

NEW GUINEA RESEARCH UNIT BULLETIN

Number 8

CATTLE, COFFEE AND LAND AMONG THE WAIN

Graham Jackson

December 1965

Published by the New Guinea Research Unit,
Australian National University,
G.P.O. Box 4, Canberra, A.C.T.

and

P.O. Box 419, Port Moresby, Papua-New Guinea

AUSTRALIAN NATIONAL UNIVERSITY

Research School of Pacific Studies

New Guinea Research Unit Committee

Sir John Crawford, Chairman, Director of the School

J.W. Davidson, Department of History and Government

H.C. Brookfield, Department of Geography

Ann Chowning, Department of Anthropology and Sociology

E.K. Fisk, Department of Economics

Editors, New Guinea Research Unit Bulletin

D.G. Bettison and R.G. Crocombe

December 1965

C O N T E N T S

	<u>Page</u>
FOREWORD	1
Chapter 1 - SETTING	3
Chapter 2 - HISTORY OF CONTACT	5
The mission	5
The administration	5
Wage labour	6
Effects of contact on subsistence	
agriculture	6
Cash cropping	7
Chapter 3 - SOCIAL ORGANIZATION AND KINSHIP	8
Traditional residence patterns	8
Parish membership	9
Parish activities	9
Parish leadership	10
Parish formation and territorial boundaries	13
Disagreements over territorial boundaries	16
Kinship	18
Chapter 4 - SUBSISTENCE LAND TENURE	19
Land tenure today	19
Garden work and crops	20
Rights to yam land	22
Yam gardening groups	26
Lone yam gardeners	29
Sweet potato gardens	30
The map of the Gaiaren gardens	32
Disputes over land claims	32
Inheritance of land claims	32
Valuable trees	32
Hunting and gathering rights	33

	Page
Chapter 5 - CATTLE	35
Introduction of cattle to the Wain	35
Wain cattle numbers	39
History of cattle at Gaiaren	40
Cattle purchasing finance	41
Pasture land	43
Herdsman	46
Cattle fodder	47
Pests and diseases	48
Breeding	48
Fencing and other expenses	48
Cattle ownership	49
Chapter 6 - OTHER LIVESTOCK	52
Pigs	52
Sheep	52
Goats	53
Poultry	53
Chapter 7 - COFFEE	54
Coffee and land rights	55
Ownership and inheritance of coffee plots	56
Communal plots	57
Chapter 8 - LAND AREAS AND REQUIREMENTS	58
Chapter 9 - CONCLUSIONS	61
The effects of cattle and coffee on land tenure	61
Factors relevant to success of cattle and coffee enterprises	62
Prospects for cattle and coffee	65
Wain and Siane capital investment	67
BIBLIOGRAPHY	69

TABLES

		Page
Table 1	Gaiaren Yam Gardens and Garden Owners, March 1964	22
Table 2	Claims to Yam Land in Use, March 1964	23-4
Table 3	Relationships in Class 2 Yam Gardening Groups	28
Table 4	Sweet Potato Gardens, March 1964	31
Table 5	Wain Cattle Numbers and Ownership	39-40

CHART AND MAPS

Chart 1	Key <u>Nu</u> kinship terms	Following p.18
Map 1	Location map of Boana	Following p. 2
Map 2	Wain area	Following p. 4
Map 3	Gaiaren parish territory	Following p.14

FOREWORD

The field work on which this report is based was carried out among the Wain people of the Lae Highlands of New Guinea from mid-February to mid-June 1964. The initial suggestion came from Dr Ron Crocombe of the New Guinea Research Unit, following a visit to the area in 1962. The Department of Agriculture, Stock and Fisheries was actively promoting coffee growing and cattle raising and the interest lay in the possible effects of these activities on the indigenous land tenure system. As field work progressed, it appeared that modifications in tenure applied only or mainly to land actually occupied by cattle and coffee. The tenure system operating in the subsistence cycle had not been greatly affected. Consequently, in writing up the material, the emphasis shifted to an attempt to explain the measure of success achieved with cattle and coffee in the Wain.

Of my four months in New Guinea, two were spent working at Gaiaren, one on other aspects of the task, and one on activities aside from actual research. The language used to conduct the enquiry among the Wain was Pidgin English, the lingua franca of New Guinea. Although some study of this had been made before arriving in the field, I had never spoken it. By the time field work was completed I could follow the Pidgin spoken by the villagers moderately well, but some things still escaped me and my powers of expression remained limited. It is clear, then, that this cannot be a full or accurate analysis.

I am grateful to the New Guinea Research Unit for the opportunity to carry out the research, and to Drs D.G. Bettison and R.G. Crocombe for advice and assistance.

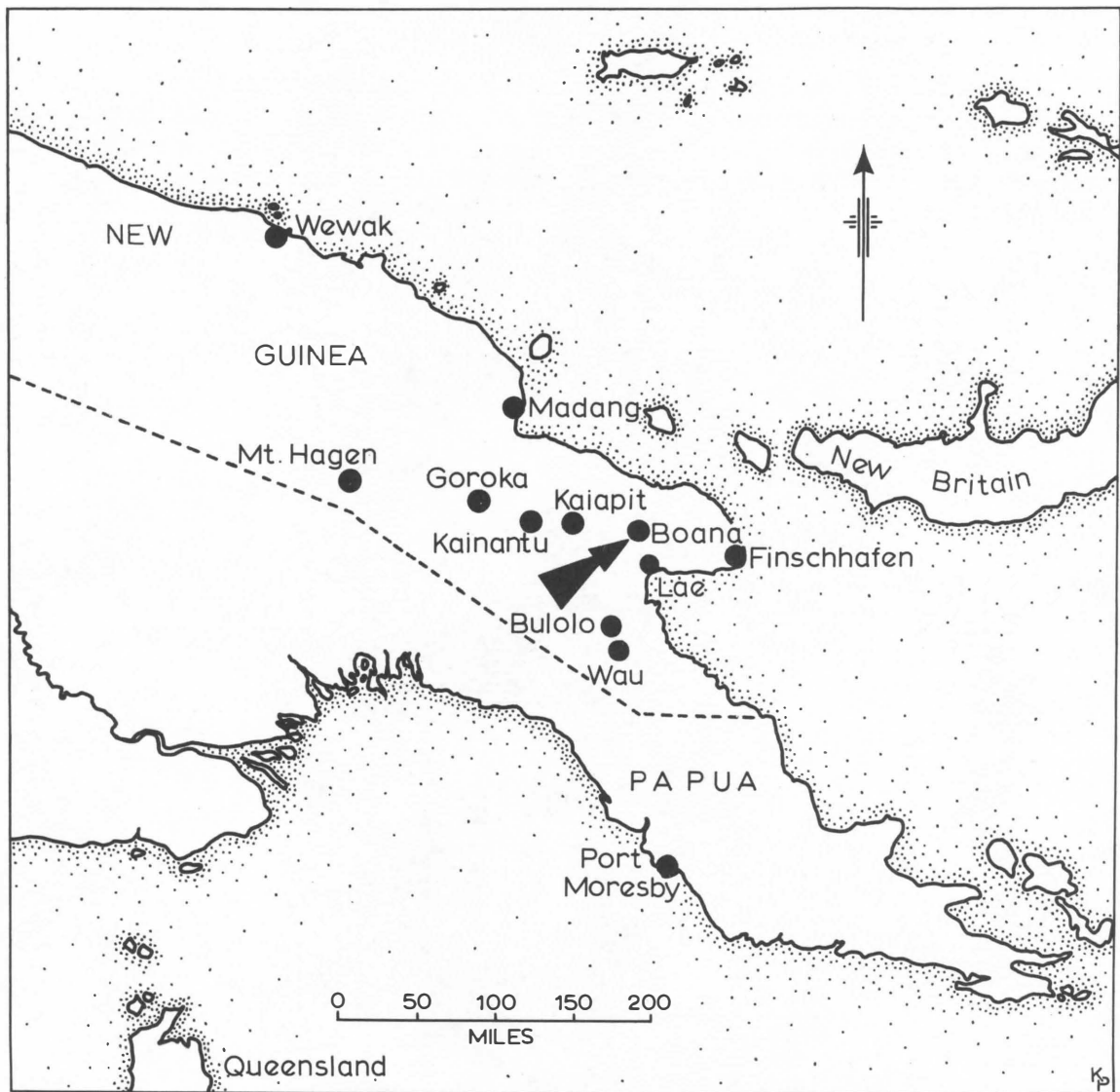
All administration departments contacted were very helpful. Mr Harry Dunstan of the Department of Agriculture, Stock and Fisheries at Lae assisted greatly with background information and supplied me with a trained agricultural field worker as an assistant.

Mr and Mrs Bergmann of the Lutheran Mission provided accommodation on my many visits to Boana and gave every other assistance possible. The information on the history of contact comes from them, unless otherwise stated. The many pleasant hours spent at

their home will always be gratefully remembered. Finally, Mrs Bergmann made detailed comment on a draft report.

On behalf of the Wain people, Singin kindly granted permission to work in the area. The people of Gaiaren and Gumbum villages allowed me to stay in their rest house. Those at Gaiaren, my chief subjects, were pleasant hosts to a visitor who must at times have been a nuisance.

The material used here was presented at the University of Auckland in a longer version as an M.A. thesis, a copy of which is held at the New Guinea Research Unit in Port Moresby. As thesis supervisor, Dr R.N.H. Bulmer made many valuable comments and suggestions.



Papua & New Guinea. Location map of Boana. Map 1.

Chapter 1

SETTING

The Wain are a group of about 5,000 people, living in some 35 villages in the Lae Highlands of New Guinea, on the southern watershed of the Huon Peninsula.

The area is centred on the mission station of Boana, 24 miles in a straight line from Lae, from which it is reached in about a quarter of an hour by small plane. There are two surface routes, one a disused walking track up the Busu River, the other the first few miles of the Markham Valley road, followed by an eight-hour foot track over a ridge. The latter was the principal outlet up to 1935, when the airstrip was built. It still receives a certain amount of use.

In pre-contact times the Wain probably lived in small scattered hamlets, but the settlement pattern now is one of nucleated villages. Rights to membership in the local group can be transmitted through either parent, but the father is the one commonly utilized.

Subsistence agriculture is the main occupation, but there is a significant cash income from the sale of fruit, vegetables, coffee and cattle.

The language spoken at Gaiaren is called Nu.

There are no detailed reports on the geology of the area and what little information there is comes from patrol reports. Probably the most accurate report states that

the Wain is composed mainly of recent Cainozoic [material] and the majority of the rocks in the area consist of basalt and limestone derivatives. Mildly metamorphosed mudstones and siltstones persist and give rise to considerable scree formation. Landslides...are frequent.... Soils...differ frustratingly and are leached considerably. Small pockets and flats in the mountains are however quite fertile and are used for cropping.¹

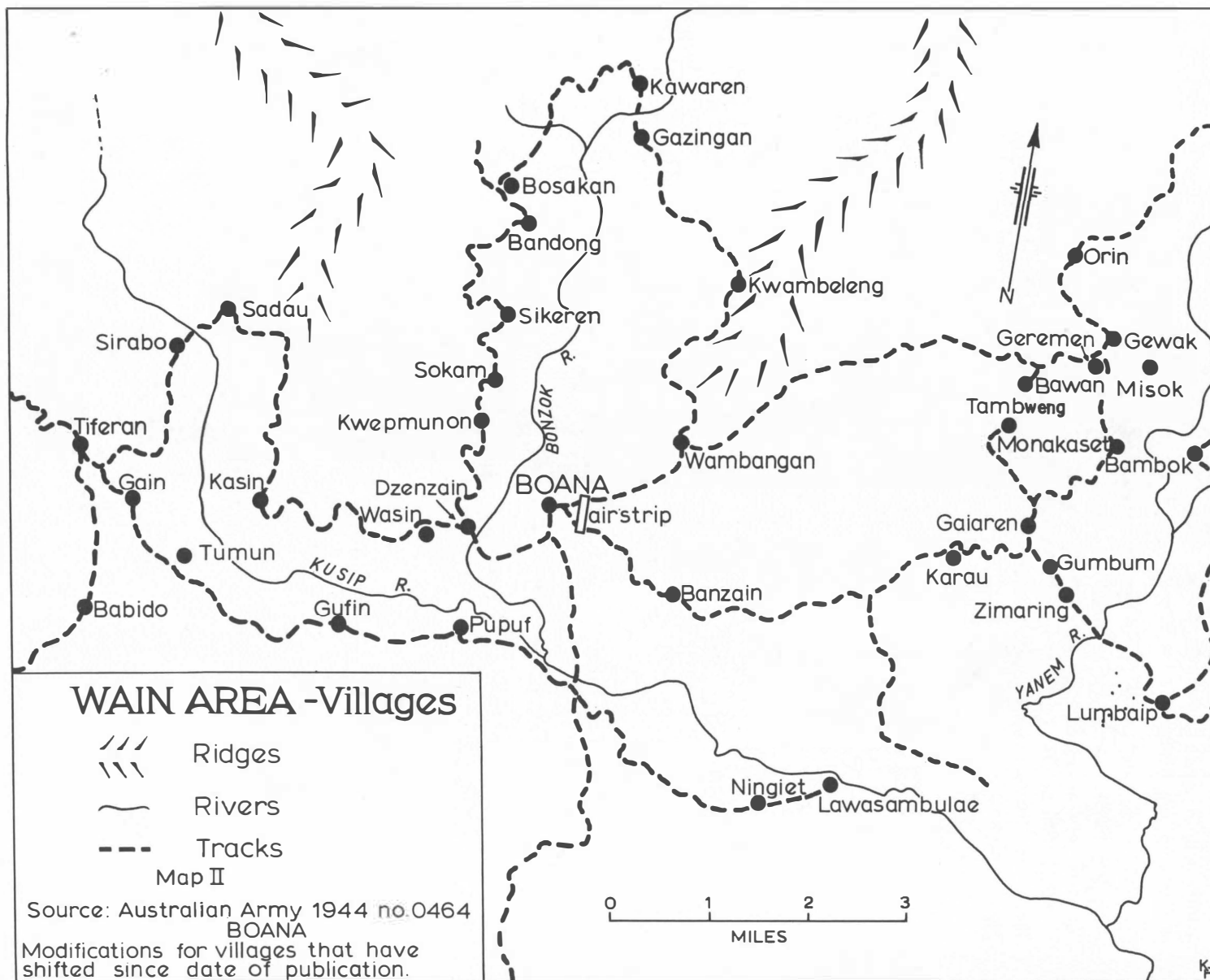
The near neighbours of the Wain are the Nabak and Erap peoples. A mechanical farming project among the latter is described in Crocombe and Hogbin, 1963.

¹

D.A.S.F. patrol report, 1960.

The climate is very mild, with a wetter season from January to June and a drier season from July to December. The average annual rainfall at Boana is approximately eighty inches.

The country is mainly mountainous rainforest and the heads of the valleys are very rugged indeed. There are some areas of grass in the lower Wain. The elevation ranges on the whole between 1,000 and 5,000 feet, though there are peaks over 7,000 feet high. Most of the villages are between 1,500 and 4,000 feet, with gardens up to 4,500 feet or higher.



Chapter 2

HISTORY OF CONTACT

The mission¹

No exact date was discovered for the first European contact experienced by the Wain. The German Lutheran missionary Christian Keysser made a journey from Sattelberg to the Markham in 1912 and his route touched the lower Wain.² Lehner, another member of the same mission, came to the Wain in 1918 and again fifteen years later. On his second visit he was greatly impressed by the changes that had taken place, mainly as a result of the activities of indigenous pastors and teachers. Whereas previously the people had mostly lived scattered about in huts at the garden sites, now they were gathered in large clean villages and had schools.³ This would at that time have applied only to the lower Wain.

Mr Gustav Bergmann entered the Wain for the first time in 1929 and he and Mrs Bergmann after further visits founded Boana Mission Station in 1932. Apart from interruptions caused by the second world war and by furloughs, they have been there ever since. The Wain are now adherents of the mission practically to a man. They have from early times appointed and supported most of their own indigenous workers, and the new religion appears to be accepted to a remarkable degree. In this as in other spheres the Bergmanns attempt to foster independence and have told the Wain that before long they will be left to run the church for themselves.

The administration

The first definite evidence for administration contact is found in a report to the League of Nations for the Territory of New Guinea (1923-24:53):

1

The mission was at first a German Lutheran mission called 'Neuendettelssauer Missionsgesellschaft'. It has since combined with some but not all of the other Lutheran missions in New Guinea to form the Lutheran Mission New Guinea.

2

Keysser, 1912:579-80.

3

Pilhofer, 1963:152-3.

in...the Waing [Wain] area, the natives who live in small communities on the mountain ranges...proved to be very timid, and some difficulty was experienced in assembling them and taking a Census. However, Luluais and Tultuls¹ were appointed and instructed in their duties....

The population of the parts of the Wain patrolled is given as 1,023. Regular patrols do not seem to have begun till the early 1930s, but except for a break during and after the war have since been maintained.

Wage labour

Wain men have been leaving their villages to take paid labour at least since the second decade of the century when German recruiters came into the area. For many years the gold-fields were the most common source of employment, but a wide variety of jobs is now taken. The number of Wain who have left their villages permanently, except to work at Boana, is still very small but almost every man works away for one to five years and a few for much longer. Those who are more permanently absent will probably return in their old age.

Effects of contact on subsistence agriculture

Subsistence agriculture was affected by the introduction of steel tools and new plants. The most important steel tool was the axe. Salisbury (1962:107-9, 118) has estimated that the implement reduced by over one-third the amount of time spent on subsistence activities by men in a subsistence economy similar to that of the Wain.

Of many new plants the most important from the point of view of the subsistence economy was probably Xanthosoma taro, which now forms an important part of the Wain diet. New varieties of sweet potato and banana could also have been significant. The advantages of Xanthosoma taro as compared to yams, and also to some extent with Colocasia taro and bananas are that it is easily propagated and requires little attention, it will grow on relatively poor soil, and a plot maintains a good yield for several years in succession. Barrau (1958:43, 45) gives a figure of three to eight tons an acre for yams, and about eight tons for Xanthosoma taro. Moreover, harvesting can continue throughout the year with Xanthosoma taro, whereas even stored yams may be unavailable in the early months of the year (Barrau, 1958:46).

1

Two grades of administration-appointed village leaders.

Sweet potatoes share these advantages with Xanthosoma taro to a considerable extent, but require greater protection from the depredations of pigs.

Manioc is an introduced tuber with similar advantages to Xanthosoma taro and sweet potatoes. It is grown in the Wain, but does not form a large part of the diet.

Cash cropping

The mission advised all its stations to become self-reliant in case support from the homeland should be cut off. This policy accorded well with the natural inclinations of the Bergmanns who introduced a large proportion of the exotic crops now grown throughout the Wain. The people were trained to care for the new plants and animals and soon wanted to begin production for themselves. Although the Bergmanns did not consciously intend to institute cash cropping, this quickly came into being and they gave every assistance with the marketing. The Wain, with advice from the Bergmanns, are now responsible for their own selling of produce and buying of goods through the Boana Trade Store, which is communally owned by the Wain, Erap and Nabak. An early enthusiasm for fruit and vegetables declined when coffee was first grown in any quantity, but increased again when coffee prices fell. Fruit and vegetables are now sold to the value of a little over \$400 a month.

Chapter 3

SOCIAL ORGANIZATION AND KINSHIP

The Wain today live in nucleated settlements of about 50 to 200 persons, nearly all of whom have rights in the surrounding land. The group of people will be referred to as a parish, the settlement as a village and the land claimed by the parishioners as parish territory.

Traditional residence patterns

Though Wain statements on the subject are not entirely consistent, it seems that in pre-contact times settlement groups were of a much smaller kind which will be referred to as hamlets. The evidence of various outside observers supports this conclusion. The D.N.A. patrol report for 1951 follows the period during and after the 1939-45 war when the Wain received no routine administrative attention. It deplores the fact that the people had abandoned the villages and 'slipped back' into their former habit of 'living dotted all over the mountainsides in groups of one or two at garden sites'. A report to the League of Nations (1923-4:67) states that the Wain 'live in small communities'. Finally, the missionary Lehner says that while at the time of his first visit in 1918 the people lived scattered about in houses at the gardens, by the time he returned 15 years later they were living in large clean villages.¹

While it seems clear that there was in pre-contact times a hamlet pattern of residence, it is not clear whether the people of a number of hamlets together formed a parish laying common claim to a particular tract of territory. There is evidence, however, that people of different hamlets came together periodically in larger villages for initiation rituals and possibly for collective defence in times of fighting. Even if hamlets did not actually come together for defence, they were certainly involved in shifting alliances for purposes of warfare.

¹

Pilhofer, 1963:152.

Parish membership

The parish consists of all persons domiciled in the local group. Entrance to the parish is usually by birth or marriage, and for men and unmarried women is ordinarily by patrification. A woman who marries outside her parish of birth is in the course of her lifetime a member of two different parishes. It is possible, though rare, for a man to move to the parish of his wife. When this occurs it is likely to be as the result of a quarrel or for some other special reason. A man who makes such a move may go to the parish of any kinsman who will offer hospitality and not necessarily to that of his wife. Where the move results from friction, natal parish membership is often resumed in two or three years time when the quarrel has died down.

Parish membership is sometimes obtained by matrification and this is regarded as perfectly acceptable. One man at Gaiaren obtained his membership in this way, his mother, who was born in the parish but married out, having returned when she was widowed.

Although parishes often contain people with diverse origins and although a number of people with a common origin may band together for some purpose such as buying cattle, in so far as kinship is concerned the groups so formed are not exclusive but may overlap on the basis of bilaterally traced ties.

Parish activities

It is rare for the parish as a whole to take part in any activity other than feasting, but there are a number of activities which can properly be described as parish concerns.

Garden clearing and tasks associated with cattle and coffee are described later. House-building is a parish task in which several or most of the men of the parish, usually under the nominal direction of the luluai or tultul, co-operate in felling trees and trimming timber, erecting the house frame and making the roof of sago palm thatch or kunai grass. Men also cut sago palm leaves but women bundle them and carry them to the village.

The main feasts are those associated with various mission functions, weddings, the completion of new buildings, and Christmas. People from outside the parish are often present if they are in some way connected with the event celebrated. Non-parishioners not infrequently help with house-building or other tasks, on a basis of personal kinship and friendship with those most closely concerned. Such individuals will have cooked food sent to them if they are absent from the later feast.

The other main communal tasks are those assigned through the administration or the mission. Administration tasks include

keeping walking tracks in order, building and maintaining rest houses, keeping latrines sanitary and the village and rest house sites tidy. Tasks performed for the mission include the erection and maintenance of churches, and of houses for indigenous mission personnel. The latter may also be largely relieved of the care of their gardens. The work is done mainly, though not entirely, on Wednesdays and Fridays, which are set aside as mission and administration work days respectively. Several different tasks are frequently undertaken on the same day and groups of people are directed by a tultul or other man of influence to assist at each.

Members of more than one parish may combine to carry out projects which concern a wider group. For example, when a house was built for the administration school teacher at Karau, people from all four parishes which the school serves came to help, irrespective of whether the individuals had children of their own attending the school. For major projects at Boana people come from all over the Wain.

Parish leadership

Wain society is on the whole egalitarian, though individuals can come to exert a very powerful influence. It is said that in pre-contact times each settlement had a recognized leader, but that there were other 'big men' who were also influential. Recognition as a leader seems to have depended on prominent participation in feasts and ceremonial exchanges and on ability as an orator.

Today the administration is the ultimate authority and though seen little in the flesh, its influence is ever present and much felt. A Department of Native Affairs patrol visits most villages about once a year and a patrol led by a European agricultural field officer comes once or twice a year, or more often, to Boana and places where special projects are in hand. The patrol staff, including agricultural field workers, see that the tasks described above have been properly carried out, settle minor and sometimes quite serious disputes, and collect the particular statistics for which they are responsible.

The permanent representative of the administration in the village is the luluai or tultul. Except for some of the smaller villages, there is ordinarily one luluai or tultul in each. He also represents the people to the administration. Patrol officers see that he has been properly performing his duties (for which a luluai receives a nominal \$6 a year) and if the village is not in the required tidy and hygienic condition he may lose his position. This does not appear to have happened recently in the Wain.

The actual influence which any particular luluai or tultul wields in his parish depends to a considerable extent on the influence he has independently of his office, though this may in turn be affected by the influence he can exert through the exercise of his office.

Each parish has one or more men who conduct mission affairs, the senior of whom is known in Pidgin as the bosmisin (mission boss). There is one trained full-time pastor to every few villages. The administration and mission leaders are in some instances the most important men in the parish but in others, as at Gaiaren, another man is undoubtedly more influential. The people of Gaiaren say that the tultul controls things concerned with the government, the two mission men things of interest to the church, and the other man things related to cattle, coffee and business. There is some truth in this but most questions of importance are discussed informally and sometimes formally by these and other persons until agreement is reached. Formal meetings are pre-arranged and are attended by most of the parishioners. They are usually concerned primarily with mission affairs but other matters are also raised and anyone may contribute to the discussion.

Accounts of two Wain leaders follow. Singin has played an important part in the cattle and coffee enterprises throughout the Wain, and Girik has taken the leading part in his own parish of Gaiaren.

Singin is the most influential man in the Wain area. He is aged 64 or more and has nine surviving children from two wives, having married the second after the death of the first. In 1912, he says, he left his village to live with an evangelist near Lae. He was taken down by a missionary, and the date he gives corresponds with Keysser's journey from Sattelberg to the Markham (see page 5), though it is unlikely that Keysser visited Singin's hamlet. The date is confirmed by the fact that Singin remembers the outbreak of the 1914-18 war about three years after he went to Lae. He says that although his father sent him away with the missionary, he himself wanted to go to escape the local fighting. He was with the evangelist for about three years and wanted to go to school but there was none available. He was considered too young to work on a plantation.

While Singin was in Lae his father died and his mother was drowned, so he went back to the Wain to look after a younger brother. He stayed for five or six years before going back to Lae, then to Salamaua, and next to the gold-fields at Bulolo. After this he worked at Kainde for an employer called Booth, then went back to the Wain a few years before the Bergmanns came to Boana. By this time he had already been offered a position as

tultul, at something less than thirty years of age. Singin has not since left the Wain except for brief periods. His present-day village of Wambangen was founded about 1928 and is a twenty minute walk from the Boana airstrip.

Singin was one of the first to be baptized, about 1937, and one of the first to be involved in buying cattle. When the Bergmanns were interned in Australia during the war he came to the forefront as a leader and acted as an intermediary between the local people and the Japanese, at the same time maintaining contact with the Australians and informing them of Japanese movements. The Japanese were in the Wain for about six weeks and forced some of the people to act as carriers, but otherwise caused little disturbance to the people. Singin was later mistaken for a man who had 'betrayed' an officer to the Japanese and was court martialled and about to be hanged when the confusion was discovered. The affair dragged on till 1946 and the Australians used him as a carrier while trying to find out more about the case. He nevertheless retained his position as tultul throughout.

Singin's influence has continued to grow since the war. From the late 1950s he has been employed as an agricultural field worker, though not trained as such. Because of his influential position and understanding of the problems involved he has had more effect in improving coffee growing methods than any of the trained workers. He is himself one of the bigger coffee growers, and with his family one of the largest cattle owners as well as being one of the very few Wain to keep sheep. Highly thought of by the administration, Singin is an honorary member of the Morobe District Advisory Council and has been taken to Australia with an official party to see, among other things, the workings of democracy in Canberra. Before the 1964 elections to the first House of Assembly for Papua-New Guinea, the people of the Wain, Erap and Nabak held a meeting of about 2,000 people at Boana. After discussion Singin was chosen unanimously to be a candidate to represent all three groups and the block vote he received was sufficient to ensure his election.¹

Singin is a man with an air of authority, and of the few speeches heard in the Wain, his was much the most impressive example of oratory. He appears to have very successfully adapted the pattern of traditional 'big man' activities, entrepreneurial and otherwise, to the contact situation.

The same is true of Girik, a man about the same age who is the foremost leader at Gaiaren, but whose influence is not nearly so

1

The initial suggestion that Singin stand apparently came from the administration.

far-reaching. He spent four years in the gold-fields before the 1939-45 war and after the war worked twelve years for a dealer in scrap-iron, looking after the food for the New Guinean employees. During the war he came back to the village and helped support the women when many of the men had run away into the bush. He is the biggest cattle and coffee owner in Gaiaren and has had a number of business ventures. For some years he had a trade store at the Boana airstrip, tended by a classificatory son, but this has been shifted to Gaiaren village as the Boana Trade Store now has a branch at the strip. The turnover of the store is \$200 to \$240 a year and a typical profit is approaching 50 per cent. Girik says he makes little out of the store and would like to discontinue running it. Accurate accounts are not kept and it is probable that much of the profit goes back to the community in other ways, such as buying the soap and buckets used in tending the cattle. He has also been associated with two groups of people who have bought trucks, putting \$40 towards each. This was in the form of loans rather than shares and most of it has now been paid back.

Girik, in contrast to Singin, was quietly spoken. He was not seen to address any formal or semi-formal group of people throughout the period of field-work and certainly not to indulge in anything that could be called oratory. He was the only adult male in the village who could not bring himself to address me by my forename. Long years in the employ of Europeans had so strongly ingrained the habit of addressing European men as 'sah' that it could not be broken. It appeared that Singin saw himself as equal to any European and more than equal to most. Lesser Wain leaders may have felt this, but were not generally prepared to act on it. Singin was able to some extent to accept or reject suggestions made by mission and administration, considering them on what he saw to be their merits, whereas others were more inclined to work within the limits set by European initiated organization. Singin did, however, co-operate very closely with both mission and administration. This probably resulted from the fact that these bodies were his chief non-Wain sources of information and advice rather than from a lack of ability to form independent judgments. Girik and Singin were both able men, experienced in the affairs of the world in which they lived. Girik was unassuming, though far from submissive. Singin, though by no stretch of the imagination arrogant, was aware of his position and expected to be treated respectfully by all.

Parish formation and territorial boundaries

It was sometimes difficult in discussions with the Wain to tell whether settlements referred to were hamlets or villages. The Pidgin term 'ples' and its Nu equivalent yotkwet seem to be

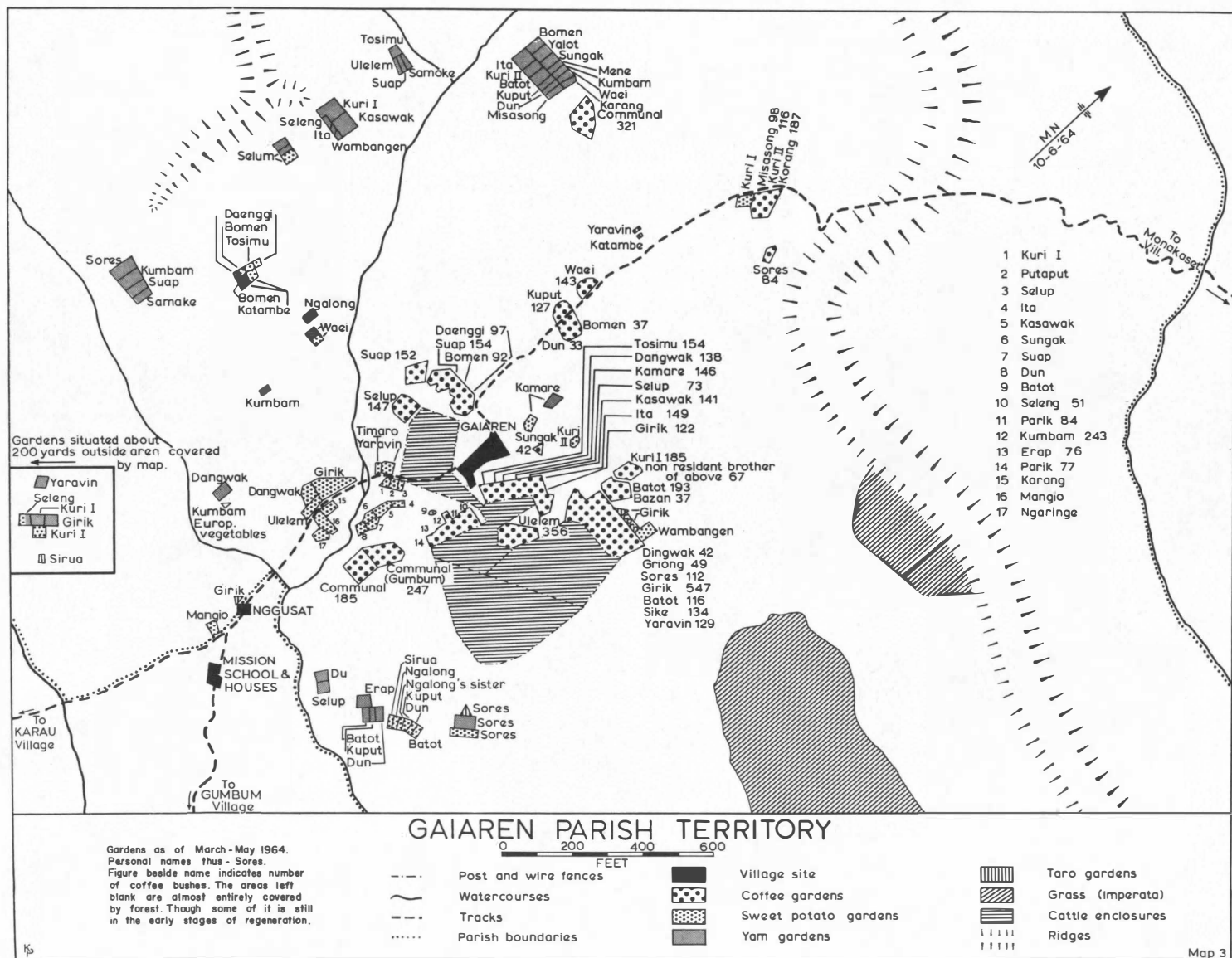
applied alike to hamlet, village and parish. This factor also complicates the reconstruction of parish histories before the present period of nucleated settlement.

Ideally each Wain parish today has its own territory which is distinct from that of every other. Each parish territory has more or less well recognized boundaries which are not on the whole transgressed. Without obtaining agreement, no one will make use of the territory of another parish other than to walk through it and light a fire to cook food. The Wain say it is permissible to take game in the immediate vicinity of administration tracks but it was not discovered with whom this rule originated or whether it is recognized by the administration.

The formation of new parishes often results from expansion, with parishes increasing in size till some members leave to set up a new village on their own parish territory. Such a village is that of Zimareng, an offshoot of Gumbum, which separated from the main village about four years ago. Although the members of both settlements claim that Gumbum territory is still undivided, there is already a strong tendency for the people of each group to use the garden land nearer their own settlement and it appears probable that with the eventual recognition of a boundary two fully independent parishes will emerge.

In the past a parish could be founded when a small group which had become isolated as a result of fighting or some other disturbance settled on the ground of a friendly or neighbouring parish. Two or three such groups sometimes combined for the same purpose. A group might alternatively settle in an existing village in which case no new parish would be formed, but it is not known to what extent this happened before fighting was discontinued. Splinter groups resulting from warfare may frequently have been annihilated or completely broken up and scattered among their individual kin. In the small amount of traditional history obtained, however, there is evidence for the pre-contact survival of at least two such groups, and a case which involved people originating in Gaiaren will now be recorded.

About 55 years ago there was fierce fighting between Gumbum and Gaiaren and many people were killed. Some Gaiaren men ran away and came to what is now Wambangen, then little more than a hunting ground for a group of people living in the area now known as Boana, though three families had gardens and garden shelters there. One of the leading men of the Boana area said to the refugees, 'Our people are few. Stay with us and we will give you land.' So they settled about what is now Wambangen village, built houses and made gardens. It is likely that they had some previous connection with the Boana people, probably through marriage. Such a relationship would mean that the Gaiaren people could expect



hospitality but would not entitle them to settle the area as of right. The Gaiaren refugees did not at this time form a village but each family lived near its gardens in the bush. The man who had invited the Gaiaren people to stay later told his son to use his mother's ground and leave his (the father's) ground for the people from Gaiaren.

There were three hamlets in the Boana area at this time. Some time thereafter Europeans (whether missionaries or patrol officers is not clear) began repeated visits and under their influence nucleated villages were formed. Those Boana people who had given land to the Gaiaren refugees united with other small groups to live in a village a little distance from where they formerly resided, on land belonging to people who lived further away again. Several members of yet another group, which had been severely depleted by fighting and sickness, were persuaded by the Europeans to join the Gaiaren people at Wambangan. Some of their land was quite close to the village and they still tend to work this land rather than other Wambangan land. The Wambangan people now formed a village instead of being scattered about among their gardens, and later some of the Boana men who had previously joined another village shifted to Wambangan, forming the third and last main element of its population. They no doubt did this so that they would be settled on land to which they had undisputed rights.

Mr Bergmann said that many years after his arrival, when Wambangan parish was to external appearances a single entity, a slighting remark was made about the ex-Gaiaren section of the parish having no real rights to land at Wambangan. He feels that had he not intervened these people would have gone back to the land they and their parents left a generation before.

Wambangan parish then was formed of three disparate elements, partly but not entirely as a result of outside influence. The Boana element, left to itself, would very likely have joined to get back to their own ground. However, it is probable that the village would not have survived in its present form without the influence of the mission in settling the dispute mentioned above. The Gaiaren men now living at Wambangan still maintain rights in their home territory but these will be dealt with when considering individual land rights.

It must be evident from the above that what appears at first sight to be a system of separate and independent parishes has in fact a complex history. This history bears on the forms of interaction taking place between parishes today.

Many of the moves described above occurred either before significant contact with Europeans or in its early stages. The cessation of fighting and the settling of people in villages has considerably reduced the rate and variety of such changes. Indeed,

it is not easy to conceive of circumstances arising today which would lead any significant section of a parish to uproot itself and settle on foreign territory. The only movements since the resettlement in nucleated villages after the 1939-45 war have been the resiting of whole villages on the same parish territory and the setting up of subsidiary villages on the territory of the original parish.

Disagreements over territorial boundaries

Quarrels over boundaries are not common in the Wain. There is no administration record of any litigation or even of disputes settled by patrol officers, though such cases could occur without any record being made. However, the patrol officers with whom the matter was discussed said they had not themselves settled any land disputes in the Wain and there is no reason to doubt their word. In the course of field work, two disputes between parishes were discovered as well as some which were primarily between individuals of different parishes rather than between parishes as such.

One interparish dispute concerns a sago grove which is divided by a stream. The first parish quotes the following reputed incident in support of a claim to the whole grove. Long ago one of their women ate another who was pregnant. The women of the village killed the culprit and threw her body away. Her head, however, was put in the stream which runs through the middle of the sago swamp. A crab entered the head and ate the brains. The woman's father's and mother's brothers dammed the stream, and the head floated to the top. They removed the crab and returned the head to the stream. The spot is thus sacred to Gaiaren people but not to the other parish which makes claims on it. 'It was our woman and it is our ground.' The people of this parish say that if people of the second parish want to use any of the palms in the grove they will have to pay.

The people of the second parish maintain that the stream in the middle of the grove is the boundary and that they could use the palms on the side of the stream claimed as theirs, but they do not in fact do so. They have few other sago palms and this may explain why they are anxious to make a claim on these.

When a schoolhouse was built at the village of the second parish for a teacher who conducts a school for the surrounding villages, sago thatch was taken from that part of the grove which is claimed by the second parish, but it was done under the direction of the luluai of the first parish. Although the luluai of the second parish came along, and appeared displeased, he made no obvious protest. The ability of a luluai of the first parish to direct operations suggests that the claims of the second were

not very strong. An alternative interpretation is that by using the thatch for a collective purpose, both parishes are accepting a partial solution to a dispute in which neither side is prepared to concede the argument.

The other dispute was between Gaiaren and Monakaset. Monakaset was founded on Gaiaren territory, partly by Gaiaren people, and even Monakaset agrees that its territory still belongs, in a sense, to Gaiaren. In spite of this, each of the two parishes today has what is regarded as its own territory. Gaiaren people claim that a certain stream (shown with the parish boundary beside it on map 3) is the boundary. There is a ridge on the Gaiaren side of this stream. The Monakaset people do not claim that this ridge is the boundary but that both parishes are entitled to work the land between the ridge and the river. A few years ago some Monakaset men who had claims to this piece of land made gardens there but the Gaiaren people objected. They say that the justice of their case was recognized by the Monakaset men who did not make any further gardens there. The Monakaset people say that they simply withdrew because they had completed the garden cycle and will go back when they wish to garden there again. In the meantime Gaiaren men are gardening in the contested area without objection by the Monakaset men.

This dispute appears to result from the division of land that was once the territory of a single parish, in which the new boundaries have not yet been fully established. From what is happening at present it appears that the Gaiaren claim may be successful in the long run. However, Monakaset has less land than Gaiaren and this may lead them to exert stronger pressure in the future. Since their cattle are at the moment pasturing with the Gaiaren cattle on Gaiaren ground they may be reluctant to make an issue at this stage.

Neither of the above disputes has been taken to the administration. For reasons which were not obtained explicitly the Wain seem reluctant to do this. It may be that neither party is willing to risk the total loss of rights which might follow from a legal decision. There is also a certain wariness of Europeans in relation to land which appears to derive from the unfortunate experience of other New Guineans rather than experiences of the Wain themselves. Again there is the feeling that quarrels are bad and that it would be shameful to take a disagreement to an outsider to settle. Neither of the disputes has yet been the subject of a meeting between the parishes concerned but it was said that meetings would be held some time in the future.

Failing this, the disagreements may lapse over time. In both cases one party is making partial use of land which is the subject of a quarrel and descendants of the users will doubtless continue

to assert rights over it. Since the rights of other claimants are not being exercised these may gradually become weaker and could eventually be lost altogether. On the other hand, the interest generated by the disputes may cause claims to be remembered in spite of the fact that they are not being exercised, and the disputes could carry on indefinitely.

Kinship

Most of the data on family and domestic groups, kinship and marriage have been omitted from this report. Collected incidentally in a study concentrating on other topics, they do not warrant recording here but they are included in the thesis on which this report is based.

The nuclear family exists in the Wain and this, or a surviving element of it, is the minimal unit in performing a number of tasks.

Chart 1 shows the key kinship terms. Classified according to Murdock (1949) the terminology is bifurcate merging of the Iroquois type.

Kin are in three main categories:

1. Father's section or parallel kin. The main Pidgin terms here are papa, barata, susa and pikinini.
2. Mother's section or cross-kin. The main Pidgin terms in this group are mama and kandere. A small number of parallel kin are classified with the cross-kin and vice versa.
3. Affines. This category includes nearly all of a man's wife's kin and most of the spouses of his cognates. The Pidgin term is tambu.

Any individual will have kin of all three categories in the parish to which he belongs. Because of predominant patrilocal residence for males and the fact that the majority (at Gaiaren two-thirds) of females marry outside their own parish, there is a tendency for persons to have more parallel than cross-kin in their natal parish.

The more or less systematic discrimination of cross and parallel kin suggests that the reckoning of kinship on the basis of unilineal descent either is or has been in the recent past of importance in some contexts, probably marriage and possibly initiation, funerary rites and ceremonial exchanges. It does not seem in the past to have been of overriding importance in defining claims to land or rights to membership in local groups. Certainly both patrification and matrification are acceptable for these purposes today.

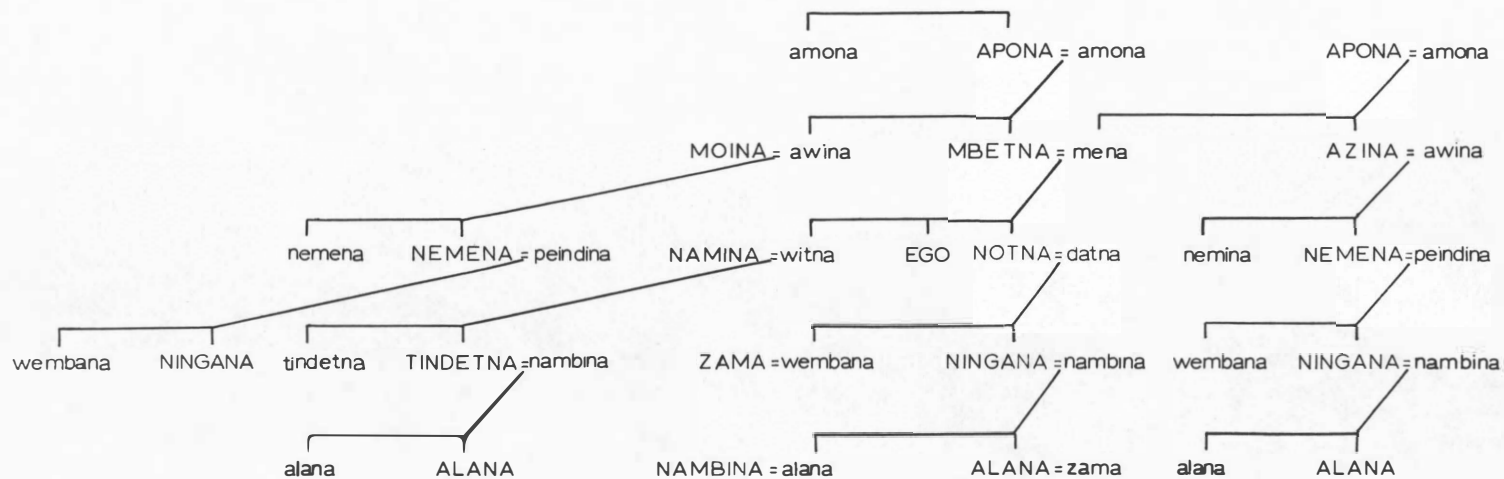


Chart 1.

KEY NU KINSHIP TERMS

(Excluding wife's kin and some other affinal categories)

Chapter 4

SUBSISTENCE LAND TENURE

Land rights in pre-contact Wain society appear to have been exercised in a flexible fashion. Although a man usually cultivated land inherited from his father, it is said that it was also common to use the land of another member of the local group or even of a kinsman in another local group, provided permission was obtained. An old luluai said, 'Before, if a Gumbum man had a kinsman at Gaiaren he could make a garden together with him and he would not be angry because of the ground. Now he could not do this because of the law.' The flexible manner in which land rights were exercised, together with a permissive ideology of local group recruitment could be taken to suggest that there was little pressure on land, though rights to certain areas especially suitable for yam growing may have been subject to careful control.

Land tenure today

Discussions of land tenure are commonly set out on the basis of some well ordered series of groups such as clan, lineage, lineage segment, individual family. The Wain do not today have any well ordered series of groups of this kind but groups are formed for gardening, and the composition of these groups will be examined. The term 'gardening group' will be used to denote any group of individuals gardening together on the same piece of cleared ground and is not intended to imply anything as to the nature of the group except as is established in the course of discussion.

Rights to yam garden land and to sweet potato garden land will be analyzed in turn, then comments will be made on valuable trees and on hunting and gathering rights respectively. Rights to land used for coffee growing and cattle herding are considered in later chapters.

Though this chapter is headed 'Subsistence land tenure', small areas scattered among the gardens are used for growing introduced vegetables intended partly for sale, and small quantities of traditional subsistence foods are also sold for cash. These practices do not appear to have entailed any change in the traditional system of land rights.

Garden work and crops

The following brief account of certain aspects of garden practice and custom, though peripheral to a discussion of land tenure, is included as background information. The land used at Gaiaren for gardening is a basin-like hillside which slopes steeply in its upper part but runs out to easy ground lower down. It faces north-east and is not immediately surrounded by high hills so that it gets most of the available sun. Drainage is on the whole good and the swampy areas are not used for gardening. Artificial drains were not seen here or elsewhere in the Wain except at Boana where their introduction is a result of mission influence. The altitude of most Wain gardens is between 1,500 and 4,500 feet. Gaiaren gardens are about 2,000 to 2,500 feet.

There are two main types of subsistence gardens, yam and sweet potato. At Gaiaren, yams are planted at some distance from the village on what appears to be the richer soil. The areas chosen are those which have supported a fairly profuse secondary growth of trees, shrubs and grasses, or on rare occasions areas of bush which have not been cultivated for a very long time, if at all. Gardens used primarily for sweet potatoes are made closer to the village on ground which, owing to poorer fertility or a shorter fallow period, or both, has produced only light regrowth. There is a considerable area of easy grass covered ground about fifteen minutes walk from the village but this is not currently used for gardening.

A yam garden is used for only one yam crop in a cycle but it may be used the following year as a sweet potato garden. This will not be done unless the new yam garden is made beside the old one, and ground so used will be returned to fallow the following year. Ground near the village which is used for sweet potatoes but not yams is cropped for two or three years in succession.

Apart from yams and sweet potatoes, the subsistence crops which are important from the point of view of their caloric contribution to the diet are Xanthosoma taro, bananas (including cooking bananas), pitpit (probably both Saccharum edule and Setaria palmaefolia), fruit pandanus (Pandanus conoideus), sugar cane (Saccharum officinarum) and maize. Less important from this point of view are Colocasia taro, cassava, potatoes, beans (including the native winged bean and introduced beans), tomatoes, watermelons, cucumbers (native and introduced), cabbages, onions, shallots, pineapples, pawpaws (papaya), citrus fruits, passion fruit, coconuts and breadfruit. Most of the garden plants listed are grown among the yams and to a lesser extent among the sweet potatoes. Some plants, especially Xanthosoma taro and sugar cane, often have a corner of garden to themselves, possibly in soils

more suitable to their cultivation, but usually bordering on yam, sweet potato or coffee gardens. In addition to the plants listed above, the Wain cultivate a large number of shrubs and herbs which are used for culinary purposes. They also utilize wild plants.

An important by-product of gardening is firewood. Stakes and branches are carried home in bundles with the garden produce and would not be taken from anyone else's garden without permission.

The Gaiaren people do not admit to any magical practices in association with gardening today. Harvesting was the only part of the cycle observed and no rituals were carried out openly in this phase. A patrol officer notes, 'From what the writer could gather very little magic is practised - possibly through mission influence.'¹

The heavy work of clearing the bush is done by the men using steel axes. If the garden is made in bush previously uncut or fallow for a very long time, the trees with trunks more than about nine inches through are not felled, but the men climb them and chop the branches off. Smaller trees may be stripped and left standing for the yam vines to climb on or chopped down to make poles for the same purpose. In the past women probably cleared the minor vegetation and were responsible for most crops other than yams. Except for a few varieties of small yams, these are still tended exclusively by men but today men help to prepare the ground and to plant sweet potatoes, taro, pitpit and other crops. They still do practically no carrying of garden produce or firewood.

A man and his wife sometimes work alone when clearing a garden but usually receive assistance from other parishioners who are not necessarily close kin. The person whose garden is being cleared supplies the evening meal for the rest of the workers and this should include some meat. Since there is practically no meat apart from tinned meat, this usually involves a small outlay in cash.

Husband and wife almost invariably garden together if they are both resident in the parish territory. The very few adult males in the village who do not have a wife residing with them are assisted by female kin. Husband and wife gardening together in some cases divide the garden to husband's and wife's portions and in other cases make no distinction. In either event it is worked as a single unit and the harvest is used by the household as a whole. In the absence of her husband, a woman gardens next

1

D.N.A. patrol report, 1960.

to her brother or other male kinsman. She works alone except for the specifically male tasks, and the whole fruit of the garden is hers.

The garden of a married couple is ordinarily spoken of as belonging to the husband, even in cases where a distinction is made between husband's and wife's portions. However, on close enquiry, the Wain say that the garden does not in fact belong to either the husband or the wife alone, but to both of them together. It is impossible to conceive of circumstances arising within the indigenous system where ownership would have to be conferred on one to the exclusion of the other. If one dies or goes away, the garden is left in possession of the other. Nevertheless, it is justifiable to record the husband's group membership and tenure claims and to disregard those of his wife because in every case at Gaiaren it was the husband's claims to land that were regarded as being exercised. In cases where a husband had left the village since the garden was planted and in the case of a man who died after field work commenced, the husband's name has still been recorded as it was his name that was given as owner of the garden.

Rights to yam land

Yam gardeners have been divided into three classes, class 1 those gardening with their wives only, class 2 those gardening in groups of from 2 to 5 males and class 3 those gardening in a group of thirteen. In Table 1 gardeners have not been distinguished according to sex but females gardening in association with a husband have been ignored. The one adult parishioner lacking a yam garden is an unmarried female.

Table 1

Gaiaren Yam Gardens and Garden Owners, March 1964

<u>Category of owners</u>	<u>No. of owners</u>	<u>No. of gardens</u>
Parishioners with 2 gardens	14	28
Parishioners with 1 garden	16	16
Parishioners with no garden	1	0
Non-parishioners with 1 garden	2	2
Total owners	32	
Total gardens		46

Clearing of yam gardens starts in June, though little is done before July. Meetings are held in the village to decide what land will be used and there is also informal discussion. It is difficult to discover by interrogation how important the meetings are but people are not simply instructed to garden with a

particular group or at a particular place. The agreement of claimants to the use of their land is obtained by the part they play in discussions, their suggestions or silence signifying consent, rather than by seeking their permission directly. At the time field work was concluded two individuals had already cleared yam gardens, but no meetings had been held. The gardens were on land to which the individuals concerned had strong inherited claims and they said that other claimants had been consulted informally.

Claims made to yam land in use in March 1964 are analyzed in Table 2.

Table 2

Claims to Yam Land in Use, March 1964

Class 1 gardeners (men gardening alone)

<u>Kinsman through which claim made</u>	<u>Nu kinship term</u>	<u>No. of claimants</u>
Father's father	Apona	1
Father	Mbetna	2
Classificatory father	Mbetna	1
Mother	Mena	1
Distant classificatory brother	Notna	1
Total class 1 gardeners		6

Class 2 gardeners (groups of 2-5)

<u>Kinsman through which claim made</u>	<u>Nu kinship term</u>	<u>No. of claimants</u>
Father's father (own or classificatory)	Apona	3
Father	Mbetna	8
Classificatory father	Mbetna	3
Mother	Mena	6
Mother's mother	Amona	1
Mother's brother of deceased husband	?	1
Sister's husband	Namina	1
Wife's brother	Namina	1
Classificatory brother	Notna	2
No rights		1
Total class 2 gardeners		27

Class 3 gardeners (members of single group of 13)

<u>Relation to primary claimant</u>	<u>Nu kinship term</u>	<u>No. of claimants</u>
Classificatory brother	Notna	6
Classificatory sister	Witna	1
Classificatory son	Ningana	3
Classificatory sister's son	Tindetna	2
Classificatory sister's husband	Namina	1
Total class 3 gardeners		13
Total for three classes		46

<u>Class of gardener</u>	<u>Class of kinsman through which claim made</u>			<u>Total for each class of gardener</u>
	<u>Parallel</u>	<u>Cross</u>	<u>Affinal</u>	
Class 1	5	1	0	6
Class 2	16	7	3	26
Class 3	10	2	1	13
Total for each class of kinsman	31	10	4	
Total no. of gardeners				45*

* The one gardener with no claim to the land being used has been eliminated from this last section of the table.

An individual's strongest rights are to land that has been used by his ancestors in his natal parish. From such land he cannot be shifted unless he is involved in a serious quarrel or makes himself so unpopular that he is in danger of violence and has to run away from the village. Even then he is likely to return within a few years when the quarrel has died down.

A man has rights not only in his father's but also in his mother's land. With about two-thirds of the Gaiaren men their mother's land is in the territory of another parish and rights to this land will rarely be exercised unless the man concerned shifts to the parish of his mother. A man who is brought up in a parish which is the natal parish of his mother but not of his father (if, for example, his mother has returned there as a young widow) is at no disadvantage.

If a man shifts to his wife's parish he can expect his wife's brother or other close affinal kinsman to grant him the use of land. However, a man's position in a parish other than his natal parish, at least for some years, is comparatively insecure.

A woman has land rights similar to those of a man but does not ordinarily have any occasion to exercise them. In most cases she will garden with her husband. Failing this, she will garden with a close kinsman, on land to which she may also have rights but which she is using primarily because she requires male assistance and which she could use even if she did not herself have inherited rights there. The latter situation is illustrated by a widow who came to Gaiaren from another parish at marriage and is gardening with her deceased husband's mother's brother. The possibility that she was using the ground on behalf of her children or exercising cognatic claims was not examined, but the affinal relationship was given as the basis for her use of the ground.

Rights are also passed to more distant kin. Classificatory sons and daughters, and cross-kin have claims to land and within the parish these are not uncommonly exercised. The small number of males not living in their natal parish are likely to lack coresident parallel kin and frequently take advantage of claims on the land of cross-kin and the custom of granting land to affines.

Much of the discussion so far has been based on rules given in response to interrogation. Though these appear to be true, they do not give an adequate idea of the complex situation created in practice by the overlapping land rights of considerable numbers of people. If three or four people gardening in a group are asked by what right they are there the most likely reply is, 'It is the land of our ancestors'. Further questioning will usually reveal that the actual fathers or fathers' fathers of one or two of the men now working the land in fact worked it before them but this is not always the case. Some gardeners are not aware who used the ground last. They say it belongs neither to any one person nor exclusively to members of the group. Even where an individual's father is remembered to have gardened a particular piece of ground the exact spot is rarely remembered. There had in most cases been a number of men gardening with him and it is seldom known today which portion of the garden each cultivated. Occasionally only the older men in a gardening group can name the primary claimants. A few areas have not been gardened in the remembered past and lack individual claimants. In such cases it is said that the ground 'does not have a man', or that it is 'bush finish'.

The figures given in Table 2 (p.23) must be treated with caution. Informants were not always agreed on the identity of person from whom the rights were derived. Nor do rights derive from or pertain to only one person. The members of a gardening group do not refer their claims to any specific individual unless pressed to do so. A person's own father is not quoted in the first instance but just his 'ancestors'. In two cases the

gardeners themselves did not know who the primary claimants were, though other persons did. In another case Girik, the foremost 'big man' in the parish, was not aware that land to which he had claims was in use as a yam garden ready for harvesting and was unperturbed when this was revealed in the course of attempts to discover the primary claimants.

It is often difficult to say whether an individual is working his section of a group garden by virtue of his own claims or simply because he is there in association with someone who has a strong hereditary claim. With one exception the claims of the gardeners in classes 1 and 2 have been recorded as though by virtue of the user's own rights. The exception concerns a piece of land which is a subject of disagreement between Gaiaren and Karau. About two generations ago the disputed land was held by a Gaiaren man and his son. The father went to Karau but the son stayed at Gaiaren and the resulting line of division of the land is the boundary at this point between the two parishes. Some Gaiaren men say that any Gaiaren man can use the ground which used to belong to the father but Karau men say that only his descendants may use it. There were in 1963-4 four Gaiaren parishioners with gardens on this ground. Two of them have claims to it through mothers who came from Karau and one is a classificatory brother of one of these and was looked after by him when orphaned. Karau folk do not object to the presence of these men but they do object to the presence of the fourth man who has no claims to the land. This case shows that the legitimacy of a man 'following' (Pidgin 'bihainim') another with claims to land may be recognized by another parish even though rights to the land are in dispute.

For class 3 gardeners the relationship shown in Table 2 is that to the primary claimants rather than that to someone to whom the user might be able to trace a claim directly. Neither of the two primary claimants has a garden with this group. The ground seems simply to have been chosen on the basis that it would be suitable for a large garden and the important relationships are those between certain of the group's members, rather than those between members and primary claimants.

Yam gardening groups

The numerical composition of yam gardening groups in March 1964 was as follows:

No. in group	No. of groups
1	6
2	1
4	5
5	1
13	1

Gaiaren people say there was no lone gardening before white men came. The change is no doubt owing in part to the steel axe, which allows a man to deal with the bush much more easily than he could in the past, and to the abandonment of garden fencing which involved considerable labour. However, most men who garden alone receive assistance with initial clearing. The groups of 2 to 5 seem to represent traditional practice. Some Gaiaren people say there were large groups of gardeners, comparable to that with 13 members, before Europeans came, others that this is not so. In view of the evidence presented for a hamlet pattern of residence in pre-contact times it is unlikely that there would be groups of this size for everyday subsistence purposes. There is evidence, however, that large communal gardens were made to provide for feasts. It could be suggested that large group clearing of ground results from the loss of men as migrant workers. The male tasks for the women with absent husbands, instead of being left to near kin, are shared among all the men gardening at the site. However, the proportion of women without husbands present in the large group (four out of thirteen) is very close to that for the parish as a whole (eleven out of thirty-two). This makes it unlikely that men are joining this group to spread the work load, though it does in fact have this effect, and the effect is enhanced by the initial communal clearing on mission and administration work days. Gardening in large groups may even result from the institution of these work days. It is not always necessary to spend two days a week at the appointed activities and one of the tasks carried out on work days at the appropriate time of the year is the clearing of garden land. The majority of the village inhabitants work together to clear a considerable area and more than a third of them (thirteen out of thirty-two at Gaiaren in 1963) may plant gardens there.

Kin relationships between people in the gardening groups will now be examined. Tabulation is difficult because it is necessary to determine which individual in each group is to be regarded as the reference point. As there are often two or three men of equal standing in a group it would be quite arbitrary to choose one of them. Such a procedure would also imply that groups were formed round influential men who in some way attracted followers, but this does not appear to be the case. Except for class 3 gardeners the groups are basically domestic. Even if the groups were formed about leaders it might be more satisfactory to take a junior member of each group as reference point, as this would throw emphasis on the sources of land claims by the younger men. Which-ever procedure is adopted, important relationships will be obscured. Thus a woman who appears from one point of view as a classificatory son's wife, may appear from another point of view as a brother's wife. Neither procedure would show that she was a

widow which is of fundamental importance in understanding the composition of the group.

A further difficulty is that in every case where people belong to two yam gardening groups the second has a different composition from the first. Obviously those relationships that differ will have to be recorded, but should the ones that are the same be recorded again? Ideally perhaps a table should show how everyone in a group is related to everyone else, but not all the relationships are equally important. It is significant that a woman whose husband is away is gardening with her brother, but probably not significant that a distant classificatory brother of his is also gardening at the same site. In spite of these difficulties the relationships between gardeners are set out below, in Table 3. A senior male in each group has been taken as a reference point. Since members of class 1 are gardening alone, they do not appear in the table. The relationships of class 3 gardeners to the primary claimants have already been given in Table 2. Class 2 gardeners will be discussed first.

No individuals belong at once to two class 2 groups, but some have additional membership in another class.

Perhaps the most striking point shown by Tables 2 and 3 is the complete absence of any man working with his own son. This is simply because no man in Gaiaren has an adult son resident in the village.

Table 3

Relationships in Class 2 Yam Gardening Groups

<u>Relationship</u>	<u>Nu kinship term</u>	<u>No. of individuals</u>
Brother	Notna	2
Classificatory brother	Notna	6
Sister	Witna	2
Classificatory son	Ningana	5
Classificatory son's son	Alana	1
Classificatory daughter	Wembana	1
Classificatory mother	Mena	1
Sister's son's wife	?	1
Total		19

There are three pairs of brothers gardening together, one pair being disguised in the table as classificatory sons. Two of these pairs of brothers have a sister in the same group, in one case widowed and in the other case with a husband away at wage labour. The apparent tendency for classificatory brothers and classificatory fathers and sons to work together is probably

exaggerated. Since residence is almost exclusively patrilocal for males (all the resident parishioners except one were born in the parish) and about two-thirds (sixteen out of twenty-three) of the currently married male parishioners have obtained their wives outside the parish, there is a tendency for the males of the parish to be related within any one generation as classificatory brothers and between any two adjacent generations as classificatory fathers and sons. Such relationships are often distant and do not seem to be the main determinant of gardening group membership.

There are five women represented in the table, four of whom do not have a husband resident in the parish. As already noted, two of these are gardening with their brothers. A third, a widow who is represented in Table 3 as a classificatory daughter, is also gardening with her two brothers. The fourth, who comes from another parish, is gardening with the mother's brother of her deceased husband. The fifth woman is exceptional in that although her husband has a yam garden in which she works, she has a separate yam garden with another group which includes three brothers, her classificatory sons. These do the male work for her. (One of them has only a sweet potato garden at the site so that no group of three brothers has appeared in the figures.) This woman's position is atypical but not abnormal. She is the wife of Girik and is herself respected by the community.

Gaiaren men say that cross and affinal kin will garden together. Table 3 shows no cross relationships and the only affinal relationship involves the woman who is gardening with the mother's brother of her deceased husband.

The kinship relations in the group of thirteen class 3 gardeners are even more difficult to analyze. In addition to the complicating factors described for the smaller groups, the large group is not based primarily on kinship. On the other hand, it includes a pair and two triads of siblings and one of the triads has a stepfather as well. This leaves four individuals without first order kin in the group. Whether they are there as additional members of the sibling sub-groups or simply as members of the group as a whole is not easy to decide. If the former view is taken, the large group can be seen as a collection of smaller groups.

Lone yam gardeners

The men who garden alone do not do so from necessity, nor as far as could be judged for reasons of personality variation. They have gardened in groups at times in the past and those of them who have two gardens all have their second garden with a group. It is possible that some men garden alone to avoid having to help clear the land of women whose husbands are away, but no

evidence was obtained to support this suggestion. These men in any case still help with the clearing of gardens other than their own.

Two of the six men gardening alone have houses about a chain apart, fifteen minutes' walk from the village. They say this is to enable them to look after their pigs which are kept in fenced enclosures near the houses, but in fact other men have built pig enclosures close to the village and these two could probably have done likewise. It appears that the real reason they have built here is to be close to their yam gardens. All other parishioners reside in the village and are thus at some distance from the nearest yam ground. These two men are partially resuming a traditional pattern of residence but still maintain houses in the village itself.

Sweet potato gardens

Sweet potato gardens tend to occur in groups but this does not have the same significance from the point of view of labour as with yam gardens. Since there is little regrowth of bush the task of clearing is not so arduous and a man and his wife are quite capable of managing it on their own. Even where full brothers garden side by side they usually work independently.

The flexibility that was evident in yam garden tenure is even more marked in the case of sweet potato ground. A few informants stated that the land close to the village used for sweet potato cultivation was not claimed by individuals at all except for the period their gardens were actually there. Once the ground had been left vacant for two or three years anyone could make a garden on it without seeking permission. Closer enquiry did not substantiate such a view. All this ground has titular owners who should be and usually are consulted before a garden is planted. One of the chief claimants to land close to the village, now an old man, has spent his adult life in a distant village and is unlikely to return, but it is said that his permission is still sought before planting land to which he has claims. No clear report was obtained of people having asked his permission on any particular occasion, but blanket permission had been granted in the terms, 'You people who truly belong to the place use the ground'.

The kinship ties between people who make sweet potato gardens together are of the same kinds as between those who make yam gardens together and it is hardly profitable to go through the same sort of analysis again. However, the greater flexibility of tenure makes it worth while to list the basis on which gardening rights are claimed and this is done in the second part of Table 4. Gardens on sites used the previous year for yams are not included in the consideration of claims to sweet potato ground.

There is no strict distinction between those who have a distant kinship claim to a piece of ground and those who garden by virtue of having asked permission.

Table 4

Sweet Potato Gardens, March 1964*

		<u>No. of gardens</u>
No. of parishioners lacking a garden	(2)	0
No. of parishioners with one garden	23	23
No. of parishioners with two gardens	5	10
No. of parishioners with three gardens	<u>1</u>	3
Total no. of parishioners with gardens	29	
No. of non-parishioners with one garden	2	2
No. of non-parishioners with two gardens	<u>1</u>	2
Total non-parishioners with gardens	3	
Total no. of sweet potato gardeners	32	
Total no. of sweet potato gardens		40

* Absent males, and females with a husband present in the village, are ignored.

Claims to Ground Used (other than yam garden ground)

<u>Kinsman through whom claim made</u>	<u>Nu kinship term</u>	<u>No. of gardeners</u>
Father's father	Apona	2
Father	Mbetna	3
Classificatory father	Mbetna	4
Classificatory brother	Notna	4
Mother's brother	Azina	1
Husband's mother's brother	?	1
Husband's brother	?	1
No known claimants		2
Permission granted		5
Total		23

Everyone has some relationship to the primary claimants and in any case the intention to make the garden is discussed with interested parties. This, as far as could be judged without being present, is what happens when 'permission' is granted rather than permission being sought directly. Some of the claims to yam gardens could have been put in this category of 'permission granted'.

The map of the Gaiaren gardens

This sketch map is based partly on poor quality aerial photographs and partly on pacing. It had been intended to mark on the map the claimants for the whole area of parish gardening ground but as foregoing discussion shows, this would be very difficult. Few areas have a single primary claimant. Most areas have at least two or three persons with a good claim and different informants will sometimes name different persons as the main claimants. Some areas of apparently good gardening ground are not claimed by anyone. Some of these do not appear to have been cultivated for many years if at all, while with others all memory of previous cultivators has been lost. To map all the land claims in detail would have required a much longer period of field-work.

Disputes over land claims

No instance of a quarrel over land between individuals of the same parish was encountered. It was said that if such a disagreement arose it would be discussed by the disputants and others with claims to the land and if no solution were reached, by the whole parish, but it would not be taken to the administration. Failing agreement, the ground might lie idle for some time.

Disagreements between individuals of different parishes occur occasionally and one has already been described (see page 16). Another concerning ground used for coffee is described on page 56. These cases tend to become issues between the parishes as well as between the individuals concerned.

Inheritance of land claims

This topic has already been dealt with by implication when considering the origin of the claims of current users. On asking who will inherit a piece of land now being used by a group, one is told that it will be inherited by their children. The children's spouses and others who wish to garden with them will also be able to use the land if the children approve. No one can predict which children will use which piece of land. That can be decided only when the time comes to make a garden. The answers tell not who will inherit the land in the sense of actually using it, but who will inherit the rights to the land, which they may or may not choose or be in a position to exercise.

Valuable trees

The main valuable trees and other large plants (referred to for convenience as trees) are sago palm, fruit pandanus, breadfruit, betel palm, pawpaw, varieties of pitpit used for making fences, and giant bamboo. Although the last two grow rapidly, stands survive indefinitely once established.

Any man may plant trees on ground to which he has strong inherited claims or on other ground with the permission of the owners. There are hundreds of valuable trees close to the village and a scattering throughout the gardening areas, though the majority are near the main tracks. They belong permanently to the planter, not to the land owner. They are frequently planted as part of a garden. After a fallow period someone else may use the land and cultivate all round the permanent trees, but these still belong to the one who planted them.

A man may plant trees in the parish territory of a kinsman who will take responsibility for them and inform the owner when the fruit is ready for harvesting. This custom is no longer important but there are still trees which have been planted in this way and they have been inherited by the descendants of the planters.

A man or woman who moves to another parish does not forfeit rights to valuable trees. One of the men who fled Gaiaren with his father as a boy has a sago grove there which is occasionally used as a source of thatch and it is said that he still receives payment for this.

The inheritance of valuable trees is from individual to individual. The owner of the trees may nominate his heirs while he is still alive or his kin may decide the matter by discussion after his death. Inheritance is commonly in the male line but a close female kinswoman will not be passed over for a more distantly related male.

Although these trees have individual owners this is not to say that no one else may take fruit from them. A kinsman may take a bunch of betel nuts, a pawpaw or some other fruit without consulting the owner, though he is expected to tell him later.

Hunting and gathering rights

Forest land belongs to the parish as a whole and any parishioner may hunt it at will. Hunting is not important now as a source of food but sometimes the men still spend a day or part of a day in the forest with their dogs, bows and arrows and an occasional shotgun. The returns are slight, an odd wallaby, bandicoot or cuscus and on very rare occasions a cassowary or bird of paradise. In the past wild pigs were found and it is said that there are still a few but I saw no evidence for their existence. Pigeons and other birds are taken occasionally. Though the men say they hunt just for the meat, it is important to them to keep the game at a low level because none of the food gardens is fenced. This may partly explain the number of half-starved dogs in some villages.

The forest is of great importance as a source of building materials. At least three varieties of timber are used for house building alone, for the piles, floor and walls. The use of a very heavy hardwood of quite limited occurrence has recently been extended to the making of fence posts for wire fences.

In addition to the parishioners themselves the children of persons born into a parish have hunting rights in its territory. From the point of view of the individual this means that a man may hunt in the parish territory of his mother. Similar rules apply if it was the father who shifted at marriage or for some other reason. It is said that in the past any person hunting in territory without a recognized right to do so would have been killed.

Chapter 5

CATTLE

Introduction of cattle to the Wain

Mr and Mrs Bergmann settled at Boana in 1932. The first cattle were brought to the station in March 1933, in accordance with the policy of making the station as economically independent as possible. The Neuendettesauer Missionsgesellschaft brought cattle to New Guinea from Australia about the year 1900. Among the early herds was one at Malahang, the mission station near Lae, and one at the Finschhafen station. Owing largely to heavy losses from tick fever, great difficulty was experienced in establishing the herds. The arsenic spray and dip then available was dangerous to the cattle and did not effect complete eradication of the ticks. Zebu cattle were introduced to improve resistance to ticks, but as they are poor milk producers they were crossed with dairy animals. Reasonably tick resistant strains resulted and the Zebu blood was present in the herd originally established at Boana.

The first cattle here were a cow from the Finschhafen station, a bull from the Malahang station and a cow from a native owner near Sattelberg. Other cattle obtained before the war were one each from native owners at Sattelberg and Hube, one each from the mission stations at Malahang and Finschhafen, and three heifers and a bull from Australia. The latter were dairy animals intended to improve milk production and did much better at Boana at an elevation of about 3,000 feet than they had at the other mission stations nearer sea level. The Boana herd flourished and one bull sired 17 calves, of which 14 were heifers.

In 1938 the first cattle passed into native hands when the mission workers (teachers and pastors) were presented collectively with a bull, a cow and a heifer. The handing over of cattle to natives was contrary to mission policy as when it was done elsewhere the cattle had gone wild. At Boana the cattle had always been kept tame by constant handling. At first there were no fences and the cattle roamed free during the day but were tied up at night.

The two herds were kept separately but both in the Boana area. The mission animals remained under the close eye of Mr Bergmann,

but one of the herdsmen he trained was responsible for the mission workers' herd.

By the time the war commenced there were about 25 cattle in the mission herd and the workers' cow had produced a calf. During the war all but two of the mission cattle were killed and eaten, some by the Japanese and others by the allies. The workers' herd was about an hour's walk away from the station and was not discovered by the Japanese. The allies (said to be Australian) saw it and told the Wain people present to drive it up. They refused on the ground that the mission workers who owned them had been returned to Finschhafen. After considerable argument the herd was left unmolested.

Owing to the absence of the herdsmen the cattle went wild during the war. After the Bergmanns returned in January 1947 all the bulls and about half the cows were killed but it proved possible to tame about five of the cows which were used for breeding. The meat of the slaughtered animals was sold and the proceeds went to the mission workers. Two mission cows survived and one of these was kept. The two herds were now run together near the station, to facilitate tick control. A bull and two cows from Australia were added to the mission herd in 1947 and after that no further outside purchases were made by the mission on its own account.

It was decided that the mission workers' herd should be disbanded by sale to private native owners and this was done in late 1947. Of the cattle sold only one went to a Wain man (Singin). The mission bought two, two went to a Nabak man and one to Bosavepe, a mission pastor from Finschhafen. The price paid for these cattle was about \$20 each and the money was distributed among the mission workers who got about \$4 each. It is not clear why the workers' herd was disbanded, but it appears that collective ownership was regarded as unsuitable in this instance. This is readily understood, since the mission workers do not form a corporate body set apart from the rest of the community.

The Wain now began to show keen interest in acquiring more cattle for themselves. In 1952 the mission arranged for a number of heifers to be imported from Australia. Eight were allotted to Boana and four cattle from the Malahang station were added to these. Owing to the cost of transport the price of the imported heifers worked out at \$140 each. This was averaged out with the cost of the four from Malahang and the animals sold to the people at \$100 a head. Of the twelve, Singin bought two, the tultul of Dzenzain (a Wain village) one, and a local Wain mission elder, Butume, had a share in one. The remainder went to non-Wain buyers. The pastor from Finschhafen who acquired one of the cattle from the first distribution got one, a Nabak teacher shared in the one

Butume acquired, a Nabak pastor and an Erap pastor each bought one, some Nabak men bought one collectively as did some Erap men, the original herdsman (a Nabak man) bought one, and one died. Although the cattle arrived at Malahang in 1952, this distribution was not made until 1954, partly owing to the fact that the Bergmanns had been away on furlough. The above account comes from Mr Bergmann who said that he may have forgotten one or two of the purchasers.

These examples convey some idea of how cattle were distributed and no further distributions will be recorded in detail. Accounts from the point of view of those receiving the cattle will be given later. The price of \$100 which the buyers were willing to pay reflects their anxiety to acquire cattle. The cases recorded above are atypical in that most of the buyers were thought to have bought for themselves as individuals but in fact some of them may have been representing small groups of persons of whom the nominal buyer was the largest contributor, the organizer, or a spokesman. The only cases it was feasible to check were those involving Wain buyers. The one bought by the Dzenzain tultul was paid for by a group of Dzenzain villagers and is their common property. Singin bought in association with his sons and other kin. The ownership of the beast bought by Butume and the Nabak pastor was in fact spread among more than two people. In all these cases then, the ownership was spread but it should not therefore be assumed that the same is true of the other purchases. There is no doubt that some of the later purchases were made by individuals.

In 1954 Mr Bergmann heard of a subsidy scheme whereby anyone who would take 20 or more cattle imported from Australia could acquire them for about \$60 as opposed to about \$140 if privately imported. He wrote to the District Commissioner asking that the Wain-Erap-Nabak be included in this scheme, but the response was at first discouraging. The scheme had been intended for Europeans and it was said that natives would allow the cattle to go wild. Mr Bergmann invited inspection of the cattle already possessed by the Wain. A patrol officer, a veterinary officer and an officer of the D.A.S.F. were sent up in turn and all reported that the cattle were well kept, very tame, and in no danger of going wild. It was finally agreed that the Wain-Erap-Nabak people be included in the scheme provided the mission acted as agent, since no individual purchasers wanted the minimum order of 20 cattle. As a result 38 heifers arrived from Australia by air in 1956 and were taken in the first instance by the mission at \$60 each. Two beasts were lost at some stage, perhaps on the overland journey from Lae to the Wain. The rest were divided into two herds of 18, one being kept at Boana and the other at the village of Gain (now shifted and called Tumum). By the time the

cattle arrived Singin was already holding about \$6,000 in cash contributed by groups and individuals who wished to acquire cattle.¹ This was more than enough to buy the entire herd. The mission sold these cattle to the native buyers at \$70 each, the extra \$10 being to cover the two losses and other expenses. Although all were sold immediately they were kept at first in the two herds and collected by their owners only as fences were built to enclose them.

From this time on the D.A.S.F. took an active interest in the cattle venture and over the next few years made further good quality animals available at low prices. The people have also bought a number of cattle on their own initiative from European and native owners and from the Malahang mission. Exchanges have been arranged among themselves and with the mission, either to save long journeys of cattle between owners, or to exchange an edible animal for one with reproductive capacity.

It has been the policy of the Bergmanns to give increasing control of all affairs to the local people. In pursuance of this policy the mission herd of 21 cattle was sold to the people in April 1963 for \$1,308. The money was being paid from the profits of the Boana Trade Store, and though payments were not complete in June 1964 Mr Bergmann was confident that they soon would be. This herd now belongs to all the people of the Wain-Erap-Nabak region collectively. Before this sale there were already 10 cattle at Boana which were common property. Although it is probable that some of these were purchased with Trade Store money, some may have been gifts to the community by individual or collective owners of cattle. These cattle are now tended by herdsmen paid from the Boana Trade Store profits.

There are scattered about throughout the Wain, and possibly also the Erap and the Nabak, other cattle which are the property of the community as a whole and it is intended that these should be brought together and sold and the money put into the Trade Store account.

It must be remembered that although cattle were placed in the hands of mission workers in 1938, it was not until 1954 that any significant number of cattle came to be owned by ordinary villagers, and not till after 1956 that more than a very few were collected by their owners from Boana and Gain.

1

This gave rise to some anxiety among various officials and led to the setting up at Boana of an agency of the Commonwealth Bank of Australia.

Wain cattle numbers

The figures in Table 5 are mainly from patrol reports which do not usually say whether they are referring to all cattle or only to those owned by the Wain themselves or again whether they include cattle owned by the Wain but kept at Boana. In view of the 1963 figure of 90 and the 1964 field-work figure of 231 it seems probable that only the cattle in the villages were counted. The figures, except for 1959, are for the Wain area alone. The 1959 figure includes the Erap and the Nabak as well.

Table 5

Wain Cattle Numbers and Ownership

<u>Source of information</u>	<u>Date</u>	<u>No. of cattle</u>
D.A.S.F. patrol report	1956	14
D.N.A. patrol report	1959	129*
D.A.S.F. patrol report	1960	53
D.A.S.F. patrol report	1963	90
Field work	1964	231
<u>Breakdown of 1964 figures</u>	<u>No. kept at</u>	<u>No.</u>
<u>Ownership</u>		
Wambangen parish (under Singin)	14)	
Wambangen parish (under Bolong)	)	
Communal	7)	Wambangen 29
Bandong parish)	4)	
Sikeren parish)	4)	
Wambangen parish (under Waum)	23)	
Communal	31)	Boana 54
Karau parish	8	Karau 8
Gaiaren parish	6)	
Monakaset parish	3)	Gaiaren 9
Bawan parish)		
Gereman parish)	6)	
Gewak parish	5)	
Misok parish	2)	Gereman 20
Orin parish	5)	
Tambweng parish	2)	
Gowombot parish	12)	
Gazegan parish	5)	
Kawaren parish	5)	Gowombot 30
Sakaren (Nabak) parish	2)	
Communal	6)	

* Native owned, including Erap-Nabak cattle.

Table 5 (continued)

<u>Ownership</u>	<u>No. kept at</u>	<u>No.</u>
Sokam parish	10 Sokam	10
Kwepmunon parish	12)	
Wambangen parish	5) Kwepmunon	18
Wasin parish	1)	
Dzenzain parish	? 10 Dzenzain	10
Tumum parish	)	
Kasin parish	) Tumum	? 29
Tiferan parish	)	
Badibo parish	)	
Gufin parish	)	
Pupuf parish	) Gufin-Pupuf	14
Total		231
Total less communal herd at Boana		200

The field-work figures were recorded mainly in March 1964. They were obtained by questioning the cattle owners or herdsman, not by counting, and in some cases the information is second hand. Where particular doubt is entertained as to accuracy this has been indicated by a question mark. Information about some of the villages not included in the list is of questionable reliability but they are all, except one, said not to have cattle. Mr Bergmann estimated the total Wain-Erap-Nabak cattle population as about 400 in 1964.

History of cattle at Gaiaren

There were 9 cattle at Gaiaren in February 1964. Three belonged to Girik, the chief businessman of the parish, three to a group of parishioners including Girik, and three to Monakaset, a neighbouring parish which does not yet have its own cattle paddock. None of the cattle arrived at Gaiaren until 1960.

Girik says that in 1954 he and two Wambangen men bought a cow. One of these men was a classificatory son of Girik, descended from a Gaiaren man who ran away to Wambangen. Girik claims to have put \$50 towards a probable total price of \$100.

The first calf born by this cow was a bull which was castrated and later sold for meat at a big mission gathering at Boana. Girik thinks it brought \$70. He has not received any of this money but imagines it to be held by his classificatory son and thinks he could make use of it if he wished to buy anything from Boana. The second calf was also a bull, and when grown was exchanged by the Malahang mission for a heifer calf which came to Girik. The third

calf was a heifer and was kept at Boana. The fourth calf, a bull, was brought to Girik as a calf and castrated. When full grown it was sold to a Nabak village (Baindoang) for a feast held to celebrate the opening of a church. The price was said to have been \$140, which is improbably high, but no evidence was obtained in confirmation or denial of this figure. The sale was not made to or through kin but 'just for money'. Girik does not know whether the original cow had further calves. There is no agreement as to whether he will receive additional animals from his classificatory son but he thinks this is possible. Up to mid-1964, then, in return for his original investment of \$50, Girik had received one heifer and one bull calf.

The heifer calf he received had a bull calf about 1961. It was sent to the Erap where one of Girik's classificatory sons was employed at an airstrip. There was no charge but it is expected that a bull calf will eventually be returned to replace it. The second calf of this cow died. The third, a bull, was born in 1963 and castrated. It is expected that it will eventually be sold for meat. In 1963 Girik bought a bull calf from the mission at Boana for \$30.

In June 1964, then, Girik's bovine assets stood at one middle-aged cow, one yearling steer, one young bull, a bull calf in expectation, a cash profit from the sale of meat and his share in the collectively owned animals, now to be considered.

In 1956 a number of Gaiaren individuals raised \$70 to buy a heifer imported under the subsidy scheme. The first and third calves born to this cow died. The cow became sick and was killed, the meat being sold to the people of Gaiaren and surrounding villages for a total of \$50. The second calf, a castrated male, was exchanged at the Boana mission for a cow, and an additional \$20 from the sale of the meat paid for a bull calf that came with the new cow. This cow had a female calf in 1963. In sum the collectively owned cattle in June 1964 numbered a cow, a heifer calf and a steer about three years old.

The cattle owned by the neighbouring parish of Monakaset which run with the Gaiaren cattle comprise a cow bought for \$70 in 1959 and its two castrated male calves.

The building up of the Gaiaren cattle herd is typical of the process in other parishes, though in some cases the transactions were more complex.

Cattle purchasing finance

Money for buying cattle comes from many sources, important among which are wage labour, the sale of garden produce and, since about 1958, the sale of coffee. Wain incomes are dealt with in

research being conducted by Mr W. Straatmans. The chief concern here is the manner in which contributions to the purchase of collectively owned cattle were recorded.

Enquiries as to the detail of contributions were almost invariably met by the statement that this could not be quoted off-hand but it was written in a book. When a tour of the Wain was made, most of these books were in the keeping of somebody not available at the time, and one or two were lost. In those books seen the figures were not easy to follow. The Gaiaren cattle books are kept by Girik, but he cannot read and the records are made and interpreted by his younger brother. Some of the records were made by two other men neither of whom is now resident in the village. While the records of both these men present difficulties in interpretation, those of one of them are no longer intelligible. Parts of the record appear to be repeated up to three times and there is considerable discrepancy between the accounts both as to the identity of the contributors and the amounts contributed. Along with cattle purchases are recorded contributions to expenses connected with the keeping of the cattle, sales of coffee and other produce, goods bought for the village trade store and money collected and deposited in Girik's care before the Commonwealth Bank opened an agency at Boana. In some cases it is no longer possible to decide which of these things the lists of contributors and amounts are concerned with. The books contain errors in addition and the crossings out or lack of them that accompany further deposits and withdrawals sometimes leave the final figure in doubt. When entries are repeated, the dates given are varied and it is often problematic whether they are the dates when contributions were made, transactions were carried out, or the original or a re-recording made of the contributions and transactions. Persons still present in the village who made contributions at the time the first cow was bought can remember what they gave and thus form a check on the books, but some of the money came from deposits already held by Girik and the exact amounts and origins of these seem to be forgotten. If enquiries of individuals as to the amounts they contributed to the buying of cattle had been followed out as carefully as would have been desirable, some of the apparent confusion may have disappeared. However, some would remain and the confusion will no doubt increase as time passes and memories become less clear.

Contributions of a few shillings were recorded at Gaiaren, but in some villages small contributions were not recorded and contributions by members of the same family were not recorded separately. An example of the confusion in another village is where figures of £700 (\$1,400), £500 (\$1,000) and the like were recorded when the amounts involved were obviously

far smaller than this. The figures probably represent shillings rather than pounds but nobody questioned was certain of this.

Persons belonging to different parishes who put money together to buy cattle were related in every case examined. With one exception it was individuals of different parishes who co-operated, not parishes as such.

In parishes which contained persons with two or three main origins, a number of people with a common origin sometimes banded together and raised money to buy cattle, but even then there was usually one man in the parish who took the leading part in purchase and husbandry of all the animals. The only contrary instance concerned Wambangen parish where three groups of people bought independently. While all acknowledge Singin as the most influential man in the parish, each group had a prominent man of its own. Two groups had their cattle in one part of the parish territory under the general aegis of Singin. The third had its cattle in another place under the direction of their own most influential member.

Within Gaiaren parish, the only one where the relations between purchasers were known in any detail, no connection was perceived between fund raising and kinship. It was said that individuals contributed according to their funds and inclinations. The somewhat blurred division between the Gaiaren parishioners with Gaiaren origins and those with Wamun origins does not seem to have been significant.

In as far as women contributed it was in amounts measurable in cents rather than dollars.

Pasture land

The pattern of rights to land used for pasturing cattle is the same as that for other parish land, described in the section on the tenure of garden land. In 1964 the 19.5 acres of land used for the cattle at Gaiaren had been removed from the subsistence cycle for only about four years. Previously it had been used mainly for growing sweet potatoes. There are still a few fruit pandanus palms, betel palms and other valuable trees scattered over it and the rights of the persons who own these are unaffected.

A number of individuals have claims to different parts of the cattle ground but two men are the chief primary claimants to most of it. The boundary between the territories of the old parishes of Gaiaren and Wamun runs through the area and the present tultul of Gaiaren, whose mother came from Wamun, has claims to the Wamun part of the land. These claims are shared with a number of other people. Rights to the old Gaiaren section of the land are held by the luluai of Wambangen who as a child ran away from Gaiaren