Pitcairn Island Land Title Reform: Altering the Land Ownership and Land Use Patterns in the Furthermost "Pink Bit."[1]

Kate HENDERSON, Jofe JENKINS and Chris HOOGSTEDEN, New Zealand

Key words: Pitcairn, land, tenure, reform,

SUMMARY

Pitcairn Island provides an interesting case study in land administration where the "traditional" method of freehold land ownership and land use is being significantly changed by the implementation of a new land tenure/land administration system. The 2000 Land Tenure Reform Ordinance will remove freehold title from the Islanders and place all the Island land under the control of the Island Council. The land will now be leased to the Islanders via a land use application to the Council. In short, an interesting reverse tenure process now exists.

This paper is based on an Honours degree research thesis. (Henderson, 2006) It first presents an historical, social, political and economic context regarding Pitcairn Island. It reviews the new land tenure system by comparing Pitcairn Island's current situation and the new tenure system against an accepted set of criteria available for designing a suitable land tenure (and registration) system.

Questionnaire and interview methods were used to survey the Islanders' perceptions regarding the new land tenure system as well as their independent views in relation to particular property rights. This analytical comparison shows areas where the systems are considered successful and where the systems appear to fall short of the selected criteria.

---

[1] Pitcairn Island is mentioned fleetingly in Ritchie's (1997) inimitable book on the remnants of the British Empire entitled "The Last Pink Bits".

TS 3A - Land Tenure and Land Administration   1/16
Katie Henderson, Jofe Jenkins and Chris Hoogsteden
Pitcairn Island Land Tenure Reform – Altering the Land Ownership and Land Use Patterns in the Furthermost "Pink Bit".

Strategic Integration of Surveying Services
FIG Working Week 2007
Hong Kong SAR, China 13-17 May 2007

Pitcairn Island Land Title Reform: Altering the Land Ownership and Land Use Patterns in the Furthermost "Pink Bit."[2]

Kate HENDERSON, Jofe JENKINS and Chris HOOGSTEDEN, New Zealand

1. BACKGROUND

1.1 History

Pitcairn Island is the only inhabited island of four islands collectively known as the Pitcairn Islands in the South Pacific Ocean. It is about halfway between New Zealand and the Panama Canal and is the last remaining British Overseas Territory in the Pacific. Its severe isolation and historical status lead to a unique settlement and lifestyle.

The modern Island history begins with the British ship HMAV Bounty and the ship mutiny of 1789. Lead by Fletcher Christian, the mutineers, with the addition of Tahitian crewmembers, came across Pitcairn Island by chance in January 1790. The development of Pitcairn Island has continued from this original settlement, eventually coming out of isolation mainly due to improved transport and communication links.

In 1790, the original population was 28 consisting of the Bounty mutineers (9), Tahitian men (6), Tahitian women (12) and one baby. Jealousy and alcohol abuse led to fighting between males. Within ten years one mutineer (John Adams), eleven women and twenty-three children remained. (Pitcairn Island Office[3], unknown) The population increased to 233 people in 1937. Decline then began with the present figure now just 47 people. (Government of The Islands of Pitcairn, Henderson, Ducie and Oneo[4], 2002) The decline results from an exodus caused by the lack of available land and a perception of better economic and social opportunities overseas including New Zealand. (GoP, 2002) The Pitcairn Government now plans a population at a sustainable level of approximately 150 people. This will allow land to be used productively without overcrowding.

1.2 Religion, Education and Health

Religion on Pitcairn Island began early with Bible teachings by Adams from a Bible and prayer book salvaged from the HMAV Bounty as a guide for living and working as a community. Pitcairn then officially became a Seventh-Day Adventist community in 1887 and a pastor from a missionary ship baptized the Islanders. (GoP, 2005)

---

2 Pitcairn Island is mentioned fleetingly in Ritchie's (1997) inimitable book on the remnants of the British Empire entitled "The Last Pink Bits".

[3] The Pitcairn Island Office will be referenced as (PIO)
[4] The Government of The Islands of Pitcairn, Henderson, Ducie and Oneo will be referenced as (GoP)

Pitcairn laws were created by the 1838 Constitution including a requirement for compulsory school attendance and school fees - the first time a British territory included compulsory education in its law. Later, other educational skills were introduced such as navigation and carpentry which evolved into the Island's carving and trade industry.

The Governor-appointed Education Officer position has mostly been filled by New Zealand registered teachers on two-year contracts. The present school roll is five. The New Zealand primary school syllabus is used and New Zealand school correspondence courses are offered for secondary school. Pupils are encouraged to take secondary/tertiary education in New Zealand with funding from the Pitcairn Government. (GoP, 2005)

Pitcairn's small medical centre is run by the Island nurse or doctor. Funding for a permanent doctor was approved by the UK Department for International Development in 2003. (GoP, 2005) Emergency treatment comes from passing ships with the possibility of medical evacuation to New Zealand. Pitcairn families can access loans/grants for medical aid. Two New Zealand social workers work there on two-year contracts. (GoP, 2005)

1.3 Communication and Transport

Historically, communication with outside came from passing naval and merchant ships. They provided Pitcairn with overseas travel and brought new settlers (new blood). The Panama Canal opening in 1914 placed Pitcairn on the direct run to New Zealand. (GoP, 2005) In 1985 a worldwide telephone system was set up through a radio-telephone service between Pitcairn and Wellington (NZ). In 1992 modern satellite communications were put in place. An Island VHF radio system is used. Radios tune to station 16 for announcements with different channels for person-to-person calls. (GoP, 2005)

Island transport was by foot due to the difficult terrain - the traditional form of moving objects was the Pitcairn wheelbarrow designed for the conditions. The arrival of tractors in 1965 upgraded narrow tracks to dirt roads. Today every family has at least one four- wheeled motorbike, many with attachable trailers, making travel to and from rural, residential and harbour areas far easier. (GoP, 2005) Initial access between the Island and passing ships was with handmade canoes until a longboat was donated in 1819. Two more were gifted from Queen Victoria in 1880. Since 1970, aluminium longboats have used jet engines. Long boats are vital to the economy of the Island as everything not produced on the Island has been carried there by these boats. (GoP, 2005)

1.4 The Economy

Initially, the Islanders had no need for a formal economy. The small community simply cultivated the fertile soils for produce, supplemented with fishing and livestock farming. Food, tools and services were traded within the community. The Tahitian women taught the community how to tend gardens, fish, and make tools and canoes. Rediscovery in 1808 lead to more ship visits and began the Island's primary barter/trade economy. (GoP, 2005) Food and materials were the main "export trade" as ships stopped to replenish supplies. In return,

TS 3A - Land Tenure and Land Administration   3/16
Katie Henderson, Jofe Jenkins and Chris Hoogsteden
Pitcairn Island Land Tenure Reform – Altering the Land Ownership and Land Use Patterns in the Furthermost "Pink Bit".

Strategic Integration of Surveying Services
FIG Working Week 2007
Hong Kong SAR, China 13-17 May 2007

ships provided tools, guns, razors, clothing and other supplies. (PIO, unknown) A decrease in whaling-ship visits in the late 1800s caused trade concerns until the opening of the Panama Canal. Since then ships have been mostly cruise and supply ships which changed exports with a focus on tourist markets. (GoP, 2005)

The **private** economy is based on self-employment with sales between Islanders and to visiting ships. Income is erratic depending on the frequency of ship visits and their ability to stop at the Island. Market items result from the manufacturing and selling of carvings, weavings, gardening and agricultural exports. (GoP, 2005) Pitcairn uses New Zealand dollars. (GoP, 2002)

The **public** economy developed by selling postage stamps (from 1940), phone cards (1998), collector coins, internet registrations and investments and it funds community needs including off-island supplies, medical and public amenities. (GoP, 2005) Pitcairn Island had a robust economy until 1996 with philately income and interest generated from the Islands Investment Fund (about $0.5 million a year). A dramatic revenue decrease (down 90% in 10 years) came with a decline in worldwide stamp purchases due to internet growth and decreasing interest in stamp collecting. (Jacques, 2006)

The Island costs about NZ$2 million dollars each year mostly spent on operational matters, i.e. transportation of goods and services. This is nearly nine times the public income and an Investment Fund was exhausted by December 2004. It now receives financial aid from the UK Department of International Development and the European Union. With the limited current revenue generation on Pitcairn, it needs to build a new economy with greater diversity and more sustainable markets. (Jaques, 2006)

Pitcairn Island has two main marketable assets – the famous history and the inhabitants' unique way of life. One solution to the economic crisis may lie with the encouragement of low-volume, high-income ecotourism. (GoP, 2002) This would provide jobs and income without necessarily interrupting the lifestyle. (Jaques, 2003) The main obstacle to developing Island tourist facilities is the difficult access as violent swells and a dangerous coast line makes it impossible for ships to anchor close. Longboats ferry people and goods between the Island and anchored ships. The severe isolation and rugged terrain negate air access which means the economy will rest with sea transportation. (GoP, 2002)

1.5 Politics and the Law

Control of Pitcairn was initially held by an autocratic leader who enforced general rules. Problems caused by outsiders led to the 1838 Constitution and Code of Laws prepared by a British Navy Officer. This provided a legal foundation of "proper" civil conduct and it also ensured **British protection over the Island.** Pitcairn Island officially became a British settlement under the 1887 British Settlement Act but Islanders date recognition as a British territory from the official signing of the 1838 Constitution. (GoP, 2002)

Katie Henderson, Jofe Jenkins and Chris Hoogsteden
Pitcairn Island Land Tenure Reform – Altering the Land Ownership and Land Use Patterns in the Furthermost "Pink Bit".

The 1838 Constitution dealt with internal affairs and external (marine) affairs. A Magistrate (chief authority) was elected annually. Two others acted with the Magistrate as a Council. All had to be native-born Islanders. A new system was instituted in 1893 with seven elected officials and separating out various executive and judicial functions. The 1893 arrangements proved unrealistic for a small community. In 1904 the system reverted back to the traditional Chief Magistrate position with two committee members. (PIO, unknown) The internal affairs of Pitcairn Island are run by an Island Council of ten members, eight being chosen by annual elections and two selected by the Governor (only filled by native-born Islanders). (GoP, 2002)

In 1898 Pitcairn Island came under the High Commissioner of the Western Pacific in Suva. Over time, gradual changes were made to government, laws and regulations. (Pacific Union College[5], 2006) Since Fijian independence in 1971, administration of Pitcairn has been with the British High Commissioner (New Zealand) as Governor to Pitcairn Island. (GoP, 2005) A Commissioner runs the Auckland-based Pitcairn Island Administration Office (PIAO) responsible for export arrangements, shipping and freight charges, accounting functions and investing in the interests of the Island. (GoP, 2002)

Pitcairn Island was the first British territory to include female suffrage in its constitution. The 1838 Constitution established free votes for every native-born Islander over the age of eighteen years or persons who had resided on the Island for five years. Now, people only need to have been resident for three years, with the intention to remain on the Island, in order to be eligible to vote. (GoP, 2005) The population size and the number of official positions actually means that each family has a Council connection. (GoP, 2005)

Pitcairn has a defined legal system. (PUC, 2006) The Island Court is under a Magistrate appointed every three years by the Governor. Magisterial authority covers both civil and criminal cases. (GoP, 2005) A Supreme Court and Court of Appeal provide higher judicial tiers with New Zealand Judges appointed by the British Government. Appeals to the Privy Council are available. Police officers are appointed by the Governor (at least one Islander) and two British officers also currently reside there. (Wikipedia, 2006)

A Land Court has jurisdiction over all land on Pitcairn including responsibility for the land register, boundaries, land grant applications, disputes over land and other land- related issues. (Wikipedia, 2006) A new law (Land Tenure Reform Ordinance, 2001) has been created to implement new land administration, land tenure and registration of land systems. This Ordinance essentially acts to remove freehold title from the Islanders placing all land under the control of the Island Council. Land will now be leased to individual Islanders via a land application to Council and subject to certain conditions.

---

[5] The "Pacific Union College" will be referenced as (PUC).

TS 3A - Land Tenure and Land Administration   5/16
Katie Henderson, Jofe Jenkins and Chris Hoogsteden
Pitcairn Island Land Tenure Reform – Altering the Land Ownership and Land Use Patterns in the Furthermost "Pink Bit".

Strategic Integration of Surveying Services
FIG Working Week 2007
Hong Kong SAR, China 13-17 May 2007

2. LAND TENURE ISSUES ON PITCAIRN ISLAND

2.1 Land Tenure

Land tenure is the *relationships or interests* that people have with land both collectively and individually. (Payne, 1997) Practically, tenure consists of different relationships or interests (termed rights) which override, complement, overlap and compete. Many land tenure systems are incorporated in land administration systems which define the practical regulation of land controls for acquisition, usage, and transfer of land. Land tenure problems arise when rights/rules are poorly defined causing tenure insecurity. Changes in tenure often follow. Equally, changes in land tenure are often met with resistance and hostility from older generations or vested interests, which would prefer the *status quo*.

Pitcairn Island has had a mixture of customary, communal, freehold, leased and community land. A large part of the land tenure was unrecorded until well into the 19th century with a number of customary rights applying on the Island. These rights involved the use of Island resources although, as the Islanders have gained more freehold rights over land, the customary rights have fallen away. Common land falls under the Island Council which maintains it for public use including public land such as the school grounds and landing bay for the long boats. Until the Ordinance of 2001, most land on Pitcairn was owned as freehold with the potential for owners to lease it out to others.

2.2 The "Trustee" Issue

Families who left Norfolk Island (a temporary refuge for Pitcairners) had written permission from the families remaining there to occupy and maintain their land on Pitcairn Island. Essentially, land was held **in trust** for the absentee owners which prevented it from being subdivided or inherited like freehold land. Access and use passed down through a family as an inheritance run "in parallel" with the Norfolk descendants' ownership rights. (PUC, 2006) The only way to obtain ownership of land was through inheritance, marriage, purchasing or having it gifted from an existing landowner. Gifting could be from anyone but usually occurred within the family group and land was often presented to a married couple if they did not have land of their own. (PUC, 2006)

With time, trusteeship rights and obligations became embedded, but uncertain, which left Pitcairners unsure whether the trusteeship land would be claimed by an absentee owner at short notice or if they could divide, gift or bequeath the land as if it were theirs. Sometimes, trustee land was incorporated with freehold to make a family "holding" while some freehold parcels ended up being fragmented into small useless pieces. (PUC, 2006)

2.3 The Records

Poor recordkeeping of land transactions and trusts exacerbated matters. Out-of-date records and uncertainties over rightful ownership and boundary positions caused problems. At this

Katie Henderson, Jofe Jenkins and Chris Hoogsteden
Pitcairn Island Land Tenure Reform – Altering the Land Ownership and Land Use Patterns in the Furthermost "Pink Bit".

Strategic Integration of Surveying Services
FIG Working Week 2007
Hong Kong SAR, China 13-17 May 2007

stage Pitcairn Island had not been surveyed and most boundaries were marked by trees or stones and easily disturbed. The yearly checking of boundary marks was often neglected and a register for the older boundary positions was lost. Land was often left with a caretaker and the concept of "borrowing" land emerged. (PUC, 2006)

2.4 "Borrowing" and its Effects

Accumulation of land by landowners, and the unavailability of other land due to trusteeship and ownership uncertainties, caused a system to be introduced where a person can 'borrow' land from a landowner to use as house land or for cultivation. Landowner permission is usually obtained but it comes with **any** conditions that the landowner sees fit. Borrowers often feel insecure in their land rights which discourages them from putting in time and effort when they may not receive the benefits. (PUC, 2006)

Through the 1930s the growing population made land tenure issues and ownership rights even more significant especially as it would inevitably have an effect on economic development. However this problem coincided with a decline in ship visits. Over time, a large proportion of the younger population left Pitcairn and settled in New Zealand. This reduced the demand for land and the need for a tenure reform at the time. However land issues continued but the fear of upsetting folk inhibited the younger islanders from speaking out. Unequal distribution of land and uncertainty of boundaries and ownership lead to the 1967 Lands and Administration of Estates Ordinance. (PUC, 2006)

3. BUILDING THE NEW PITCAIRN LAND TENURE SYSTEM

3.1 The Philosophical Base and Processes

Pitcairn's land tenure system is currently going through a significant change in an attempt to create a new but secure tenure system that best suits the current situation whilst maintaining the unique culture and society of the Island. Change was instigated by the 2001 Land Tenure Reform Ordinance which vests all land with the Island Council which will lease it to the Islanders for various lease periods dependent on proposed land use.

The Ordinance outlines how the new system will be implemented, the process of acquiring land through the new lease application system, how leased land can be utilized, how a lease can be terminated, and the process of dealing with land of absentee land owners or excessive land acquisition through an annual land tax. It lists enforceable covenants for land parcels, and the consequences for non-compliance. Opposition to the new system is coming mainly from those Islanders who believe that they will lose land because the amount they currently own is likely to be considered **excessive to their 'reasonable needs'**. Others admit that they see the benefits of the system but are disappointed about various rights and traditions that will be abolished.

Katie Henderson, Jofe Jenkins and Chris Hoogsteden
Pitcairn Island Land Tenure Reform – Altering the Land Ownership and Land Use Patterns in the Furthermost "Pink Bit".

Strategic Integration of Surveying Services
FIG Working Week 2007
Hong Kong SAR, China 13-17 May 2007

Good land tenure and registration systems should be designed for the needs of the society. Consultation and investigating alternative options are essential. However, the British High Commission appears to have decided on the new tenure system and registration system without full consultation and, apparently, without fully considering alternatives or whether the design actually suits the unique Pitcairn situation. Common land still exists but every family has had private land to bequeath, lease or sell. The freehold land is to be vested in the Island Council and individuals will have to apply for a lease over the land they desire to use regardless of whether the land was originally theirs.

Certainly, strong security of tenure can be provided through leases as well as freehold ownership. The new Pitcairn Island system will provide the Islanders with security of tenure in a number of areas. Each lease will have a set time period, related to land use, which is clearly set out in the Ordinance. Each lessee has the automatic right to reapply for a lease over the land when the lease finishes. The threat of another person making an application over land a holder wishes to retain is eliminated in the Ordinance (Section 4).

The new tenure system is intended to ensure security of ownership through the new registration system that will be created with the new lease data. (Past registration systems were poorly maintained and some records books lost.) The new system will record every lease and corresponding details i.e. parcel dimensions and ownership details. The Ordinance provides assurance that the register is authenticated and enforced by law. This provides lessees with security that their claim to the land is recorded safely and correctly.

The new land tenure system will eliminate some land and property rights that the Islanders have had since the first settlement including the right of transfer. The Ordinance states specifically states that it is illegal to mortgage, charge or sub-lease land held as a leasehold estate. The use and control rights of landowners have also been restricted since the leased land must be used for a certain purpose, i.e. house land; garden land; orchard land; forest land; or commercial land. Previously the landowners had freedom in the use of their land and how to maintain it. The Ordinance attaches covenants to every leasehold estate which force the lessee to maintain the land and buildings **to the satisfaction of the Council**. This can also be seen as a restriction on the rights of the Islanders as they are required to keep the land and buildings to the Council's standards rather than their own.

The current system of registration was created in 1985 by Frank Preston (a British surveyor) employed by the British High Commission to survey and create a registration system over the residential area of Adamstown. This system is based on a simple Torrens system with a Registry Map to provide an index to the land from which the location, boundaries, approximate areas and unique section numbers can be established. The land register was designed so that each parcel of land has a separate page to record all land dealings and transactions over time. Problems with the Pitcairn registration systems occurred through poor record maintenance and lack of knowledge of how to use the "Preston" system although instructions were left on maintenance and updating once the surveyor left the Island. Unfortunately these instructions were not followed properly.

3.2 Applying the Land Registration Checklist

Seven classic features have usually been employed as a basic checklist when assessing land registration systems: Security; Simplicity; Accuracy; Expedition; Economy; Suitability to Circumstances; and, Completeness of Record.

3.2.1   Security

The main concern with the 1985 register was the inadequate maintenance and updating of the system - pages are still being found that should have been included. It is common to see changes made on one sheet but not on other affected sheets. Some updates in the system are often photocopies of the original but with only half the information changed.

The lack of respect for boundary marks was also a cause for concern. Many of the rural marks were disturbed or destroyed with the introduction of a bulldozer in 1983. This left boundary positions being based on memory rather than physical proof because the annual boundary inspections as set out in the regulations were often neglected.

In principle, the new registration system should improve security of rights and tenure through clear instructions of how the lease system will operate and ensuring the security of the records. The Lands Commission's functions include establishing and identifying boundary positions in a durable and permanent form. In addition, the Commission is required to compile and maintain the land register which will be authenticated and passed to the Lands Court where it will become enforceable by law. This provides security to the Islanders because once applications are approved and recorded they are undisputable.

The covenants for each land parcel provide security to lessees in that they are told clearly what they can/cannot do on the land and the consequences if they ignore the covenants. Further security flows from a Land Tenure Reform Ordinance amendment requiring all land records to be held electronically in three places. The Master Record will be in the Pitcairn Governor's office (British High Commission, Wellington), the second in the Pitcairn Island Commissioner's office in Auckland and the third in the Registrar of the Lands Court office on Pitcairn. Each owner is given a paper copy of their lease.

3.2.2   Simplicity

Wherever possible, simple forms should be used for land registration and the style and structure of the register must be straightforward and minimize the possibility for confusion. (Greenwood, 1996) The enabling law also needs to be suitable for the social and economic situations and be translatable into the local language.

The 1985 system was a simple Torrens System with written instructions on register maintenance. Despite this, there are a worrying number of mistakes and omissions across the

Katie Henderson, Jofe Jenkins and Chris Hoogsteden
Pitcairn Island Land Tenure Reform – Altering the Land Ownership and Land Use Patterns in the Furthermost "Pink Bit".

Strategic Integration of Surveying Services
FIG Working Week 2007
Hong Kong SAR, China 13-17 May 2007

register. The main reason appears to be a lack of knowledge of registry workings coupled with ignorance of surveying processes. The rural registration system (Green Book) was difficult to follow because each Island person had a personal page recording their land rights instead of a record page for each parcel. This made it difficult to track ownership and it was vital to know the Island family history to trace back to the last recorded owner almost like a deeds system. This was time consuming and complicated.

The new registration system is designed to provide a clear, simple way of recording land lease access and usage. Standard leases and processes should assist. The lease length reflects the land use category. This can limit the freedom to change the kind of crops or sources of income quickly and problems could yet arise with parcels used for more than one purpose. Mortgages and sub-leases are illegal and land transactions go through the Council with proper processes. The digital record system is easy to update and use.

3.2.3   Accuracy

Accuracy is important in a registration system to eliminate (or certainly reduce) disputes and prevent insecurity. Two areas where accuracy is especially important are accuracy of the record and spatial accuracy. Accuracy of record ensures the clear and correct recording of "title" and additional rights and encumbrances. The second is the correct position of the parcel in relation to the surrounding area. Suitable positional accuracy is relative to community needs. It makes no sense to try and achieve a high positional accuracy if the purpose of the definition does not require it. Accuracy can be assured by checking that the register properly reflects the parcel position and this will appear on a cadastral map of the parcel attached to the Certificate of Title. (Greenwood, 1996)

Lack of maintenance meant that the accuracy of the old registration record systems was questionable. Many transactions have not been officially "signed off" or changes were made to adjoining parcels but appear only on that title. Another issue is that old titles are still included in the register and not cancelled causing confusion over which title is accurate. The Lands Commission now identifies and establishes boundaries of leasehold estates. It is easy to update any changes to the digital system and maintain accuracy.

The 1985 survey of residential land had a horizontal accuracy of ±1.0m. Until a 2006 survey, rural land had not been cadastrally surveyed - boundary accuracy was estimated at ±3.0m or greater. The accuracy of the new system is a maximum error of ±0.5m. However, traverse work carried out in February/May 2006 achieved accuracies to ±0.2m. In future surveys, an accuracy of ± 0.5m relative to the Pitcairn Astro Station (PAS) is needed. Heights will be relative to the PAS as meters above sea level within ± 0.5m.

3.2.4 Expedition

Expedition means that a good registration system is one where correct and maintained documents are processed in a sensible time period and do not become obsolete. If the system takes too long, people incur further costs creating opposition to the system itself.

With the new system a notice will be required to go up on the public notice board for a period of 30 days. The new tenure system requires a survey of the land parcel to be completed along with an application so that the boundaries can be checked and confirmed. Issues could arise here because the surveyor on the Island has limited training and if complex surveys arise beyond his capability then the application cannot be granted. There will then be a delay until a qualified surveyor can be contracted to the Island. Delays may occur because Land Court decisions can be reviewed by the Supreme Court.

3.2.5 Economy (Costs)

Registration system costs comprise set-up costs and maintenance costs. The overall cost of carrying out a land transfer or subdivision is not expensive compared to overseas. The Red Book (urban areas) is simple with little in-depth work needed to carry out a Register change. Ground marking is minimal so there is little cost for boundary marks. Register entries are changed by crossing out the old information and inserting the new which means it is reasonably cheap. The general cost would be payment to the Lands Court for the site inspection, measure up and the decision-making time. Once this was completed the Registrar would fill in the appropriate information. Government workers on Pitcairn are currently paid an hourly rate of NZ$10 so a general land transaction could cost between $150-$200 for a few hours work unless there are any objections.

Because the new system is still being completed, the overall cost of changeover is unknown. Prices need to be set, e.g. how much to pay the survey technician on Pitcairn for carrying out a survey of a leasehold estate. A feature of the new system is the desire for minimal additional cost for Islanders, e.g. *"Every Land Allocation Title shall create a leasehold estate in the land affected held without consideration of rent from the Island Council"*. In addition, a paper copy is provided to the lessee free of charge.

The only income generated by the new registration system is through an Annual Land Tax to discourage having land uncultivated and instead return it to the Council for future leases. The tax is aimed to deter both absentee landowners (NZ$0.50 per sq.m.) and owners who have more land than the Council feels is necessary (NZ$0.30 per sq.m.)

3.2.6 Suitability to Circumstances

The new land tenure and registration systems are designed to encourage Pitcairners back and prevent others from unreasonable land accumulation. In approving leases, the Lands Court has to look to: the reasonable needs of the applicant and his/her family for self support; the

TS 3A - Land Tenure and Land Administration   11/16
Katie Henderson, Jofe Jenkins and Chris Hoogsteden
Pitcairn Island Land Tenure Reform – Altering the Land Ownership and Land Use Patterns in the Furthermost "Pink Bit".

Strategic Integration of Surveying Services
FIG Working Week 2007
Hong Kong SAR, China 13-17 May 2007

capability of the applicant to competently utilise and manage the land profitably; the economy of the Island; the export market for the Island's trade; and, the historical connection the applicant may have with the particular parcel.

3.2.7 Completeness of Record

The registration system is required to ensure a complete record of individual land parcels with all relevant details. The old systems were separate for rural and residential. Both systems had also been surveyed and recorded differently. As mentioned previously, digital format of the new system will ensure a complete and uniform record of the leasehold titles. The system is easy to use and will now include the Adamstown (urban) survey data as well as the recent rural survey data to form one overall system.

3.2.8 Conclusions

The old systems performed poorly against most criteria with security, accuracy and completeness of record as obvious flaws. The 2001 Land Tenure Reform Ordinance pays particular attention to accuracy in both the record and spatial context, security over title and property rights and overall completeness of record. The set roles and responsibilities for the Island Council, Lands Court and citizens should ensure that the system is understood and that the procedures and maintenance are conducted correctly.

The main area where the new registration system could yet fail is the "suitability to circumstances". The historical and traditional activities on the Island are more complex than the Ordinance allows for. Through 2006, a number of discrepancies and issues have been brought to the attention of the Island Council and British High Commission that were not originally considered at design time, some of which may require a rethink.

4. PITCAIRN ISLANDERS' PERCEPTIONS OF PROPERTY RIGHTS

Using anonymous questionnaires, sixteen Islanders (50% of those eligible) provided personal opinions on land rights. The responses demonstrated that the Islanders hold quite similar opinions. Questions required responses on a five-point Likert scale (**1=Not very important; 5=Very important**) to questions such as:

"Please could you indicate how important the following property rights are to you personally by ticking a box and briefly explaining why you feel this way."

4.1 The ability to bequeath, inherit or gift. (Importance: Mean = 3.5 ; Median = 4)

There is a sentimental right to be able to pass on land to family as has been traditional. Ordinance amendments now allow the Islanders to bequeath land for inheritance. The right to gift land, a long-standing right and a sentimental gesture, is still denied.

4.2 The right to subdivide/consolidate land. (Importance: Mean = 1.9; Median = 1)

It is not considered to be particularly important to have the official right to subdivide or consolidate land since most current Islanders on the Island have enough land to suit their purposes. If a person owns more land than they can productively manage it is "wasted", so it seems quite sensible to give it to another Islander to use. Under Section 6. (a)(i) which covers the covenants placed on leasehold estates, the right of transfer can be permitted with approval from the Council and Lands Court

4.3 The ability to clear a property. (Importance: Mean = 3.8; Median = 5)

The right to clear land was seen as important because land is used more productively if it is cleared. The general consensus is that if you own the land then you should be able to utilise it how you see fit or, in the case of a trustee ownership, with the approval of the owner. Section 6 (a) (ii) and Section 8 (a) (i) allow for agricultural and house land to be kept clear. However it is not apparent whether the intention is to keep the land clear as in "neat and tidy" or clear where the remaining vegetation is removed after harvest.

4.4 The right to exclude other from land (Importance: Mean = 3.8; Median = 5)

The common opinion is that it is a "basic right" to have power to exclude people from entering private personal land. On Pitcairn there has never been an issue with people accidentally or casually walking onto someone else's land. Often, long-standing customary rights of passage over other people's land exist. The only situation where this right would be important is if people had been warned against entering onto land. This could occur for a variety of reasons, e.g. unwanted outsiders such as reporters!

4.5 The ability to fertilise, irrigate, drain. (Importance: Mean = 4.; Median = 4)

Pitcairn's economy requires good agriculture. The Islanders consider the right to fertilise and irrigate as essential so as to ensure that the land is properly cared for and to prevent soil nutrients being stripped. This is consistent with the Ordinance objectives where Section 6 (a) (ii) requires that lessees keep land in a "good and husband like manner".

4.6 The right to erect buildings /structures. (Importance: Mean = 4.3 ; Median =4)
Most people believe that the right to erect buildings is significant. A number of interesting comments were made. These covered how the right to erect structures was beneficial to maintaining the community appearance rather than letting a building become run down. Another noted the covenants included in the Ordinance required a standard of maintenance over building and structures on house land otherwise the Council can terminate the lease.

4.7 The right to cultivate crops of choice. (Importance: Mean = 4.6 ; Median =5)
This question had the most overwhelming response. Nearly every person said that the right to choose what to cultivate is highly important to them - as long as it is within the law!

Katie Henderson, Jofe Jenkins and Chris Hoogsteden
Pitcairn Island Land Tenure Reform – Altering the Land Ownership and Land Use Patterns in the Furthermost "Pink Bit".

Comments were made that the new law and land application system will limit the type of land use to the land type specified in the application. The new tenure and registration system will inhibit this right as a leasehold estate can only be used for the purpose designated by the lease. There are five land use categories set out in the Land Tenure Reform Ordinance namely: house land, garden land, orchard land, forest land and commercial land. Problems are already arising as to dealing with multiple-use land.

4.8 Which of the following activities should be regarded as a satisfactory land use of a leasehold estate and how long do you believe a lease for each activity should last?

	N/A	<1	1-2	5	10	20	25	50	Life of Vegetation	Life of Applicant	No Response
Growing subsistence crops	-	2	4	1	2	-	-	-	1	1	1
Growing cash crops	-	-	3	1	2	-	1	-	1	3	1
Planting trees for cropping	-	-	-	-	1	2	1	-	2	5	1
Planting trees for timber	1	-	-	-	-	1	3	1	-	6	-
Aquaculture	7	-	-	2	1	-	-	-	-	-	2
Grazing	8	-	1	1	-	-	-	-	-	-	2
Bee keeping	1	-	1	1	-	1	-	-	-	7	1
Materials for craft/handiwork	-	-	1	-	-	1	1	-	1	7	1

Table 1: Suitable Time Periods for Activities on a Leasehold Estate

We can see that the proposed ideal duration is clearly influenced by the use-type and the life cycle of specific crops or products. The preferred lease period for growing crops (subsistence and cash) shows a trend for the desired lease to be between two-five years. This would allow a year for the crops to grow and then another year or two to reap the benefits of the crops. Under the 2001 Ordinance the decided time period for these crops is five years which is consistent with the desired lease duration identified by the Islanders.

The activities which involve growing trees have longer duration periods with a notable number of people preferring these leases to be for the life of the applicant or at least the life of the trees. The materials used for handiwork are most likely to be wood from trees which then makes sense for this activity to have a duration preference of the life of the applicant. Section 5 (1) allows a lease of twenty years for cropping trees (orchard land) and a lease for the life of the forest on forest land. The two different purposes for the trees are the reason for the different duration. With forest land it can take time to reap any benefits whereas orchard trees should harvest annually. Aquaculture and grazing are not carried out on the Island. Most meat is imported and fishing and diving is open for all the Islanders. These activities are not subject to lease as they are not a viable land use option.

4.9 In relation to the land tenure reform ordinance, how do you think "reasonable needs" should be assessed?

Pitcairn Island has a very unique and diverse population. Most families are self-sufficient and generate their own income in their own way. Because of this, each family will use their land for a different purpose depending on their choice of trade, i.e. every family has different

TS 3A - Land Tenure and Land Administration   14/16
Katie Henderson, Jofe Jenkins and Chris Hoogsteden
Pitcairn Island Land Tenure Reform – Altering the Land Ownership and Land Use Patterns in the Furthermost "Pink Bit".

Strategic Integration of Surveying Services
FIG Working Week 2007
Hong Kong SAR, China 13-17 May 2007

needs. Almost every questionnaire answer stated that "reasonable needs" will have to be assessed differently for each person and their family situation.

5. CONCLUSIONS

Pitcairn Island is unique not only for its history and location but for its alternative solution for a global problem: finding a registration system to suit a community. As shown, there are some worrying problems with the land tenure and land registration systems currently in place on the Island which was the catalyst for the creation and implementation of the 2001 Land Tenure Reform Ordinance. Surrounding this new Ordinance are the crucial issues of whether the design of the new system will solve the problems, how it will be accepted into society and is it suitable for the Pitcairn situation.

The new land registration system has been designed specifically to resolve the flaws of the previous systems as well as encourage the return of people to the Island in the attempt to rebuild the social and economic aspects of the Island. By controlling the ownership and use of land on the Island the Council seeks to ensure that all members of the community have the opportunity to live self sufficient lives as much as possible and have security over their land ownership rights and property rights.

Some land administration and land registration issues were not adequately considered in the creation of the 2001 Land Tenure Reform Ordinance. It is now the task of the Pitcairn Government and British High Commission to work through these issues and create additions and amendments to cater for these requirements and solve the problems that arise during the final implementation of the Land Tenure Reform Ordinance.

REFERENCES

The Government of The Islands of Pitcairn, Henderson, Ducie and Oneo, (2005). Guide to Pitcairn, New Zealand

The Government of Pitcairn, Henderson, Ducie, Oneo Islands, (2001) Lands Court Ordinance, British High Commission, Wellington, Revised Ed 2001

The Government of Pitcairn, Henderson, Ducie, Oneo Islands, (2006) Land Tenure Reform (Amendment) Ordinance, British High Commission, Wellington, 2006

The Government of Pitcairn, Henderson, Ducie, Oneo Islands, (2001)Land Tenure Reform Ordinance, British High Commission, Wellington, Revised Ed 2001

Greenwood, D. (1996) SE103 Land Tenure Course Book, The University of the South Pacific, University Extension, Suva

Henderson K. (2006) Land Tenure and Land Registration System Issues of Pitcairn Island. Unpublished BSurv (Honours) Thesis School of Surveying University of Otago New Zealand 103p

Jaques, L. (2003) Pitcairn Island Report. Pitcairn Island Government, available:
http://ec.europa.eu/comm/development/body/csp_rsp/print/pit_spd_en.pdf2003,   (accessed April 2006)

Katie Henderson, Jofe Jenkins and Chris Hoogsteden
Pitcairn Island Land Tenure Reform – Altering the Land Ownership and Land Use Patterns in the Furthermost "Pink Bit".

Strategic Integration of Surveying Services
FIG Working Week 2007
Hong Kong SAR, China 13-17 May 2007

The Office of the Governor of Pitcairn, Henderson, Ducie and Oneo Island, (2002) Pitcairn Islands Single Programming Document, Commission Regulation 2304/2002 available: http://ec.europa.eu/comm/development/body/csp_rsp/print/pit_spd_en.pdf,
2002 (accessed April 2006)
Pacific Union College, (2006). http://library.puc.edu/Pitcairn/pitcairn/govthistory13. shtml (accessed November 2005)
Payne, G. (1997) Urban Land Tenure and Property Rights in Developing Countries, Intermediate Technology Publications, London
Pitcairn Islands Office, (none) Pitcairn's History, available: http://www.government.pn/
(no date) (accessed March 2006)
Ritchie, H. (1997) The Last Pink Bits Hodder & Stoughton London 231pp
Rowton Simpson, S. (1976) Land Law and Registration, Surveyors Publications, London
Wikipedia, Politics of the Pitcairn Islands: http://en.wikipedia.org/wiki/ Politics_of_the_Pitcairn_Islands June 2006 (accessed: May 2006)

BIOGRAPHICAL NOTES

Kate Henderson works as a graduate surveyor in a multi-disciplinary practice in Wellington. In 2006 she was awarded the Sir Holmes Miller prize for the best BSurv (Honours) thesis.

Jofe Jenkins has worked extensively in the New Zealand surveying industry ranging from high-precision industrial monitoring to cadastral surveys. In 2006, he made two visits to Pitcairn Island to perform surveys and provide professional advice on land tenure issues.

Chris Hoogsteden is presently the Dean (Head of School) of the New Zealand National School of Surveying. He has been a career academic for 30 years and has a special interest in land tenure and economic analysis of survey systems.

CONTACTS

Dr Chris Hoogsteden – Dean of School
New Zealand National School of Surveying
University of Otago
PO Box 56 Dunedin
New Zealand
Tel. + 61 34797605
Fax + 61 34797586
E-mail: hoogstc@albers.otago.ac.nz

TS 3A - Land Tenure and Land Administration   16/16
Katie Henderson, Jofe Jenkins and Chris Hoogsteden
Pitcairn Island Land Tenure Reform – Altering the Land Ownership and Land Use Patterns in the Furthermost "Pink Bit".

Strategic Integration of Surveying Services
FIG Working Week 2007
Hong Kong SAR, China 13-17 May 2007