

MANUS PROVINCE

By Nicholas Darku, formerly Provincial Rural Development Officer in Manus.

Mr Nicholas Darku comes from Kieta in the North Solomons Province. He did his early Primary schooling in Tubiana, Kieta and Buin, then went to Hutjena High School. In 1968 he went to Malabunga High School in the East New Britain Province where he completed his high schooling.

He attended Vudal Agricultural College in 1969 and graduated in 1971.

His first posting was to Rabaul District in 1972. He worked mainly on Crop Extension and Land Settlement Schemes.

Early in 1973 he was transferred to Taliligap Extension Centre as the Officer-in Charge, and later that same year he had another posting to Kieta in the North Solomons as the Officer-in-Charge of that district.

He attended a Middle Management Course at Internal Training Institute in Sydney in February 1974 and returned in June. When he returned he was transferred to Buin.

He worked in Buin as the Officer-in-Charge until he was posted to Manus Province as the Provincial Rural Development Officer in 1975. He then became Senior Agricultural Officer in Arawa, North Solomons Province.



Nicholas Darku

GEOGRAPHY

TERRAIN

The Manus Province is situated two degrees south of the equator, and comprises the Admiralty, Hermit, Ninigo, Anchorite and Pelleluhun island groups. Manus is the largest in the group, and is 96 km long and 32 km wide. The bulk of the population lives on Manus Island.

The terrain varies considerably with some very rugged mountains in the inland areas extending from Kari to Kali Bay down to Peli-Bowai on the south coast. The highest peak rises to a height of 718 metres.

The country is very broken with steep ridges and many streams which makes road construction expensive and difficult.

The coastline on Manus Island is covered with areas of fine sandy beaches. Most offshore islands are low-lying atolls, including Western island group. The islands of Rambuty, Baluan and Lou have steep mountains rising to some 305 metres and above.



Manus Coast

VEGETATION

Most of the mainland is covered with rainforest. In some areas the forest extends to the shores. The coast is a mixture of mangrove swamps and old established plantations.

The highlands of Central Manus are heavily timbered which makes future logging prospects bright. The old garden areas are covered by secondary growth. The coconut plantations and village settlements occupy the coral sandy soils along the coastline and immediate inland areas.

On the coastline edible sago palms are found plus several species of native fruit trees. Extensive sago growing is found on river banks along the river courses.

Most offshore islands are under coconuts and fruit trees which play major roles in food supply.

CLIMATE

There is one Meteorological Station at Momote Airport.

The temperature ranges from 26.7° to 29.4°C .

The average rainfall is 2 500 mm. It does not vary greatly.

There is no distinct wet and dry period, however two prevailing winds occur each year. During these times the sea around Manus is very rough and travelling by boats and canoes becomes hazardous.

LAND

The total land is estimated at 2 070 square kilometres. Of this approximately 1 036 square kilometres is classified as arable land with varying limitations. There are no suitable areas for mixed farming or grazing. Approximately 3 500 hectares is under cash cropping and some grazing. Approximately 200 square kilometres is classified as marginal land.

SOIL TYPES

The soil types range from light sandy to heavy red clay types. Alluvial clay loam soils are found along river courses and are generally fertile soils.

Volcanic soils are only found on Lou and Baluan islands off the south coast of Manus mainland. The islands of Luf and Maron are also volcanic.

ROADS

The Province does not have a well-developed road network. It has an estimated 48 kilometres of all-weather road to the eastern tip of the island running from Mokerang Village, Momote and PNG Defense Force Patrol Boat Base Lombrum on Los Negros Island to Provincial Headquarters at Lorengau. From Lorengau towards Bunai is accessible for 57.9 km to a four-wheel drive vehicle in dry periods.

This road has opened the central Manus villages for further agricultural development, mainly rubber, cattle and pigs. Manus Transport Company commenced a bus service to Lundret Village and back three times per week. This service will be further extended when the road is improved.

Another major road construction has been started. This road will start at Sou on the north coast and will join up Kari village inland and will further connect the Manus highway at Buyang Village.

The Kali Bay to Malai Bay road has now been completed. In a year or two the Manus highway will connect the west coast to east coast with several feeder roads going to villages.

AIRSTRIPS

Momote is the only major airport in the Province. This airport has been upgraded to cater for international flights.

A small-craft airfield is on Lou island. On Western Islands three private airfields are based.

WHARVES

There are two overseas wharves at Lorengau and Lombrum Naval Base. Two coastal vessel wharves are at Lorengau.

COMMUNICATIONS

Telephone

Communication with outside provinces is still a problem. Local communication is good only within the Lorengau township and Lombrum Defense Force Patrol Boat Base. Outlying islands can be contacted by radio.

There is no subscriber trunk dialling system at Lorengau and it is not expected for a long time to come. The township of Lorengau is very well served by local telephone network which is still manual and operates for 24 hours per day.

Radio

The N.B.C. has a local radio station "Manus Belong Chauka". This is the only way to communicate within the provinces. The government departments have used the station for extension work.

The station opens up at 5 o'clock in the afternoon and closes at 10 p.m.

Transport

There is only one Bus Service run by Manus Transport Service. The bus service operates between Lorengau and Momote and Lorengau-Lundred. Rates are Lorengau-Lombrum 70 toea per trip and Lorengau-Lundred 45 toea per trip. Only 3 P.M.V.s are currently operating in Manus.



Many people in Manus travel by boat

PEOPLE

POPULATION

The estimated population is about 25 500 plus. The estimated manpower available is around 16 000. The absentees are estimated to be around 2 500, approximately 10%. The annual birth rate for the province is 4%, slightly higher than the country's birth rate which is 3%. The 4% annual birth rate means that 1 000 babies are born per year. This is obtainable from records at the Lorengau Hospital.

The potential farmers are estimated at 60% or 15 300.

CULTURE AND CUSTOMS

There are at least 11 languages spoken in the province. However, at least three languages are spoken by the majority. They are TITAN, KURTI, and KELE. The outlying islands have their own languages as do most of the villages inland.

Some of the social customs have adverse effects on development. Most of the Manus people are bound to obey their traditional customs at times. Traditional beliefs are very distinct right through the province.

The three main religious groups are Catholics, Evangelical Churches and Seventh Day Adventist.

There are not any major active cult movements. However, there are two minor cult movements. The most significant movement is the Paliau Movement on Baluan Island. This is a mixture of cult and economic movement.

Another minor cult movement is on Rambutyo Island called Muli Movement at Liuliu Village.

Sorcery is practised throughout the province, but not actively. With the introduction of law and order elders who practise sorcery are reluctant to put it into use. If they are found using sorcery the person concerned is liable to be punished by law.

LAW AND ORDER

Law and order is very well observed in the province. No tribal fighting has occurred.

Land disputes are sporadic. Land disputes occur in some coastal areas and disputes over fishing grounds exist. This is not so with growing of crops.

I think the situation with fishing grounds could become worse as the population increases and more coastal people derive cash from fish sales.



Fishermen of M'Buke Island

BEHAVIOURAL PATTERNS

There is a gradual behaviour change within the subsistence farming community towards cash income. The power of cash has changed people's attitudes not to sit and expect a free hand-out but to work in order to earn cash income.

There is a general tendency by groups to acquire more expatriate-owned plantations.

The people's general motivation is to achieve goals such as taking part in business ventures in town, running their own business groups, etc. However, in many cases the limiting factor is the general know-how on the running of the enterprise. Many of the educated Manusians are outside the province either working for government or the private section.

Thus lack of technical know-how is holding up possible changes in the province.

EDUCATION

There are 47 community schools, 2 high schools, 3 vocational centres, 1 skulanka and 1 multi-racial school in Manus Province.

The community school enrolment in 1976 was 2 885.

Vocational centre enrolment in 1976 was 104.

High school enrolment in 1976 was 735.

Skulanka enrolment in 1976 was 35.

The total 1977 intake for community schools was 585.

Total high school intake for 1977 was 240.

The total number of 3 759 students in 54 schools in the province in 1976, represents 15% of the total population.

The effects of education on agricultural development is insignificant. Most of the school leavers have a tendency to seek employment in industries other than agriculture.

The village people have looked on education as a means of cash income through their children working in highly paid jobs. It is evident that the majority of Manus people working outside the province send a fair amount of cash to their parents. Sometimes elders have put stress on education as the only means for Manus people to obtain money.

A considerable number of school leavers stay home. It is frustrating for young people to stay home without any employment. However, in a number of areas school leavers have formed themselves into what are called "Leavers' Clubs". Two such clubs are now groups which have started agricultural developments with DPI assistance.

A piggery project at Sohonoriu has been established with technical assistance from Department of Primary Industry and financial assistance from Manus Provincial Area Authority.

On Baluan Island the groups are engaged on a fishing project as well as other things. The Leavers' Clubs get assistance from all government departments where it is applicable.

HEALTH

The level of nutrition is generally low throughout the province. The main staple food is sago which is low in protein and high in starch. However, this is compensated for by high consumption of fish (which has high protein value) on coastal villages. This does not apply to inland villages.

There are two hospitals in the province. The Manus General Hospital at Lorengau and Papua New Guinea Defence Force Hospital at Lombrum.

The province is well served by several aid posts run by the Public Health Department and council.

There is no "food action" group in the province, however, I anticipate the formation of a Provincial Nutritional Committee in the future.

The Department of Public Health conducts health education in Lorengau and in village areas. The birth rate in Manus is high at 4%. However, hospital officials predict this percentage to drop through family planning classes that are being conducted at Lorengau.

AGRICULTURAL DEVELOPMENT PROGRAMME

SUBSISTENCE AND NUTRITION

Local awareness of the problem of malnutrition is being increased. At the 1975 Food Crops Conference in Lae it was reported that 34% of children attending Maternal Child Health clinics in Manus suffer from malnutrition.

Extension and nutrition patrols are being carried out in an endeavour to discover the extent of the problem. High protein vegetable seeds have been purchased for resale to villages and a seed multiplication plot at Tamat has been established. It is intended to set up vegetable demonstration plots at Kali Bay and Kari village, and to improve village poultry. In 1981 three evaluation patrols will be launched into all affected areas to determine the effects of the programme.

CATTLE

There is little development of cattle in Manus. There are three native projects with a capacity of 10 heads each. There are a few privately owned plantations and mission projects with an estimated 90 head. In the future two forty ha projects, fenced and planted to improved pasture, are planned.

One project will be established, stocked and maintained each year for the next two years, and two farmers at a time will attend a basic animal husbandry training course.

FISHERIES

There is a great potential for fish in the province but the lack of adequate storage and ice facilities, and the long distances people would have to travel to sell their catches, and disputes over fishing grounds are problems.

It is intended to increase fish production by improving present facilities and to investigate further possibilities. Trials will be carried out on smoking fish for sale in the inland areas, as an alternative to freezing. Fisheries staff will attend courses at Kavieng Fishery College.



Fishing nets

PIGS

Two intensive piggeries at Manus and Papitalai provincial high schools have been very successful. It is further planned to conduct patrols to educate farmers on better pig husbandry methods, to hold four one-week pig management courses at Tamat for at least ten farmers at a time, and to recommend one field staff member for an advanced pig management course at Lae. Six additional piggeries on an intensive or semi-intensive system will be established in 1979. Production of pigs at Tamat Agricultural Station will be increased to ten breeders. In 1981 we shall look for a prospective pig farmer to establish a project near town to produce porkers for sale. In the same year a hundred weaners from Tamat will be distributed to new farmers.

RUBBER

There are three rubber factories established at Kari, Derimbat and Rossum. Farmers will be encouraged to increase rubber production from 0.1 tonnes in 1974/75 to 4 tonnes in 1978, by bringing each smallholder's block into production. Individual blocks will be increased by $\frac{1}{2}$ ha each bringing provincial total hectareage to 120 ha. A marketing system for rubber will be organized in Manus and old processing plants will be replaced. It is planned to send 4 rubber farmers to practical rubber management training courses at Gavien and field staff members to Malaysia for advanced rubber management and technical training. Plantings will be increased, regular tapping encouraged, and tapping methods improved.



*Manus Agricultural Centre at
Tamat. Assistant Simon Loh inspecting
10 month-old rubber trees*

VEGETABLES

The idea is to get people to grow enough green and high protein vegetables for their own consumption. Any excess can be sold at the market for additional family income.

Suitable soils are limited in some areas and there are transportation problems for people wishing to sell their produce.

In 1977/78 the main extension activity will be trials and demonstrations and introduction of suitable varieties. The market system for local production will be improved and the necessary stocks bought. In 1979 a nursery at Pelikawa Base Camp is planned.

COCOA

Transportation is a major problem in this area. In 1975/76 production was 3 tonnes. Fermentaries will be completed in 1977/78, and farmers will be encouraged to pick more pods and maintain their existing gardens. Plantings will be increased and two field staff members sent to Keravat Lowlands Agricultural Experimental Station

for a course on cocoa technology. Cocoa extension patrols in all areas will be conducted to educate farmers on pruning, harvesting/processing and explain price fluctuation. Fertilizer trials will be conducted, an officer to work on cocoa inspection appointed, and negotiations conducted to establish a buyers' agency in Lorengau.

COCONUT

Eight hundred farmers are involved in coconut farming. An estimated 2 900 ha of coconuts are planted. More than 50% of this is producing. Copra prices, transport difficulties and frequent bad weather conditions are some of the problems affecting production.

An increase in production is planned, and regular harvesting of nuts will be encouraged. A Ceylon type hot air drier is to be built, a replanting programme carried out and extension patrols into all coconut growing areas conducted.



Cocoa harvesting on Lou Island

Photographs: Office of Information

