the right of ownership.

Work continued in 1960 on the provisional edition of maps on a scale of 1 : 100,000.

At the end of the year under review 212 maps in this series had been printed. When complete, the series will consist of about 290 map sheets for the whole of Netherlands New Guinea.

Completion of the remaining sheets awaits the conclusion of the aerial photographic survey of the Meervlakte.

In 1960 a start was also made with the printing of maps for the definitive edition of the 1 : 100,000 series; nine were completed during the year.

I. PUBLIC FINANCE

1. THE BUDGET

The budget of Netherlands New Guinea for the year 1960 shows a total expenditure of f. 143,686,100. From the country's own resources an estimated sum of f. 59,510,600 will be received, so that the contribution of the Netherlands will be f. 84,175,500. Of this latter sum, f. 56,710,800 constitutes a contribution towards the deficit of the ordinary service, whilst f. 27,464,700 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 1958 incl. (according to the provisional budget accounts):

Year	expenditure	Revenue	Netherlands Government contribution
1950	f. 36,224,461.46	f. 20,652,362.08	f. 15,572,099.38
1951	f. 47,066,064.10	f. 31,066,126.97	f. 15,999,937.13
1952	f. 58,669,117.94	f. 40,075,541.00	f. 18,593,576.94
1953	f. 77,724,723.58	f. 53,132,569.91	f. 24,592,153.67
1954	f. 93,923,590.59	f. 51,532,795.28	f. 42,390,795.31
1955	146,118,536.58 *)	f. 78,177,313.01 *)	f. 67,941,223.57
1956	130,089,395.20	f. 57,674,290.54	f. 72,415,104.66
1957	125,486,117.47	f. 57,031,767.52	f. 68,455,349.95
1958	121,348,885.67	f. 56,822,056.03	f. 64,526,829.64

*) Including the above-mentioned redemption of f. 26,932,100.

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
1958	f. 36,500,000

According to the estimates for the years 1959 and 1960, the expenditure, revenue and Netherlands Government contribution were as follows:

Year	Expenditure	Revenue	Netherlands Government contribution
1959	f. 137,719,800	f. 65,769,800	f. 71,950,000
1960	f. 143,686,200	f. 59,510,600	f. 84,175,500

The expenditure and the revenue for the years 1959 and 1960 also include amounts relating to the adjustment items. According to provisional information, the estimated actual revenue of the Territory for these years was f. 36,700,000 and f. 36,300,000.

2. TAXES

The proceeds of the various taxes in 1960 were as follows:

Income tax	f. 8,330,000
Company tax	f. 3,510,000
Property tax	f. 20,000
Wages tax	f. 1,020,000
Stamp duty	f. 220,000
Transfer duties	50,000
Import duties	f. 7,160,000
Statistical duties	f. 940,000
	<u>f. 21,250,000</u>

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.

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. the 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.

With effect from 1 January, 1961, the investment reserve mentioned under b. will be replaced by an investment deduction. This deduction will be 20% of the purchase value of plant; for purchases in the first five years after the foundation of a firm the deduction will be 50% of the purchase value.

Furthermore, the possibility of compensation of losses will be extended.

As a result of these measures, the provisions aimed at fostering economic activity will have gained considerably in effectiveness.

In the levying of income tax no distinction is made between Papuan and non-Papuan taxpayers. 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. 3000, the assessment is made in a manner 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. The investment deduction mentioned under income tax will also be introduced for company tax, to replace the investment reserve. The possibility of compensation for losses will also be extended in the case of company tax.

Investment reserve (investment deduction) and free write-off play an important part among the provisions aimed at fostering economic activity, since they often mean that in the case of high initial investments no company tax need be paid during the initial years of an undertaking.

Another facility offered, namely that of the possibility of tax reduction for concerns whose aim is the exploitation of natural resources and whose business entails more than the normal risks, was further extended during the year under review. It is now possible to make the reduced rates applicable to a wider circle of businesses if this is required by considerations of general economic policy.

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 $\frac{3}{8}\%$ is levied after deduction of f. 24,000;
- c. if it is worth more than f. 120,000, $\frac{3}{10}\%$ 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. In this case, 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 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 ship.

Import duties

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

In the main the duties are relatively low. The levying system is in broad outline as follows: 6% for means of production, semi-manufactures, etc., 12% for ordinary consumer goods, 20% for luxury consumergoods; raw materials are exempt from import duty.

The basis of the tariff is formed by the principles and distinctions on which the 1937 customs nomenclature of Geneva is founded.

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 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 removes, provided that it is not new; goods imported by the Government, on the basis of practical considerations; 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 fields of industry, agriculture, forestry, stock-breeding, fisheries or mining, if and insofar as this is necessary in the economic interests 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 a rate of 1% of the value of imported goods and 3/8% of the value of exported goods. These duties are in part of the nature of a fee. The relevant ordinance includes a number of grounds for possible exemption.

J. BANKING AND CREDIT

1. CURRENCY AND CIRCULATION OF MONEY

No change occurred in the monetary system of Netherlands New Guinea in 1960. The Netherlands New Guinea guilder is tied to the Netherlands guilder on a parity basis.

The Netherlands-New Guinea guilder is divided into 100 cents. The Government of Netherlands New Guinea issues notes in denominations of f. 500, 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 (bronze) 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 yet possess any bank of issue. Although in 1960 the number of bank branches was increased by a branch at Biak, and is now five, banking and, as a result, transfer business are not very far developed. In view of this it is still possible to transfer larger sums of money than postal orders permit by means of Government money orders. This possibility does not apply to places where a bank branch is established.

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

end of 1955	f. 17,900,000
end of 1956	f. 20,100,000
end of 1957	f. 21,600,000
end of 1958	f. 20,900,000
end of 1959	f. 22,700,000
end of 1960	f. 24,100,000

The extent of cheque-book money was as follows:

end of 1955	f. 8,200,000
end of 1956	f. 6,700,000
end of 1957	f. 4,100,000
end of 1958	f. 4,600,000
end of 1959	f. 4,500,000
end of 1960	f. 3,500,000

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

end of 1955	f. 26,100,000
end of 1956	f. 26,800,000
end of 1957	f. 25,700,000
end of 1958	f. 25,500,000
end of 1959	f. 27,200,000
end of 1960	f. 27,600,000

In the interior, where the money economy has so far won little ground, there is 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, viz. the Nederlandsche Handel-Maatschappij, with five branches, viz. at Hollandia, Biak, Manokwari, Sorong and Merauke.

As a result of the restricted development of the country, the activities of the bank are limited. The Nederlandsche Handel-Maatschappij is chiefly concerned with the transfer of moneys to and from other countries, normal banking business, the settlement of import and export transactions and the financing of 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, by means of which 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 entail more than the normal risks. 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. Since 1959 all postal establishments have been open for post office savings business.

During the year under review the possibility of employing administrative officials for post office savings transactions at places where there is not post office, sub-post office or auxiliary post office was regulated by law. Furthermore, all the statutory provisions were enacted which were necessary in connection with the arrangements for transferring post office savings bank balances from Netherlands New Guinea to the Post Office Savings Bank in the Netherlands and vice versa.

The interest-bearing maximum of f. 6000 was raised to f. 10,000.

The possibility was also opened of considerably increasing the interest-bearing maximum of f. 10,000 under certain conditions for deposits made by religious, charitable, cultural, scientific and institutions for the general benefit established in Netherlands New Guinea, and also for those made

by bodies whose aim it is to promote the economic development and/or the economic strength of Netherlands New Guinea and its population.

The interest, calculated on full amounts of f. 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 the years 1958, 1959 and 1960

Year	Depositors		Deposits			
	P*	O**	T***	P	O	T
1958	390	757	1147	64,384.89	733,307.10	797,691.99
1959	466	719	1185	183,140.29	1,115,781.34	1,298,921.63
1960	869	253	1122	158,579.85	1,246,470.33	1,405,050.18
Year				Repayments		
				P	O	T
1958				7,054.44	152,385.85	159,440.29
1959				36,626.59	686,344.76	722,971.35
1960				93,988.72	1,086,107.93	1,180,096.65

* P = Papuans ** O = others *** T = total

The balance on savings on 31 December, 1960, was f. 1,439,155.51, of which f. 268,435.28 was held by Papuans and f. 1,170,720.23 by others.

3. BANK CHARGES

The bank charges underwent practically no change in 1960. The principal ones are:

a. for domestic payments:

remittances in writing and telegraphic transfers/sight drafts $\frac{1}{2}$ o/oo, with a minimum of f. 1.50 plus postage and telegraph charges, if any;

b. for foreign payments:

commission on foreign exchange 2 o/oo up to and including f. 10,000; above f. 10,000 1 o/oo, with a minimum of f. 20;

transfer of bills: blank bills $\frac{1}{8}$ o/oo, with a minimum of f. 1.50; documentary bills $\frac{1}{4}$ o/oo, with a minimum of f. 1.50 plus 7% interest over the period of currency and airmail postage, if any;

blank irrevocable credits: $\frac{1}{4}$ %, with a minimum of f. 2.50; documentary irrevocable credits: $\frac{1}{2}$ %, with a minimum of f. 2.50 plus interest, if any, when settling any drafts drawn;

debit interest: approx. 7% (credit interest on current account or deposit balance is not paid);

exchange margin with the Netherlands: $\frac{1}{2}$ %.

4. BALANCE OF PAYMENTS AND FOREIGN EXCHANGE CONTROL

Very few changes occurred in 1960 in the foreign payments of Netherlands New Guinea in comparison with preceding years.

in millions of guilders

	from the country concerned credit				the country concerned debit			
	1957	1958	1959	1960	1957	1958	1959	1960
Direct transfers, incl. purchases of foreign exchange, to and from the Netherlands	135.-	129.6	136.1	152.8	136.-	129.-	135.6	152.6
Australia	4.7	5.1	6.2	5.8	4.4	4.8	6.5	5.9
Singapore	8.3	6.6	7.-	8.1	7.4	7.4	7.1	8.1
Hongkong	3.1	4.-	4.3	5.4	3.3	4.2	4.2	5.5
New York and London	1.4	1.3	2.4	5.8	1.4	1.2	2.6	5.8
	152.5	146.6	156.-	177.9	152.5	146.6	156.-	177.9

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

*Balance of payments of Netherlands New Guinea in millions of guilders *)*

	credit				debit			
	1957	1958	1959	1960	1957	1958	1959	1960
<i>Current items</i>								
<i>Merchandise</i>								
Exports	7.8	8.-	10.5	10.2				
Imports					65.8	58.-	58.2	62.3
<i>Services and other current items</i>								
Shipping and aviation	-.-	-.-	-.-	-.-	6.5	9.8	9.6	9.1
Other firms	8.1	10.3	7.2	1.3	1.8	1.8	0.4	2.2
Travellers	0.1	0.2	0.2	0.3	2.5	2.1	2.2	2.7
Other current items (incl. various Govt. receipts and payments)	13.2	15.2	17.3	21.8	10.3	13.3	13.-	16.3
<i>Incidental items</i>								
Savings, etc., incl. postal order business **)	2.8	2.8	3.5	1.7	10.9	13.3	14.9	11.5
Government contribution	67.4	58.3	65.-	96.7	-.-	-.-	-.-	-.-
Foreign exchange transactions and internal transfers	53.1	51.8	52.3	45.9	54.7	48.3	57.7	73.8
	152.5	146.6	156.-	177.9	152.5	146.6	156.-	177.9

*) 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. 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. In order to ensure the regular supply of two essential-articles, rice and wheat flour, these articles are subject to a special import licence, which is at the same time a voluntarily accepted obligation to import the articles in question. Payment for these articles, too, is not bound to any country of origin.

K. TRADE

1. ORGANIZATION

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

2. FOREIGN TRADE

The balance of trade for 1960, as compared with the preceding five years, displayed the following picture:

year	imports x f. 1000	exports x f. 1000	covering percentage
1955	92,512	34,288	37
1956	94,788	30,067	32
1957	114,298	30,946	27
1958	85,860	28,063	33
1959	79,495	31,441	40
1960	86,221	27,800	32

The passive balance of trade of Netherlands New Guinea clearly reflects the general economic situation in this underdeveloped area.

For many years to come large-scale investments will be needed to such an extent that for the time being any great increase in the covering percentage is not to be expected. The temporary rise in the covering percentage in 1959 must be attributed to the considerable rise in re-exports caused by the return of the valuable equipment of the Sterren Mountains expedition.

a. Exports

The decline in value of the total exports from Netherlands New Guinea by about 3,6 million guilders in respect of 1959 is the balance of the following factors:

- | | |
|-------------------------------------------------------------------------|-----------------------|
| 1. the rise in the export value of joint native agricultural produce by | 0.5 million guilders; |
| 2. the increase in the exports of timber by | 0.7 million guilders; |
| 3. the decrease in the exports of copal and dammar by | 0.3 million guilders; |
| 4. the decrease in the exports of scrap by | 0.1 million guilders; |
| 5. the decrease in the re-export of goods by | 3.1 million guilders; |
| 6. the decrease in the exports of crude petroleum by | 1.3 million guilders. |

The total volume of exports of native products, including timber, displayed a rise in 1960 in respect of 1959. This rise was caused by an increase in copra exports by about 840 tons, an increase in exports of nutmeg and mace by about 110 tons, an increase in exports of cocoa by about 27 tons and an increase in timber exports by almost 5600 cubic metres.

The drop in the price of copra, which came into effect in particular in the second half of 1960, led to the value of exports of this product dropping by about f. 160,000, despite the increase in the volume of copra exported.

The drop in the value of exports of crude petroleum was also caused by a price drop. In volume exports of petroleum displayed a slight rise (just over 3500 tons). Exports of resins and crocodile skins decreased in volume. In value the exports of resins dropped in accordance with the volume exported. Owing to a sharp rise in the price of crocodile skins, the export value of this article rose by a total of f. 474,000, on the other hand.

As in 1959, nutmeg and mace were the principal native export products in value in 1960. They totalled approx. 3.4 million guilders, followed by copra with about 3.1 million guilders.

Exports to Singapore increased during the year under review to 4.6 million guilders (1959: 2.5 million guilders). This was caused by the rise in the price of crocodile skins, more than 80% of which product was exported to this commercial centre, and by an increase in exports of crude petroleum.

Exports in 1960 to Australia were about 5.6 million guilders, and to Japan about 5.2 million guilders. Exports of native products were again mainly to the Netherlands in 1960 (4.4 million guilders), then to Germany (2.4 million guilders) and Singapore (2.1 million guilders).

More detailed information on the trend of exports in 1960 and the three preceding years is given in Appendices XXIV, XXV and XXVI.

b. Imports

Imports into Netherlands New Guinea in 1960 were 110,255 tons, to the value of 86.2 million guilders, as against 92,088 tons to the value of 80.1 million guilders in 1959. The increased imports are chiefly the result of the increase in the imports of refined petroleum products, viz. from 7.5 million guilders in 1959 to 13.1 million guilders in 1960. The factors behind this are the extension of international air traffic and the introduction of jet liners in 1960.

Imports of textiles, including clothing, also increased, from 5.4 million guilders in 1959 to 6.8 million guilders in 1960. Imports of foodstuffs rose in volume from about 23,700 tons in 1959 to about 24,100 tons in 1960; in value these dropped from about 24.1 million guilders in 1959 to 23.8 million guilders in 1960. Imports of fish and fish products rose from about 1370 tons in 1959 to 1630 tons in 1960. The value of these imports increased from 1.8 million guilders to 2.1 million guilders.

The chief countries of origin were the Netherlands, with 37.9 million guilders, Singapore with 18.0 million guilders and Australia with 5.9 million guilders.

The joint imports from EEC countries in 1960 amounted to 44.6 million guilders, or 52% of the total import value, against f. 45.2 million or 56% in 1959.

More detailed data on imports are given in Appendices XXVII A and XXVII B.

3. IMPORT POLICY

Imports are free, with the exception of a few goods designated by the Governor. Permits are required for the importation of rice, flour and sugar, in order to ensure a regular supply of these essential goods.

Import permits for the above articles are given only to a few importers who take on themselves the obligation of keeping sufficient reserve stocks of these goods. This regulation does not imply any restriction of imports and is not aimed at any country.

The imports of the three articles under Government supervision represented in 1960 an import value of 8 million guilders, or about 9% of the total value of all imports of goods into Netherlands New Guinea. Other imports, to the value of 78 million guilders, or about 91%, have been entirely liberalized. For completeness' sake it may be mentioned here 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.

The trend of the wholesale turnovers by volume of rice, flour and sugar reflects the increasing consumption of these foodstuffs by the Papuan population during the last few years:

Wholesale turn overs by volume x 1000 kg net

	1957	1958	1959	1960
Rice	7635	7655	8351	9297
Flour	1435	1551	1553	1688
Sugar	1513	1821	2161	2434

In view of the satisfactory trend of stockpiling, it was decided at the end of 1960 to liberalize imports of sugar with effect from 1 January, 1961, so that Government efforts with regard to imports of commercial goods will from that date be confined to the two cereal products, flour and rice.

CHAPTER III

SOCIAL CONDITIONS

A. GENERAL PROBLEMS

The isolation, inaccessibility and impassability of the Territory and the dearth of natural resources led to New Guinea being left alone throughout the centuries. As a result it was only in a few coastal regions that contact with the outside world had some degree of fruitful effect on the social, cultural and economic structure of the Papuan community.

The difficult natural circumstances in which the population lives, and still live in part today, also hampered their social, cultural and economic development. These circumstances further prevented the development of the administrative institutions required by modern society.

These factors, which determined the original situation, play an important role even today. The present-day Papuan community is still characterized by a fragmented social structure. The small local groups, often consisting of only a handful of families, in which the population are scattered throughout the whole Territory, have little interrelation, so that contact is difficult to establish and collaboration with other groups can only be brought about gradually.

Meanwhile, despite these restraining influences, all kinds of changes are occurring. Naturally various stages of development may be noted in this respect, depending on the one hand on the length of contact with the outside world and on the other hand on the receptivity of the various sections of the population to new influences.

As a result of the extension and intensification of administrative influence, information and advice from official circles, education, improved communications, the introduction of a money economy, which is gradually replacing the closed village economy, and the impact of new means and methods of production, new ideas leading to social change are gradually breaking ground.

The Protestant and Catholic Missions are making an important contribution to this, especially in the field of education, which is particularly valuable because their work is helping at the same time to fill a spiritual vacuum which threatens to occur when the Papuan meets Western culture.

In many regions the population are changing increasingly to a more concentrated form of residence, which simplifies the introduction of education, agricultural extension and medical care.

In the urban centres a considerable contribution to social emancipation is being made by social centres, well-run women's clubs and sport.

B. HUMAN RIGHTS

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

Slavery, and also 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 Netherlands 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 dwelling 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 laid down by ordinance in the interests of public order, peace and morals (Section 154 of the BNG, Article 18 of the DHR).

Education may be freely given, 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 the Administration 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 their land are protected in Section 39 of the BNG, amended by the Act of 30 June, 1960 (Netherlands Bulletin of Acts, Orders and Decrees No. 261 of 1960). Persons not forming part of the Papuan population may not have the disposal either directly or indirectly of land to which rights of the Papuan population attach, nor to premises, perennial plantings or forest stands on such land; exceptions must be laid down in law and this must define in which case, how and according to which rule they will be granted. This is apparently in contradiction with the spirit of Article 17 of the DHR. In reality this provision is necessary to prevent dispossession of the population. (See also Chapter II, section B.2, Utilization of land and land tenure).

Furthermore, the Papuan population can only be deprived of the right to their land in the public interest, on the basis of Section 127 of the BNG (see above), and these rights cannot be restricted by the authorities except on the basis of statutory regulations.

C. THE STATUS OF WOMEN

The status of women in the present-day society of New Guinea varies, depending on the various stages of development through which the local Papuan community is passing.

In the regions recently brought under administration, where warfare and head-hunting were the order of the day until recently, the status of women in the formal sense is lower than that of men, although in reality the influence that they have in society is often great and, for instance in the field of property – managing and disposing of their personal possessions – women are definitely not man's inferior.

Woman's task, providing food for the family and looking after the children, is often more difficult than that of the man, much of whose former work – waging war and making preparations to do so – has disappeared.

In the more developed areas a gradual change has occurred in the division of labour between man and woman as a result of the introduction of the money economy and of the cultivation of commercial crops, coupled with new agricultural methods. It is now the task of the man to provide part of the family's money income. The performance of paid labour is also bringing about changes in the old situation.

Under the influence of Christianity – there are now about 300,000 Christian Papuans – and as a result of the general evolution of Papuan society, new legal conceptions are breaking ground in other senses, too, and other ethical standards are being adopted, in particular with regard to the position of both parties when contracting a marriage.

In the traditional Papuan community the woman was restricted in her freedom of will with regard to concluding a marriage. Although the old views on this matter have by no means completely disappeared, and the dowry still plays an important part, the conviction is steadily growing that the parties must be free to make up their own minds about marrying.

In the urban centres, where the ties with the tribal and village community and with the customs and views prevalent there, (which often hamper all progress) are less strong, the emancipation of women has made the greatest advances. There woman's position is practically equal to that of the man. There the man is entirely responsible for maintaining his family; the task of the woman is more confined to looking after the home, as a result of which she has more time and opportunity to improve her mind. In this connection reference may be made to the steadily growing interest in the Papuan women's clubs.

The participation of Papuan girls in education may be described as entirely satisfactory. In the year under review 15,380 girls were attending schools for primary and continued education, as against 21,043 boys.

In the eyes of the law of the Territory, men and women are absolutely equal. They both possess the right to vote and the right to be elected to office. Women are equally entitled to occupy public posts. In the New Guinea Council installed on 5 April, 1961, one seat is held by a woman.

D. LABOUR AND 1. LABOUR POLICY. GENERAL PROBLEMS

EMPLOYMENT CONDITIONS

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 the most harmonious development of the Territory, that is possible.

In the light of the above objective, which entails a balanced development of town and country, it is on the one hand necessary 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 in past years.

For instance, in 1955 the Wandammen subdivision was temporarily closed to recruiting, whilst for a number of subdivisions recruitment is subject to limitations.

Steps have also to be taken to ensure that, since employment in the urban centres is of course not unlimited, an undesirable social situation does not come into being as the result of an unchecked 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 this mental attitude, by social conditions, by his culture and his personal feelings is, by Western standards, generally low as yet. By training, technical and vocational 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 teach the Papuan efficiency and labour discipline – concepts foreign to him – and to increase his productivity.

The Papuan participating in organized labour in the urban centres, although at first still closely linked to his tribal or village community, outgrows this after a few years have gone by. He becomes more and more bound up with the new life which, however, constantly makes stringent demands of his powers of adjustment. The authorities should support and guide this process of adjustment. In this social development work among the urban Papuans, in which Papuan women are

also involved, there is close cooperation with private and religious organizations, which receive financial aid from the Government for their work in this field.

The increase in the number of Papuan workers in 1959, which was mainly caused by the work on the construction of airfields and roads in the interior, did not continue in 1960. In all, 15,910 Papuan workers were registered in 1960. Of these, 10,221 were working in the urban centres of Hollandia, Biak, Manokwari, Sorong and Merauke.

Registration over the last five years gives the following picture:

NUMBER OF REGISTERED WORKERS	1956	1957	1958	1959	1960
in the urban centres	12,101	11,715	11,567	11,100	10,221
outside the urban centres	5,225	4,186	4,319	5,646	5,689
Total	17,326	15,901	15,886	16,746	15,910

INDEX FIGURES (1955 = 100)	1956	1957	1958	1959	1960
in the urban centres	108	105	103	99	91
outside the urban centres	125	100	103	135	136
Total	113	104	103	109	104

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

year	in the urban centres	outside the urban centres
1956	12,101 (70%)	5,225 (30%)
1957	11,715 (74%)	4,186 (26%)
1958	11,567 (73%)	4,319 (27%)
1959	11,100 (66%)	5,646 (34%)
1960	10,221 (64%)	5,689 (36%)

A considerable number of the workers are employed in the building trade. Over the last five years the breakdown has been as follows.

year	building trade	other trades
1956	5,759 (33%)	11,567 (67%)
1957	4,133 (26%)	11,768 (74%)
1958	3,832 (24%)	12,054 (76%)
1959	5,020 (30%)	11,726 (70%)
1960	5,256 (33%)	10,654 (67%)

Of the total number of registered Papuan wage-earners, 64% were to be found in the urban centres of Hollandia, Biak, Manokwari, Sorong and Merauke in 1960. A breakdown of these workers into single, married who have left their families behind in the villages, and married living with their families in the town gives the following picture for the above towns:

Urban centres	Single		Married			
	from vicinity	from elsewhere	without family		with family	
			from vicinity	from elsewhere	from vicinity	from elsewhere
Hollandia	566	1466	150	250	380	868
Biak	1044	216	162	76	1083	78
Manokwari	241	600	24	78	126	611
Sorong	166	555	4	73	36	462
Merauke	311	350	21	19	87	140

Of the total Papuan labour force registered in the entire Territory during the year under review, 8306 persons were single (52%) and 7604 (48%) married; of the latter, 6231 were living with their families at their place of work.

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 branch is headed by a jurist, with a mechanical 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. CATEGORIES OF WAGE-EARNERS

The distribution of the Papuan labour force among various branches of trade and industry gives the following picture:

Group No.	Nature of the business	Number of Papuan employees (1960)
0	Agriculture, stock-breeding, forestry, timber-felling, hunting, fishing, etc.	2070
1	Mining above ground or below ground of coal, oil, gas, nickel, cobalt, karang, gravel, sand, etc.	373
2/3	Bakeries, shoe-making and sail-making firms, sawmills, furniture factories, printing shops, lemonade factories, brickworks, stonebreakers, repair shops, shipyards, installation businesses, etc.	899
4	Firms in which construction work is done, such as the building, construction, repair and demolition of houses, buildings, roads, bridges, dams, hydro-electric stations, power stations, etc.	5256
5	Public utility concerns, such as gas, electricity and water works, refuse-collecting and street-cleaning services, etc.	555
6	Trade, shops, banks and insurance	682
7	Undertakings transporting persons and goods, warehousing concerns, firms storing goods and firms for communications, such as telegraph, telephone, etc.	1408
8	Education, public health, administration, judicature, police, fire services, legal profession, hotels, restaurants and cafes, laundries, hairdressers, photographic dealers, cinemas, etc.	3623
	Domestic servants	671
9	Businesses which cannot be placed under one of the categories 0 to 8 incl.	373
	Grand Total	15,910

There was no change in the number of working women; in 1959 there were 994 (5.9%), as against 999 (6.3%) in the year under review. Of the native labour force, 9093 persons were in Government service and 6817 were employed by private enterprise. In 1959 these figures were 9508 and 7238 respectively. As in 1959, a sum of approx. 20 million guilders was spent on wages, food and housing for Papuan workers. See also Appendix XXVIII.

4. THE LABOUR MARKET

During the year under review 611 persons availed themselves of the facility of registering for work with the Labour Affairs Branch in Hollandia and Manokwari. Of these, about 40% could be found work.

5. WORKERS' ORGANIZATIONS

There are two trade unions, viz. the Christian Workers Union of Netherlands New Guinea (the CWNG/Persekding) and the General Catholic Officials Association (the ARKA), a regional division of the Dutch association of that name. At the end of 1960 the CWNG/Persekding had 3000 members (1959: 2400) and the ARKA 1100 members (1959: 1000).

Organizationally no distinction is made in either union between Papuans and non-Papuans.

6. SETTLEMENT OF LABOUR DISPUTES

During the year under review a number of labour conflicts occurred. In all cases it was possible to arrive at a quick solution by consultation between representatives of the employers and of the workers and through the intermediary of the Labour Inspectorate.

As a result of these disputes 1443.5 mandays were lost in the whole Territory.

7. SOCIAL WELFARE IN INDUSTRY AND AGRICULTURE

See Section G, Town Planning and Housing, of this chapter.

8. VOCATIONAL AND TECHNICAL EDUCATION

For this see Chapter IV, Education.

9. LABOUR LEGISLATION

In anticipation of the new labour and industrial safety legislation, which is still in the preparatory stage, directives have been drawn up for the regulation of the legal position of day labourers working for the Government but not in official public employment. These will come into effect at the beginning of 1961.

E.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. This function is performed by the Director of Economic Affairs.

Efforts relating to native cooperatives are mainly of an advisory and supervisory nature; these societies receive theoretical and practical assistance but the principle of self-activity and personal responsibility is fundamentally adhered to.

In the performance of his duties the Adviser for Cooperatives is aided by the Bureau for the Development and Organization of Papuan Business (called in previous years the Office for Cooperative Affairs) with a graduate official at the head and four executive officers as inspectors in the administrative divisions. This Bureau is responsible not only for native cooperative societies and work communities, but also for encouraging and assisting in the development of a Papuan trading middle class, the promotion of Papuan industry and crafts and the granting of credit to Papuan businesses.

For three years an annual course in cooperative knowledge, administration and simple bookkeeping has been given at Manokwari for members of managing committees and staff of native cooperatives. A total of 45 persons have been given the diploma of this course. Four Papuans have attended a cooperative course in the Netherlands.

During the year under review no cooperative course was given. Preparations are being made for a reorganized course, viz. a commercial training course for Papuans on behalf of cooperatives and individual Papuan businesses.

2. GRANTING OF CREDIT

Since 1957 it has been possible for the Government to grant credit to cooperative societies entered in the "Public Register" for capital expenditure to reinforce or expand their activities. Since 1959 it has also been possible to grant credits to individual small Papuan firms.

During the year under review a total of 24 credits were granted, amounting in all to f 51,830.

Of these credits, eleven were given to fishermen for the purchase of outboard motors (together f 10,450), four to dealers (f 6000), three to haulage contractors (f 8540), two to (rattan) furniture-makers who had attended a course in basket-making in the Netherlands (f 10,840), two to cooperative societies (f 6940), one to a contractor (f 4000) and one for taking over a driving school (f 5000).

The total outstanding amount of credits, after deduction of repayments already made, was approx. f 120,000 on 31 December, 1960 (1959: over f 94,000).

3. COOPERATIVE SOCIETIES AND WORK COMMUNITIES

The number of cooperatives entered in the "Public Register" with corporate rights in 1960 was eight. The number of unregistered cooperative societies and work communities increased from 50 to 68.

The total turnover of the registered and unregistered cooperatives rose from f 1,575,000 in 1959 to f 2,000,000 in 1960.

The distribution of the cooperatives and work communities, registered and unregistered, was as follows on 31 December, 1960:

Hollandia residency	28
Geelvink Bay residency	7
West New Guinea residency	19
Fak-Fak residency	5
South New Guinea residency	17
T o t a l	76

Apart from the old exception, the cooperatives and work communities are mixed in character. They all combine the production and marketing of native products with the sale of consumer goods in their own shops. The sale of consumer goods is a considerable stimulus for the production of goods to obtain a money income.

In South New Guinea fifteen work communities were set up for the production of copra.

The work communities have built copra drying sheds and now produce copra in cooperative fashion. Although most of these work communities had only been active for a few months, their joint production in 1960 was already f 250,000. In order to encourage production and to simplify the bringing of coconuts to the drying sheds and the transport of the copra produced to the places of shipping, twelve of these work communities have been given credits for the purchase of draught oxen and oxcarts.

The "Onin Sehati" cooperative at Roembati (Fak-Fak division) resumed its production of timber, which it had stopped in 1958. The cooperative exported 2500 cubic metres of timber to Japan. The PPPA cooperative at Biak established commercial contacts with Japan, too, and exported to that country in November 1960 the first trial batch of copra.

F. STANDARD OF LIVING

The Papuan community, particularly outside the urban centres, is still for the greater part living at the stage of a low level of autarchy. This autarchy does not lend itself very well to statistical observation for the purpose of determining the level of prosperity of the population by scientific methods.

At the end of 1960 a survey began of the way of life of Papuans in urban centres in the form of a poll. This will be continued in 1961. The statistical insight into the way of life of this more Western-minded Papuan urban population obtained from this poll, after the diet revealed has been checked to ensure that it is medically sound, will be laid down in a standard consumption pattern which can help the authorities in deciding on their wage and price policy. It has already been found that the costs of a sound diet pattern per person per day will average f 1 to f 1.25, and will demand 50-60% of total family expenditure.

Appendix XXX A gives index figures for the cost of living at Hollandia for higher-income groups; Appendix XXX B gives retail prices and index figures of a number of important foodstuffs and stimulants, also at Hollandia.

The authorities have laid down maximum prices for about one hundred imported foodstuffs and stimulants and also soap and washing powders which are important items of income expenditure. Lists showing these maximum prices have been distributed throughout the Territory. By special publications of the Service for Popular Information the maximum prices have also been brought to the attention of the Papuan population. It has further been laid down that the prices of foodstuffs and stimulants, clothing, footwear and pharmaceutical articles must be displayed in the shops.

The result of this regulation, compliance with which is strictly supervised, is that the prices of the most important imported goods are the same in all urban centres along the coast.

The total cost of living on 1 December, 1960, was 2% lower than 1 December, 1959, according to the figures.

There are a number of indications that the wage level of the Papuans is on the other hand on the rise, which favourably affects the standard of living of this group, given the fall in the cost of living.

G. TOWN PLANNING AND HOUSING

1. CONDITIONS AND PROBLEMS

During the first years of development the construction of the necessary administrative centres with the corresponding houses and offices and the ancillary public works formed the main problem.

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 at the beginning the authorities were faced with very great difficulties.

Of necessity use had to be made in those years of accommodation dating back to the war years for both housing and offices. This accommodation was made suitable for this purpose more or less provisionally.

Gradually it proved possible to overcome these difficulties. By using the services of a number of contracting firms, the construction of houses, offices and other utilitarian structures could be tackled on a wider scale, in the first years mainly in the urban centres, later at smaller places too.

By general education, followed by specialized training in the building trade, a steadily growing force of Papuan building trade operatives has gradually been built up. By the use of mechanical processing methods good bricks and concrete shapes can now be made locally. Now that the Manokwari sawmill is in operation, the supply of wood has improved so greatly that in 1960 a start could be made on a fairly large scale with the building of houses and utilitarian structures entirely from wood or by means of building systems making generous use of wood.

The increasing activity in the urban centres as a result of the implementation of the housing programme and the continuing provision of the infrastructure (harbours, airfields, offices, schools, hospitals, etc.) caused an increasing migration of labour from the country to the towns. The result of this was that – since this migration gradually began to involve families, whose settlement acquired a more permanent nature – provisions had to be made to house the Papuan workers. New housing estates had to be built, in the first place in the urban centres, but also in various smaller places.

In Hollandia a large number of houses for Papuan workers have been built on the Hamadi estate since 1956, and later in the Polimac district as well, as also in Biak and, on a more modest scale, in several smaller places.

At Manokwari a new residential district has been built at Sanggeng, chiefly housing Papuan labour at the sawmill and the shipyard. Elsewhere in this town there is a residential district for Papuan workers employed by other firms.

During the year under review the above-mentioned provisions were further extended.

Although in general the worst of the housing shortage, both for personnel recruited from outside the Territory and for local workers, has now been dealt with and, with the odd exception, satisfactory accommodation has been provided for the various Government services as well, housing still continues to be a difficult problem requiring the unremitting attention of the authorities.

In Hollandia all the central offices of the Government, with the exception of the Court of Justice, are now housed in newly built offices. During the year under review the construction of the head office for the Post Office was completed, as was the school building for the General Secondary School (the Private Secondary School).

During the year under review preparations were made for the construction of a suitable building at Hollandia to house the New Guinea Council, which was to be installed in 1961. Since it will be some time before this building is completed – it is expected that it will not be ready before 1962 – provisions were also made for temporary accommodation for the Council.

2. ORGANIZATION

The Buildings and Town Planning Branch of the Department of Public Works is in charge of the construction of public buildings, utilitarian structures and housing. Under this branch come the building and upkeep of the offices 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, whilst finally, in collaboration with the Department of Public Health, the branch is also responsible for environmental sanitation.

The Waterways Branch of the Department of Public Works 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 Land Registry and Mapping Branch of the Department of Public Works is, with regard to town planning, responsible for making the cadastral maps and doing the surveying required for town planning.

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 during the year under review in the field of housing; Appendix XXXI A gives a survey of construction from 1956 to 1960 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 an official of the Department of Public Works went to Australian New Guinea for an exploratory visit and to exchange experience in the fields of building and civil engineering.

4. FINANCIAL AND TECHNICAL AID FROM THE AUTHORITIES

In 1959 a credit arrangement was drawn up on behalf of private house-building. Under this arrangement building credits are granted by the authorities to persons who have a reasonable income but not enough capital to finance the building of their own home.

The credit to be granted is not more than $\frac{3}{4}$ of the building price. The estimated building price may not be more than f 20,000. The interest is 3% per annum.

A modest use was made of this arrangement during the year under review.

H. 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 medical attention; the contribution is 4% 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 and Justice 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 f 39,000 was spent on this aid. The above-mentioned branch also looks after the families left behind when a leprosy patient enters a leprosy, again in collaboration with the patient's doctor.

b. Unemployment

The number of unemployed in the urban centres changed only slightly in respect of 1959. Cut-of-work European workers who, as a result of their limited training, could not easily find work again, were given an opportunity to leave for the Netherlands with Government support, and to receive vocational training there.

c. Accidents and sickness

During the year under review 84 industrial accidents, 17 more than in 1959, were reported to the Labour Affairs Branch. A survey covering the years 1955 to 1960 follows:

year	number of accidents	minor injuries	serious injuries	fatal injuries
1955	106	72	22	12
1956	102	90	6	6
1957	62	48	7	7
1958	94	80	8	6
1959	67	56	7	4
1960	84	58	21	5

The employer is obliged to pay compensation in the case of industrial accidents. The Labour Affairs Branch is responsible for supervising the financial settlement of the consequences of industrial accidents.

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 are responsible for granting social relief; for the other places aid is given under the supervision of the Heads of Local Administration. Elderly and impecunious Europeans in need of care are sent to the Netherlands at Government expense.

Under the General War Injuries Regulations relief was paid during the year under review to disabled war victims. Also under these regulations payments were made to next-of-kin of war victims, including widows, mothers and children. During the year under review the payments made to this group of needy persons were brought in line with the cost of living in Netherlands New Guinea.

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 and Justice consists of the head of the branch, two officers for social work, two social workers and a small clerical staff.

For the financial year 1960 a sum of f 560,500 (incl. f 45,000 capital expenditure) was made available on the budget for this branch, to be used among other things for social aid, 1B after-care, infant welfare, sport and recreation, social development work and libraries. (For 1958 and 1959 the respective sums were f 658,000 (of which f 177,000 capital expenditure) and f 570,900 (of which f 22,000 capital expenditure).

On behalf of social work among urban Papuans the branch maintains close contact with three social workers of church organizations. Furthermore, all kinds of social activities are stimulated in the Territory.

Also active in the field of social welfare are the Netherlands New Guinea Red Cross, the Green Cross Society and the St. Vincent Foundation.

The Netherlands New Guinea Red Cross is active in, among other things, the provision of reading matter and welfare work in hospitals.

The Green Cross Society is chiefly concerned with assisting in the nursing at home of bedridden patients. It runs well-attended consultation centres for infants at Hollandia and Manokwari.

The St. Vincent Foundation is principally engaged 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. The independent St. Vincent Foundation at Manokwari runs a children's home housing a number of children from unfavourable social environments.

Socio-cultural educational work

In 1955 Papuan women's clubs were founded at a number of places in the Territory as a result of private initiative. In the course of the years increasing interest has been displayed in these clubs, and this has been reflected in a steady growth of both the number of clubs and the number of members.

Papuan women's clubs are now located at Hollandia and vicinity, Genjem, Sarimi, Biak, Seroei, Manokwari, Sorong, Merauke and Fak-Fak. The total number of clubs is 56 (1955 : 23), and the total number of members 1189 (1955 : 470).

In these clubs, whose efforts are supported by the Government, the women are given instruction in sewing (making layettes for babies and clothes for themselves) and cooking; they are also taught about health and hygiene, diet and child care.

Much attention is devoted to self-activity and, particularly in recent years, to the training of Papuan women leaders. During the year under review four training courses for Papuan women leaders were held at Hollandia; such courses were also organized at Seroei and Sorong. These courses last three months, whilst the number of participants averages fifteen.

At Manokwari the Papuan women leaders are trained somewhat differently. There they are instructed once a month, at a meeting, on the programme that is to be put into effect during the coming month.

Furthermore, at Hollandia two special cookery courses, lasting three months, were organized for Papuan women.

A family day was held for members of the women's clubs at both Hollandia and Manokwari. The programme consisted of a competition for the best self-made clothes and competitions for men, women and children, and finally a play put on by one of the clubs. In the new residential district of Polimac, in anticipation of the construction of the Social Centre there, a house was made available in which the "kaum Bapa" has found accommodation. This is an association for Papuan men in which they are taught woodworking so that they are able to make items of furniture for their homes. This course is run by ex-pupils of the Primary Technical School at Kota Radja.

Besides women's and men's clubs there are girls' clubs, which are more along the lines of social clubs, but at which lessons in sewing and embroidery are given.

Poor relief

During the year under review a sum of more than f 228,000 was spent on poor relief. The figure in 1959 was over f 142,000.

Infant welfare

During the year under review subsidies totalling f 57,140 were paid to the private organizations which run 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 in the year under review the sum of f 18,000. The number of registered sports clubs is 263, the number of members 6939.

Passages to the Netherlands for emergency social cases

In the year under review 23 persons were sent to the Netherlands at Government expense as social and socio-medical emergencies, whilst five cases 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

The pattern of criminality varies from region to region, depending on the one hand on the degree of administrative influence and on the other hand on the character of the original culture.

In some cultures warfare (head-hunting,) occupied an important and sometimes a central place, whilst in the whole Territory the Papuans took the law into their own hands almost entirely when settling disputes.

Assault, crimes of violence and crimes of morals occupy the principal place in the statistics of crime.

However, nowhere does crime form a problem that has got out of hand.

When cases are tried the punishments are adapted to the degree to which the population have already become acquainted and familiar with the new forms and standards of justice.

Juvenile delinquency, by which is understood criminality of young persons up to and including the age of sixteen, occurs to a very limited extent only, and then mainly in the urban centres. The most common offences are theft, assault and crimes of morals, theft being the main category.

The extent of juvenile delinquency is not such that it is necessary to have special juvenile courts.

However, the law offers the possibility of a juvenile delinquent not being tried, but being placed at the disposal of the Government, which then takes measures to educate the person concerned.

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 XXXVa.

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 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 fourteen days) and curtailment of privileges. Corporal punishment is forbidden.

d. Remission, work, privileges

Prisoners work both inside and outside the prisons.

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 possibility of provisional release on condition of good conduct.

e. After-care of discharged prisoners

The Central Board for the After-Care of Discharged Prisoners and a Local After-Care Committee are situated at Hollandia. Outside the capital the 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 provisional release and on all fundamental 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 suitable discharged prisoners, for whom it helps to find work and accommodation as far as possible.

The Local After-Care Committee also has the duty of advising the Director of Social Affairs and Justice on proposals for provisional release if necessary of making such proposals itself to the competent authority.

On request it advises and informs the competent authority on instances of provisional release and on the special conditions with which those released may made to comply.

A person sentenced to imprisonment can be provisionally released when two thirds of his sentence and also at least nine months have elapsed. He is put on probation for a given period, during which he has to satisfy certain conditions.

During the year under review fourteen Papuans were provisionally released.

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 Nederlandsche Nieuw Guinee Petroleum Maatschappij's own medical service ceased operations in mid-1960, as a result of the curtailment of the company's activities. The buildings, equipment and staff were taken over by the Government.

The Territory has 22 medical districts; 19 districts have available a hospital with one or more rural out-patient clinics; three medical districts do not yet have a hospital, but do have an out-patient clinic with admission facilities. Each medical district has a number of rural out-patient clinics, a medical staff under a doctor who is directly responsible to the Director of Public Health.

Special sections for the whole Territory are those for the control of endemic diseases (malaria, yaws, tuberculosis and leprosy), maternal and child welfare and health education. There are also sections for dental care, pharmaceutical supplies and the care of mental defectives, together with a Central Medical Laboratory.

The heads of these sections are also immediately subordinate to the Director.

At the Central Office the Director is assisted by the Subdirector and also by three Government doctors, who are responsible for the following:

- training of medical staff
- environmental sanitation
- nutrition (nutritional research and diet improvement)
- international health matters
- quarantine and smallpox control
- documentation and statistics
- matters concerning medical examinations
- library.

The administrative staff of the Central Office attends to general affairs, staff matters, financial and budget affairs, and technical matters.

Collaboration with other Departments takes place in, among other bodies, the Nutritional Council, composed of experts in agriculture, education, public health and administration.

2. PERSONNEL

The number of doctors and dentists working in Netherlands New Guinea rose in the year under review to 95, 63 of whom are Government medical officers. The job breakdown of the doctors in 1960 was as follows:

	Government	Other bodies
<i>A. General administration</i>	5	1
<i>B. Independent sections:</i>		
Malaria control	2	—
Yaws control	1	—
Tuberculosis control	3	—
Leprosy control	2	1
Health education	1	—
Central Medical Laboratory	1	—
Maternal and child welfare	1	—
<i>C. Other medical officers</i>		
General Service	41	25
Surgery	1	—
Internal medicine	1	—
Dental surgery	4	5
Total	63	32

The staff of specialists was joined by a children's specialist, an ophthalmologist and a hygienist.

For a complete list of medical personnel see Appendix XXXVI and for a table showing staff directly available for the medical care of the population in the years 1954 - 1960 see Appendix XXXVI A.

3. EXPENDITURE ON PUBLIC HEALTH

THE COSTS OF MEDICAL SERVICES IN RECENT YEARS HAVE BEEN:

1953	f. 3,209,000	(index)	100
1954	" 4,400,000		137
1955	" 5,900,000		184
1956	" 6,300,000		198
1957	" 6,800,000		212
1958	" 7,000,000		218
1959	" 7,500,000		233
1960	" 8,000,000		249

*) excluding indirect costs of personnel and transport.

In the year under review the sum of f. 667,100 was spent on capital construction on behalf of the Department of Public Health.

Private bodies were given Government subsidies totalling f. 33,000 on behalf of medical aid to the population.

THE AID RECEIVED FROM UNICEF DURING THE YEAR UNDER REVIEW WAS:

for malaria control	f. 55,000
for environmental sanitation	" 21,500
for maternal and child welfare	" 114,500
1960 total:	f. 191,000
(1959: f. 126,000)	

Since 1958 the sum of f. 320,000 has been received from private organizations (the SIMAVI Society and the National New Guinea Committee) for the building of three chest clinics for tuberculosis control, three tuberculosis wards and six patients' houses in leproseries, and also one maternity home and one boat in which to make medical tours.

Considerable aid has also been received from the Netherlands New Guinea Red Cross.

4. HOSPITALS

The number of Government hospitals is 19 (as in 1959); the number of Government out-patient clinics is 112 (1959: 104), of which 88 (1959: 80) are rural out-patients clinics, four of these having admission facilities.

The total number of hospital beds in the Government hospitals and out-patient clinics is now 1164 (1959: 1000). The number of nursing days in 1960 was 286,360.

In the "Irene" psychiatric clinic the number of beds is 48, and the number of nursing days was 16,245. A total of 482 patients was nursed in the leproseries.

The number of curative treatments at out-patient clinics, rural out-patient clinics and given during tours by doctors and other nursing personnel totalled 1,033,789 in 1960.

For further details see Appendices XXXVII and XXXVIII.

On 1 July, 1960, the NNGPM hospital was taken over by the Government. In view of this the Government hospital at Sorong-Doom is now in use only as an out-patient clinic. As a result a large

hospital (142 beds) with modern facilities is now available for the medical care of the population of the Radja Ampat Islands and of the western part of the Vogelkop.

In Seroei two wards were built on to the hospital. Merauke was given a pavilion for infectious cases; the leprosy there was completed. At Hollandia the maternity home donated by the SIMAVI Society was put into use. The construction of the leprosy at Kaimana was almost finished by the end of 1960. In the leproseries of Sorong, Manggurai and Seroei tuberculosis pavilions were built, the costs being borne by the SIMAVI Society.

A Medical Centre is to be built at Hollandia. Building and fitting-out, which will cost \$ 1,290,000, will be financed by the Development Fund for the Countries and Territories Overseas of the European Economic Community. The project was approved by the Commission of the EEC in the year under review.

The Medical Centre will be the central point from which the curative and preventive health care will be directed and coordinated. At the same time the investigations for diet improvement will be made there and the medical experience gained throughout the Territory will be analysed.

Finally, various courses for medical personnel will be concentrated at the Medical Centre.

The supplying of the hospitals, out-patient clinics and the sections of the Department as regards medicine, dressings, medical instruments, insecticides and chemicals is the function of the *Pharmaceutical Supplies Section*, headed by a pharmaceutical chemist.

The turnover during the year under review was f. 984,750. A total of some 350 cubic metres (about 97,000 kg) of medicines, etc., were sent to places outside Hollandia.

About 20% of the medicines are prepared in the Central Dispensary, which possesses modern equipment (such as a tableting machine, a sterilizer, a distiller, vaccine storage, etc.). The medicines are made up by five certificated Papuan junior pharmacists, who are under the supervision of an assistant pharmacist.

In the chemical laboratory medicines supplied both from the Netherlands and from the Central Dispensary are regularly checked. Further, regular dietary investigations are made, and drinking water is also analysed.

In the Central Medical Laboratory investigations are made on behalf of the entire Territory. Research into tuberculosis was extended. The further typification of special strains isolated in Netherlands New Guinea is performed in collaboration with special research centres in the Netherlands.

In the course of the year under review the equipment of the laboratory was again considerably extended.

There were 13,102 determinations, made up as follows:

Bacteriological examinations (except tuberculosis examinations)	1903
Tuberculosis examinations	5498
General serology	542
Lues serology	1170
Serology on behalf of the Yaws Control Section	2063
Clinical examinations	745
Drinking water analyses	102
Miscellaneous	79
total	13,102

Dental Care has treatment centres at Hollandia, Biak, Manokwari, Sorong and Merauke. The smaller places are also visited regularly. The total number of treatments in 1960 was 17,523.

5. TRAINING AND EDUCATION

There are now the following courses for medical personnel in Netherlands New Guinea:

Nature of course	Length of course	Entrance requirement	Number of pupils at end of 1960
Male or female nurse, Netherlands New Guinea diploma	5 years	diploma of continuation school	146
Auxiliary nurse, male or female, Netherlands New Guinea diploma	2 years	ditto	204
Mental nurse, male or female, Netherlands New Guinea diploma	2 years	ditto	8
Infant welfare nurse	2 years	ditto	77
Laboratory assistant	3 years	ditto	3
Junior pharmacist	3 years	ditto	4
Malaria control assistant	3 years	ditto	8

From 1954 to the end of 1960 the following diplomas were awarded:

- 165 male or female nurses
- 106 auxiliary nurses
- 12 mental nurses, male or female
- 129 infant welfare nurses
- 22 laboratory assistants
- 22 junior pharmacists
- 12 malaria control assistants.

During the year under review six Papuan pupils holding the primary secondary school diploma left for Australian New Guinea to train as auxiliary doctors at the Medical School of Port Moresby. (Later in the year a seventh young man was nominated for this training). Two pupils are now attending the course for auxiliary dentist at the Dental School of Suva, Fiji.

To reinforce the training for male and female nurses Netherlands New Guinea diploma, a Dutch nurse was given a WHO scholarship for a course for nursing instructors in New Zealand. At the end of 1960 a second nurse left for New Zealand to receive the same training. After they have returned they will teach full-time on the course for male and female nurses centralized in Hollandia.

Besides the cadre of certificated Papuan nurses of both sexes, there was a need for an auxiliary corps of reasonably well trained staff capable of performing simple ward and out-patient clinic work under supervision. The two-year course for auxiliary nurses instituted to meet this demand yielded its first graduates in the year under review.

For further details of the courses see Appendix XLII.

6. DEMOGRAPHIC DATA

Scientifically reliable demographic data cannot yet be given for the whole Territory. The Office of Native Affairs continued with the careful registration of births and deaths in the Sentani area. A demographic investigation is being conducted in the Schouten Islands, the costs of which are being borne by the EEC development fund.

The birth and death figures reported by nurses and infant welfare nurses cannot yet claim complete reliability. Nevertheless, the figures furnished are a clear indication of a considerable

excess of births in the areas subject to intensive medical care (Schouten Islands, Japen, Nimboran, Sentani), whilst in the areas recently brought under administration births are still for the greater part levelled out by deaths (Upper Digoel, Moejoe, Baliem).

7. ENDEMIC DISEASES

Malaria and filariasis

In 1960 an important decision was taken with regard to malaria control. In consultation with and on recommendations from the regional office of the WHO at Manila, a plan was developed for converting the existing malaria control project into a malaria-eradication pilot project. This project will cover 200,000 inhabitants, or half of the population of Netherlands New Guinea living in malarial areas. The aim is to achieve in the area concerned an interruption of malaria transmission under the prevailing circumstances in Netherlands New Guinea by applying a combination of the various malaria control techniques.

During 1960 malaria control was continued in the areas already protected and extended according to plan in the Vogelkop, as a result of which a total of 230,000 persons were brought under the protection of insecticides. In 1961 this total will be extended by a further 20,000 persons.

WHO gave advice, whilst UNICEF again provided material assistance in the form of insecticides, medicines, sprays, transport and laboratory equipment.

Besides house-spraying, the distribution of medicines was applied more selectively.

Great attention was paid to the evaluation of the campaigns. The data collected stress the fact that the results of these control campaigns are very satisfactory in most areas, in particular in the more densely populated ones.

In view of the results obtained on the Schouten Islands (40,000 inhabitants), the consolidation phase could begin by the institution of what is called supervision. Preparations for consolidation have been made for the area around Merauke and the vicinity of Hollandia-Sentani.

In a few areas the results of control were still disappointing. From an investigation of this it was found that residence in the temporary houses in the food gardens must be considered as having a decisive effect on malaria transmission. Extension of house-spraying to these "garden houses" has therefore been undertaken more intensively than formerly.

The results obtained with increasing the frequency of house-spraying were favourable in part of the pilot project. Elsewhere the results were partially cancelled out by frequent residence in garden houses.

Sensitivity tests of anophelines were performed regularly. Resistance to insecticides was not found.

Knowledge concerning the distribution of malaria and its vectors in the area not yet brought under protection was broadened and deepened.

The medicated salt project was continued in the Arso-Waris area and the Upper Tor district. After initially good results with this form of control, the medicine, pyrimethamine, had to be replaced by chloroquin, since the malaria parasite concerned, *P. falciparum*, had developed resistance to the prophylactic. An optimum dosage for the chloroquin-salt mixture is still being sought. The scheme used in Brazil gave inadequate protection.

In the field of *filariasis control*, the major project with hetrazan at Inanwatan formed the centre of activities. This project started in January 1960. The results obtained in the evaluation survey in December were extremely favourable. They have given rise to the decision to suspend the distribution of hetrazan for six months, after which a new investigation will have to determine the further approach.

A number of important items of information were added to the existing knowledge concerning the transmission of filariasis.

The effect of house-spraying on filariasis transmission by *Aedes kochi* was evaluated on the island of Pam. Although it is still too early to make a definite pronouncement, the findings point to the transmission of filariasis having been interrupted.

Yaws

In the past year more than 12,000 persons were given initial treatment, so that at the end of the year the total number of persons treated had been increased to more than 390,000.

Those treated were mainly small groups, as a result of which enclaves in the area treated were eliminated or the boundaries between the treated and the untreated area were shortened.

The stress again fell during the year under review on consolidation in areas already treated. More than 240,000 persons were subjected to a resurvey, in which ¼% contagious yaws was found. More than 50,000 contact cases were treated.

A gradual decrease has been found to be occurring in the number of contagious cases in resurveys. Areas which up to now had an unfavourable reputation displayed a striking improvement, such as the Vogelkop and large parts of South New Guinea.

In the Central Highlands the number of posts at which yaws is controlled by case treatment increased in number. More doctor's posts were set up, and more Papuan nurses were posted. The missionary societies play a considerable part in out-patient treatment. Practically all the groups of the population in the valleys of the Central Highlands can now receive out-patient treatment.

The time does not yet seem ripe for a campaign with total mass treatment in Netherlands New Guinea. In areas where intensive case treatment is given the clinical index is slowly falling.

During the year under review aid was received from UNICEF for the last time in the form of adrenaline ampoules.

Reporting to WHO/UNICEF was continued in the old manner.

The central mobile team was again used during the year under review to assist the outposts in the extension of initial treatment and resurveys. Serological follow-up investigations were continued in a number of districts.

Tuberculosis

In 1960 considerable attention was devoted to the systematic examination by means of photofluoroscopy of urban centres and the villages which can be reached by the equipment from these centres.

Of the 32,989 persons who could be reached, 30,645 were examined. Of these 24,608 had reached a suitable age for photofluoroscopy.

The number of chest clinics is now eight, all of which have full-time personnel.

Besides the central machinery for detecting cases, there are now facilities for X-ray examinations at 13 places scattered throughout the country.

At the end of 1960 a total of 1472 Papuans and 230 non-Papuans were under out-patient treatment. The number of consultations rose from 14,987 to 26,892. With a total capacity of 180 beds, 409 patients were able to undergo clinical treatment.

In the central register, in which only bacteriologically checked cases are given, 692 new cases were recorded: 607 Papuans and 85 non-Papuans. As a result, the total number of registered cases rose to 2127 Papuans and 322 non-Papuans.

Further extension of the BCG vaccination campaign with thermolabile liquid vaccine is meeting with great difficulties through technical drawbacks.

As a result, a pilot campaign with thermostable freeze-dried glutamate vaccine has begun, the results of which are being intensively studied at present.

In this campaign one of the things being investigated is the postvaccinal allergy after vaccination with wet and dry vaccine.

The situation of the revaccination campaign may be given as follows:

	Tested	Read	Vaccinated/Revaccinated
1st revaccination campaign	124,067	122,839	59,970
2nd revaccination campaign	41,342	40,932	15,910
3rd revaccination campaign	17,651	17,476	7,765
4th revaccination campaign	684	672	227

In April 1960 the Final Report BCG Vaccination Campaign Netherlands New Guinea, relating to the WHO-UNICEF Assisted BCG Campaign 1956-1959, was submitted to the UNICEF Resident Representative at Bangkok.

Leprosy

Leprosy control is performed mainly in leproseries, where the borderline and lepromatous patients are treated. Furthermore, where possible a start was made in the year under review with out-patient and home treatment of the non-infectious cases.

Owing to the low density of population and difficult communications, the leproseries are for the time being essential.

Nobody is ever compelled in any way to enter a leproseries.

In the control of leprosy in 1960 not only DDS was used, but also, for the first time, the newer medicines DPT and ETISUL.

For some years now the need has been felt for social measures for leprosy patients who commit themselves to leproseries on medical advice.

After the Head of the Leprosy Control Section had made a preliminary study of this matter in the Philippines, Thailand, Malaya, Singapore and Hongkong under the auspices of a fellowship, a programme was drawn up which makes it possible for patients in leproseries to perform paid labour, and so to maintain contact with work in the community outside. Implementation of this programme has begun in Sorong. In 1961 this will also be extended to the other leproseries.

The leproseries at Sorong was extended by a tuberculosis pavilion. Ten houses for patients are under construction. At Miei a radiography pavilion was built; a tuberculosis pavilion is being constructed.

The first patients have arrived at Merauke for admittance to the leproseries. The leproseries at Kaimana is practically ready.

A total of 482 patients are now undergoing treatment in leproseries. The total number of nursing days in the leproseries was 163,405, and that in the wards in the leproseries 10,612.

In 1960 a total of 31 patients were discharged from the leproseries after a bacteriologically negative period of one year. These patients are now receiving after-treatment in out-patient clinics.

Furthermore, tuberculoid patients were given out-patient treatment in the medical centres where there is a doctor or experienced nurse.

The total number of cases treated in out-patient clinics increased in 1960 to 630 (1959: 545). In 1952 the number was eight.

After a special preliminary training a Papuan nurse was posted to Biak. He was given the task of DDS medication of the non-infectious or no longer infectious cases in the villages along the south coast of Biak.

In the past year a special course was started at the Sorong leproseries for pupil public health nurses. The result of this will be an extension of out-patient therapy.

The initial leprosy survey by Section doctors in the most important leprosy foci was extended in 1960. Resurveys were performed by the local doctors.

The ways in which leprosy entered and spread were traced. The survey, which was based to a considerable extent on information supplied by the population, has revealed that leprosy was introduced from island groups to the west of Netherlands New Guinea in the years between 1900 and 1920. Practically all coastal regions have now found to be infected. An exception is formed in the south by the Casuarine Coast, the Agats subdivision and the Kokonao subdivision. The interior is still free for the greater part. The worst foci are found in the subdivisions of Sorong, Wandammen Bay and the Schouten Islands and the subdivision of Merauke.

The number of known living leprosy patients was 4885 on 31 December, 1960, of which 761 were borderline and lepromatous cases.

The leprosy index for the whole area of Netherlands New Guinea under administration was 11.1 o/oo at the end of 1960.

Information in the field of leprosy control is given by means of films and slides.

By lessons at the training schools for officials of the administrative service and for teachers, at the institutes for continued education, and also by information given in the villages during tours, efforts are being made to give the population a better idea of the course, infectiousness and possibilities of curing leprosy. It has been found that the surveys of the distribution of leprosy mentioned above also give the population a clearer picture of the nature and the infectiousness of the disease precisely because they cooperate actively in these surveys.

Considerable aid was received from charity. The SIMAVI Society gave three tuberculosis pavilions for the Sorong, Miei and Merauke leproseries, to a value of f. 55,000. The National New

Guinea Committee gave f. 40,000 on behalf of the leprosy at Kaimana. Through the assistance of the NNGPM the Sorong leprosy was provided with an electrical plant.

Local committees gave financial aid for various purposes.

The activities of the local leprosy committees were combined by the foundation of the Netherlands New Guinea leprosy committee.

Smallpox

No cases of smallpox occurred in the year under review. The existing vaccination situation was kept at the same level. Particular attention was paid to the coastal regions, where the disease is most likely to be brought in from outside. The number of vaccinations was 78,105, of which 22.9% were for the first time.

Other infectious diseases

No cases of quarantinable diseases occurred in 1960, either. The following diseases occurred in epidemic form:

Influenza	2512 cases reported
Mumps (Parotitis epidemica)	2218 cases reported
Measles	395 cases reported

The influenza especially hit the population of the Vogelkop, and there were a relatively high number of fatal cases. The mumps (Parotitis epidemica) spread epidemically, in particular along the north coast, but relatively large numbers of cases were also reported from the south coast. Serious complications did not occur. Measles were observed in the Vogelkop in particular.

An infectious intestinal disease with several dozen fatal cases among young children occurred in Geelvink Bay, in particular on the island of Japen.

Furthermore, 451 cases were reported of bacillary dysentery, chiefly from Manokwari and Merauke.

The following infectious diseases occurred sporadically:

meningitis	(7)
encephalitis	(2)
typhoid	(10)
scrub typhus	(6)
diphtheria	(15)

8. STATE OF NUTRITION AND HEALTH EDUCATION

The state of nutrition of the population is to a considerable extent determined by their staple diet. Netherlands New Guinea offers a great variety as regards its diet patterns. In the mountains the staple food is tubers; in the Central Highlands it is ipomoea, or the sweet potato, in the western part of the Vogelkop mainly taro, and in the eastern part yams. Moreover, at many places tapioca, which probably entered New Guinea in this century, is consumed.

Along the coasts areas are to be found where solely sago is eaten as the staple diet. In the north the sago is often made into a porridge; in the south this method of preparing is unknown, and sago is roasted or baked in all kinds of ways, or made into cakes.

Between the characteristic tuber and sago diets lie all kinds of transitions to more mixed dietary patterns. In the towns rice is slowly superseding the products of the country.

The most important nutritional problem is the shortage of protein. In the Central Highlands animal protein is scarce. Pigs are bred everywhere, but pork is eaten only on festive occasions and does not occur on the daily menu. In a number of valleys a more regularly consumed source of protein is the cherax, a kind of lobster.

To improve the provision of protein Inland Fisheries is promoting the creation of fish ponds, and it is looking for species of fish which are suitable for putting into the natural waters of the Central Highlands. The investigations into the nutritional value of the protein of sweet potatoes,

tubers and leaves made by the Central Institute for Nutritional Research TNO at Utrecht are being continued. The purpose is to investigate which varieties of *Ipomoea* contain the most and best protein, and which other crops could supplement any deficiencies in the amino-acid composition of the sweet potatoe protein.

In the regions where sago predominates there is in general sufficient protein available in the form of molluscs, fish and wild pigs. Here the primary concern is improvement of the catching and preserving methods for fish. These regions are not so very suitable for the laying-out of fish ponds, though in some cases it may be useful to put new species of fish into natural waters.

Protein deficiency can also be supplemented by vegetable protein. In agricultural regions considerable publicity is being made for the cultivation and eating of such species of beans as *phaseolus aureus*, *arachis hypogaea*, *cajanus cajan* and *phaseolus vulgaris*. In regions where the population still have an insufficient grasp of agriculture, efforts are being made to persuade them to plant useful trees. Preference is given in particular to trees which can supplement the protein ration, such as nut trees (*Canarium*, *Terminalia catappa*, *Aleurites moluccana*, *Anacardium occidentale*, *Inocarpus edulis*) and breadfruit trees (*artocarpus integra*, and the *Gnetum Gnemon*).

In the twons and the regions where the money economy is making its appearance, the dietary pattern is changing strongly. Native foodstuffs are often replaced by imported items, with the attendant danger that the nutritional situation will deteriorate.

Education on diet is given via schools, boarding schools and women's clubs. Furthermore, a simple cookery book, written with local possibilities and needs in mind, has been published.

A separate problem is the endemic struma in a large number of valleys of the Central Highlands and in the Vogelkop. These valleys are difficult of access, so that it is not possible to send in adequate supplies of iodized salt. The distribution of this endemic struma is broadly known, and it is only a matter of finding a practical method of control for this disease.

9. PRINCIPAL CAUSES OF DEATH

Insofar as reliable data are available, chiefly from the hospitals, it may be concluded that infant mortality is principally the result of malaria, intestinal infections, malnutrition and diseases of the respiratory system. Among the older age-groups pneumonia and tuberculosis are the chief causes of death.

10. ENVIRONMENTAL SANITATION

Besides the direct control of infectious endemic diseases, it is also necessary that the danger of infection should be eliminated as much as possible.

The most important factors in this are the availability of a generous supply of water of reliable quality, good removal of faeces and garbage, and good accommodation.

In the urban centres this is the authorities' task. In the rural regions the population themselves are in the first instance responsible for the sanitation of their own environment. Before they can do this, they will have to be given the necessary understanding of the problem, and they will have to have the necessary aids.

A village hygiene project is in preparation, which will be supported by WHO, UNTAB and UNICEF. It will begin in January 1961. The project will cover a number of villages on the Schouten Islands, with a total population of about 6000.

The necessary equipment (UNICEF gave material to the value of \$ 16,500) has already arrived. The sanitary engineer recruited by WHO and put on the payroll of UNTAB has meanwhile been engaged, and will be available for a period of two years from January 1961. The project also provides for the training of Papuans with a junior technical school diploma as junior sanitary officers.

It is the intention to have the population play an active part in the project right from the beginning.

By means of the results achieved and achievable, plans will be drawn up for gradually providing the rural population centres with better environmental sanitation.

11. MATERNAL AND CHILD WELFARE

As in past 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 85 infant welfare nurses were employed. They were stationed as follows:

1. Merauke and vicinity	28
2. Hollandia and vicinity	10
3. Biak and vicinity	6
4. Seroei and vicinity	10
5. Genjem and vicinity	8
6. Manokwari and vicinity	3
7. Sarmi and vicinity	1
8. Waren and vicinity	1
9. Sorong and vicinity	3
10. Mindiptanah and vicinity	2
11. Inanwatan and vicinity	4
12. Fak Fak and vicinity	4
13. Ajamaroe and vicinity	2
14. Teminaboean and vicinity	1
15. Enarotali and vicinity	2

THE ACTIVITIES IN THE LAST FIVE YEARS DISPLAY THE FOLLOWING PICTURE:

	1960	1959	1958	1957	1956
Consultations regarding infants	68,142	(59,777)	(52,364)	(42,077)	(25,078)
toddlers	105,347	(88,317)	(47,422)	(37,055)	(22,807)
expectant mothers	17,912	(16,693)	(12,367)	(11,821)	(5,229)
Deliveries	1,901	(1,710)	(1,397)	(1,374)	(1,146)
Home visits	63,105	(48,142)	(24,000)	(12,000)	(4,782)
Population covered by Section	57,000	(55,000)	(50,000)	(44,300)	(41,000)

As the possibility of putting an adequate number of certificated personnel on this work is still limited for the time being, a start was made with the training, provisionally as a trial in Inanwatan, of dry nurses, mostly older village women who already have experience in assisting during deliveries. They are trained in the elementary principles of midwifery and are taught about the most efficient diet during pregnancy and after delivery.

The results for the period June 1959-1960 in the above area are given in the following table:

Village	Inhabitants (approx.)	Attended deliveries	Unattended deliveries	Maternal death	Still birth	Neon +	Post neon +
Kampong Baroe	250	14	2	—	1	1	1
Makoro	115	2	3	—	—	1	—
Jahadan	220	8	2	1	1	2	2
Puragi	380	16	3	1	2	1	1
Saga	280	19	—	1	1	1	1
Moegim	370	18	6	—	—	3	—
	1815	77	16	3	5	9	5

In 1960 a further two courses of the same kind were given in the districts of Sentani and Demta.

On 26 February, 1960, the first nurse/midwife Netherlands New Guinea Diploma passed her course.

At the end of 1960 six pupils were attending the course for nurse/midwife in Hollandia.

Contrary to the original report that the UNICEF milk supplies were to be stopped, 130,000 lb of powdered milk will be received in the coming year, so that daily milk can be given to 5000 school-children.

Outboard motors, bicycles, vehicles and medicine were received from UNICEF and sent to the various centres.

On 29 October, 1960, the SIMAVI maternity home in Hollandia was officially opened.

K. COMMUNITY DEVELOP- MENT

Community development is a method of approach forming 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 foundation of social centres and clubs in urbanized places, cooperatives and agricultural regional projects, which are dealt with elsewhere in this Report.

Particularly promising results have been obtained with the agricultural regional projects, in which, especially in the initial stages, stress is laid on the economic aspect, in particular agricultural development, as a basis for progress in other fields (see Chapter II, section B. 11, "Agricultural Regional Projects").

CHAPTER IV

EDUCATION

THE GENERAL EDUCATIONAL SITUATION

1. AIMS AND PROBLEMS

Education in Netherlands New Guinea has a dual purpose:
in the first place the giving of basic education for the spiritual and social development of the population;
in the second place the training of a sufficient number of officials to fill appointments with the Government and private enterprise and of other persons who can direct social and cultural development.

As already explained elsewhere in this report, the difficult natural conditions and the great isolation in which the population of Netherlands New Guinea has lived for centuries are the reasons why the Papuan community has been able to develop only slightly in material, social and cultural respects. Even today the Papuan community is characterized by a fragmented structure. The Papuans have no alphabet of their own; a common language has not been able to develop.

In the fulfilment of its tasks in the field of education the Government is therefore faced with many problems. It is confronted with great differences in development of the Papuan community, not only the differences of long standing in the cultural field between the various Papuan sections of the population, but also those proceeding from the intensity and the duration of contact with Western culture.

In the rural districts, in particular in the regions only recently brought under administration, only the very simplest (three-year) education is possible, and only little attention can be given to scholastic subjects, having regard to the still low standard of development of the population. Where development has advanced further, normal primary education with three-year and sometimes four-year courses is given. The more gifted pupils are selected for the three-year continuation school, which rounds off the three-year village education to six-year primary education and prepares the pupils for continued education and vocational training.

The efforts of the authorities are directed towards *six-year* primary education for each child, but for most of the rural population this is not yet possible, for the reasons stated above.

In the urban centres, where the population has been in contact with Western culture more intensively, and for a longer period, *six-year* primary education is general.

In the urban centres there are also the schools for continued and secondary education: the intermediate secondary schools, the advanced primary schools and the secondary school.

There are also various vocational training courses, such as teachers' training, junior technical education and the domestic science school for girls, as well as a large number of courses in Government service.

There are no institutions of higher education. Three Papuans are at present studying at universities in the Netherlands.

The general education described above, and also the vocational training, is for the greater part entrusted to the Protestant and Catholic Missions, which have long been doing important work in the acculturation of the population. Private education (like public education) is under the supervision of the Inspectorate of Education. The expenditure on education by private bodies is fully subsidized by the Government. The Government courses do not come under the Inspectorate of Education.

Besides the above education fully subsidized by the authorities there are numerous private schools and courses, most of them village schools run by the Catholic and Protestant Missions in areas only recently brought under administration, at which the teaching does not yet comply with legal requirements. A number of these schools are given a partial or an endorsing subsidy by the Government.

Anyone, irrespective of race or origin, religious convictions or colour of skin, has access to any institute of education.

With the exception of the *six-year* primary schools in the urban centres, the advanced primary schools and the secondary school, at which modest school fees are charged in accordance with the means of the children's parents (below a certain income no school fees are charged), education, both general and vocational, is free of charge. The same applies to the Government courses.

There is no compulsory school attendance. In the more advanced areas, where education is already a familiar, well-known element of the community and where practically every child of school-going age is receiving education, this is superfluous; in the other regions, where the parents do not as yet realize the importance of education for their children or are only gradually learning to see it, compulsory school attendance is impossible to comply with. It is therefore not considered opportune for the time being to introduce it.

2. PUBLIC AND SUBSIDIZED PRIVATE EDUCATION

A survey of schools managed by the Government and by the various school administrations is given in Appendix XL.

Public education comprises the following:

a. Village schools	2
b. Central village schools	2
c. Primary schools B	4
d. Primary schools A	8
e. Intermediate secondary school	1
f. Advanced primary schools	3
g. Junior technical school	1
h. Domestic science school	1
i. Teachers' training college	1

There are also 62 Government and vocational training courses, such as these given at the Administrative Institute, the Police School, the Elementary School of Navigation, the Agricultural School, etc. (see Appendix XLII).

Subsidized education consists of the following:

a. Village schools	632
b. Continuation schools	21 (of which two schools have two parallel classes at each level)
c. Primary schools B	15
d. Primary schools A	9
e. Intermediate secondary schools	6
f. Advanced primary schools	2
g. Secondary school	1
h. Junior technical schools	3
i. Training schools for village teachers	4 (of which one has parallel classes of each level)
j. Teachers' training course	1

3. UNSUBSIDIZED EDUCATION

Appendix XLI gives the data on unsubsidized education.

Both the Protestant and the Catholic Missions 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 propagation of Christianity.

In the initial stages the teaching at these little schools is directed solely towards accustoming the children to some measure of discipline and regularity. Together they learn to play, sing and work in the school garden. 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 level required for subsidization is ultimately reached. This means recognition as a full school.

During the year under review 22 such schools were recognized as village schools.

There are 281 unsubsidized village schools managed by the following missionary societies and congregations: the Missionary Society of the Netherlands Reformed Church (the ZNHK), the Molucca Protestant Church (the MPK), the Baptist Mission Council (the DZR), the Christian and Missionary Alliance (the CAMA), the Protestant Molucca Mission (the ZPM), the Apostolic Vicariate of Hollandia (the AVH), the Apostolic Vicariate of Merauke (the AVM), and the Evangelical Church (the ECK). In all, these schools have 7764 pupils, 5323 boys and 2441 girls.

The 283 teachers at these schools are almost entirely Papuans (274 Papuans and 9 non-Papuans). Hardly any of them have teaching qualifications. Most of them are trained at the (Protestant) Evangelist School at Ransiki or at the (Catholic) Catechist Schools at Kepi and at Kenandega (Waris area).

The Baptist Foreign Mission runs a course for village teachers at Tiom (Baliem Valley). Here a number of young Papuans from the coastal regions with a continuation school education are trained as teachers for the village schools to be opened in this very primitive area, which has only been subject to administrative influence since the end of 1956. In the course, which lasts four years, the pupils concentrate in particular on studying the culture and language (Ndani) of the population.

Furthermore, the Evangelical Church, in collaboration with the ZNHK, runs a course for native ministers of religion (Theological School), which is located in Hollandia, as well as 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, Mindiptanah and Kimaan, together with a domestic science school at Merauke.

The Apostolic Vicariate of Hollandia runs two courses in carpentry at Kokonao (Mimika) and at Epouto (Wissel Lakes), and three domestic science courses for girls (at Fak-Fak, Kokonao and Epouto), which are three-year and open to girls who have attended a village school.

The CAMA manages a continuation school at Tigi (Wissel Lakes), which is to be subsidized as from 1 January, 1961.

The NNGPM runs its own primary school A at Sorong, and a Malay school for its Indonesian personnel.

The Chinese section of the population prefers its own schools with Chinese as the language of instruction. There are now ten Chinese primary schools, viz. at Hollandia, Biak (2), Sorong-Doom, Sorong-Remo, Manokwari, Fak-Fak, Kaimana and Merauke (2), run by Chinese societies. Sorong and Manokwari also have five schools run by the Apostolic Vicariate of Hollandia in conjunction with the local Chinese societies. The total number of pupils at these six-year schools is 773, viz. 466 boys and 307 girls.

The St. Vincent Foundation manages seven infant schools, viz. two at Hollandia, three at Sorong, one at Manokwari and one at Biak. The Foundation for Protestant Education runs four infant schools at Hollandia and 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. During the year under review the MPK opened an infant school at Fak-Fak.

The Government grants an endorsing subsidy to nine infant schools and also to various vocational and domestic science courses.

The following survey gives a picture of the development of unsubsidized education in 1960:

	Number of schools at the end 1959	Added in 1960	Taken off list because:		Number of schools at the end 1960	Remarks
			removed or closed	subsidized		
Infant education	14	—	—	—	14	9 schools with endorsing subsidy
Village education	261	42	—	22	281	
Continuation education	1	—	—	—	1	
Primary education	11	4	—	—	15	
Continued education	—	—	—	—	—	
Vocational training	8	4	—	—	12	endorsing subsidy Baliem
Training of village teachers	1	—	—	—	1	
Training courses of a religious nature	6	—	1	—	5	

4. GOVERNMENT COURSES

Various Government departments run training schools and courses on behalf of the department or in the general interest. These courses are fully financed by the Government; the students pay nothing. The courses are not the concern of the Department of Cultural Affairs, and so do not come under the Inspectorate of Education. A number of them are full-time day schools, viz.:

the Training School for Indigenous Administrative Officials;
the Central Training School of the General Police;
the Elementary School of Navigation;
the Agricultural School and
the course for junior administrative appointments.

The Training School for Indigenous Administrative Officials is now open solely to graduates of the intermediate secondary school. The course lasts two years. In view of this it was possible to abolish the three-year course meant for primary school graduates.

The training of officials for the administrative service, which was started in 1954 to fill the vacancies in the lower ranks of the senior administrative posts by young Dutchmen, ceased in the year under review. In the very near future these junior ranks can be occupied in their entirety by Papuan administrative officials.

Agricultural education consists of a number of courses for staff and a number of practical agricultural courses. The latter courses are given at Kepi (South New Guinea), Manokwari, Fak-Fak and on the island of Japen. The aim of these courses is to increase the practical ability of established Papuan farmers.

For further details and information on all existing courses see Appendix XLII.

B. ADMINISTRATION OF EDUCATION

1. THE ADMINISTRATION OF EDUCATION

a. The Government's administration of education

The Department of Cultural Affairs consists of three administrative branches, viz.:

- I. General Affairs;
- II. General Inspectorate,
- III. Educational Matters.

The duties of the *General Affairs* Branch include:

1. making the necessary regulations in the field of education;
2. activities of a non-educational nature, such as statistics, financial and staff matters, promoting scientific research, cultural matters and public worship, and matters concerning the Broadcasting System.

The *General Inspectorate* Branch is concerned with all teaching given at public, subsidized and unsubsidized educational establishments, both general and vocational, with the exception of Government courses and those given by business firms.

The *Educational Matters* Branch has the task of determining the direction which will have to be followed by education, which therefore amounts to planning and research.

b. The share of the missionary societies in education and their relations with the Government

The share of the missionary societies in education is very considerable. Reference may be made to the survey given under C. 2. The societies have their own school administrations, which are 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 are stationed at Ifar, Sarimi, Biak, Seroei, Manokwari and Sorong.

The general school administration of the Molucca Protestant Church, of the Baptist Mission Church, the Christian and Missionary Alliance and, since the year under review, of the Unevangelized Fields Mission (the UFM) and of the Baptist Foreign Mission (the BFM) has been entrusted to the general school management of the ZNHK.

The MPK district (counting the MPK schools in the South New Guinea division) is under a district school manager stationed at Fak-Fak. The DZR district is managed by a district school

manager stationed at Teminaboean, and the CAMA district is run by a district school manager at Enarotali (Wissel Lakes); the district school managers of the UFM and the BFM are stationed in the Baliem Valley.

The Apostolic Vicariate of Merauke has a general school manager at Merauke, and district school managers at Wendoe, Moeting, Okaba, Kimaan, Mindiptanah, Kepi, Tanah-Merah and Agats.

The Apostolic Vicariate of Hollandia has a general school manager at Hollandia and district school managers at Kenendega, Enarotali, Sorong, Foeog, Steenkool, Fak-Fak and Kokonao.

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.

c. Participation of Papuans in the administration of education

Through their representatives in the New Guinea Council, installed on 5 April, 1961, the population have a right of say in laying down educational policy.

At regional level, too, the population are acquiring via their representatives on the regional council an increasing influence in educational affairs.

In all there were 714 Papuan male teachers and 20 Papuan female teachers employed in public and subsidized education during the year under review. One of the school supervisors is a Papuan.

d. Inspection and supervision

The inspection body, which comes under the General Inspectorate, supervises compliance with legal provisions and the standard of education. There are four inspection districts. These cover:

- I. the Hollandia division;
- II. the Geelvink Bay/Central New Guinea divisions;
- III. the West New Guinea and Fak-Fak divisions;
- IV. the South New Guinea division.

Each district is under the direction of an inspector of education, who is aided by school supervisors for the inspection of village education. There are eight school supervisors, one of whom, with the rank of chief supervisor, is attached to the General Inspector. One of the other school supervisors is a Papuan.

Further, supervision is exercised by officials of the administrative service and of Public Works with regard to the material condition of the schools, by Public Health officials as regards health and by Finance officials concerning correct management and spending of the grants.

The above applies to both public and private schools. As regards the latter schools, the school administrations concerned naturally exercise supervision in the first instance.

2. EXPENDITURE ON EDUCATION

I. Government expenditure in 1960

a. Normal expenditure:

General Management and Inspectorate

Staff	f. 45,000
Materials	f. 86,000

Education of the Population

Staff	f. 4,261,000
Materials	f. 2,823,000

Western Education

Staff	f. 2,384,000
Materials	f. 870,000

Vocational Education

Staff	f.	267,000
Materials	f.	324,000
<i>b. Capital expenditure</i>	f.	1,488,000
<i>c. Total costs of education:</i>		
Staff	f.	7,327,000
Materials	f.	4,103,000
Capital expenditure	f.	1,488,000
	f.	<u>12,918,000</u>

Survey of the total costs of education for the years 1950 to 1960 incl.:

1950: f.	3,080,332	1955: f.	6,555,010
1951: f.	3,114,000	1956: f.	7,250,041
1952: f.	3,850,900	1957: f.	9,840,345
1953: f.	4,128,842	1958: f.	9,454,617
1954: f.	5,926,202	1959: f.	10,879,680
		1960: f.	12,848,000

The above figures incorporate only the expenditure on education chargeable to the Budget of the Department of Cultural Affairs. They leave out of consideration expenditure relating to the vocational 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 1960

Apostolic Vicariate of Merauke	approx. f.	100,000
Apostolic Vicariate of Hollandia	approx. f.	150,000
ZNHK, MPK, DZR, CAMA, UFM, BFM	approx. f.	250,000
St. Vincent Foundation	approx. f.	25,000
Protestant Education Foundation	approx. f.	10,000
Private Secondary School Foundation	approx. f.	10,000
NNGPM	approx. f.	<u>350,000</u>
Total	approx. f.	<u>900,000</u>
	(1959 approx. f.)	850,000)

C. STRUCTURE

OF THE

EDUCATIONAL SYSTEM

Appendix XXXIX A gives a survey in diagrammatic form of the educational system, which also shows how the schools follow on one another and gives an idea of the possibilities offered by education.

The *village school* is the basis of the educational system of Netherlands New Guinea, with its predominantly rural population.

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 to be found in the less developed regions, at first 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 level of the teaching is raised, the stress shifts more to the latter subjects, and as a result the school can be converted in the course of time into a village school B, the normal and at present most common type of village school.

In the more advanced areas the village school A is to be found. 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.

Survey of the number of village schools

Division	Subsidized			Total subsidized	Public B
	A	B	C		
Hollandia	2	71	17	90	1
Geelbink Bay	14	102	—	116	—
Central New Guinea	2	26	9	37	—
West New Guinea	2	119	9	130	1
Fak-Fak	7	67	13	87	—
South New Guinea	4	118	50	172	—
Total	31	503	98	632	2
1959:	19	457	124	600	2

The *continuation school*, which follows on the normal three-year village teaching, has a special character. It serves to train more gifted pupils and to prepare them for continued education and vocational training.

The staff of the three-year continuation school consists of three Dutch teachers and one graduate of the teachers' training courses or village teacher. As the continuation school is attended by pupils from a large catchment area, a boarding establishment is attached.

Teaching at the *girls' continuation school* has a dual 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.

There are eight continuation schools for boys, seven continuation schools for girls and six mixed continuation schools.

The more normal continuation of three-year village teaching is given by the *central village school*, which is also three-year. A start was made with the introduction of this school type in 1958. It has no boarding establishment, since it is meant for more densely populated regions. There are now two of these schools.

The six-year *primary school A* is the equivalent of the primary school in the Netherlands and is meant for the Dutch-speaking part of the urban population.

The six-year *primary school B* is meant for that part 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 onwards — Dutch becomes the language of instruction. Teaching at the primary school B is equivalent to that given at the primary school A.

Survey of the number of primary schools A and B

Place	Public		Subsidized		Total	
	A	B	A	B	A	B
Hollandia	3	2	2	2	5	4
Sarmi	1	—	—	—	1	—
Seroei	—	—	1*)	1	1	1
Biak	1	—	2	2	3	2
Manokwari	1	—	2	2	3	2
Sorong	—	1	2	3	2	4
Fak-Fak	1	—	—	2	1	2
Merauke	1	1	—	2	1	3
Tanah-Merah	—	—	—	1	—	1
Total	8	4	9*)	15	17*)	19

*) The primary school B at Seroei also has a primary school A department.

In *continued education* a distinction is made between the following types of schools:

The *intermediate secondary school*. This four-year school is open to graduates of the continuation school and of the primary school B after they have passed an entrance examination. The intermediate secondary school has a boarding establishment attached.

The *advanced primary school* is equivalent to the school of the same name in the Netherlands. It is open to graduates of the primary school A who have passed an entrance examination. Graduates of the primary school B and of the continuation school also have access in theory to the advanced primary school. However, for these 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 identical with that of the same category of school in the Netherlands. It is open to pupils who pass the entrance examination. In 1961 a three-year department will be attached to this school which follows on the intermediate secondary school and is specially directed towards the needs of the Papuans.

The *training school for village teachers* gives a three-year course. This course is very important, since the quality of the teacher determines the quality of the teaching.

The curriculum is adapted to modern ideas, the stress falling on the practice of teaching. One of the members of the teaching staff has the special task of maintaining contact with the teachers to aid these and further their skill, especially in the first years of their career. This also fosters the possibility of good adaption of the training to the practical demands of village education.

The training school for village teachers also has a boarding establishment.

The *teachers' training course*, the aim of which is the further education of the village teacher, is held in the afternoons. The course lasts three years. The graduates are placed in the continuation schools and the primary schools B to attend to teaching in the lower classes.

The three-year course at the *training college* for teachers qualifies its graduates to teach at the primary school B, the continuation school and the central village school. The qualification for entry is the leaving certificate of the intermediate secondary school, but via a transitional class attached to the school qualified village teachers may also be admitted. It is the intention in the future to replace the Dutch teachers at the primary schools B, the continuation schools and the central village schools by graduates of the training college.

The *junior technical school* is meant for pupils who have had six years of primary education. The school, which is two-year, consists of a metal-working and/or a woodworking department. These schools have boarding establishments attached, with the exception of the public junior technical school at Hollandia. The public junior technical school has only a metal-working department.

The *domestic science school* is meant for girls who have had six years of primary education. During the year under review the first school of this type was opened at Hollandia. The school is attended by both Papuan and Dutch girls.

Education for women and girls

With the exception of seven girls' continuation schools, there are no separate schools for girls as far as general education is concerned; all other schools, except the continuation school for boys, are open to both girls and boys.

Furthermore, during the year under review the above-mentioned domestic science school at Hollandia was opened. In the first year of its existence this school still had a small number of pupils, but it is expected that it will meet an increasing demand.

A survey follows of the number of girl pupils at the various types of school. (The figures between brackets relate to 1959.)

	Papuan girls		Non-Papuan girls	
1. Village school	13,142	(12,226)	209	(316)
2. Continuation school (central village school)	892	(823)	47	(45)
3. Primary school B	1,247	(1,039)	988	(895)
4. Primary school A	12	(9)	1,250	(1,163)
5. Intermediate primary school	36	(14)	38	(17)
6. Advanced primary school	8	(5)	239	(173)
7. Secondary school	—	(—)	54	(53)
8. Teachers' training college	4	(—)	3	(—)
9. Training school for village teachers	35	(25)	17	(18)
10. Domestic science school	2	(—)	6	(—)
Total	15,378	(14,141)	2851	(2680)

This table does not include pupils on courses training for a special profession, such as the nursing courses.

Domestic science is taught at the girls' continuation schools. Domestic science courses are also run by the Apostolic Vicariate of Hollandia, by the Missionary Society of the Netherlands Reformed Church and by the Apostolic Vicariate of Merauke, which also runs a domestic science school. This private domestic science training is partly subsidized.

Moreover, in various villages and urban centres older girls and women 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

Elementary 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, the subdivisions of Nimboran, Sarmi, Sorong and Manokwari. In the other coastal districts of the divisions of Hollandia, Geelvink Bay, West New Guinea and Fak-Fak illiteracy does not form a problem either, since in these areas education has found full acceptance for decades now.

The percentage of illiterates varies greatly in the different regions of the area brought under administration. On estimate it varies in the coastal regions of the north and west from 15 to 40%, and in the remaining regions brought under administration from 30 to 70%; in the area not yet under administration it is 100%.

In the less developed areas there is little point in trying to combat illiteracy among the older people, since these people are too firmly tied to tradition and are hardly, if at all, open to new ideas. Moreover, there is no immediate benefit to be gained from their being able to read and write at present in these areas.

The combating of illiteracy has a more local and incidental nature. The initiative is often taken by local organizations or persons. A striking feature is that the desire to learn to read and write is strongest in those places and regions where the number of illiterates is small. Here illiteracy forms an obvious handicap. The activities in this field proceed to a considerable extent from the Papuan community itself.

During the year under review grants were given to 32 courses for combating illiteracy. In the years 1953 to 1960 incl. about 2200 adults attended such a course (1953: 112; 1954: 174; 1955: 215; 1956: 244; 1957: 287; 1958: 306; 1959: 417; 1960: 650).

There is considerable interest among adults in the more developed areas in courses in Dutch, which are also supported by the authorities. During the year under review there were 26 such courses.

Reference should also be made to the courses in English which were organized for the first time in 1960. Grants were given for three courses in English.

E. SCHOOL BUILDINGS

The village schools and the teachers' houses attached are built by the village community concerned. The authorities finance the construction of all other public and subsidized schools, including the boarding establishments and teachers' houses belonging to certain schools. During the year under review a total of f. 1,418,000 was spent on construction, extensions and major repairs.

F. YOUTH ORGANIZA- TIONS

Sport forms an important spare-time activity for young people. Efforts are being made to establish contacts at inter-regional and international level. An example that may be cited is that of the sports meeting between the school-children of Hollandia and of Wewak in Australian New Guinea which took place during the year under review.

The *Scouts* are the largest youth organization. Netherlands New Guinea is a district of the Netherlands Scouts Association, the headquarters of which are in The Hague. The district headquarters are in Hollandia. At the head of the district is a district commissioner, aided by a number of assistant district commissioners, who have specialized functions. The district is subdivided into nine subdistricts, viz. Hollandia-Port, Hollandia-Inland, Biak, Seroei, Manokwari, Sorong, Teminaboean,

Fak-Fak and Merauke. The organization now numbers about 2500 members (1959: 1500). It is still expanding. During the year under review the training of leaders began. Two candidate leaders passed a training course (the Gilwell course) in Sydney.

A scout group of six (five Papuans) led by a Papuan took part in the Pan Pacific Jamboree held in Sydney during the year under review.

At Hollandia there are two clubs for Papuan girls. As a basis for the activities of these clubs use is made of the set-up 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 practical 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.

Furthermore, in practically every village there are associations, often run by the churches, which engage in flute-playing, singing and sport.

G. CULTURAL

INSTITUTIONS Under the Department of Social Affairs come public lending libraries at Hollandia, Biak, Manokwari, Sorong-Remoe, 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. Furthermore, 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 on the protection of nature underwent no change in the year under review.

I. THE DEVELOP- MENT OF EDUCATION

a. Development during the year under review

Village schools

The number of public and subsidized village schools, which was 602 in 1959, rose during the year under review to 634.

The growth of village education was not only quantitative but, having regard to the fact that in 1960 some fifty village schools C became village schools B, was also qualitative to a considerable extent.

The number of pupils at the village schools in the year under review was 30,271 (1959: 28,156); the number of teachers was 1058, of whom 692 (65.4%) were Papuans (1959: 967, 610 and 63.0% respectively).

Continuation schools and central village schools.

These schools number 23 (1959: 21), this total consisting of 8 boys', 7 girls' and 6 mixed continuation schools and 2 mixed central village schools.

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 2842 (1959: 2627).

The number of teachers at these schools in the year under review was 90, of whom 61 were Dutch male and female teachers (1959: 84 and 59).

Primary schools

The number of *primary schools B* grew in the year under review to 19, and the number of pupils increased to 5033, i.e. 665 more than in 1959, and $3\frac{1}{2}$ times as many as in 1952.

In 1952 the number of Papuan pupils at these schools was 34% of the total; in the year under review this had risen to 56%. The number of teachers was 135, of whom 89 were Dutch male and female teachers (1959: 121 and 80).

The number of *primary schools A* rose during the year under review to 17. The number of pupils in the year under review was 2634 (1959: 2423). The number of teachers has increased from 35 in 1952 to 85 in 1960.

Continued and secondary education

Continued and secondary education now comprises seven intermediate secondary schools, five advanced primary schools and one secondary school, the private secondary school at Hollandia.

The number of intermediate secondary schools increased during the year under review by three; the number of pupils increased from 273 to 430, and the number of teachers from 12 to 16. The number of advanced primary schools grew by two in 1960; the number of pupils rose from 349 to 468 and the number of teachers from 16 to 20.

In secondary education an increase in the number of pupils by 22 to 150 occurred.

Training schools for village teachers

The number of training schools for village teachers underwent no change from four during the year under review. The number of pupils at these schools rose to 453 (1959: 438); the number of teachers increased to 19 (1959: 18).

The number of teachers' training courses is now one, with eight students.

Teachers' training college education

In the year under review a training college for teachers was set up at Hollandia. The college has 31 pupils in the first class. Attached to the college is a (preparatory) transitional class with 24 students. There are seven female students, four of whom are Papuans. There are three teachers.

Vocational training

There are now four junior technical schools (1959: 4). The number of pupils is 267 (1959: 271). The number of teachers is 18 (1959: 18).

During the year under review a public domestic science school was set up at Hollandia. It has eight pupils, two of whom are Papuans, and two teachers.

Number of Papuan pupils

The total number of Papuan pupils at the above schools was:

Year:	Boys	Girls	Total
1952	15,602	10,815	26,417
1953	15,431	11,657	27,088
1954	15,506	11,354	26,860
1955	15,446	11,718	27,164
1956	16,143	12,130	28,273
1957	16,988	12,401	29,389
1958	17,828	12,727	30,555
1959	19,158	14,142	33,300
1960	21,041	15,378	36,419

The number of Papuan teachers in the year under review totalled 734, 20 of whom were women. (1952: 293; 1953: 347; 1954: 354; 1955: 420; 1956: 450; 1957: 483; 1958: 568 and in 1959: 649).

Placing of Papuan pupils who left continuation schools or primary schools B with a leaving certificate during the school year 1959-1960

Continuation schools

Awarded a leaving certificate:

Boys	Girls
434 (368)	170 (182)
26 (10)	37 (35)

Of these, the following returned to their villages:

(the greater percentage of girls returning to the villages is caused by the fact that much of the teaching given at the girls' continuation school is directed towards the future task of the girl as housewife)

Further training followed by the rest:

at a training school for village teachers

135 (123) 14 (14)

at a junior technical school

48 (74) — —

at an advanced primary school

— (2) 1 —

at an intermediate secondary school

107 (65) 18 (3)

	Boys	Girls
on a course given by Public Health	57 (44)	76 (98)
on other Government and private courses	61 (24)	4 (7)
Of the girls, the following married or went to help run various womens' or girls' clubs		20 (18)
Placement unknown	- (26)	- (7)
<i>Primary schools B</i>		
Awarded a leaving certificate	218 (95)	58 (50)
Of these the following went to:		
the private secondary school at Hollandia	3 (4)	- -
an advanced primary school	15 (10)	12 (3)
an intermediate secondary school	49 (24)	17 (10)
a junior technical school	26 (9)	- -
a training school for village teachers	19 (5)	4 (5)
a course given by Public Health	3 (4)	10 (3)
a course given by the Post Office	28 -	1 -
a course given by the Meteorological Service	25 -	3 -
The following entered the service of other Government or private bodies	44 (17)	9 (7)
Placement unknown	6 (22)	2 (22)

The figures in brackets are those for 1959.

Seven of the Papuans studying in the Netherlands returned during the year under review. Two of them are studying further at the Theological School, Hollandia, one was chosen to train as a doctor at the Medical School at Port Moresby; the others have completed their studies (one on the cooperative course, one at a technical college and two a course for basket-making).

Twenty-nine Papuan young people of both sexes are now studying in the Netherlands. Three young men are at a university, two at the National Institute for Tropical Agriculture, five at a secondary school. Two girls are attending a secondary school for girls, five are on a nursing course and five more on a course for teachers of rural domestic economy. One young man is studying to be a teacher at a teachers' training college, another is preparing to do so, two are on technical courses, one is studying bookkeeping at the Goedhart Foundation, and two are studying for the entrance examination to a secondary school.

One Papuan girl is doing practical work in a hospital after gaining her nursing diploma.

In order to encourage the training of Papuans in the Netherlands the necessary scholarships will be made available. It is the intention, starting in 1961, to send at least 50 Papuans to the Netherlands every year to attend various more advanced courses of training, differing greatly in length, but averaging four to five years.

Seven young men are on a seven-year doctors' training course at the Medical School at Port Moresby. From now on six young people will be chosen for this course every year. Furthermore, six young men are on a radio engineering course at Port Moresby, two on courses for auxiliary doctors and auxiliary dentists respectively at Fiji and four on a boatbuilding course at Honiara (Solomon Islands).

b. Future development

It is the intention to give general education for Papuans a new basis, which, more than the present system, will make it possible to give the pupils those opportunities for more advanced education which are commensurate with their abilities. The result will be that the population's reservoir of talent will be used as effectively as possible in the interests of the development of the country and its people.

The new set-up is envisaged as follows:

Four years of basic education; then

Three years of continuation education, or two years of rounding-off
education for those who do not
qualify for further study.

Secondary education:

First stream: two years of intermediate secondary education

Second stream: ditto; first and second stream together form the
four-year intermediate secondary school

Third stream: secondary school (Papuan department).

The difference between the new and the present system is chiefly that – besides the extension of the duration of basic education from three to four years – each stream gives a rounded-off education. Pupils who after the completion of a certain place of study do not qualify for the next phase will receive a certificate corresponding to the level they have reached and may go on to the various vocational and Government courses or start work in the community.

The new scheme will mean a considerable advance in education, both quantitatively and qualitatively. It will be gradually introduced as the necessary teaching staff become available. To meet the increasing demand for teachers the number of courses for village teachers will be doubled from the beginning of 1961, whilst the standard of the teachers will be raised by increasing the length of the courses from three to four years.

J. INFORMATION AND PUBLICITY

1. INFORMATION

The information directed towards the Papuan population is provided by the Popular Information Service, which comes under the Department of Internal Affairs.

In the first place it aims at teaching the Papuans something about their own country and about themselves. Information is further given in connection with the implementation of Government measures in the field of administration, public health, agriculture, stock-breeding and fisheries. This is done in close cooperation with the departments concerned.

During the year under review special attention was paid to information on the coming institution of the New Guinea Council in 1961 and the political reforms connected with this.

In the dissemination of information use is made of the radio, films, film strips and sliders. Furthermore, periodicals and booklets are published, and lectures given.

Information directed towards the further social development of the more educated members of the population led to the creation of a Social Development Section.

Provision of reading matter

The Popular Information Service publishes and distributes free of charge a weekly entitled "Pengantara", and an illustrated monthly called "Triton".

The weekly "Pengantara" has a circulation of 8,000; it is bilingual, Malay and Dutch, and gives news from home and abroad.

The illustrated monthly "Triton" contains reports from home and abroad, short stories, a section for young people and articles on public health, agriculture, etc. It is available to subscribers only. These number 1,000.

In the field of popular reading matter numerous booklets and brochures have been published in recent years, and now total about 100. In the year under review twenty new publications appeared, with a total circulation of 34,500. There are now 63 libraries for popular reading matter and 26 agencies. Via these agencies informatory material on the United Nations is also distributed.

In the Schouten Islands subdivision a new magazine is now published for the population of Geelvink Bay. It appears every two weeks on stencil, and is called "Padamara".

The Popular Information Service helped in the setting-up of the magazine "Mertju Suar", a two-weekly news and information sheet for the inhabitants of the Sentani area.

Auditory information

The Popular Information Service provides daily radio broadcasts for the Papuan population.

The programme includes news broadcasts and documentary programmes in many fields, broadcasts by Christian and Mohammedan groups, and broadcasts by employees' organizations.

Visual information

During the year under review 320 film shows were given at various places.

Two large-scale tours were made to help improve the Papuan diet and planting methods in the area of Argoeni Bay and Tanah Merah Bay respectively.

In Manokwari an independent film unit was installed, with the special task of providing visual information in the West New Guinea division.

Social development

During the year under review a Social Development subbranch was instituted, with the function of aiding and supporting study clubs, discussion groups, etc., by making study material available to

them. At present there are twelve such clubs in the Territory. One of the main subjects of study was the political development of Netherlands New Guinea, and specifically the institution of the New Guinea Council, and also of regional and local representative bodies.

2. PROVISION OF NEWS, NEWSPAPERS AND PERIODICALS

The Government Information Bureau, which is linked to the Government Secretariat, has the function of providing information on Government policy to official bodies in Netherlands New Guinea and in the Netherlands, and also to publicity media in the Netherlands and other countries. The bureau issues a daily news bulletin on behalf of the Netherlands New Guinea Broadcasting System, and further publishes the "Mededelingen voor de Pers" in Dutch and the "Press Releases" in English.

The Popular Information Service of the Department of Internal Affairs is responsible for the provision of news and information for the Papuan section of the population. The Service collaborates in the arranging of radio programmes for the Netherlands New Guinea Broadcasting System and for the regional transmitters. It publishes the above-mentioned periodicals "Pangantara" and "Triton".

The Department of Internal Affairs also has a Visual Information Branch, whose task it is to make films, photographs and other visual aids.

Since 2 January, 1959, an independent daily has been published at Hollandia, the Nieuw-Guinea Koerier.

With the collaboration of the Inland Administration the stencilled weekly "De Fak-Fak Bode" (The Fak-Fak Messenger) is published at Fak-Fak, whilst "De Lens", a likewise stencilled sheet, is published twice a month by the printers of the same name at Manokwari. In Sorong a bilingual stencilled weekly, the "Sorong Post", is published with the collaboration of the Inland Administration.

Furthermore, the Catholic Press Institute publishes at Hollandia a weekly news sheet printed in the Netherlands, "De Tifa".

The Netherlands New Guinea Christian Workers Union (CWNG) and the regional branch of the General Catholic Officials Association (ARKA) both publish monthlies.

In the Schouten Islands subdivision and in the area of Sentani two-weekly regional papers are published.

See further Appendix XLV.

3. CINEMAS AND PROJECTION INSTALLATIONS

a. Cinemas

There are twenty permanent cinemas: six at Hollandia (viz. two at Hollandia-Noordwijk, one at Hollandia-Inland, two at Sentani and one at Ifar), two on Biak, two at Manokwari, five at Sorong (of which two are at Doom), two at Fak-Fak, one at Seroei and two at Merauke.

b. Mobile projectors

The Popular Information Service has six projectors in use, intensively employed for disseminating information in various villages in the interior.

c. Production of films and photographs

The Department of Internal Affairs has a Film and Photograph Production Branch. The films produced are both documentaries and newsreels. In 1960 newsreels were made on 32 subjects with a total length of 6700 feet. For the documentaries 11,000 feet of film were made; five documentaries were released, while three documentaries were supplemented.

A large number of photographs and slides were made.

The photographs, films, slides and film strips made were distributed both in the Territory itself and abroad.

4. BROADCASTING

The broadcasting system is run by the Department of Cultural Affairs.

During the year under review a start was made with an important extension of the radio system. Six regional transmitters were put into operation, viz. at Hollandia, Merauke, Manokwari, Sorong, Fak-Fak and Biak. These transmitters, which for the time being are of limited power – varying from 1/4 to 1/2 kW – broadcast programmes for the Papuan population only. There are daily transmissions,

lasting about 2½ hours. The transmissions are usually in Malay, but use is also made of regional languages.

The air time of the central transmitter at Biak (output 5 kW) was extended from 42½ to 51½ hours a week. A programme is broadcast daily for the Papuan population (from 6.30 to 8 p.m.).

Reactions received indicate that the Papuan population are displaying an increasing interest in the transmissions, and also in the Dutch programmes.

The number of radio receivers among the population increased not inconsiderably during the year under review. The appearance on the market of fully transistorized receivers made an important contribution to this.

Programma policy is supervised by a Programma Advisory Committee, in which both officials and private persons, Papuans and non-Papuans are represented. It is the intention in the future to set up separate programme advisory committees for the regional transmitters.

