

THE AUSTRALIA INSTITUTE

# **Privatising Land in the Pacific**

## **A defence of customary tenures**

Edited by

Jim Fingleton

Discussion Paper Number 80

June 2005

ISSN 1322-5421

© The Australia Institute

This work is copyright. It may be reproduced in whole or in part for study or training purposes only with the written permission of The Australia Institute. Such use must not be for the purposes of sale or commercial exploitation. Subject to the *Copyright Act* 1968, reproduction, storage in a retrieval system or transmission in any form by any means of any part of the work other than for the purposes above is not permitted without written permission. Requests and inquiries should be directed to The Australia Institute.

<b>Table of Contents</b>
--------------------------

<b>Tables, Figures and Boxes</b>	<b>iv</b>
<b>The Authors</b>	<b>v</b>
<b>Acknowledgements</b>	<b>vi</b>
<b>Preface</b>	<b>vii</b>
<b>Summary</b>	<b>ix</b>
<b>Introduction</b>	<b>1</b>
<i>Jim Fingleton</i>	
<b>Agricultural production and customary land in Papua New Guinea</b>	<b>6</b>
<i>R. Michael Bourke</i>	
<b>Customary land tenure and agricultural success: the Mekeo case</b>	<b>16</b>
<i>Mark Mosko</i>	
<b>Does customary land ownership make economic sense?</b>	<b>22</b>
<i>Chris Lightfoot</i>	
<b>Common property and development: forests and pastures</b>	<b>28</b>
<i>R. J. Fisher</i>	
<b>Conclusion</b>	<b>34</b>
<i>Jim Fingleton</i>	
<b>References</b>	<b>38</b>

**Tables, Figures and Boxes**

Table 1	Production and annual growth rates of export tree crop commodities, 1980–2000	10
Table 2	Annual growth rates of smallholder and plantation sectors for oil palm, coffee, cocoa and copra, 1980–2000	11
Figure 1	Annual growth rate of rice and wheat imports into PNG per person by decade, 1961–2003	8
Box 1	Oil palm plantings on customary land	9
Box 2	Individual forest plots and high transaction costs in Sichuan	31
Box 3	Property rights in Chinese rangelands	33

## The Authors

**Dr Jim Fingleton** is a lawyer-anthropologist with more than 30 years' experience advising governments in two dozen countries in the Pacific Islands, Asia, Africa and the Caribbean. During the 1970s and 1980s he conducted fieldwork on reform of customary land tenures in a number of the provinces of PNG, and he has returned many times since to work on projects for the development of customary land. He is an independent development law consultant specialising in land tenure, agriculture and natural resource management policy and legislation. He has a beef cattle farm in northern NSW.

**Dr Michael Bourke** is an Adjunct Senior Fellow in the Department of Human Geography in the Research School of Pacific and Asian Studies, The Australian National University, Canberra. He also works as a self-employed consultant. He has been continuously involved over the last 35 years in research and development on agriculture in PNG, and has conducted extensive fieldwork throughout the country. He is a specialist in PNG village agriculture with a particular focus on food production. He has written and edited six books and over 200 papers on PNG agriculture.

**Professor Mark Mosko** is Head of the Department of Anthropology in the Research School of Pacific and Asian Studies, The Australian National University, Canberra. He is a Fellow of the Academy of the Social Sciences in Australia. Over the past 30 years he has conducted a total of more than three years' ethnographic research during nine separate fieldtrips among the Mekeo peoples of PNG. He has published more than two dozen journal articles and chapters on a wide range of topics involving indigenous Mekeo culture and the changes their society has experienced from European colonisation to the present.

**Chris Lightfoot** is an independent consultant economist with post-graduate qualifications in agriculture, economics, rural development and property valuation. He has over 35 years' experience working in Australia, Asia and the Pacific Islands, including four years in the Highlands of PNG. He has provided policy advice on macro-economic reforms and rural development to Pacific Island governments and international development agencies. He has lectured in project analysis, natural resource management and economic development at the University of Melbourne and elsewhere.

**Dr R. J. Fisher** is a Senior Lecturer in Geography and Senior Researcher in the Australian Mekong Resource Centre at the University of Sydney. He specialises in social and political ecological aspects of natural resource management, particularly involving community forestry. He was Deputy Director of the Regional Community Forestry Training Center in Bangkok from 1997–2001 and has carried out research or consultancies in a wide variety of countries in Asia, the Middle East and Africa. He has written widely on community forestry and related fields.

## Acknowledgements

Chris Lightfoot would like to acknowledge Neil Sturgess and Daniel Fitzpatrick for assistance in preparing his paper.

Michael Bourke is grateful to the following:

- Professor John Gibson of the University of Waikato for the data on rice and wheat imports per person;
- Dr John Angus of CSIRO Canberra for helpful discussion on the growth rates of agriculture globally;
- Dr Tim Curtin of Canberra for pointing out the impact on global prices of increasing the output of palm oil at 30–40 per cent over a long period;
- Dr Paul Chatterton of WWF Madang for information on biodiversity of New Britain forests; and
- Ms Tracy Harwood of the Land Management Group at the ANU for providing editorial assistance.

The Australia Institute would like to thank Dr Chris Gregory of the ANU for refereeing this paper.

All views remain those of the authors.

## Preface

This paper reflects the growing concern of a number of scholars about the influence of free market ideology on proposals to change land use and land ownership in the Pacific. In a series of papers published by the libertarian think tank, the Centre for Independent Studies, Professor Helen Hughes, an influential figure in the aid debate, has proposed that Australia's aid to Papua New Guinea be made contingent on a far-reaching transformation of customary forms of land tenure. These 'reforms' would require land owned and used by traditional groups to be divided up and allocated to individuals who could then buy and sell land in the market.

The diverse group of scholars whose views are collected together in this paper argue that such a prescription, far from solving PNG's development problems, would be highly detrimental to the social and economic welfare of that country. When people heard that land reforms along these lines were being proposed in 2001, there were riots in Port Moresby and four people were killed.

The authors – who between them have more than 100 years of practical and research experience in the Pacific – argue that Hughes' opinions are informed by an ideological approach rather than an understanding of how land is actually owned and used in PNG and other Pacific countries. They challenge those calling for radical change to land tenure systems in the Pacific to respond to the facts laid out in this paper rather than retreating to free market dogma.

The Australia Institute is pleased to be able to contribute to this important debate and hopes that this paper will bring more balance to it.

Clive Hamilton  
Executive Director  
The Australia Institute



## Summary

This discussion paper challenges the argument that Pacific nations must abandon their customary land tenures and embrace individual titles in order to develop. It is a response to the views of commentators – notably Helen Hughes and her co-authors at the Centre for Independent Studies – who claim that customary land tenures are a barrier to development everywhere, and governments should be encouraged and assisted to convert them to freehold or other forms of individual titles.

The contributions in this paper expose as demonstrably false the argument that customary land tenures are an impassable barrier to development, the basis on which the push for individualisation rests. Because the position of Hughes and her co-authors displays some fundamental misunderstandings, the paper begins by clarifying two basic confusions.

First, implicit in the argument of Hughes and her co-authors is that land in these societies is owned ‘in common’, and immediately the impression is created of land to which members of a community have open, undifferentiated access – something like ‘the commons’ in England before the Agricultural Revolution. As anyone with knowledge of customary land tenures in the Pacific Islands will confirm, this characterisation is a serious distortion of the truth. In fact, land tenure is a complex but flexible system of rights and obligations at individual, family, clan and tribal levels.

Secondly, some critics seem to see communal ownership as a form of communism. There is simply no equivalence between customary land tenures and communes, collectives or co-operatives. As the great pioneer anthropologist Bronislaw Malinowski observed more than 80 years ago: ‘A modern joint-stock company might just as well be called a “communistic enterprise”’. In simple terms, customary tenures can be seen as a balance between group and individual rights and obligations, with land ownership being held at group level and land use being exercised at the individual or household level.

Customary land tenures are often portrayed as static, non-adaptive, uncertain and backward-looking – in short, an obstacle to development. On the contrary, research shows that people operating under the flexibility of their customary tenures are able to adjust to the changing demands they make on their land under modern circumstances, adapting to increased internal migration and new patterns of land settlement, the growing cash economy, new uses of their land and an increasing population.

Michael Bourke shows that, far from being an obstacle to development, customary tenures are the dynamic sector. Over recent decades, agricultural production in PNG – both domestically marketed food and export crops – has expanded steadily under customary tenures, but has mostly declined under registered titles. This runs totally contrary to the main argument advanced by Hughes and her co-authors with respect to customary tenures.

While Bourke describes the general picture across the whole country, Mark Mosko’s paper provides a striking rebuttal, at a regional and village level, of the main argument advanced by Hughes and her co-authors. His research in the Mekeo area of PNG

reveals people successfully producing and marketing two major indigenous crops (betel nut and betel pepper) from their customary lands, channelling the income into improved housing, school buildings, a church, health facilities and a mini hydro-electricity scheme, thereby elevating the living standards of the village in general, and women and youth in particular. It is a far cry from the dismal picture of communal village life painted by Hughes and her co-authors in their calls for revolutionary change.

Chris Lightfoot tackles the economic arguments, showing that the difference in value between a lease over customary land and a lease over a freehold is negligible in economic terms, but customary land provides much higher social benefits. Taking Fiji as his main example, he shows how a system based on the registration of group-based tenures in customary land has, for over 60 years, underpinned investments ranging from sugar cane production to international tourist resorts, while at the same time providing a social safety net for villagers.

R. J. Fisher shows that there are some natural resources (e.g. forests and grasslands) in developing countries for which group-based systems of tenure and management are not just viable but essential to reducing poverty and allowing economic benefits to flow to communities. Indeed, frequently the resources involved are legally owned by the state and resource-users have no legal rights at all, yet they do invest in managing the resource. In many respects the situation corresponds closest to that which Hughes has termed 'communal', in the sense that such rights that do exist are enjoyed by a locally resident community. Ironically, when attempts were made in China to convert pasture land formerly owned by herders' collectives (that is, the 'communal' model) into private plots, they were resisted by the herders as impractical.

The push to individualise customary tenures is an old approach dating from the 1950s; it has been tried before and has failed comprehensively. It is neither desirable nor feasible to cancel out group rights and responsibilities over customary land. There may be a need, in certain circumstances, to strengthen the rights of individuals and ease the constraints of customary tenures. A two-tier registration system, with group titles as the 'head title' (i.e. ownership), and then subsidiary titles (such as leases) granted by groups to the users of the land, may be a feasible and effective reform. But the radical free market reforms urged by Hughes and her co-authors would, if implemented, be a major set-back to social and economic development in the Pacific.

## Introduction

Jim Fingleton

### **The debate over land reform**

As Papua New Guinea (PNG) approaches the thirtieth anniversary of its independence, attention is again focused on the touchy subject of Australian aid. Since independence in 1975, Australia has spent more than \$14 billion in real terms on official development assistance to PNG,<sup>1</sup> yet according to the World Bank it is the only nation in the Asia-Pacific region which is getting poorer.<sup>2</sup> One person with strong views about what must be done for the more effective use of aid is Helen Hughes, Emeritus Professor of Economics with The Australian National University (ANU), a former senior World Bank employee, Senior Fellow at The Centre for Independent Studies and trenchant critic of Australia's aid policy to PNG for more than 20 years. She is also a member of the Foreign Affairs Council which, among other functions, advises the Foreign Affairs Minister Alexander Downer on Australia's aid policy.

In a paper for The Centre for Independent Studies, 'Aid has failed the Pacific', Hughes lists the problems – the failure of Pacific economies to grow, low living standards, political corruption, theft and assault, poor education and health facilities, and so on (Hughes 2003, p. 24). These are serious problems, and the search for solutions should be a priority for the governments of the region and the agencies providing them with development assistance. Among the policy reforms Hughes sees as necessary is the establishment of individual land titles. On the principle of 'mutual obligation', aid from countries like Australia should, in her view, be made conditional on the recipient countries adopting her proposals for the individualisation of customary tenures (Hughes 2003, pp. 2, 24; Gosarevski, Hughes and Windybanks 2004b, pp. 135-36).

This discussion paper challenges the argument that countries must abandon their customary land tenures and embrace individual titles in order to turn from poverty to the path to wealth. It is a response to the views of (mainly) economic commentators who urge that customary land tenures are a barrier to development everywhere, and governments should be encouraged and assisted to convert them to freehold or other forms of individual titles.

As an introduction to the debate, during 2004 three articles on land reform were published in successive issues of the *Pacific Economic Bulletin*:

- The first, titled 'Is Papua New Guinea viable?' was written by Steven Gosarevski, Helen Hughes and Susan Windybank (2004a). In a section on land reform, they say that 'communal ownership has not permitted any country to develop', and that it is 'the principal cause of poverty' in PNG. In its place there should be the 'registration ... and endorsement of individual titles by the traditional landowning communities' (Gosarevski *et al.* p. 137).
- The present author's response to this article was titled 'Is Papua New Guinea viable without customary groups?' (Fingleton 2004). There, the view that PNG had to

<sup>1</sup> [http://www.ausaid.gov.au/publications/pdf/qas34\\_contribution.pdf](http://www.ausaid.gov.au/publications/pdf/qas34_contribution.pdf)

<sup>2</sup> Editorial in *The Sydney Morning Herald*, 9 May 2005.

abandon group ownership of land in favour of individual property rights in order to develop and grow was challenged. It was argued that customary tenures involve a balance between group and individual rights and obligations, and that individual land rights could be strengthened without the abolition of group ownership. Furthermore, there had been a recent change of opinion from bodies like the World Bank towards a more favourable view of customary tenures. Within PNG there is support for the selective introduction of a system involving registration of group titles in the first instance, with groups then granting registrable occupation rights to members and leases to non-members (Fingleton 2004, pp. 112-114).

- The third article, also by Gosarevski *et al.* (2004b), was titled ‘Is Papua New Guinea viable *with* customary land ownership?’ This author’s view that group ownership is a form of private property was criticised as showing a ‘fundamental confusion’ (p. 133) and the case for its replacement with individual titles was repeated:

Where land reform has effectively led to individual land ownership or other forms of secure individual tenure, it has been successful in rapidly raising the living standards of rural communities (Gosarevski *et al.* 2004b, p. 134).

The author’s proposal for the registration of both group and individual titles is, Hughes and her co-authors claim, what their first paper advocated – that land reform would give communities ‘a choice between individual land registration and communal ownership for those who preferred traditional land owning’ (Gosarevski *et al.* 2004b, p. 135).

At the end of 2004, Helen Hughes settled the ‘viability’ question to her satisfaction. In ‘The Pacific is viable!’ she sets out the ‘well known’ policy measures necessary to make Pacific Island states viable, the first being to abandon group ownership of land in favour of individual property rights (Hughes 2004b). Again we read, ‘No country in the world has developed without individual property rights’, but in the Pacific ‘inept land registration attempts ... have contributed to the failure to establish private property rights in land’. The land ownership debate ‘has been stalled by expatriates involved in land policy formulation, who are so convinced of the benefits of communal land ownership that they deny its costs’ (Hughes 2004b, p. 5).<sup>3</sup>

For Hughes, the term ‘land reform’ can mean only one thing – the replacement of group ownership by individual titles. Other proposals advocating policies and laws that would provide for the registration of both group and individual titles in customary lands, do not qualify as ‘land reform’ in her eyes.

The main aim in the following papers is to expose as demonstrably false the argument that customary land tenures are an impassable barrier to development – the basis on which the push for individualisation rests. Because the position of Hughes and her co-authors displays some fundamental misunderstandings, an attempt will first be made to clarify a basic confusion apparent in the current land reform debate. There is no argument that the debate is necessary; for too long the question of appropriate land tenure reform has been off the agenda in Pacific Island countries. What is important,

---

<sup>3</sup> In a footnote to this last sentence, Hughes refers to this author as a Pacific land management practitioner who ‘puts the case against reform’ (Hughes 2004b, p. 13, fn14).

however, is that the debate be based on the facts and a clear understanding of the issues. The papers that follow will set out the facts which we believe must inform the debate on land tenure reform. Based on those facts, the Conclusion will suggest how land tenure reform might be addressed by governments in the countries concerned, and by the agencies providing them with development assistance.

The five contributors to this discussion paper are a diverse group of scholars and development practitioners from a variety of disciplines, who each present their case based on decades of fieldwork and practical experience in various parts of Asia and the Pacific.

### **A basic confusion over the nature of customary land ownership**

Those arguing for the individualisation of customary tenures use the term ‘communal land ownership’ to define the current circumstances, yet nowhere in the debate do they spell out what this term means. It is left up to the reader to infer the meaning. Although the term is often used in discussion,<sup>4</sup> it is problematic for a number of reasons.

First, implicit in the usage of Gosarevski, Hughes and Windybank is that land in these societies is owned ‘in common’, and here is where the problems start. Immediately the impression is created of land to which members of a community have open, undifferentiated access – something like ‘the commons’ in England before the Agricultural Revolution. As anyone with knowledge of customary land tenures in the Pacific Islands will vouch, this characterisation is a serious distortion of the truth. Chris Lightfoot in his paper dismisses the ‘Tragedy of the Commons’ analogy. Mark Mosko’s paper on the Mekeo area of PNG provides an illustration of the mechanisms by which agricultural land in the Pacific Islands is allocated in accordance with a complex but flexible system of rights and obligations at individual, family, clan and tribal levels.

The second problem with the term ‘communal land ownership’ is that it tempts readers to import into its meaning concepts with which they are more familiar. I have argued elsewhere that some critics seem to see communal ownership as a form of communism (Fingleton 2004, p. 112). This concern is not misplaced. When the debate in Australia moved from the Pacific Islands to the land rights of Australian indigenous peoples,<sup>5</sup> leading newspapers editorialised about ‘reading the last rites over an economic model of cooperativism’,<sup>6</sup> and opinion pieces equated Aboriginal land rights with Marxism.<sup>7</sup> There is simply no equivalence between customary land tenures and communes, collectives or co-operatives.<sup>8</sup> Almost 80 years ago, the great pioneer anthropologist, Bronislaw Malinowski, explained (with what can be seen today as striking prescience):

We have in Melanesia a compound and complex system of holding property, which in no way partakes of the nature of ‘socialism’ or ‘communism’. A modern joint-stock company might just as well be called a ‘communistic

<sup>4</sup> It even appears in legislation – for example, the *Lands Registration (Communally Owned Land) Ordinance* of 1962 in PNG.

<sup>5</sup> Helen Hughes again attacks ‘communal land ownership’, this time for Aboriginal and Torres Strait Islanders (Hughes and Warin 2005, p. 4).

<sup>6</sup> *Canberra Times*, 8 April 2005

<sup>7</sup> Michael Duffy, *The Sydney Morning Herald*, 25 April 2005

<sup>8</sup> Helen Hughes seems to believe in an historical progression, from communal through feudal to individual stages of development (Hughes 2003, p. 12).

enterprise'. As a matter of fact, any descriptions of a savage institution in terms such as 'communism', 'capitalism' or 'joint-stock company', borrowed from present-day economic conditions or political controversy, cannot but be misleading (Malinowski 1926, p. 19).

In simple terms, customary tenures can be seen as a balance between group and individual rights and obligations, with land ownership being held at group level and land use being exercised at the individual or household level (Fingleton 2004, p. 112).<sup>9</sup> But even this simplified version is arguable, and there is no substitute for local investigation of the nature of a community's land tenure system to understand its content. Contrary to the apparent belief of the critics of customary tenures, a single concept like 'communal land ownership' cannot be validly used to cover all titles and uses, across time and place, for all categories of customary land.

Where a term is needed, 'customary land tenures', preferred by some of the authors of this discussion paper, conveys the sense of plural systems and variety necessary to ground the debate. Proposals for the reform of customary tenures must take account of this variety; Asian forms of land tenure are different from those in the Pacific; within the latter, Polynesian forms are different from Melanesian; within the latter, Mekeo forms are different from Tolai, and so on. What should be done about customary land tenures is a highly charged subject, but simple-minded views about what they are do not help.

### **Are customary land tenures really a problem?**

Misunderstanding a complex subject is one thing, but misrepresentation of the facts is even less helpful. Perhaps the strongest argument Gosarevski, Hughes and Windybank make against customary land tenures is that they have prevented growth and development, and are 'the principal cause of poverty' in PNG. 'Communal land ownership means low agricultural productivity', they say (Gosarevski *et al.* 2004a, p. 137). Michael Bourke, in his paper below, demonstrates that this statement is flatly contradicted by the facts. In recent decades, production of all agricultural commodities by villagers on their customary land has expanded. In the plantation sector, however, on land alienated from customary tenures, production has contracted for all tree crops with the single exception of oil palm. While Bourke describes the general picture across the whole country, Mark Mosko's paper provides a striking rebuttal of Hughes and her co-authors' main argument at a regional and village level.

Chris Lightfoot tackles the economists' arguments against customary tenures, showing from the Fiji example that it is possible to establish secure, transferable individual property rights under a system of 'communal' land ownership.<sup>10</sup> R. J. Fisher illustrates that, with respect to some natural resources (e.g. forests and grasslands), customary systems of tenure and management are not just viable but essential for sustainable use, to enable poverty reduction and economic benefits to flow to communities. In China, when the common rights to pastures were converted to individual entitlements, the resource suffered. Again the general point is proven; the appropriateness of the system varies according to the context.

---

<sup>9</sup> I stressed the dangers of generalising about customary tenures (Fingleton 2004, p. 112).

<sup>10</sup> Lightfoot explains that, as an economist addressing the arguments of the economists against 'communal land ownership', he has adopted their term for that purpose.

### **What should be done about customary land tenures?**

There is no argument with the critics of customary land tenures that the goals of reform measures are growth and sustainable development. The argument is over the nature of present problems and the most suitable ways of achieving those goals. This discussion paper shows from a variety of perspectives that proposals to convert customary land tenures in the Pacific to individual titles are poorly informed and likely to hinder, rather than encourage, development and the alleviation of poverty.

But if not individualisation, then what might be an answer? It is not the intention of this discussion paper to spell out what an alternative system for reform of customary land tenures might comprise. That task will be undertaken elsewhere.<sup>11</sup> In the Conclusion, however, I will draw upon the lessons of the past and the realities of the present to suggest how land reform might allow for a strengthening of individual rights in land without destroying the social fabric underlying customary land tenures.

---

<sup>11</sup> Proposals for land tenure reform in Papua New Guinea will be outlined in a forthcoming Discussion Paper in the State, Society and Governance in Melanesia (SSGM) series, ANU, Canberra.

**Agricultural production and customary land in Papua New Guinea**

R. Michael Bourke

### **Introduction**

This article addresses a series of assertions about agriculture in PNG by Hughes (2004a, 2004b) and Gosarevski, Hughes and Windybank (2004a, 2004b). The alleged shortcomings of agricultural production identified by these authors are attributed to:

... communal ownership [of land, which] has not permitted any country to develop. In Papua New Guinea, where 90 per cent of people live on the land, it is the principal cause of poverty (Gosarevski *et al.* 2004a, p. 137).

Assertions made by these authors that agricultural production in PNG is in decline are contested, and data are presented indicating that it is growing fastest in the village sector where people operate under customary land tenures. This is the situation for domestically marketed food, betel nut, vanilla, coffee, cocoa and copra. Much of the plantation sector, where production takes place on alienated and registered land, has performed poorly in recent decades, especially for coffee, cocoa, copra and rubber production.

I first present an overview and discussion of agriculture, identifying the producers and the land tenure arrangements under which they operate. Some of the arguments advanced by Hughes (2004a, 2004b) and Gosarevski *et al.* (2004a, 2004b) are then considered.

### **Agriculture in PNG: an overview**

Agricultural production may conveniently be divided into what is consumed within the nation and what is exported. The former category includes:

- subsistence food, both crops and animals;
- domestically marketed food crops;
- domestically marketed livestock, mainly chickens, pigs and cattle;
- subsistence and marketed fish and other marine foods;
- sugar cane grown on an estate and by associated village outgrowers; and
- numerous other items sold within PNG, including firewood, betel nut and tobacco.

Several commodities are produced for the export market, the main ones being:

- palm oil (and palm kernel oil);
- coffee, mostly Arabica with a little Robusta;
- cocoa;

- copra and copra oil;
- vanilla;
- minor tree crops (rubber and tea);
- fish, crocodiles and other marine products; and
- other minor exports, including cardamom, chilli, other spices and pyrethrum.

In recent years, four commodity groups have performed particularly well. These are domestically marketed food, oil palm, vanilla and betel nut. A brief overview is now given for the main groups listed above.

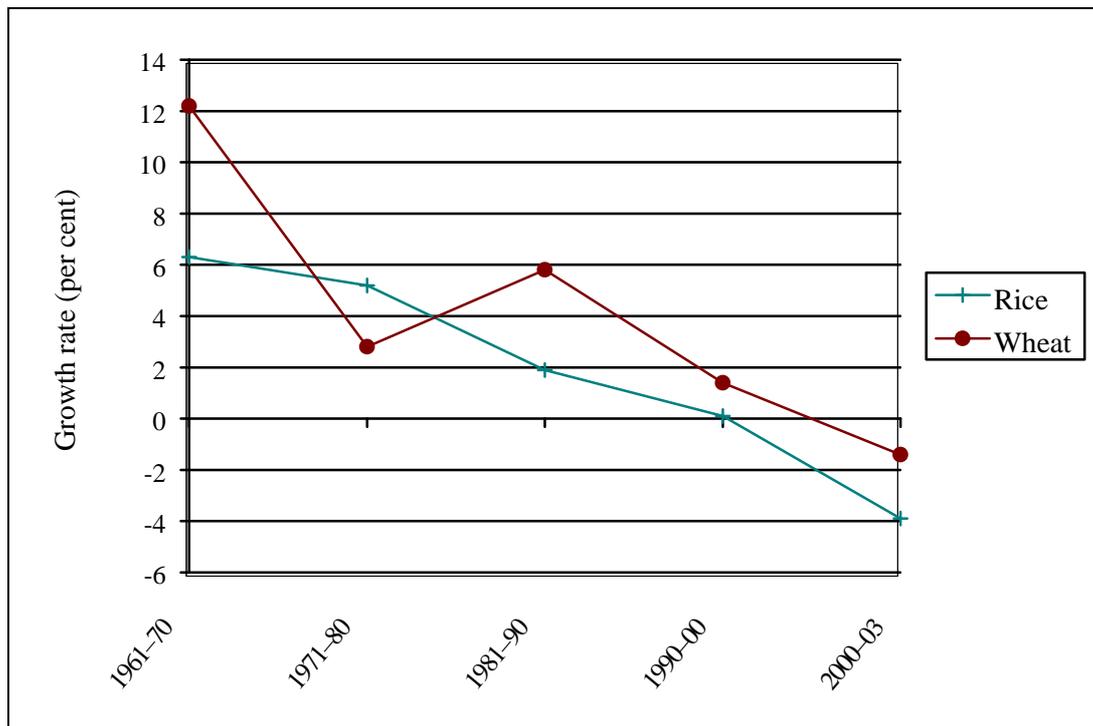
Subsistence food production is arguably the most important component of PNG agriculture. It provides most of the food consumed in PNG and all indications are that the volume of energy food is adequate (with a few minor exceptions). A 1996 study showed that 80 per cent of the food energy consumed in PNG was grown in the country (Gibson 2001, p. 42). The proportion was even higher for rural villagers (84 per cent) as urban people obtain half their food energy from imported foods. The proportion of food energy gained from locally grown food has almost certainly increased in the past decade. This is because imports of grains are static or declining,<sup>12</sup> and consumption of imported grain per person is falling (Figure 1) due to the rapid rise in the price of imported food induced by the decline of the PNG currency against the US dollar. In a recent study, Bourke and Vlassak (2004) estimated that 4.5 million tonnes of energy (staple) foods are grown in PNG each year; that is, a little more than one tonne a year for every rural villager. They valued this production at K2 850 million in 2004, based on the cost of substituting that food with the cheapest imported source of food energy.

Domestically marketed food has been growing rapidly over the past 30 years (Bourke 2005). A number of policy decisions in PNG, including the devaluation of the PNG currency in 1994, and again in 1997, have boosted the subsector. The currency was worth about US\$0.70 in 1997 and has declined to the range of US\$0.20–0.30 since then. This has resulted in a threefold increase in the price of imported food and consequent declining consumption per person (Figure 1). Villagers have responded by producing more food for sale in local and distant markets. Consequently the volume of locally grown food traded within PNG has increased rapidly, particularly since 1998. Fresh food generates significant income for rural villagers; in the mid 1990s it was second in value only to Arabica coffee and worth more than cocoa, betel nut, copra, oil palm and fish (Allen *et al.* 2001, p. 543).

---

<sup>12</sup> Rice imports have ranged from 143 000 to 154 000 tonnes per year for the period 1999–2004, with a mean of 149 000 tonnes. Wheat imports have ranged from 106 000 to 137 000 tonnes for this period, with a mean of 125 000 tonnes per year. Since 2000, rice imports per person have fallen at four per cent per year, while wheat imports per person have fallen at one per cent per year.

**Figure 1 Annual growth rate of rice and wheat imports into PNG per person by decade, 1961-2003**



Source: John Gibson, University of Waikato, pers. comm. 2004.

Among the export crops, oil palm has shown the most rapid growth over the past 30 years, starting from a small base in the late 1960s.<sup>13</sup> Production has increased fivefold over the 20-year period 1980–2000, with an annual growth rate of ten per cent per year (Table 1).<sup>14</sup> Oil palm is grown in five regions of PNG with production occurring on estates, land settlement schemes, land leased from villagers (‘lease lease-back’) and local villagers’ land. Over the past decade new production has come from village plantings, estates on land leased from local villagers, the Community Oil Palm Development and smallholder plantings where land has been purchased or leased directly from local villagers – see Box 1.

<sup>13</sup> Discussion is confined to the volume of PNG production as this is what PNG producers can influence. Changes in the value of exports are not considered as they depend on both the volume of production and the world price. PNG producers are ‘price takers’ and have little or no influence on the prices they receive, except that production of better quality produce sometimes commands a premium price.

<sup>14</sup> Figures quoted are a mean for the five-year period centred on 1980 and the five-year period centred on 2000. Data on production for export crops was provided by staff of the various commodity organisations in PNG, including the Oil Palm Research Association, Coffee Industry Corporation, Cocoa Board, Kokonas Industri Koporesen and Spices Industry Board.

### **Box 1 Oil palm plantings on customary land**

Recent developments in the oil palm sector show the possibilities for production from customary land. Two thirds (67 per cent) of this valuable crop is grown in West New Britain Province. By the mid 1990s, the supply of state-owned land was exhausted and there were no possibilities for expansion of either estates or land settlement schemes on state-owned land. The only opportunity for expansion was on customary land and the industry has continued to expand with all new plantings on customary land over the past ten years. Four systems are now used for new plantings in West New Britain:

- i. The Village Oil Palm Scheme – under which villagers have planted significant areas of oil palm on their own customary lands.
- ii. The Lease Lease-back system – under which customary landowners have sub-leased some of their land to an oil palm estate company, receiving rents and royalties in return. The term of the lease is typically 20 years (one cropping cycle), after which landowners can choose to renew or not renew the lease.
- iii. Community Oil Palm Development – under which the customary landowners have formed their own company in the Biialla area, and are managing 4 600 ha of their customary lands as oil palm plantations, with technical support from an oil palm estate company.
- iv. Customary purchase – where smallholders purchase or lease land directly from local landowners to establish blocks.

Production of the other major export tree crops of coffee and cocoa has grown more steadily over the period 1980–2000 at a respectable two per cent per year (Table 1). The period of very rapid expansion for cocoa and coffee occurred earlier (early 1960s to mid 1970s for cocoa and early 1960s to early 1980s for coffee). Production of the minor tree crops (tea and rubber) grew slowly over this period (0.3 to 0.5 per cent per year).<sup>15</sup> Copra production was static, although copra oil produced within PNG has grown steadily, if not spectacularly, at about one per cent per year over 20 years (Table 1). Population growth rate over this period is officially 2.7 per cent, but some anomalies in the 1980 and 2000 census data suggest that the real growth rate was probably somewhat less.

<sup>15</sup> Tea is grown exclusively on estates in Western Highlands Province and there is no smallholder production. In contrast, most rubber is now grown by smallholders, with only one major plantation still operating.

**Table 1 Production and annual growth rates of export tree crop commodities, 1980–2000**

Commodity	Production (tonnes)		Annual growth rate (%) 1980–2000
	1980	2000	
Palm oil	43 407	289 920	10.0
Coffee	47 606	70 776	2.0
Cocoa	27 219	37 820	1.7
Copra oil	33 283	41 364	1.1
Rubber	3 812	4 189	0.5
Tea	7 061	7 464	0.3
Copra	140 883	140 722	0.0

Source: PNG Coffee Industry Corporation; Cocoa Board of PNG; Kokonas Industri Koporesen; Bank of PNG Quarterly Bulletins.

Note: The 1980 figure is a mean for the five-year period 1978–1982; likewise the 2000 figure is a mean for the period 1998–2002. For copra, the second figure is for 2000 only.

Another agricultural success story in recent years has been vanilla. Until the late 1990s only minor quantities of vanilla were exported from PNG, for example about one tonne in 1998. Due to production and political problems in Madagascar, which had accounted for about 75 per cent of global production, and increased demand partly associated with the global release of a vanilla-flavoured cola drink, global prices rose dramatically in the late 1990s. PNG villagers responded quickly and production increased rapidly (McGregor 2004). By 2003 PNG production had exploded to about 200 tonnes.<sup>16</sup> The annual growth rate over the period 1988–2003 was a remarkable 188 per cent per year (and it has been 132 per cent per year since 2000).

PNG vanilla exports represented about ten per cent of world production by 2003 and PNG was the third largest exporter of vanilla after Madagascar and Indonesia (McGregor 2004). The export value was over K100 million (about US\$30 million). However, in 2004 and 2005, world prices fell rapidly. Estimates of current production in PNG are not available but there are indications that production is being maintained at a high level despite marketing problems associated with poor quality beans. In the first quarter of 2005, exports from the main producing province (East Sepik) alone were running at a rate of about 130 tonnes per year suggesting that total exports in 2005 may not be much less than in 2003 and 2004, although the export value will be less because of reduced world prices.

Betel nut consumption has increased significantly in PNG in recent decades. Aside from local markets, the major markets are the urban areas and the highlands where the crop does not grow. Until the late 1960s few highlanders consumed betel nut, but that started to change once the Highlands Highway was made an all-weather road in the late 1960s. Demand in the highlands outstripped the ability of villagers in the Markham Valley to

<sup>16</sup> Production statistics for vanilla in PNG are incomplete. The PNG Spice Industry Board recorded production of 141 and 150 tonnes in 2003 and 2004 respectively. They believe that this underestimates actual exports because of incomplete statistical returns and their best estimate is that production was about 200 tonnes in each of these years (M. Waisime, pers. comm. 2004 and 2005).

supply betel nut and production has expanded rapidly over the past 20 years. Betel nut commerce is characterised by long-distance trade, numerous intermediate traders and wholesale markets in the Markham Valley and near Port Moresby. The main supply areas for Port Moresby are the Bereina area in Central Province and lowland locations in Gulf Province (see paper by Mark Mosko in this collection). The catchment area for the highlands has expanded greatly since the mid 1980s and now includes many lowland locations in East Sepik, Madang, Morobe, Oro and West New Britain provinces. All betel nut is grown on customary land and the extensive marketing networks are managed by PNG entrepreneurs.

## Discussion

Virtually all of the subsistence food, domestically marketed fresh food and animal food, betel nut, firewood, tobacco, vanilla and minor export crops being produced in PNG are grown by villagers on customary land. About 85 per cent of the coffee, cocoa and copra produced in PNG is now grown by villagers on customary land. Among both domestic and export agricultural products, oil palm is the only one where there is significant estate production, with two thirds (67 per cent) of palm oil coming from estates and the rest from settlers and village growers.

The statistics on growth of production over the past 20 years hide the important fact that it is generally the smallholder sector that is continuing to grow while the plantation (estate) sector is declining. This is the case for coffee, cocoa, copra (Table 2) and rubber. For example, copra production has been static over the period 1980–2000 but, in fact, village production increased at 2.4 per cent per year over that period while plantation production declined by 5.6 per cent per year. Among the agricultural commodities, both domestic and export, it is only oil palm where the estate sector has grown faster than the smallholder sector since the 1980s.

**Table 2 Annual growth rates of smallholder and plantation sectors for oil palm, coffee, cocoa and copra, 1980–2000**

Commodity	Annual growth rate (%)		
	Smallholder	Plantation/estate	Both subsectors
Oil palm	4.2	8.7	6.8
Coffee	2.9	-1.1	2.0
Cocoa	1.9	-3.9	1.7
Copra	2.4	-5.6	0.0

Source: PNG Oil Palm Research Association; PNG Coffee Industry Corporation; Cocoa Board of PNG; Kokonas Industri Koporesen.

Note: For coffee, cocoa and copra, the 1980 figure is a mean for the five-year period 1978–1982; likewise the 2000 figure is a mean for the period 1998–2002. The period for oil palm is 1985–1987 to 2001–2003. The oil palm data are for fresh fruit bunch, not palm oil (as used in Table 1). The use of slightly different data sets was dictated by data availability.

PNG has a vigorous domestic agricultural economy and this is overlooked by many observers, including the authors cited above who are so dismissive about its agricultural production. In the early to mid 1990s, the most important sources of cash for rural villagers were (in decreasing order by value): Arabica coffee, fresh food, cocoa, betel

nut, copra, oil palm, fish (and other marine foods), firewood, tobacco, cattle, Robusta coffee and crocodiles (Allen *et al.* 2001, p. 543). Six of these commodities are sold on the domestic market and six are exported.

It is the smallholders in PNG, mostly villagers producing their crops and livestock on customary land, who have expanded their production since the 1980s. In contrast, production from the plantation and estate sectors, which takes place on alienated and registered land, is declining for coffee, cocoa and copra. As the rapid expansion in production and sale of domestically marketed food and vanilla since 1998 demonstrates, villagers operating on their customary land are responsive to market conditions. Oil palm is the only significant agricultural industry where a high proportion of production occurs on non-customary land, and almost all of the expansion in recent years has been on customary land.

Despite the impressive progress that has been made in agricultural production over the past 50 years, there are a number of factors limiting further increases in both production and, to a lesser degree, the price for which produce can be sold. These include:

- inadequate quality of produce, especially for fresh food, vanilla and coffee;
- transport constraints, especially poorly maintained roads and bridges;
- access to credit and working capital for middlemen and traders;
- marketing inefficiencies, particularly for domestically marketed fresh food;
- inadequate dissemination of information and improved planting material;
- security for people and produce; and
- limited areas of land without major climatic or physical limitations for high productivity, especially for cocoa, coffee and oil palm.

To date, access to the land and land tenure arrangements have not constrained agricultural development for most smallholders. The plantation sector for coffee, cocoa and copra, where producers have individual title on alienated land, has performed poorly in recent decades for a number of reasons. But having individual land title did not assist producers with other problems they faced, including declining world prices, inability to switch from one commodity to another as the market changed, poor transport infrastructure, and security issues.

### **The specific charges**

Let us examine the specific criticisms levelled at PNG agriculture by Hughes (2004a, 2004b) and Gosarevski, Hughes and Windybank (2004a, 2004b). The assertion that ‘Since the 1980s, Papua New Guinea’s volumes of ... palm oil, coffee, cocoa, tea and copra exports have declined’ (Gosarevski *et al.* 2004a, p. 139) is factually untrue. Production of palm oil, coffee, cocoa, tea and copra oil has increased since 1980. Among the export tree crops, only copra production has been static over this period (Table 1). Oil palm is singled out for special mention.

Palm oil exports are said to be a success story, with 11 per cent a year growth in real earnings from the 1970s. Papua New Guinea's climate and soils are ideal for oil palm, and the world market is growing rapidly with the economic rise of China. ... Yet Papua New Guinea's share of the palm oil market in 2002 was still only 2 per cent. Given Papua New Guinea's geographic advantages, its exports should have grown at 30–40 per cent from the zero of the 1960s. ... The smallholder palm oil sector has been crippled by communal land ownership (Gosarevski *et al.* 2004a, pp. 139, 141).

Let us examine oil palm in more detail. Production has not declined since the 1980s as announced by Gosarevski *et al.* (2004a), and in fact there has been a fivefold increase in production over the period 1980–2000 (Table 1). Although this claim has been dropped from their subsequent papers, their strident criticism of the PNG oil palm industry continues.

To put the PNG oil palm industry into a global perspective, over the 20-year period 1980–2000, the area of oil palm planted in PNG grew at an annual rate of ten per cent per year, the same annual growth rate for exports of palm oil. This was faster than the global average for oil palm plantings (seven per cent), than that of Malaysia, the world's largest producer (seven per cent), and faster than a number of other producing nations but not as fast as Indonesia (11 per cent) or Thailand (14 per cent) (Wahid *et al.* 2004). The criticism that the PNG industry should have grown at 30–40 per cent per year over a long period is ridiculous. It is simply not possible from a practical perspective, once the area under crop is moderately large, to expand so quickly. No other country has achieved this growth rate once the industry has been established. In any event, such high growth rates over a long period would flood the world market and cause prices to crash. If PNG oil palm production had grown at 40 per cent per year for the past 20 years, PNG alone would have produced three times as much palm oil as the entire global production in 2003. If it had achieved this rate of growth for the past 30 years, PNG would have produced almost nine times global production which would have resulted in a collapse of the world price for palm oil.

Gosarevski *et al.* (2004a) also assert that PNG's climate and soils are ideal for oil palm. While this is true for a small proportion of the PNG land mass, much of the remaining suitable land is already devoted to intensive land use either for estates or village use. There are still good prospects for continuing expansion of the areas devoted to oil palm in the short to medium term; however, that will be at the cost of destroying areas of tropical forest with high rates of endemic species composition, especially on New Britain (Paul Chatterton, pers. comm. 2005). Despite these environmental concerns, it is likely that the rapid rate of expansion will continue for some years with, nevertheless, environmental considerations eventually proving a limiting factor. Much of PNG is mountainous and 48 per cent of the land area is classed as steep or very steep (McAlpine and Quigley n.d.). As well, seasonal or permanent flooding occurs on a further 26 per cent of land. Only a quarter of all land in PNG was classified by Saunders (1993) as being used for agriculture, either village or estate. Three quarters was not used because of environmental limitations. In another exercise, Allen *et al.* (2001, p. 530) classed 12 per cent of agricultural land as having high or very high agricultural potential, 29 per cent as having moderate potential and more than half (59 per cent) as having low or very

low potential.<sup>17</sup> These environmental constraints cannot be wished away and will eventually limit the expansion of the land-hungry oil palm industry.

The claim by Gosarevski *et al.* (2004a) that the PNG oil palm industry should have grown at 30–40 per cent per year is quite unrealistic. The actual growth rate of palm plantings and palm oil exports of ten per cent per year over several decades has been a significant achievement, with all expansion over the past ten years taking place on customary land. In the medium to long term, expansion is likely to be restricted by environmental limitations.

Regarding vanilla, PNG is criticised by Hughes (2004a) for producing only four per cent of world vanilla exports worth US\$5 million, and she questions its capacity to compete in the longer term. PNG production has grown extremely rapidly (at 132 per cent per year since 2000) from a very small base, so that exports were about ten per cent of global production by 2003 and PNG was the third most important exporting nation. This very high rate of growth is either comparable with, or exceeds, that of other boom agricultural commodities elsewhere in recent decades. This includes, for example, the rapid expansion of vegetable production in Malaysia, flowers in Yunnan Province in China, fruit production in Thailand (Rerkasem 2004) and soy bean in Brazil and Argentina. There are some serious issues with the quality of vanilla in PNG which the industry is attempting to address, but to criticise the PNG vanilla industry for being a small global player is unjust.

Another agricultural subsector that has grown rapidly in recent decades in PNG is domestically marketed food. Again, this is singled out for criticism by Gosarevski, Hughes and Windybank who allege that:

The failure of palm oil exports to grow in line with market opportunities, the decline of other principal agricultural exports, and the failure of food supplies to urban areas have been responsible for much of Papua New Guinea's stagnation (Gosarevski *et al.* 2004b, p. 133).

The facts are that domestically marketed food in PNG has been expanding steadily, and at times rapidly, for more than 30 years. Imports of grain are static or falling, and consumption of imported energy food per person has fallen over the past six years in response to rapid price increases. Food producers have responded by increasing production. Again, the assertion made by these authors is contradicted by statistical data and by field research in PNG.

## **Conclusion**

Agricultural production in PNG has performed much better than Gosarevski *et al.* (2004a; 2004b) claim. Most agricultural production takes place on land held under customary tenures, including three of the four best-performing subsectors in PNG agriculture, domestically marketed food, vanilla and betel nut. Among the major export tree crops, growth rates for coffee and cocoa have been reasonably high, with the smallholders farming on customary land expanding production while the plantation sector, farming on alienated and registered land, has performed poorly. The only

---

<sup>17</sup> Agricultural land here refers to the one quarter of all land in PNG that has been used for agriculture. It is based on whether vegetation is anthropogenic (influenced by people) or non-anthropogenic.

exception to this trend has been the very successful oil palm industry. The area devoted to oil palm in PNG has expanded at a rate higher than the global average for over 20 years. In the past, that expansion was on alienated land but almost all expansion since the mid 1990s has been by the estate or village subsectors on customary land. The charges levelled against agricultural production, and the people involved in those industries in PNG, are mostly unfair and untrue.

## Customary land tenure and agricultural success: the Mekeo case

Mark Mosko

### Customary land tenure, development, and the alleviation of poverty

The series of papers recently published by Helen Hughes and her associates (Hughes 2004a; 2004b; Gosarevski *et al.* 2004a; 2004b) maintain that ‘communal land ownership’ is:

- the source of low agricultural productivity and small incomes;
- an impediment to economic and social development and to the improvement of the standard of living of the populace of PNG and other Pacific countries; and
- the primary cause of poverty and economic failure in the Pacific.

They also claim that ‘communal ownership has not permitted any country to develop’ (Gosarevski *et al.* 2004a, p. 137), and in their rejoinder to Fingleton (2004) they comment ‘... Dr Fingleton does not give any examples of communal land ownership leading to rapid economic and social development anywhere in the world – for a good reason. There has been no such development’ (Gosarevski *et al.* 2004b, p. 133).

Here I provide such an example, that of the Mekeo peoples of PNG, noting the misleading portrayal of customary land tenures in terms of ‘communal land ownership’ by Gosarevski *et al.* (2004a; 2004b) – see Introduction. Although Mekeo do not alone constitute a country, they have enjoyed notable economic and social success in agricultural pursuits while satisfying the development aspirations of most villagers with their customary land tenure system intact. Over the past decade and a half, gross household incomes generated through cash-cropping have averaged between K5 000 (A\$2 500) and K24 000 (A\$12 000).<sup>18</sup> Contrary to the rhetoric of Gosarevski, Hughes and Windybank, the continuing reliance upon customary forms of land tenure has not doomed these Pacific peoples to economic stagnation and low standards of living.

To understand this success, four questions must be answered: Who are Mekeo? What form has their social and economic success taken as regards the elevation of the people’s living standards generally and women’s particularly? What is the nature of customary Mekeo land tenure? And how has this system facilitated rather than impeded development?

### The Mekeo of PNG

The Mekeo (population 21 480 in 2000) live in 24 villages along two rivers on the coastal plain of the Central Province, 150 km northwest of Port Moresby, the national

---

<sup>18</sup> Conversion rates between these currencies have been very unstable over the period covered by this paper, with the PNG kina devaluing from \$A1.51 in 1993 to \$0.50 currently. The noted variation in annual income figures has been due mainly to the kina’s decline, cyclical vacillation in the volume of crops produced for sale resulting from El Niño/La Niña alternations (especially during droughts of 1990–1994 and 1997–1998), and fluctuations in the price that villagers receive for their produce in the urban marketplace – factors extraneous to the land tenure system that facilitated the production of the people’s crops in the first place.

capital (National Statistical Office 2002, pp. 15-16).<sup>19</sup> Their land consists mainly of grassland, rainforest and swamp, approximately 400 square km of which is arable. As Austronesian-speakers, they are related to many other coastal groups in PNG and the island Pacific (e.g. Samoa, Fiji, Tahiti, Hawaii, Guam).

Intensive interactions with Europeans began some 130 years ago, so by now four to five generations of people have had experience with the outside world. Nonetheless, the 'traditional' social organisation based around clan groupings continues to structure much of village life. Each of the several clans that compose a village is led by a 'chief', other named hereditary officials, and elder male and female members. Catholic missionaries (Order of the Sacred Heart) have provided a relatively high level of education for most villagers – a key factor underlying current economic success. In Maipa village (population 425) where I have concentrated my research, there are more than 20 adult men and women who have either attended or graduated from high school. More than a dozen of these people have formal vocational qualifications (electrician, teacher, forestry, etc.), and one is a university graduate. Also, from the end of World War II to National Independence in 1975, the Australian colonial administration supported Mekeo communities with considerable expertise and infrastructure in conjunction with various cooperative agricultural schemes (coffee, rice, coconut, cocoa, citrus, etc.).

### **Mekeo production and marketing of areca-nut and pepperfruit**

With the collapse of these projects in the 1980s following the post-Independence deterioration of transport and distribution facilities (e.g. roads, airstrips, markets), Mekeo have achieved notable economic success in the production and wholesale marketing of two indigenous crops, areca-nut (betel-nut) and pepperfruit, cultivated in accordance with the pre-existing system of land tenure. The chewing of areca-nut and pepperfruit mixed with lime is a customary practice found across many parts of PNG and, aside from its mildly intoxicating effects, it is highly valued as epitomising human sociality.

Mekeo are well-positioned to produce a large marketable surplus of areca-nut and pepperfruit:

- their fertile garden lands enable both crops to grow profusely with little labour;
- the technology required is relatively simple;
- Mekeo possess an abundance of arable land;
- despite ever-deteriorating roads, village entrepreneurs have organised an informal but efficient system for transporting crops by canoe and lorry to town;
- Port Moresby, directly connected to Mekeo by the Hiritano Highway since 1972, provides an ever-expanding population (254000 in 2000) of avid areca-nut chewers; and

---

<sup>19</sup> Until the imposition of colonial administration, the peoples now identified as 'Mekeo' did not constitute a single integrated societal unit but were distributed among four autonomous political 'tribes'. The main features uniting Mekeo beyond the sharing of contiguous territory were a shared language, culture, and social organisation.

- the customary land tenure system enables all villagers – old and young, men and women, family groups and individuals – to produce and sell their surplus areca-nut and pepperfruit to whatever extent that they are willing and able.

Consequently, Mekeo have been able to maintain a dominant role in areca-nut and pepperfruit marketing in proportion to Port Moresby's growth.

### **Pepperfruit production and cash earnings at Maipa village**

Maipa village has specialised in the production of pepperfruit. Situated near the foothills of the central range, the villagers' areca palms are infested with an insect that kills the mature trees but this location gives them more regular rainfall than villages closer to the coast, particularly in the annual dry season (June to December) and during the periodic El Niño droughts. This means that Maipa and one other similarly placed village, Ioi, usually receive sufficient rainfall to keep their pepperfruit growing when the vines of people downstream wither and cease producing (Mosko 1999).

During these times, Maipa villagers receive exceptionally high prices for their pepperfruit – from K40–80 (about A\$20–40) per ten kg bundle. During the El Niño drought of 1990–1994, for example, Maipa households were averaging gross incomes of around K10000 (A\$15000 at 1993 exchange rate). With about 50 households, approximately K750000 (\$A1 125000) was flowing into this one small village annually. Over three months I recorded 2000–3000 kg of pepperfruit, worth K10000–15000, being sent to town daily except for Sundays (Mosko 1999; Allen *et al.* 2002, pp. 22-23). Considering that a typical six-member household can harvest and market 20 or more ten kg pepperfruit bundles per week when prices are high, a family can earn around K1000 gross per week, or more than K50000 (A\$25000 in 2005 dollars) per year during exceptionally good times. When growers downstream are also producing, pepperfruit prices in town drop to around K5–20 per ten kg bundle, and when the market is really glutted prices can drop as low as K0.50 (about A\$0.25), or less than A\$10 for a week's harvest.<sup>20</sup>

### **Elevation of living standards at Maipa village**

By conventional measures, the standard of living at Maipa has risen substantially. Most domestic dwellings are now constructed partly or wholly of modern building materials – iron roofs, planed timber, steel posts, neon electric lights, louvered aluminium and glass windows. The last time I conducted an inventory of consumer durables, there were 12 petrol-powered electrical generators, two amplified string bands, two pay snooker tables, four well-stocked trade-stores, eight kerosene-powered family fridges, refrigerated beer for sale at any hour, five vendors selling frozen supermarket meat, six chainsaws, four enormous dugout canoes purchased from the Papuan Gulf, two fibreglass dinghies, 20 outboard motors, a TV and VCR, many mountain bikes and dozens of boom boxes. Everyone now sleeps on foam mattresses, and people wear a wide range of fashionable manufactured clothing. Beyond the purchase of consumer durables, a significant portion of annual family incomes has gone to pay school fees, this year K100 per high school student. Villagers have also experimented with three voluntary credit societies.

<sup>20</sup> The economic success represented in the above figures, while characteristic of the Mekeo region, is not entirely uniform across all villages. Some communities are closer to the main routes of transportation, or blessed by higher rainfall or other ecological factors which favour them over others (Allen *et al.* 2002, pp. 22-23, 30-32).

Most dramatically, Maipa residents have pooled large sums of surplus wealth for several substantial building projects. In the mid 1990s, K67 000 was collected for the construction of a new church. After completing the church with their own donated labour, villagers gathered another K50 000 for a Top-up Primary School. Seven of eight classrooms and teachers' dwellings are now completed so children can live with their families all week rather than, as earlier, living in unsupervised dormitories at the Mission's boarding school downstream. The children of two neighbouring villages attend Maipa's school, and at least one Maipa migrant in Port Moresby sends his children home to live with relatives where, he claims, they receive a superior education to what is offered in town. In the last few years, the two large clan clubhouses have been rebuilt with modern building materials, providing meeting places for a wide range of community functions. On last report, Maipa villagers were well along in planning a health station and a mini hydro-electrical project (Faiparik 2005). All of these projects have been implemented by the people themselves with nothing more than token contributions from external sources.

These enhancements in living standards are not unique to Maipa and have been variously repeated across the Mekeo district where people are actively exploiting their customary land tenure system in marketing areca-nut and pepperfruit. Unsurprisingly, the rapidity of these achievements has engendered a number of social problems – problems which would have arisen with or without individual freehold title to land – but the people have struggled to address these with some success. In the early 1990s, many families abandoned their subsistence food gardens in favour of flour, rice and tinned foods imported from town. When the price of pepperfruit collapsed in 1994, these people were suddenly without food. They scrambled to plant fast-growing sweet-potato plots, only getting through with the generosity of their kin who had had the foresight to keep subsistence gardens going. Nowadays everyone plants food gardens regardless of pepperfruit price fluctuations.

Initially there was also a great increase in the consumption of alcohol by men in many villages, with frequent fighting and violence, sometimes aimed at women and children. The level of drunkenness and violence has declined considerably since about 2000 however, largely as a result of women's and adolescents' participation in cash cropping. The customary land tenure system is sufficiently flexible that it enables women and youths to generate cash by planting and marketing areca-nut and pepperfruit in their own right. With independent cash incomes separate from their husbands or families, village women have been regularly organising their own fund-raising campaigns for the various community building projects separately from the men and typically in competition with them. Consequently, married women and single girls have achieved new levels of autonomy in their personal affairs while consolidating their collective presence as a force counterbalancing that of men. Men now share with women control of the main local leadership bodies, the Church Committee and the Society of Mary. While it is difficult to measure such things quantitatively, according to my wife, who has observed and participated in these changes over three decades, the status of women in the village has increased enormously in conjunction with their activities in pepperfruit marketing.

### **Mekeo customary land tenure**

Maipa people have been able to improve their standard of living largely because their customary land tenure system remains intact. However, Mekeo tenure of agricultural land, which is fairly typical of the Pacific (Ward 1997), is a far cry from the ‘communal land ownership’ conjured up by Gosarevski, Hughes and Windybank. It consists in a complex allocation of rights and obligations such that there are several discernible categories of ‘owners’ and ‘users’ with correspondingly different kinds of rights of ownership and use and corresponding responsibilities of custodianship. Only the unoccupied and undeveloped forest land, grasslands, and swamps which provide a great wealth of bush resources to villagers but which possess very low potential for agriculture (Hanson *et al.* 2001, pp. 54-55) can be construed as being owned or used ‘communally’ in the sense that all Maipa residents have relatively open access to them for the satisfaction of their individual, family and collective needs.

Maipa village is composed of four named clans. People nominally belong to their father’s clan, but they are important auxiliary members of their mother’s clan too. By the extended calculation of these ancestral kin ties through both parents, any villager can usually trace genealogical relations to every other villager and also to people in clans in other villages. Typically, each clan’s chief and hereditary officials manage the clan’s affairs with the advice and support of elder members including women who have married into other clans. As regards land tenure specifically, the chief of one of Maipa’s four clans is acknowledged as the ultimate ‘owner’ of the land, since in the mid 19th century it was his direct chiefly ancestor who led the war party that drove away the previous inhabitants. But because the ancestors of the other three clans served as warriors in those engagements, ‘spilling their blood on the land’, their chiefs and living members are viewed as possessing inalienable rights to the ownership and use of that land too. Thus the one chief who is nominal ‘owner’ of the land must consult with the chiefs and leaders of the other resident owning clans when major issues concerning the land arise. All village residents, regardless of clan affiliation, are thereby guaranteed access to tracts of land for their domestic dwellings, their food gardens, and their pepperfruit plantations.

This situation usually involves individual persons and domestic groups having primary rights to build houses or plant crops on land that their fathers or other ancestors previously utilised. If a given parcel of land in this category lies unused, then others – typically near kin, clanswomen’s children, or in-laws – can exercise secondary rights to use it. Also, in-marrying women acquire definite rights of use in their husbands’ blocks of clan land. In practice, Mekeo land tenure is further complicated by the fact that the ownership of trees such as sago, coconut and areca palms planted on the land is calculated separately from the land itself – a practice found throughout the Pacific. In sum (and this is still a much simplified account), rights and duties of ownership and use of agricultural land are distributed in complex cooperative relationships among the one chief who nominally owns the land, the officers and leaders of the other three clans who helped win the land, the community at large, and the individual gardeners with their families both nuclear and extended (Fingleton 2004, p. 97).

This inherent flexibility of customary Mekeo land tenure has been critical to the economic and social success of the people of Maipa and other villages (Fingleton 2004, pp. 98-99). Since the boundaries between lands owned and used by different people are never permanently fixed and claims to ownership and use are never completely

exclusive, villagers have the capacity to allocate their land in accordance with prevailing social values of kinship and morality. Every villager is effectively guaranteed access to as much land as he/she needs for housing, the gathering of bush resources, subsistence, and cash-cropping. People who are motivated to expand their cash incomes from pepperfruit or areca-nut or engagement in other entrepreneurial pursuits are not impeded by a lack of access to land.

In recent years, as a further indication of this flexibility, there has been a significant influx of people from other villages and regions to Maipa where they have established their own households with house, garden and pepperfruit plots. In the past, it was typically in-marriage wives who would relocate to new villages as adults. But with Maipa's marketing success, natal women are starting to bring their husbands to live with them there. There are now two non-Maipa and four non-Mekeo husbands and nearly a dozen non-Mekeo wives in residence. People frequently remark, because of this, 'Maipa is like a town'. Interestingly, the in-marriage people have been adopted into kinship networks in accordance with traditional rules of clanship and marriage, making them fully participating members of the community. Also a few urban wage-earning Mekeo have returned to Maipa for retirement, taking up pepperfruit marketing to support themselves. The flexibility of the customary land tenure system thus provides life-long security for all community members – something which developed economies such as Australia's are incapable of doing for all their members – while enabling everyone to strive for financial success in the contemporary world.

### **Customary land tenure and development**

By any measure, the case of Maipa and Mekeo generally is one of impressive success, and it provides a model example of 'development' and enhanced living standards. There are numerous factors contributing to this outcome which I have tried carefully to outline in this paper. Most significantly, contrary to the assumptions of Hughes and her associates, the people's continued reliance on customary arrangements for land ownership and use has facilitated agricultural success, not impeded it. Moreover, if Mekeo land ownership were converted to individual freehold title as advocated by Gosarevski, Hughes and Windybank, there is every reason to suppose that villagers would continue to market areca-nut and pepperfruit as their chief cash-earning activity – hence with no marginal increase in financial benefits, but at the cost of a severe deterioration in social benefits once many villagers were disenfranchised from their land.

What might then be recommended as a solution to the economic and social stagnation of Pacific Islanders beyond Mekeo? In the rural areas I have visited, the answers are only too clear to practically everyone on the ground: roads, education, *good* roads, markets, *maintained* roads, distribution networks, infrastructure (e.g. *roads*), security, quality health services, and an end to political corruption – for starters. In the Mekeo region and, as Bourke demonstrates in his paper, for many other parts of PNG, villagers are advancing themselves both economically and socially. There are a number of constraints which are inhibiting this advancement but customary land tenures are not among them. If PNG officials and planners could be advised to attend to these desperately obvious needs rather than be distracted by the false and misleading view of 'communal land ownership' displayed by Gosarevski, Hughes and Windybank, there might be more hope for villagers' future lives.

## Does customary land ownership make economic sense?

Chris Lightfoot

### Individual rights under customary ownership

In the article ‘Is Papua New Guinea viable?’ Helen Hughes and her two co-authors assert that ‘communal ownership has not permitted any country to develop’ (Gosarevski *et al.* 2004a, p. 137). In the Introduction to this discussion paper, and in some of the other papers, it is pointed out that the term ‘communal land ownership’ as used by Gosarevski, Hughes and Windybank is problematic. I share those misgivings, but in responding as an economist to Hughes and her co-authors, my main concern is to address their economic arguments against land tenure systems based on customary land ownership. For that purpose, I have adopted their term ‘communal land ownership’ where necessary. It will, however, be apparent from my comments below that I do not see the term as adequate to sum up the way in which customary land is owned and used in the diverse land tenure systems of the Pacific Islands. I use the term ‘communal’, in contrast to ‘individual’, to mean that land rights based on membership of a group are involved.

There is more than ample evidence to show that secure, transferable, individual property rights are an essential characteristic of a modern developed economy.<sup>21</sup> What is in question is whether such a system can be based on customary ownership or must be based on individualised freehold. In the following paper it will be argued that a land tenure system based on customary ownership can deliver all the essential characteristics required to develop a modern economy while protecting the land rights of members of the community. It will also be asserted that the benefits of this approach outweigh the costs.

The argument advanced by Gosarevski, Hughes and Windybank against ‘communal’ land ownership ultimately derives from Hardin’s analysis in the ‘Tragedy of the Commons’ (Hardin 1968, pp. 1243-48). Hardin correctly points out that ‘open access’ to a resource will almost inevitably lead to its over-exploitation and thereby reduce the benefits obtained from its use. He cited the right to graze cattle on the village common to demonstrate the inevitability of over-exploitation. The situation Hardin described, however, is quite different from the way land is owned and used throughout the Pacific. Typically in the Pacific, members of a community do not have ‘open access’ to the land that is owned under customary tenures; land is used by individuals for their own benefit. Generally the land is used for private cropping which, of necessity, establishes boundaries around the usage rights of individuals. In his paper, Michael Bourke discusses the individual use of customary land in PNG to grow various cash crops, including fresh food, coffee, cocoa, copra, vanilla and betel nut. Most of these crops are grown on customary land by individuals for their personal benefit. It is clearly incorrect to suggest that individuals can never develop customary land for their own benefit.

In the article ‘Is Papua New Guinea viable *with* customary land ownership?’ Gosarevski *et al.* (2004b, pp. 113-136) maintain that no country retaining a customary land

---

<sup>21</sup> Ron Duncan provides a very cogent analysis of the importance of property rights to economic development in his article ‘Land Tenure, Economic Development, and Environmental Sustainability’ (Duncan 2002).

ownership system has developed. While this assertion is clearly untrue, given the developments that have occurred in PNG, Fiji and other Pacific states, it is probably true to say that a strictly customary land tenure system would be a constraint on the level of development. The absence of secure, individual and transferable property rights limits the type of development that can be undertaken, which in turn limits the level of development of an economy. Gosarevski *et al.* (2004b, p. 134) argue that this constraint can only be addressed by moving to an individualised freehold tenure system, through which the most able entrepreneurs acquire the ownership of the productive land. They go on to claim that the cost to the remainder of the community from losing direct access to land will be more than offset by the benefits gained through employment and the transfer of wealth created by the increased productivity of the land.<sup>22</sup>

While acknowledging the importance to development of secure, individualised transferable property rights, I question the need to move to an individualised freehold land tenure system. As Fiji has shown, it is possible to establish a land tenure system that is based on customary ownership while providing individuals with secure and transferable property rights.<sup>23</sup> The principal differences between the Fiji system and the individualised freehold system being advocated by Gosarevski, Hughes and Windybank are the:

- a. **Nature of the ownership:** In Fiji, the land remains the customary property of the traditional owners. Under an individualised freehold system the land is the private property of a specific owner.
- b. **Duration of the property right:** Under the Fiji system, the land may be leased, through the Native Land Trust Board (NLTB) by a specific user for a specified period of time. Under an individualised freehold system the duration of the property right is an indefinite period.

In the context of this debate, the economic questions that need to be asked are:

- to what extent does the nature of the ownership limit the effective and efficient use of the land?
- is a lease over customary land a form of property right that is inferior to an individualised freehold?
- if such a lease is a form of property right inferior to an individualised freehold, what is its net economic cost?

The essential difference between leasehold and individualised freehold is the duration of possession. Leases are for specified periods and individualised freeholds have indefinite duration. It is perfectly feasible and common for leases to be transferable, used as collateral for loans and developed. Leases and individualised freeholds are generally subject to the same regulations and usage restrictions imposed by the state and

---

<sup>22</sup> As the experience in the former Soviet bloc shows, in a period of transition it is usually the most unscrupulous and corrupt that end up owning resources, and these new owners frequently sequester much of the subsequent income in foreign investments. At least in the short term, there has been very little 'trickle-down' effect from the activities of the most 'able' to the newly-liberated workers.

<sup>23</sup> Fiji's land tenure system and economy are discussed later in this paper.

municipalities. While it is possible for owners to impose additional constraints on the use of leases, this is not an essential characteristic of a lease.

Provided a lease is transferable, it has a market value and that value represents the capitalised value of the highest and best use to which the property can be put. Individualised freehold properties, which by definition are transferable, also have market value and that value also represents the capitalised value of the highest and best use to which the property can be put. The market value reflects the value in use and therefore is a measure of the economic value of the land. The difference in value between leasehold over a property and the individualised freehold of the same property is the difference in the capitalised value of either property right. This will occur if the market signals for leasehold land are different from those for freehold land. In the context of this debate the difference, if any, between the two values is the direct cost of having a land tenure system that permits individual leaseholds over customary land versus replacing customary land tenure with an individualised freehold land tenure system.

Other things being equal, there is unlikely to be any significant difference between the economic values of land held either under lease or individualised freehold. If the land remains productive, the lease will be renewed indefinitely and therefore its economic value will be the same as it would be under individualised freehold. If the land becomes unproductive then it will have no economic value whether under leasehold or individualised freehold. If the rights under leasehold and freehold are equally enforceable under law there is essentially very little, if any, difference in value between the two. The rents paid for leased land are transfer costs and have no net economic impact.

Even in the unlikely event that an individualised freehold must be compared to a single-period lease – that is, the lease is not renewed – the difference in values is minimal. As discount tables show, the present value of a 30+ year lease is slightly less than the present value of an individualised freehold. For example, at a ten per cent discount rate, a 30 year lease is worth 94.3 per cent and a 50 year lease is worth 99.1 per cent of the individualised freehold value. So, even in this extraordinary example of a single-period lease, the direct economic cost of a secure, individual and transferable lease over customary land is likely to be somewhat less than five per cent of the economic value of the land if it were held under individualised freehold.

### **Role of land as a social safety net**

The major economic benefit that derives from the on-going ‘communal’ ownership of land is the much higher degree of security for the members of the community. Having access to (or at least the right to make claims on) land is an important social safety net for Pacific Islanders. It has real value for the community that exceeds the simple return from the direct use of the land. It enables people to take risks in pursuing education, finding paid employment, investing and other activities. The level of risk implicit in change is a major, if under-recognised, constraint to development. If permanently alienated from their land, Pacific Islanders would have no choice but to take whatever employment was available for whatever payment was offered. Gosarevski *et al.* (2004b, p. 134) argue that this would be a better outcome than the current situation. I am not convinced.

None of the Pacific Island economies can afford comprehensive state-sponsored social security systems; the right of access to land provides most Pacific Islanders with a degree of security that the dispossessed peasants of South America, the Philippines and many other countries can only dream of. Unlike the utopia described by Gosarevski *et al.* (2004b, p. 134) – the better life available to all if the most ‘able’ own the nation’s land – the cold reality for the urban poor who scabble for a living around Manila and Mexico City and the landless poor of Bangladesh is a life of grinding poverty, where there is no choice but to take any work at any price. In the Pacific the reservation price of labour is generally relatively high due, in large part, to the fact that Pacific Islanders have access to land – or at the very least believe they have access to land.

In the absence of a detailed economic analysis of the benefits of having broad-based access to land it is only possible to surmise. However, it seems highly likely that a land tenure system which permits the establishment of secure, individual and transferable leases over customary land is going to provide markedly greater benefits to Pacific Island communities than an individualised freehold system which concentrates ownership in the hands of a fortunate few.

### **The Fiji example: failure or success?**

Fiji is the only country in the Pacific that has effectively addressed the issue of retaining customary ownership of land while meeting the needs of investors and financiers. It is therefore worth spending some time looking at several of the claims and assertions made about the Fiji economy and land tenure system during the course of this debate.

As pointed out earlier, Gosarevski *et al.* (2004b, pp. 133-36) assert that it is impossible for an economy based on ‘communal’ land tenure to develop. They go on to dismiss the counter-evidence provided by Fiji. In a separate article, Hughes asserts that Fiji’s economic growth has been disappointing when compared to Botswana’s (Hughes 2004b, pp. 4), the implication being that Fiji’s ‘communal’ land tenure system is responsible. To say the least, this is a perverse interpretation of the situation. First, the impression conveyed by the article is that Botswana has an individualised land tenure system. In fact, as is the case in Fiji, the majority of the land in Botswana is held under what Gosarevski, Hughes and Windybank would call ‘communal’ land tenures.<sup>24</sup>

Secondly, while it is true that the growth rate of the Fiji economy has been disappointing, the reasons for this lacklustre performance are well known and thoroughly documented (ADB 1999). They have little, if anything, to do with the land tenure system. The Ratu Mara Government’s mistaken reliance on central planning and trade regulation from the mid-1970s to the late 1980s caused the economy to stagnate. There was a brief moment in the early 1990s when the economy responded to the then Interim Government’s trade liberalisation policies but this interlude did not last long. Subsequent elected governments rapidly reverted to the inward-looking strategies that favoured special interest groups at the expense of the majority. The reasons Fiji has a poor growth record can be traced to the fiscal, social and macroeconomic policies of successive governments. They certainly cannot be attributed to the land tenure system.

To suggest, as Hughes does (2004b, p. 4), that the concentration on sugar cane growing on leased lands instead of the development of a more diversified agricultural system is a

---

<sup>24</sup> Daniel Fitzpatrick 2005 (pers. comm.).

negative consequence of the customary ownership of land is quite ridiculous. It totally ignores the fact that growing sugar cane is the most profitable activity in many areas, and therefore a fully rational economic decision – exactly the sort of decision that Gosarevski, Hughes and Windybank are arguing must be fostered if the Pacific economies are to grow. Sugar cane is the most profitable activity in those areas because of the artificially-inflated price that derives from the heavily-subsidised Lomé Agreement<sup>25</sup> and a system that pays for cane weight rather than sugar weight. In addition, to suggest that all the rents from this inflated price are captured by a few venal chiefs (Hughes 2003, p. 8) ignores the fact that most of the rent is dissipated by inefficient agricultural practices that derive from the Fiji Sugar Corporation's pooled-price payment arrangements.

In the same article, Hughes (2003, p. 8) also asserts that the NLTB lease terms are too short to justify investment in the land, a statement that completely ignores the fact that most of the holiday resorts in Fiji have been constructed on land leased through the NLTB. It also ignores the fact that sugar cane is a biennial crop and the 30 to 50 year NLTB lease periods are more than enough to justify the investment required to grow sugar cane. It is true that the operations of the NLTB have left a lot to be desired; notably, the excessive administration costs and the narrowly-based disbursement structure have meant that most Fijians have received very little for the use of their land. This is an understandable cause for discontent amongst the landowners. However, these difficulties do not mean that the principle underlying the establishment of the NLTB is fatally flawed.

Leading up to the establishment of the NLTB in 1940, the leadership of Fiji, in particular Ratu Lala Sukuna, understood clearly the need to establish a land tenure system that would foster the development of under-utilised land. At the same time the leaders were rightly concerned that, if handled incorrectly, the revised land tenure system could result in the traditional owners being dispossessed. The model they developed has three key components:

- i) the boundaries of each land-holding unit are defined and registered;
- ii) the members of each land-holding unit are registered on the *Vola ni Kawa Bula*<sup>26</sup> (VKB) at birth; and
- iii) the NLTB is a legally-constituted entity which has the legal right to enter into enforceable lease agreements that cannot be overturned at the whim of the land owners.

While each component of this model is essential, the key to its success is the role of the NLTB. The NLTB acts as a 'firewall' between the land owners and the lessees. A lease entered into with the NLTB is legally enforceable and once entered into cannot be overturned by the land owners. Over the years there have been occasions when the land owners have attempted to disrupt lessee use of property; in all cases the rights of the

---

<sup>25</sup> Under the Lomé Agreement between the African, Caribbean and Pacific (ACP) countries and the European Union (EU), the ACP countries are entitled to sell selected commodities, including sugar, to the EU at EU domestic prices. Since the inception of the Lomé Agreement, the EU domestic price for sugar has been as much as triple the world price.

<sup>26</sup> The *Vola ni Kawa Bula*, commonly known by its acronym VKB, is the Fiji Islands' register of all native Fijians. The register was established under the *Native Land Act* 1940.

lessee have been protected by the Fiji justice system. In summary, NLTB leases have the essential characteristics of secure, individual and transferable property rights – they are protected by law, granted to individuals for their own use and transferable. As such, banks and other financial institutions are willing to accept them as security for loans. Under the NLTB system virtually all of the potentially productive land has been brought into production.

In conclusion, it should be noted that, despite its disappointing growth performance, Fiji still ranks as a lower middle income country according to the World Bank ranking of nations. This puts Fiji well ahead of most of its neighbours. I venture to suggest that, in large part, this is because Fiji has a land tenure system that provides secure, transferable, individual property rights, albeit a land tenure system that is based on customary land ownership.

## Common property and development: forests and pastures

R. J. Fisher

### Introduction

In a recent paper, Gosarevski *et al.* (2004, p. 137) argued that ‘Communal ownership has not permitted any country to develop’, the underlying point (reiterated and, to some extent, elaborated in other individual or joint publications by the same authors) being that development does not occur without individual rights to land. Although the contention focused on agricultural land, the point was made as a generic statement. This paper argues that ‘common property’ can work for development in some types of land-based resources and that in some situations it is the only viable way to manage land. This is not to say common property is always appropriate, but in some circumstances it is and the appropriateness of various systems of rights is always dependent on the context. The paper does not address rights to agricultural land as the topic is covered in other papers in this collection.

Many cases of ‘common property’ over forests and pastures actually occur where the land is legally state-owned, but where there is some degree of local decision-making by a specific group about resource management and distribution of resources. This does not mean that these matters are fully under local control or that group members have unconstrained access. State land is often *de facto* common property, although community control over decision-making and access may be limited. The minimum condition for common management is that the state tolerates (in the sense that it does not interfere with) at least some degree of local decision-making.

In this context, much of the discussion in this paper is about group management and not necessarily about common property in the formal sense. However, there is not much difference between these concepts if tenure is seen as an arrangement, either formal or informal, governing access. Common property is understood here as comprising an effective degree of control of, and access to, land-based resources by a particular group.

In some of the cases of forest and pasture management discussed below, it is clear not only that individual rights are not a necessary precondition for development or investment, but that investment and development can occur when there are no formal rights at all.

Gosarevski, Hughes and Windybank seriously oversimplify the distinction between individual property rights and what they refer to as ‘communal ownership’. In the real world tenure systems often combine aspects of individual and group rights. For example, nomadic pastoralism typically combines common rights to pastures with individual ownership of livestock. Swidden cultivators in South East Asia frequently manage an overall forest territory as a group, but allocate cultivation rights within this to individual households. (And they do this on land which is almost invariably under formal state ownership.) In many countries where forests and pastures are regarded as common property, individual trees are recognised as being private property.

## Forests

In many countries, large areas of forest are under formal state ownership and controlled, at least in theory, by government authorities. This is true of most countries in Asia and Africa. However, despite this common pattern, there are many examples of forests managed as 'common property' either by local 'communities' acting informally (i.e. extra-legally) or through official devolution of management and use rights.

White and Martin claim (2002, p. 3), based on 'official tenure data for 24 of the top 30 forested countries in the world', that 77 per cent of forests are administered by governments and another four per cent consists of public land 'reserved for communities'. Private ownership is distributed between individuals and firms (12 per cent of the total) and community and indigenous land (seven per cent of the total). Obviously there is a difference between the two types of community forest included in the public and private categories in terms of formal ownership. In practice, even these categories would include a considerable range in the extent to which communities have effective control of forests; the categorisation does not take account of significant areas of forest that are formally under government ownership but managed *de facto* by communities.

One prime example of *de facto* forest management comes from Nepal where there is now a very large government program under which permanent use rights to forests are handed over to Forest User Groups. This is done on the basis of an Operational Plan, which is an agreement between the users and the Forest Department as to the general parameters under which the forest patch is to be managed and how products are to be used. By 2003, over 12 000 FUGs had been registered, more than a million hectares of forest land were managed and above one million households were involved. This particular approach to devolved forest management was formalised by legislation in 1993,<sup>27</sup> but earlier forms of community forestry in Nepal go back to the late 1970s.

During the early period when community forestry was under development, research showed that there were large numbers of local forest management systems based on common property arrangements throughout the country (Fisher 1989; 1994). These systems existed without any formal authority and often without the knowledge of the Forest Department. They frequently involved protection of degraded forest areas for regeneration and thus often included costs in the sense of forgone access to products during regeneration. The important thing is that protection and forgone access amounted to a form of investment not only in the absence of individual rights but of any legal rights at all. In many cases, the local arrangements included regulations for limiting collection of certain products and for sharing them between households. Although communities were legally allowed to collect only dry branches and leaf matter lying on the ground, local systems sometimes (extra-legally) allowed regulated collection of cut wood and leaves for fodder.

The shift towards formal devolution of rights to communities (as Forest User Groups) provided increased security of access to necessary products and some generation of income from the sale of non-timber forest products. However, the Forest Department has been very reluctant to allow communities to harvest and sell timber from community

---

<sup>27</sup> The legislation was originally drafted by Jim Fingleton, one of the present authors, as an Asian Development Bank consultant to the Government of Nepal.

forests commercially, although there are many forests suitable for this purpose. The barrier to development here is not the absence of individual rights, but the absence of a necessary devolution of decision-making either to individuals or groups.

A second example of community management comes from Shinyanga in Tanzania (Barrow and Mlenge 2003; Mlenge 2004). This area was severely degraded for a variety of reasons including commercial cash cropping in the colonial period and government policies which encouraged clearing for agriculture following Tanzania's villagisation policy in the 1970s. In more recent years the government has experimented with a decentralised and participatory approach in the area, a major element being the recognition of local rights to use forest products and the development of a policy framework that has enabled the re-establishment of traditional *ngitili* (forest enclosures), based sometimes on individual rights and sometimes on community rights. The result is that hundreds of thousands of hectares of forests have regenerated as a consequence of protection and significant benefits (including cash income) have been returned to local people, including the poor. Notably, some cash income from community *ngitili* has been reinvested in development activities such as schools. According to a recent evaluation, over 64 per cent of households benefit extensively from *ngitili*. The average income per household per year is US\$1 000 (Monela *et al.* 2004), a significant amount in such a poor region.

Importantly, the re-establishment of *ngitili* included a mix of individual and community *ngitili*, a matter decided by the local population and apparently depending on the size, location and customary use rights.

The size and accessibility of forests often make management by individuals very difficult; for example in cases where forests consist of moderately large areas remote from settlements, management of separate individual plots is often not practical. The larger and more remote the forests, the more likely this is to be true. In such situations, some form of common property arrangement may be the only viable choice. Division of relatively large areas of forest remote from villages and individual households (as is very common in Nepal) imposes considerable transaction costs, especially in terms of protection. (For an example from China see Box 2). In China, efforts to devolve rights and responsibilities for forest management have included devolution to the household level under the household responsibility system. One application of contracted household-based management was to 'responsibility hills' (*zerenshan*) but, according to Liu and Edmunds (2003), the Forestry Department felt that the system increased deforestation and stopped the approach.

### **Box 2 Individual forest plots and high transaction costs in Sichuan**<sup>28</sup>

A case from Qu Xian County in South Eastern Sichuan illustrates some of the reasons why individual rights over forests may not work and may not lead to investment. In this case there is a valley with intensive mixed agriculture and forestry. There are trees almost everywhere: clumps of trees form part of home gardens around individual houses; there are trees on the edges of agricultural terraces and in corners unusable for agriculture such as on the edges of streams. In the distance, there are several small hills, more or less bare of any sign of trees or, for that matter, any form of agriculture. It turns out that these bare hills are technically classified as village collective forests, allocated to the village for the use of the villagers. However, this is not a case of the 'tragedy of the commons'. The areas are actually divided up into separate plots for the use of individual households under the 'household responsibility system'. In other words the rights to use the forests and their products are held privately. The problem is that the plots are remote from the village and are too small to justify any input of labour for protection purposes. Consequently, investment in tree plantation and cultivation is not worth the transaction costs.

There are, of course, two ways to implement privatisation. One is to divide land-resources into numerous small plots; the other is to privatise large pieces and transfer them to selected individuals. In fact, this is commonly done, especially in the sense that large areas of forests are provided to private companies as concessions for logging. While this might lead to development in the sense of economic growth, it does not generally move local people out of poverty. The history of indigenous peoples in forest areas of tropical Asia illustrates this point. Frequently, even the obvious benefits of commercial logging, such as jobs, go to outsiders and not to forest dwelling people.<sup>29</sup>

It is sometimes argued that forests do not always have the potential to contribute in a large way to poverty alleviation (Angelsen and Wunder 2003). Dove (1993) argues that poor people living in tropical forests are poor because they are politically marginal and therefore do not have access to valuable forest resources such as timber which are controlled by outsiders. Wunder (2001, p. 1817) suggests that 'natural forests may have a poor comparative advantage for alleviating human poverty', but he seems to ignore the possibility that the situation might be different if the forest dwelling poor controlled forest resources, perhaps through issuing concessions to commercial companies on the basis of community title. This discussion is not specifically concerned with the relative merits of individual rights or community rights. However, it does emphasize the point that absence of control of forests by the poor is probably more of an issue than whether that control is exercised through individual or common rights.

### **Pastures**

Livestock rearing in countries such as Australia and the US is often based on a ranching model in which both pastures and livestock are owned privately. However, such an approach becomes increasingly difficult in arid areas where conditions require extensive movement seasonally or where variations from year to year require flexibility of access

<sup>28</sup> Source: Slightly modified from draft manuscript under preparation by R. J. Fisher.

<sup>29</sup> In reference to privatisation of agricultural land, Gosarevski *et al.* (2004a; 2004b) exhibit an endearing optimism about the capacity of the benefits of growth to trickle down to the poor.

to pastures with highly irregular local conditions.<sup>30</sup> Several forms of semi-nomadic and nomadic pastoralism and vertical transhumance have developed in such circumstances.

As Finke puts it:

In arid zones exclusive property rights often do not make sense because people are in need of large and partly overlapping territories in different seasons. Moreover the high variation in precipitation makes it necessary to have access to different territories (Finke 2000, p. 2).

These types of pastoralism require institutional structures to enable decisions about the timing and direction of movement and to coordinate responses to local variations in grass conditions; in addition, they require arrangements to provide access to dispersed pastures. Individual property rights are not very useful in such circumstances. There are a variety of ways in which flexible rights to access can operate. Rights may be in the form of common property, either through formal legal title or, more commonly, informal arrangements among herdsmen regulating access to land officially belonging to the state. Access can also be in the form of negotiated rights to graze animals on fallow agricultural land (as is common in Western Rajasthan), or to use certain pastures at certain times of the year (as in the case of high altitude pastures in parts of Nepal).

This does not mean that pastoralism involves forms of group rights only. On the contrary, nomadic and semi-nomadic pastoralism almost invariably involves a combination of group rights to pastures and individual ownership of livestock.<sup>31</sup> Attempts to privatise grazing rights have often been resisted by herders on pragmatic grounds – see Box 3.

---

<sup>30</sup> This flexibility can occur in ranching systems, but only in the case of very large ranches and low stocking density.

<sup>31</sup> The main exceptions to this are the attempts to collectivise pastoralism under communist regimes which collectivised livestock ownership. They also collectivised land ownership, but this was not usually the same thing as common property. Formal communes and collectives tended to be directly under the control of the centralised state rather than the control of their members.

### Box 3 Property rights in Chinese rangelands

Prior to reform in the 1980s, the commune system in China applied to pastoral regions. Following reform under the 'household responsibility system', livestock belonging to the communes was distributed to households (Banks 2001). Attempts to establish household tenure over pastures has been strongly resisted, although official statistics claim otherwise (ibid). Regarding a study of several parts of Western China, Banks *et al.* point out that the 'first feature of institutional arrangements ... is the persistence of collective and group arrangements, despite attempts to allot to individual households' (Banks *et al.* 2003, p. 134). The way these arrangements operate varies. (Following the arguments made earlier in this paper, this could be expected in the context of differing local contexts and seasonal conditions).

[In Yunnan] collective use of grasslands occurs at the administrative village level, but winter hay fields have been allocated near farmland, although management of these allotments has failed in many areas... *De facto* arrangements are such that summer pastures are used in common by the whole administrative village, whereas winter pastures are only used in common by the smaller natural village unit (Banks *et al.* 2003, p. 134).

Although arrangements differ across all sites, 'individual tenure has only successfully been established in hayfields and artificial pasture' (Banks *et al.* 2003, p. 134).

Far from group rights being a barrier to effective (and profitable) pastoral management, impoverishment is usually a consequence of the reduction of available pasture (due to conversion to agriculture), forced settlement and the loss of institutions for managing access and deciding which pastures are in the best condition for grazing.

### Conclusions

Contrary to the assertion by Gosarevski, Hughes and Windybank that 'communal' rights to land are a barrier to development, this paper argues that various types of group arrangements ('common property') have often been quite effective in forest and pasture management. In fact, there is sometimes no viable alternative as in cases where forests are large and remote from places where people live and where environmental conditions require pastoralists to be mobile and to respond flexibly to local grazing conditions.

It is also clear that, far from firm individual rights being essential, people often manage both forests and pastures through informal common property arrangements, in the absence of any legal rights at all. In fact, they sometimes invest (including by forgoing benefits in order to protect regenerating forests) in the absence of legal rights. In such cases, it is not the group arrangements that are a barrier to development but the fact that the group rights are constrained by the state (as in the case of Nepal where communities are rarely able to harvest commercial timber).

This paper is a response to the argument that individual rights are intrinsically superior to common rights. However, it does not simply argue the reverse proposition (that common rights are intrinsically superior to individual rights). On the contrary it argues that the appropriateness of one system or another, or of a system which combines individual and property rights, varies according to context.

## Conclusion

Jim Fingleton

### **What is wrong with customary tenures?**

Customary land tenures are often portrayed as static, non-adaptive, uncertain, backward-looking – in short, an obstacle to development. On the contrary, research shows that people operating under the flexibility of their customary tenures are able to adjust to the changing demands they make on their land under modern circumstances, adapting to increased internal migration and new patterns of land settlement, the greater importance of the nuclear family, the growing cash economy, new uses of their land and an increasing population. My own research among the Tolai people of the Gazelle Peninsula in PNG (Fingleton 1985) showed that they were able to manipulate their customary land tenure system to allow the continuous redistribution of their village land in ways which promoted its most advantageous use.

In this discussion paper, Bourke shows that, far from being an obstacle to development, customary tenures are the dynamic sector in PNG. Over recent decades, agricultural production in PNG – both domestically-marketed food and export crops – has expanded steadily under customary tenures, but has mostly declined under registered titles. This runs totally contrary to the main argument advanced by Gosarevski, Hughes and Windybank with respect to customary tenures.

While Bourke describes the general picture across the whole country, Mosko's paper provides a striking rebuttal, at a regional and village level, of the main argument advanced by Hughes and her co-authors. His research in the Mekeo area reveals people successfully producing and marketing two major indigenous crops (betel nut and betel pepper) from their customary lands, channelling the income into improved housing, school buildings, a church, health facilities and a mini hydro-electricity scheme, thereby elevating the living standards of the village in general, and women and youth in particular. It is a far cry from the dismal picture of communal village life painted by Gosarevski, Hughes and Windybank in their calls for revolutionary change.

Lightfoot tackles the economic arguments, showing that the difference in value between a lease over customary land and a lease over a freehold is negligible in economic terms, but customary land provides much higher social benefits. Taking Fiji as his main example, he shows how a system based on the registration of group-based tenures in customary land has, for over 60 years, underpinned investments ranging from sugar cane production to international tourist resorts, while at the same time providing a social safety net for villagers. Customary land is registered and then leased to developers through the agency of a special body, the Native Land Trust Board, which Lightfoot describes as the 'firewall' between land owners and lessees. The leases are secure, transferable property rights, protected by law and accepted by banks as security for loans. Under this system, virtually all of the potentially productive land in Fiji has been brought into production. Although Fiji's economic growth rate has been disappointing, the reasons are not related to customary tenures.

Fisher illustrates that there are some natural resources (e.g. forests and grasslands) in developing countries for which group-based systems of tenure and management are not just viable but essential to reduce poverty and allow economic benefits to flow to communities. Indeed, frequently the resources involved are legally owned by the state and resource-users have no legal rights at all, yet they do invest in managing the resource. In many respects the situation corresponds closest to that which Hughes has termed 'communal', in the sense that such rights as do exist (usually, to participate in management of the resource and to have access to it for subsistence purposes) are enjoyed by a locally-resident community. The irony is that when attempts were made in China to convert pasture land formerly owned by herders' collectives (that is, the 'communal' model) into private plots, they were resisted by the herders as impractical.

### **What should be done about customary land tenures?**

In my *Pacific Economic Bulletin* article (Fingleton 2004) it is pointed out that the push to individualise customary tenures is an old approach dating from the 1950s; that it has been tried before and has failed comprehensively. It is not necessary, nor is it desirable or feasible to cancel out group rights and responsibilities over customary land. But there may be a need, in certain circumstances, to strengthen the rights of individuals and ease the constraints of customary tenures. I have advocated in the article a two-tier registration system, with group titles as the 'head title' (i.e. ownership), and then subsidiary titles (leases, etc.) granted by groups to the users of the land. This discussion paper is not arguing that any intervention in customary tenures is unacceptable; the argument is about what need there is to intervene, and what is the most suitable intervention.

Where land under customary tenures is being converted to new uses which require a clearer definition of land rights, a case can be made for replacing some of the flexibility of customary tenures with the certainty of registered titles. Such cases could be areas of customary land within the boundaries of towns and cities, or on their fringes, where people are settling on land without formal recognition of their rights to occupy. All towns and cities in Melanesia, to a greater or lesser extent, have problems associated with such informal and unregulated settlement. In rural areas, cases where a clearer definition of land rights might facilitate development could be where large investment is planned in agricultural production, including post-logging operations. In such circumstances, a system for the registration of land titles would provide a valuable service to land owners and those seeking to develop the land.

If the individualisation of customary tenures is not the answer, then what is? Just as the individualisation trend came out of Africa half a century ago, it is back to Africa that we can look for indications of the way forward. At the recent Land in Africa Conference, African leaders, researchers into land issues and international agencies<sup>32</sup> met in London in November 2004 to explore current thinking and experience with land tenure issues across the continent. Among the findings and conclusions of the conference were:

- land titling programs have proved to be slow, expensive and difficult to keep up-to-date (*Sustainable Development Opinion* 2005, p. 5);

---

<sup>32</sup> Among the agencies involved were the Rockefeller Foundation, UK Economic and Social Research Council, Canadian International Development Agency (CIDA) and the UK Department for International Development (DFID).

- registration of individual titles risks many secondary right-holders losing access to their land (p. 5);<sup>33</sup>
- the debate about land reform options is often argued in economic terms, but there are also many other dimensions which relate to stability, social cohesion, identity and equity (p. 4);
- many policy options are available to governments and reforms should be tailored to different settings (p. 5); and
- ways of securing land rights work best when based on tenure systems already known to the community concerned (p. 5).

These views are a strong endorsement of those expressed in PNG over 30 years ago, when the Commission of Inquiry into Land Matters (CILM) presented its report (Papua New Guinea 1973). It made recommendations across a wide range of land matters, but in respect of customary land tenures its guiding principle was that reform ‘should be an evolution from a customary base not a sweeping agrarian revolution; collective and individualistic extremes should be avoided’ (Papua New Guinea 1973, p. 15). Other relevant CILM views were that:

- the previous emphasis on individualisation of titles was not appropriate;
- new legislation for customary land registration should be introduced, but it should be used sparingly, and only where there was a clear demand from the land owners concerned and a real need to replace customary tenures;
- the ‘basic pattern’ should be to register group titles, and provide for the group to grant registrable occupation rights (to group members) and leases (to non-members); and
- the land-owning groups should be incorporated, with a constitution defining their membership, powers and decision-making processes.

Progress in implementing these recommendations has been disappointing. In the late 1970s, PNG’s National Executive Council approved the drafting of national legislation based on the CILM’s recommendations, one element of which was a law for the registration of titles in customary land. A change of government meant the shelving of this legislation, but in the mid-1980s one of the provincial governments decided to bring in its own legislation providing for the registration of titles in customary land and regulation of dealings in the registered titles. That legislation – the *East Sepik Land Act* and *East Sepik Customary Land Registration Act* of 1987 – was based on the CILM’s recommendations.<sup>34</sup> Under AusAID and World Bank-funded proposals, support was supposed to be provided for the trial and evaluation of that legislation but, for various reasons, the trial never took place.

---

<sup>33</sup> This point was made with particular reference to the views of the prominent Peruvian economist, Hernando de Soto, that titling the property of the poor will generate the basis for more equitable and sustained economic growth (De Soto 2000).

<sup>34</sup> I discuss the East Sepik land legislation (which I drafted, under an AusAID consultancy) in Fingleton (1991).

One lesson to be learnt from PNG's long experience of land reforms is that implementing reform is never easy – and it is getting harder. In recent years, whenever there has been a suggestion that the government is contemplating new legislation for the registration of interests in customary land there have been strong expressions of public opposition. In such circumstances it is even less likely that a proposal for the revolutionary reform of customary land tenures would be entertained. It seems that, like it or not, Papua New Guineans are going to be reliant on their customary forms of land tenure for some considerable time to come. Fortunately, as this discussion paper shows, that is no bad thing.

It is important for governments of developing countries to keep the subject of land tenure reform on their policy agenda. Customary tenures cannot, by themselves, meet all the modern development requirements for safe and certain interests in land. The foregoing debate indicates that reform proposals based on indigenous tenure systems, which intervene only when, where and to the extent necessary and reflect the administrative realities of the country concerned, are the ones which have the greatest chance of making a long-term contribution to poverty alleviation and sustainable development. The legal and administrative arrangements to implement such a system of evolutionary reform are matters for follow-up discussion.

## References

- ADB 1999, *Fiji Islands: Making Steady Progress*, Pacific Island Economic Report Series, ADB, Manila.
- Allen, B. J., Bourke, R. M., and Hanson, L. 2001, 'Dimensions of PNG Village Agriculture' in R. M. Bourke, M. G. Allen and J. G. Salisbury (eds.), *Food Security for Papua New Guinea. Proceedings of the Papua New Guinea Food and Nutrition 2000 Conference*, ACIAR Proceedings No. 99 (Australian Centre for International Agricultural Research, Canberra), pp. 529–553.
- Allen, B., Nen, T., Bourke, R., Hide, R., Fritsch, D. Grau, R., Hobsbawn, P. and Lyon, S. 2002, *Agricultural Systems of Papua New Guinea*, Working Paper No. 15, revised edition (Department of Human Geography, Australian National University, Canberra).
- Angelsen, A. and Wunder, S. 2003, *Exploring the Forest-Poverty Link: Key Concepts, Issues and Research Implications*, CIFOR Occasional Paper No. 40 (Center for International Forestry Research, Bogor, Indonesia).
- Banks, T. 2001, 'Property Rights and the Environment in Pastoral China: Evidence from the Field', *Development and Change*, Vol. 32, pp. 717-740.
- Banks, T., Richard, C., Li, P. and Yan, Z. 2003, 'Community-Based Grassland Management in Western China: Rationale, Pilot Project Experience, and Policy Implications', *Mountain Research and Development*, Vol. 23, pp. 132-140.
- Barrow, E. and Mlenga, W. 2003, 'Trees as Key to Pastoralist Risk Management in Semi-Arid Landscapes in Shinyanga, Tanzania, and Turkana, Kenya' International Conference on Rural Livelihoods, Forest and Biodiversity, 19-23 May 2003, Bonn, Germany ( Convened by CIFOR, GTZ and ICRAF).
- Bourke, R. M. 2005, 'Marketed Fresh Food: A Successful Part of the Papua New Guinea Economy', *Development Bulletin* No. 67, pp. 22–24.
- Bourke, R. M., and Vlassak, V. 2004, *Estimates of Food Crop Production in Papua New Guinea* (The Australian National University, Canberra).
- Bromley, Daniel W. 1992, *Making the Commons Work: Theory, Practice and Policy*, International Centre for Self Governance, ICS Press, San Francisco.
- Crocombe, R. 1987, *Land Tenure in the Pacific*, University of the South Pacific, Suva.
- De Soto, Hernando 2000, *The Mystery of Capital: why capitalism triumphs in the West and fails everywhere else* (Bantam Press, London).
- Dove, M. 1993, 'A Revisionist View of Tropical Deforestation and Development', *Environmental Conservation*, Vol. 20, pp. 17-24.
- Duncan, R. 2002, Land Tenure, Economic Development, and Environmental Sustainability, Viewpoint, *Development Bulletin* 58, p 119.

- Faiparik, C. 2005, 'Villagers Plan to Build Hydro, Health Projects', *The National*, 7 February, <http://www.thenational.com.pg/0207/nation29.htm>
- Fingleton, J. S. 1985, 'Changing Land Tenure in Melanesia: The Tolai experience', Doctor of Philosophy thesis, The Australian National University, Canberra (unpublished).
- Fingleton, J. 1991, 'The East Sepik Land Legislation', in Peter Larmour (ed.), *Customary Land Tenure: Registration and Decentralisation in Papua New Guinea*, Monograph 29 (Institute of Applied Social and Economic Research, Port Moresby), pp. 147-61.
- Fingleton, J. 2004, 'Is Papua New Guinea viable *without* customary groups?' *Pacific Economic Bulletin*, Vol. 19 No. 2, pp. 111-18.
- Finke, P. 2000, *From "Common Property" to Open Access: Changing Pastoral Land Tenure in Post-Socialist Mongolia*, Paper presented at 'Constituting the Commons: Crafting Sustainable Commons in the New Millenium', Eighth Conference of the International Association for the Study of Common Property, Bloomington, Indiana, USA, May 31-June 4.
- Fisher, R. 1989, 'Indigenous Systems of Common Property Forest Management in Nepal', Working Paper No. 18 (East-West Environment and Policy Institute, East-West Center, Honolulu).
- Fisher, R. 1994, 'Indigenous Forest Management in Nepal: Why Common Property is Not a Problem' in Michael Allen (ed.), *Anthropology of Nepal: People, Problems and Processes* (Mandala Book Point, Kathmandu).
- Gibson, J. 2001, 'The Economic and Nutritional Importance of Household Food Production in PNG' in R. M. Bourke, M. G. Allen and J. G. Salisbury (eds.), *Food Security for Papua New Guinea. Proceedings of the Papua New Guinea Food and Nutrition 2000 Conference*, ACIAR Proceedings No. 99 (Australian Centre for International Agricultural Research, Canberra), pp. 37-44.
- Gosarevski, S., Hughes, H. and Windybank, S. 2004a, 'Is Papua New Guinea viable?' *Pacific Economic Bulletin*, Vol. 19 No. 1, pp. 134-48.
- Gosarevski, S., Hughes, H. and Windybank, S. 2004b, 'Is Papua New Guinea viable *with* customary land ownership?' *Pacific Economic Bulletin*, Vol. 19 No. 3, pp. 133-36.
- Hanson, L., Allen, B., Bourke, R. and McCarthy, T. 2001, *Papua New Guinea Rural Development Handbook* (Department of Human Geography, Australian National University, Canberra).
- Hardin, G. 1968, 'The Tragedy of the Commons', *Science*, 162:1243-8.
- Hughes, Helen 2003, 'Aid has failed the Pacific', *Issues Analysis*, No. 33, Centre for Independent Studies, Sydney.

- Hughes, Helen 2004a, 'Can Papua New Guinea Come Back from the Brink?', *Issues Analysis*, No. 49, Centre for Independent Studies, Sydney.
- Hughes, Helen 2004b, 'The Pacific is Viable!' *Issues Analysis*, No. 53, Centre for Independent Studies, Sydney.
- Hughes, H. and Warin, J. 2005. 'A New Deal for Aborigines and Torres Strait Islanders in Remote Communities', *Issue Analysis* No. 54, Centre for Independent Studies, Sydney.
- Larmour, P. 2002. 'Policy Transfer and Reversal: Customary Land Registration from Africa to Melanesia', *Public Administration and Development*, No. 22, pp. 151-61.
- Liu, D., and Edmunds, D. 2003, 'The Promises and Limitations of Devolution and Local Forest Management in China' in David Edmunds and Eva Wollenberg (eds.), *Local Forest Management: The Impacts of Devolution Policies* (Earthscan Publications Ltd, London).
- McAlpine, J., and Quigley, J. no date, *Natural Resources, Land Use and Population Distribution of Papua New Guinea. Summary Statistics from PNGRIS. PNGRIS Report No. 7* (Commonwealth Scientific and Industrial Research Organisation, Canberra).
- McGregor, A. 2004, Diversification into high value export products: the case study of the Papua New Guinea vanilla industry. Unpublished paper. Food and Agriculture Organization of the United Nations, Rome.
- Malinowski, B. 1926. *Crime and Custom in Savage Society* (Routledge and Keegan Paul, London).
- Mlengi, W. 2004, *Ngitili: An Indigenous Natural Resources Management System in Shinyanga* (Arid Lands Information Network—Eastern Africa, Nairobi).
- Monela, G., Chamshama, S., Mwaipopo, R. and Gamassa, D. 2004, 'A Study on the Social, Economic and Environmental Impacts of Forest Landscape Restoration in Shinyanga Region, Tanzania', (Draft Report, Ministry of Natural Resources and Tourism, Tanzania, and IUCN Eastern Africa Regional Office).
- Mosko, M. 1985, *Quadripartite Structures: Categories, Relations and Homologies in Bush Mekeo Culture* (Cambridge University Press, Cambridge).
- Mosko, M. 1999, 'Magical Money: Commoditization and the Linkage of *Maketsi* ("Market") and *Kangakanga* ("Custom") in Contemporary North Mekeo' in David Akins and Joel Robbins (eds.), *Money and Modernity: State and Local Currencies in Melanesia* (University of Pittsburgh Press, Pittsburgh).
- National Statistical Office, 2002, *Census Unit Register, Central Province* (National Statistical Office, Port Moresby).
- Native Land Trust Board of Fiji, History and Operations, <http://www.nltb.com.fj>

- Papua New Guinea 1973, 'Report of the Commission of Inquiry into Land Matters', Government of Papua New Guinea, Port Moresby.
- Rerkasem, B. 2004, 'Transforming Subsistence Cropping in Asia', Proceedings of the 4th International Crop Science Congress, Brisbane. Accessed at [http://www.cropscience.org.au/icsc2004/symposia/2/4/177\\_rerkasemb.htm](http://www.cropscience.org.au/icsc2004/symposia/2/4/177_rerkasemb.htm)
- Saunders, J. C. 1993, *Agricultural Land Use of Papua New Guinea: Explanatory Notes to Map. PNGRIS Publication No. 1* (Commonwealth Scientific and Industrial Research Organisation, Canberra).
- Sustainable Development Opinion* 2005, 'Land in Africa: Market asset or secure livelihood?' Summary of conclusions from the Land in Africa Conference, London, November 8-9, 2004. <http://www.iied.org/aboutiied/landinafrica.html>
- Wahid, M. B., Abdullah, S. N. A., and Henson, I. E. 2004, 'Oil Palm – Achievements and Potential', Proceedings of the 4th International Crop Science Congress, Brisbane. Accessed at [http://www.cropscience.org.au/icsc2004/symposia/2/4/187\\_wahidmb.htm](http://www.cropscience.org.au/icsc2004/symposia/2/4/187_wahidmb.htm)
- Ward, R. G. 1997, 'Changing Forms of Communal Tenure' in Peter Larmour (ed.), *The Governance of Common Property in the Pacific Region* (Research School of Pacific and Asian Studies, The Australian National University, Canberra).
- White, A., and Martin, A. 2002, *Who Owns the World's Forests? Forest Tenure and Public Forests in Transition* (Forest Trends and Center for International Environmental Law, Washington, D.C.).
- Windybank, Susan and Manning, Mike 2003, Papua New Guinea on the Brink, *Issues Analysis*, No. 30, Centre for Independent Studies, ANU, Canberra.
- Wunder, S. 2001, 'Poverty Alleviation and Tropical Forests—What Scope for Synergies', *World Development*, Vol. 29, pp. 1817-1833





**The Australia Institute promotes a more just, sustainable and peaceful society through research, publication and vigorous participation in public debate.**

The Australia Institute is an independent non-profit public policy research centre. It carries out research and policy analysis and participates in public debates on economic, social and environmental issues. It undertakes research commissioned and paid for by philanthropic trusts, governments, business, unions and community organisations.

The Institute is wholly independent and not affiliated with any other organisation. As an Approved Research Institute, donations to its Research Fund are tax deductible for the donor.

### **Philosophy**

The Institute was established in 1994 by a number of individuals from various sections of the community. They share a deep concern about the impact on Australian society of the priority given to a narrow definition of economic efficiency over community, environmental and ethical considerations in public and private decision-making. A better balance is urgently needed.

The Directors, while sharing a broad set of values, do not have a fixed view of the policies that the Institute should advocate. Unconstrained by ideologies of the past, the purpose of the Institute is to help create a vision of a more just, sustainable and peaceful Australian society and to develop and promote that vision in a pragmatic and effective way.

### **Membership**

Membership is a valuable means of contributing to the objectives of the Institute. The annual fee is \$88 (with a discount for low-income earners). Members receive the *Newsletter*, published four times a year, and are entitled to Institute papers free of charge on request. They also receive discounted admission to some Institute functions.

If you would like to purchase our publications or support The Australia Institute through membership or donation please contact:

Innovations Building, Eggleston Road  
ANU ACT 0200  
Tel: (02) 6125 1270 Fax: (02) 6125 1277  
Email: [mail@tai.org.au](mailto:mail@tai.org.au)

**Website: [www.tai.org.au](http://www.tai.org.au)**

### Discussion papers available from The Australia Institute

- 79 Junankar, P. N. (Raja), *Who is Better at Managing the Australian Economy: Labor or the Coalition?* June 2005.
- 78 Flood, M. and Barbato, C., *Off to Work: Commuting in Australia*, April 2005.
- 77 Hamilton, C., Denniss, R. and Baker, D., *Wasteful Consumption in Australia*, March 2005
- 76 Flood, M., *Mapping Loneliness in Australia*, February 2005
- 75 Hamilton, C., Sherrard J. and Tate A., *Climate Change Policy Beyond Kyoto: A new global plan*, February 2005
- 74 Macintosh, A. and Denniss, R., *Property Rights and the Environment: Should farmers have a right to compensation?* November 2004
- 73 Bambrick, H., *Trading in Food Safety? The impact of trade agreements on quarantine in Australia*, October 2004
- 72 Saddler, H., Reidy, C. and Passey, R., *Geosequestration: What is it and how much can it contribute to a sustainable energy policy for Australia?* September 2004
- 71 Wilkinson, D., Denniss, R. and Macintosh, A., *The Accountability of Private Schools to Public Values*, August 2004
- 70 Hamilton, C., *The Disappointment of Liberalism and the quest for inner freedom*, August 2004
- 69 Pocock, B., *Work and Family Futures: How young Australians plan to work and care*, August 2004
- 68 Hamilton, C. and Macintosh, A., *Taming the Panda: The relationship between WWF Australia and the Howard Government*, July 2004
- 67 Pender, H., *Public Policy, Complexity and Rulebase Technology*, June 2004
- 66 Turton, H., *Greenhouse Gas Emissions in Industrialized Countries: Where does Australia stand?* June 2004
- 65 Maddison, S., Denniss, R. and Hamilton, C., *Silencing Dissent: Non-government organisations and Australian democracy*, June 2004
- 64 Flood, M., *Lost Children: Condemning children to long-term disadvantage*, May 2004
- 63 Healy, J., *The Benefits of an Ageing Population*, March 2004
- 62 Breakspear, C. and Hamilton, C., *Getting a Life: Understanding the downshifting phenomenon in Australia*, February 2004
- 61 Pocock, B. and Clarke, J., *Can't Buy Me Love? Young Australians' views on parental work, time, guilt and their own consumption*, February 2004
- 60 Griffiths, P., *Democratising Excellence? Chamber music and arts policy in Australia*, December 2003
- 59 Flood, M., *Fatherhood and Fatherlessness*, November 2003