

Observations on Land Tenure in Tarawa Gilbert Islands

R. G. CROCOMBE

*The Australian National University, New Guinea
Research Unit, Port Moresby*

The government of the Gilbert Islands has probably achieved more in the field of land tenure than any other government in the Pacific with the possible exception of the Kingdom of Tonga. Although circumstances differ greatly between territories, there are a number of points of principle on which the Gilbertese experience is of considerable comparative interest.

I spent two weeks on Tarawa in July 1965 looking at very limited and specific aspects of the tenure system. In view of the fact that Mr Twomey's report¹ provided information derived from an analysis of land registers and included parcel sizes, distance from owner's village, etc., I concentrated on the Lands Court, and on utilization in relation to ownership of land.

The Land Court

Analysis of Land Court records for Tarawa atoll for the five years 1960-4 inclusive showed that the court sat on an average of 18 days per year and an average of 9 members attended each sitting (out of a total ranging between 20 and 22). An average of 71 cases was dealt with per year (including 8 boundary cases) i.e. just on 4 cases per sitting day. As much of the court's work is merely ratification, this is not unduly high in a population of 7,000 owning 3,251 land parcels.

There has been a decline in the number of land cases each year. In 1958 there were 511 cases (including 10 boundary cases) and in 1959 only 173 (including 6 boundary cases). The scribe states that the reason for the large number of cases at that time was that when the Lands Commission recorded original title to the lands, the names of deceased persons were frequently included because their children had not yet been allocated the estate, but in 1958-9 an effort was made to transfer title to such land to the heirs. As noted above the average dropped to 71 cases per year during 1960-64 inclusive, and during 1963-4 averaged only 52 cases per year. This suggests, as does the nature of the cases, that the system is operating more efficiently and that the public is becoming more familiar with the principles adopted by the court. The average number of sitting days declined from 21 in 1960 to 15 in 1964.

As the only monetary compensation to members of the court is the six-

¹ Twomey, J. B. "Report of the 'Pilot Survey' carried out at Tarawa-Gilbert and Ellice Islands Colony." 1963. See elsewhere in this issue.

monthly distribution of court fees, the decline in cases has resulted in a decline in pay for court members. The total fees to be divided among all court members averaged only £ 14.8.9 per year during 1960-64 giving each member an average annual income of only £ 1.12.0 from this source or about 1/9d per sitting day. Members are paid only for sessions they attend, and the decline in income has been paralleled by a decline in attendance. During 1960-2 an average of 10.5 members attended court, whereas during 1964 it was only 6.6 and for the first seven months of 1965 only 6.1. Every Lands Court has a statutory minimum number of members who must be in attendance before it can legally function. The quorum for Tarawa is 11, but in fact the court has operated below a quorum almost invariably during the 5 years under review. Court members from South Tarawa seldom attend owing to the distance (members must provide their own canoe transport) and the limited compensation. Some are said to be too old to travel and the attendance register shows that several members never attend a single sitting in a year.

It may be worth considering the possibility of having court members appointed for a shorter, fixed period of perhaps three years, and of requiring that a member be automatically retired if he does not attend three meetings in succession or is absent for more than half the meetings in any year. Now that the bulk work on title determination is complete and the courts have settled to a routine, it may be appropriate to reduce the number of court sittings to six or even three per year, and a strong case can be made for increasing court fees by up to 50 per cent, in view of comparative earnings from other sources on Tarawa.

An analysis of 100 sample cases (being the first 25 cases each year 1962-5 inclusive) showed that they comprised:

| | |
|--|------------------------------------|
| Inheritance of deceased estates | 29 (of which 16 were disputed) |
| Transfers between living persons ("gifts") | 10 (" " 2 " ") |
| Wills (by persons migrating to Solomon Islands) | 2 (" " 0 " ") |
| Leases (to govt. and co-op. except 2 between islanders for trade stores) | 9 (" " 1 " ") |
| Adoptions (not necessarily involving land) | 9 (" " 1 " ") |
| Illegitimate children (not necessarily involving land) | 4 (" " 1 " ") |
| Partition of land | 2 (" " 0 " ") |
| Exchange of land | 3 (" " 1 " ") |
| Appointment of caretaker for land | 1 (" " 1 " ") |
| Case withdrawn | 2 |
| Property other than land | 9 (of which 5 were disputed rents) |
| Occupation of house (between parent and child) | 4 (of which 3 were disputed) |
| Daughter demanding land from father | 1 (of which 1 were disputed) |
| Father wanting to withdraw former gift | 1 (" " 1 " ") |
| Permissive occupation | 1 (" " 1 " ") |
| Boundary disputes | 6 (" " 6 " ") |
| Title disputes (mostly <i>babai</i> pits) | 7 (" " 7 " ") |
| | <hr/> |
| | 100 (" " 47 " ") |

Very few of the 100 cases are readily avoidable as most are routine matters.

The 6 boundary cases (which represent about 4 cases per year) would probably have been avoided if all boundaries on the island had been surveyed, but 4 court cases a year would not of itself justify the cost of a full island survey. The 7 title disputes, most of which relate to old *babai* pits which were not recorded by the original Lands Commission, are of a kind which will not doubt diminish as the recorded titles become accepted as indefeasible.

The majority of land disputes (apart from those relating to boundaries and titles discussed above) concern the allocation of deceased estates. Wills would help but it is said that most Gilbertese people have an aversion to making wills, and in fact there are only 12 wills deposited with the Lands Court for the whole of Tarawa (with a population of over 7,000). Even when wills have been prepared they are sometimes disputed. It might be assumed that litigation would be reduced if principles of inheritance were more clearly specified but the relevant section of the Lands Code (sec. 11) is already so detailed that it must be difficult to administer. Further specification is unlikely to solve the problem. In a land-hungry subsistence economy with no land market and a minimum area below which land must not be partitioned, the competition for deceased estates is unlikely to diminish. Fortunately the cost of resolving these disputes in the court is very low indeed.

According to figures provided by the scribe there was an average of 28 deaths per year on Tarawa during the 5 years 1960-64. Most but not all of these would be landowners. The 29 deceased estates in the above sample represents about 21 per year, so it seems that inheritance claims are being brought to the court and not, as in some developing countries, being kept away from the courts.

Appeals

Appeals are much more expensive than original hearings and appeals are lodged against nearly 30 per cent of all disputed cases (45 appeals and 318 cases on Tarawa during the five years 1960-64 but as shown on page 5 only 47 per cent of cases involve dispute). The average of 9 appeals per year on Tarawa consumes an average of $3\frac{1}{2}$ sitting days or just under 3 cases per sitting day. This costs the colony government about £ 35 (at £ 10 per sitting day) in addition to what it costs the local government.

The 45 appeals heard on Tarawa during the past 5 years comprised:

| | | |
|---|----------|----------|
| Inheritance | 24 cases | |
| Boundary disputes | 13 " | |
| Property other than land | 2 " | |
| Withdrawn, failed to appear, or lodged too late | 6 " | Total 45 |

The boundary appeals (averaging $2\frac{1}{2}$ per year) would presumably be avoided if the island were surveyed. The inheritance appeals comprised:

| | |
|--|---------|
| Services rendered (usually caring for aged) vs. kin ties | 4 cases |
| Kin who got no share from an estate claiming a share | 5 " |
| Kin who got a share claiming larger share | 7 " |
| Lands of a permanent absentee | 1 " |
| Adopted vs. born issue | 4 " |
| Legitimate vs. illegitimate issue | 1 " |

Insufficient information to classify 2 cases Total 24

Under the existing Land Code, and with existing social and economic conditions, few of the disputes over inheritance could be readily avoided. What could be reduced is the proportion which are appealed against, which is much higher than expected. It would be useful to know the reasons why so many appeals are lodged-whether it reflects a lack of confidence in the court, whether maintenance of self-esteem forces people to push their case to the limit irrespective of its merits, or whether pressures can be exerted to have decisions modified on appeal.

In most appeals relating to inheritance, the Lands Court decision is modified or reversed. In boundary cases the Lands Court decision is usually upheld. The breakdown of the 45 appeals heard during the 5 years 1960-64 is as follows:

| | Court Decision Confirmed | Appellant upheld | Compromise | Adjourned or can't trace | Total |
|--|--------------------------------|---------------------|------------|--------------------------------|-------|
| Inheritance | 8 | 5 | 11 | | 24 |
| Boundary Disputes | 8 | | 2 | 3 | 13 |
| Property other than land | 1 | | 1 | | 2 |
| Withdrawn, failed to appear, or lodged too late | 6 | | | | 6 |
| Total | 23 | 5 | 14 | 3 | 45 |

It is a disturbing fact that 66 2/3 per cent of appeals in inheritance cases lead to some advantage for the appellant (usually a compromise under which he gets more than the Lands Court gave him, but less than he appealed for). This must encourage litigation instead of encouraging their acceptance of court decisions.

The Distribution of Land Rights

During the four brief days at Abaokoro local government centre I undertook a small survey of Tabonibara and Marenanuka villages to determine the distribution of land rights and the extent to which land use correlated with land ownership². One of the many short-comings in so brief a study is that it was impossible to determine the areas involved. The following discussion refers exclusively to the number of parcels as no comparison of size was possible.

The people of Tabonibara and Marenanuka have rights (of either a proprietary, potential proprietary or usehold kind) in 214 parcels of land on Tarawa, an average of nearly 10 parcels per household (there is a total of 22 households in the two villages).³ These rights may be analysed as follows:

| | |
|---------------------------------------|----|
| Husband is sole owner | 5 |
| Wife is sole owner | 32 |
| Daughter by former wife is sole owner | 1 |

² Messrs. Nataua Taniera of District Office and Ikaati Tekai of Tarawa Local Government kindly assisted with this survey.

³ This average of nearly ten parcels per household is close to the average for the Colony as a whole (i.e. roughly 9,000 households of 5 persons each and about 92,000 parcels of Land).

| | |
|--|-----|
| Total in sole ownership | 38 |
| Husband is joint owner | 13 |
| Wife is joint owner | 19 |
| Total in joint ownership | 32 |
| Total in which proprietary rights are held | 70 |
| Husband is potential owner (i.e. now owned by one of his parents) | 48 |
| Wife is a potential owner | 11 |
| <i>Total in which proprietary rights may be acquired by inheritance (but not necessarily so)</i> | 59 |
| 'Caretaker' or other permissive customary usehold rights | 75 |
| Registered usehold rights to <i>babai</i> pits on land owned by others | 10 |
| <i>Total use rights</i> | 85 |
| <i>Grand Total</i> | 214 |

It will be noted that of the 214 lands associated with all the households in the two villages, only 38 (18 per cent) are held in sole ownership. A further 32 (15 per cent) are held in joint ownership and 59 (28 per cent) are held solely or jointly by a living parent not resident in the household. "Caretaking" (i.e. permissive occupancy of one kind or another) accounts for the remaining 40 per cent.

Of the 129 parcels in which sole, joint or potential ownership rights are held, the rights are held by husbands in 66 cases, wives in 62 and a daughter in 1 case. Wives are legal owners in nearly three times as many instances as husbands, but husbands are potential owners in more than four times as many instances as wives. This fact did not come to my notice until I analysed the data after leaving the Gilberts, and I am at a loss to explain it. The differences appear too large to be fortuitous. It may be that immigrant males were more common than immigrant females in the past generation (7 household heads in the sample were from outer islands against 5 wives of household heads but the proportion was probably higher in the previous generation) and that today males are acquiring a larger share of the inheritance than females.

I had expected that persons with extensive land-holdings would be marrying other persons with extensive land-holdings, but this was not so. Very frequently persons with little or no land on Tarawa were marrying persons with extensive land rights. Marriage would thus appear to be operating to distribute land. This is highly desirable, but it is more usual in areas of the Pacific with which I am more familiar for persons with extensive property to marry one another. I do not understand what social forces on Tarawa lead in the opposite direction.

The Use of Land

There is no close correlation between ownership and use. In 19 of the 22 households one or more persons claimed actual or potential proprietary rights to varying numbers of parcels of land in islands other than Tarawa. They do not use these lands. Whether they could exercise rights to them if they returned to those islands is another question, depending on frequency of contact, fulfillment of obligations during absence, and pressure from other claimants.

Of the 129 parcels of land on Tarawa in which sole, joint or potential rights

were held within the household, 48 (37 per cent) are not used at all by the household holding the rights. They are used by lessees (government, cooperative societies or traders), other right-holding kin, or 'caretakers'. A further 32 are used partly by the household claiming the rights, but jointly used at the same time by other households in these or other villages. Only the last 49 (38 per cent) are used solely by a household which holds rights to them, but in many cases the proprietary rights are shared with other households even though use is not.

Even of the 19 parcels which are owned solely, 12 are used in full or in part by households other than that in which the owner resides.

With the exception of the teacher at the Catholic school, every household subsists by the exercise of land rights held by one or both spouses. The most common pattern is for the household to use land provided by only one spouse (including land held by the spouse in a 'caretaker' capacity from other people). In only 8 households out of 22 were lands of both spouses used and even then one usually provided the bulk of them. In 8 cases all lands used were provided by the husband and in 5 cases all by the wife.

'Caretaking' (permissive occupancy without legal title) was almost universal. The 22 households were 'caretaking' on 75 parcels of land, not including 10 *babai* pits which were registered but on the land of others. All but 2 of the 22 households were 'caretaking' on one or more parcels of land. At the same time all but 6 of the 22 households held sole, joint or potential rights to 33 lands on which other persons (*not* including others with rights on the lands) were 'caretaking.' In addition almost every household shared some lands with other right-holders outside the household.

Unlike marriage, 'caretaking' is not usually an equalising mechanism. I had assumed that those with little land would 'caretake' for those with a surplus, but in the majority of cases this was not so. The 6 households which 'own' (i.e. various members have sole, joint or potential rights to) 9 or more parcels of land, 'caretake' on 27 additional parcels (an average of $4\frac{1}{2}$ per household). The 7 households with 'own' 5 to 8 parcels, caretake on 24 lands (an average of $3\frac{1}{2}$ per household) and the 8 households which 'own' 4 or less parcels caretake on 33 (an average of 4 per household). There was, however, very marked individual variation. Although no areas were measured, at least some of those who did a lot of 'caretaking' already owned relatively large areas and at least some who did little 'caretaking' had only small areas of their own. Two householders who 'caretake' on a number of different holdings farm them very efficiently and claim that it is because they keep the groves productive and pay taxes regularly that they are so often entrusted with this responsibility. Some other villagers, however, suggested that it was partly because these people could and did provide lavish hospitality for the landowners when they paid visits.

There was insufficient time to correlate land use and caretaking with distance from the rightholder's village, or to make detailed study of the factors involved in the selection of caretakers. Although many are distant kin, some are not, and even where they are kin the principles determining which of the many possible kin are chosen to 'caretake' were not elicited. Caretaking was most common on coconut lands and 15 households were caretaking on 54 coconut

lands. There were also 15 households (not all the same as those caretaking on coconut lands) caretaking on 30 *babai* pits (some but not all of which were within the coconut lands mentioned above). In addition, 10 households had registered *babai* pits on the lands of others. 14 of the 22 households were resident on lands to which they had no actual or potential rights of ownership.

A case could be made either to praise 'caretaking' or to condemn it. It does get the land distributed and probably results in more effective utilization than would be achieved without it. On the other hand there is no security of tenure. What is most significant, however, is that its very existence suggests that the legal system is insufficiently flexible to cater for the extent and number of adjustments in land use which in fact occur. The 'caretaker' system, with all its drawbacks, provides this flexibility. 'Caretaking' can only be done away with if a more effective substitute can be provided.

Possible Approaches to the Resolution of Tenure Problems

Tenure reforms can only be justified if the expected economic and social benefits to be derived from them exceed the economic and social costs of executing them. These are very difficult costs to measure, but some assessment is possible. The factors which result in the full potential output from Gilbertese lands not being achieved include failure to replant old palms, inefficient husbandry, irregular harvesting, damage by rats and theft of nuts. The extent to which fragmentation of holdings, boundary disputes, 'caretaking' and multiple title also reduce output is difficult to determine.

Despite these drawbacks, the present copra production of about 200 pounds per acre per year from village copra is far above the average for atolls in the Pacific. This is the more marked because the Gilbert people must draw almost all their subsistence from the same land at the same time.

Survey: The Gilbert Islands and other atolls strike me as one of the exceptional instances of individually-held agricultural land in the world wherein a full cadastral survey may not be merited. Cadastration would probably reduce social problems (in this case boundary disputes) a little, but it is unlikely that it would affect productivity at all significantly. Boundary disputes are not a major problem on Tarawa (see page 29) and unless they are a more serious problem elsewhere, the cost of a complete survey of all holdings in the group (perhaps in the region of £75,000?) may not be justified.

The reasons advanced for questioning (but not necessarily opposing) fullscale survey in this instance are:

(a) The units are so small. The average land parcel in the Gilbert Islands is under one acre and the cost of surveying such small units would be extremely high. It would be surprising if total cost did not exceed £1 per plot which is extremely high in a society where per capita cash income from land does not exceed £5 per year.

(b) The land is not of high productive quality, nor intensively cultivated.

(c) Each islet is so small that the high water mark provides a ready-made outer boundary and internal boundaries are relatively short and, because of high population density, relatively well known.

If, however, survey is to be associated with consolidation and reshaping of holdings so that fragmented and elongated parcels are done away with (as the Twomey report recommends) then survey may well be merited. We return to this question at the end of this paper.

Land registration: The process of land registration in the Gilbert Islands appears to me to have been a classic of efficiency at low cost which could well be studied by other countries which are now considering lands registration. The land registers at the Tarawa Local Government centre at Abaokoro appeared to be well maintained, but as there are no copies and as they are kept in a small thatched hut, they are vulnerable to fire and water damage as well as to forgery and fraud. Transcribing copies by hand would be too costly and too subject to error, but modern photographic copying processes may be worth consideration. If this were done one copy could be placed in a central register for the colony as a whole, and the other issued to the landowner (or senior landowner in the case of joint ownership). Experience elsewhere in the Pacific suggests that landowners value such title documents very highly, care for them meticulously, and are quite prepared to pay for them.

Transfer of land rights: If the situation in Tabonibara and Marenanuka is at all indicative of the situation in the Gilbert Islands as a whole, it can be safely said that the land registration programme did not achieve the goal of individual ownership and use of land. Almost every household uses the land of others and at the same time some of its lands are used by others. It is widely assumed that sole ownership is the most desirable and 'caretaking' the least desirable, presumably because productivity is thought to decline progressively with each of the systems other than sole ownership. Unfortunately it was not possible for me in so short a time to test this assumption by measuring output per acre between lands which are held solely, jointly, potentially or by 'caretaking'. If measurement showed that productivity did decline in the way many postulate, facilities would need to be provided to convert other forms of right-holding to sole ownership wherever practicable. I am not aware of the political or administrative feasibility of insisting that only sole title will be granted in future cases of inheritance, but it may be worth considering.

One of the most important reasons people do not have their own land at present is because transfer of land rights is seldom made except at death. Thus most people do not acquire any legal title to land until their parents die, i.e. until the recipients are approaching middle age and have passed their most productive years. Until the death, and frequently for many months thereafter, there is no agreement as to who will succeed to rights in what land. In so far as the allocation is determined by the verbal will of the deceased this gives protection to the aged, but in so far as the uncertainty inhibits replanting and husbandry by the younger generation, it must reflect on output. It may be worth investigating the feasibility of providing legislation to permit a young man at marriage or at age 20 to claim a share of his parents' estates, but leaving the parents the right to retain at least one land each (or not less than one quarter of their total holdings) for their own use.

One statutory limitation that does merit investigation would be one restricting inheritance by absentees. I would recommend that a Land Court be not allowed

to grant to more than one piece of land to any person who has resided on the island concerned for less than one whole year in the last five years. The one piece would provide sufficient for retirement for those who have spent their working lives away but intend to retire on their islands of origin.

'Caretaking' would no doubt be reduced if other forms of land transfer were more readily available or more frequently used. It is understood, for example, that even though gift of land is permitted in the legislation, the Tarawa Lands Court will not usually allow it unless it is to a close relative.

Several forms of transfer may be considered. Outright sale would have advantages if it were strictly limited some in such way that a person could not buy lands on any island other than the one on which he was normally resident nor if he and his wife and unmarried children were already the registered owners of more than 5 acres. A strict limitation of this kind would facilitate redistribution of small lots without the drawbacks of unlimited sale which lead to excessive aggregation and exploitation.⁴ Sales of this kind should *not* be subject to Land Court approval, as most courts are composed of old men who would not grant such approval.

Leasing between villagers has relatively little to commend it in this situation. It would make tenure a little more secure, but for that very reason I doubt that many landowners would be prepared to grant a formal lease to another Gilbertese. There are already adequate provisions for leasing, but I did not find a single example of a Gilbertese leasing farming land to another Gilbertese (and only a few instances of leasing for shop-sites and other commercial purposes). The introduction of rightholders who serve no additional productive function that would not be served without them is to be avoided. Except where landlords provide capital or technical or managerial skills which are not otherwise available to the farmer they constitute a class which receives part of the proceeds without contributing to the productive process. If they can do without the land, they should be given every encouragement and facility to sell it outright to someone who will farm it himself.⁵ Moreover, leases are costly to administer, and in the Cook Islands, New Zealand Maori areas and in American Indian reserves, the cost to governments of administering leases is in many cases greater than the amount paid in rental.

One technique for forcing people who do not use land to make it available to others in the Gilbert Islands is the 'Neglected Lands Ordinance 1959'. This important piece of legislation may be of interest to a number of other Pacific territories. Although the ordinance has not been implemented a great deal, the occasions on which it has been worthwhile and its value was demonstrated by the number of Gilbertese who told me of this ordinance quite without my raising the question, and who had either cleared and planted lands which were otherwise neglected, or allowed others to use them instead. Vigorous implementation of this ordinance to the limits of political practicability would appear to

⁴ Unlimited sale leads to insecurity as often as to security of tenure. The land reforms of South America are in a number of instances designed to overcome problems created by unlimited sale.

⁵ Many countries have legislation barring people from owning farm land unless they work it themselves.

have a direct impact on productivity, particularly if it were associated with provisions for limited sale, and if some of the more cumbersome requirements of the legislation could be done away with.

The Neglected Lands Ordinance forces people to use or allow someone else to use, and in the latter event results in more caretaking. This problem can be overcome by a technique known as the Maryland Ground Rent System which originated in the state of Maryland, U.S.A. The fundamental principle is that if a person occupies and uses land for a specific period (15 years in Maryland) he has a statutory right to buy it at government valuation. That is, if a landowner can do without the land for 15 years then this substantiates that he does not need it for himself, and he is not allowed to debar the user from obtaining title. In the Gilberts, a fixed period (perhaps 10 years) of caretaking could be such as to give the user a statutory right to buy. In the case of persons working away who may want to retire on their island of origin, one parcel of land could be exempted from the provision. In the Gilberts the caretaker normally pays the land tax and his tax receipts would provide evidence of caretaking. The same feature (i.e. evidence of having used the land or paid tax on it), could be used to give priority among potential heirs at inheritance.

Consolidation and incorporation: Two possible approaches to the tenure problems of the Gilbert Islands lie in consolidation on the one hand, or incorporation on the other. A detailed experiment with each of these techniques may be merited, if the people of two islands were willing to experiment.

I would recommend that a full cadastral survey with consolidation of fragmented and elongated holdings, be undertaken on one sample island. Permanent absentees would need to be bought out and those with surplus holdings encouraged to sell to those with insufficient. The cost of the operation in money, time and skills would need to be recorded in detail, as well as Gilbertese reaction to the programme. Thereafter, detailed records of copra output would need to be kept for some years.

At the same time, I would recommend that another island be incorporated.⁶ No survey would be undertaken, but the whole of the coconut lands would be exploited systematically by a co-operative. Persons would be given shares in the co-operative in proportion to the area of their coconut lands as shown in the lands register. Clearing, planting and harvesting could be undertaken regularly as on a plantation, and drying would be done at central collection points. All work would be paid for according to output preferably on a 'task' or contract basis and shareholders (i.e. landowners) would be paid once or twice annually in proportion to their shareholdings. The proportion of total income to be paid for work as opposed to land rights would need to be assessed, but if the co-operative were to take over all clearing and planting then perhaps 25 per cent of gross income may be considered a reasonable share for land holders. Again costs, public reaction, and subsequent effects on productivity would need careful documentation.

⁶ Incorporation has been extensively used on Maori holdings in New Zealand, some incorporations have failed, but some are outstanding successes and the largest single farming enterprise of any kind in New Zealand is a Maori incorporation with assets of about £1,250,000 and an annual net profit of about £100,000.

Consolidation would presumably require additional legislation, and incorporation possibly also, depending on whether existing provisions for lease to a co-operative society were used or whether a new legal provision was considered essential. The latter would be easier to operate but may not be merited for experimental purposes. Leases should be adequate provided *babai* pits, pig-pens, house-sites, pandanus trees and burial grounds were specifically excluded from the terms of the lease.

It is not unlikely that associated crop improvement programmes such as banding trees against rats, seed selection, replanting and research into soils, spacing and tree productivity could be more easily introduced to an island which has been incorporated and was working as a single unit.