

Options for strengthening the regulatory framework for sustainable forest management in Niue

Report N1

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Abbreviations and acronyms

AAC	Annual Allowable Cut
AFM	Accredited Forest Manager
APFNet	Asia-Pacific Network for Sustainable Forest Management and Rehabilitation
AFM	Accredited Forest Manager
CoHP	Code of Harvesting Practice for the Indigenous Forests of Niue 2004
DAFF	Department of Agriculture, Forests and Fisheries
EIA	Environmental Impact Assessment
EOI	Expressions of interest
FAO	Food and Agriculture Organisation of the United Nations
FD	Forestry Division of the Department of Agriculture, Forests and Fisheries
FPO	Forest Practices Officer
FMP	Forest Management Plan
ha	hectares
km	kilometre
m	metre
DAFF	Department of Agriculture, Forests and Fisheries
NFI	National Forest Inventory
NFP	Niue Forest Products
NFPS	National Forest Policy Statement
NNSP	Niue National Strategic Plan 2009-13
NGO	Non-government organization
SFM	Sustainable forest management
SPC	Pacific Community
THP	timber harvesting plan

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1. Summary

This report reviews the regulatory framework for the management of forests in Niue. The report finds that good progress has been made towards the development of a comprehensive legal and policy framework. However, it is unlikely that government or the private sector alone will have the resources and capacity to effectively implement the framework. It is concluded that Niue should actively pursue an 'enhanced co-regulatory model' as part of a strategy to build the capacity for self-management and self-regulation within the private sector whilst allowing the government to maintain core functions in the areas of training, education, monitoring, enforcement and reporting.

The report discusses the settings and drivers necessary to implement an enhanced regulatory framework in Niue and concludes with a list of potential actions that could be taken. These actions are-

1. Establishing a register of potential timber production lands (PTPL)
2. Attracting businesses for the harvesting and processing of timber
3. Re-focussing the need for forestry expertise in government
4. Building the capacity of forest owners to self-manage their forests through a system of 'Accredited Forest Managers'
5. Improving the estimates of forest growth and sustained yield
6. Promoting SFM for multiple benefits
7. Monitoring and enforcement of the Forest Management Plan, Code of Harvesting Practice, Forests Act and regulations
8. Transparent reporting of the standards of forest management being achieved.

2. Current regulatory framework

2.1 Legislation

Niue has no specific forestry law. However, a Forests Bill 2016 has been prepared and is scheduled for submission to parliament. The key provisions of the bill are-

- The making of a Forest Management Plan, which must prescribe the maximum annual allowable cut (AAC)
- The issue of Timber Cutting Licences and Timber Processing Licences for the commercial harvesting and processing of timber
- The appointment and powers of forestry officers
- Offences and penalties.

The bill does not make reference to the *Code of Harvesting Practice for the Indigenous Forests of Niue 2004* (CoHP). However, section 7(4) of the bill provides that for a FMP *Once operative, a plan or reviewed plan must be treated for all purposes as if it were an environmental standard for the carrying on of timber cutting or timber processing activities on forestry land* and section 11(1)(a) of the bill provides that conditions may be imposed on a timber cutting licence. Subject to legal clarification, this provision would potentially allow elements of the FMP and the CoHP to be applied in the form of conditions to all timber cutting licenses (see Table 2).

Annex 1 contains a list of other legislation relevant to forest management.

2.2 Policies

The country's key planning document, the *Niue National Strategic Plan 2014-2019* (NNSP) has 'Environment' as one of its seven National Development Pillars with the following objective: 'Sustainable use and management of Niue's natural resources and environment for present and future generations'.

The *Niue National Biodiversity Strategy and Action Plan 2015* (NNBSAP) (Government of Niue, 2015) recognises the important role of forest management and conservation for the maintenance of terrestrial biodiversity. The following actions within the plan are highly relevant to forest regulation-

- 1.2 Promote sustainable management of forestry, water and wildlife resources through legislation
- 1.3 Strengthen public awareness and support for biodiversity conservation
- 1.5 Manage any timber harvesting to ensure a sustainable operation that does not threaten native biodiversity or the integrity of forest ecosystems
- 1.6 Suspend any logging operations following cyclones and undertake forest surveys to determine if they can resume and with what allowable cut
- 2.1 Finalise and map the boundaries of existing Protected Areas and give them legal protection
- 3.1 Complete and implement Environment Impact Assessment (EIA) Regulations (as amendment to the Environment Act)
- 3.2 Develop a code of practice for land clearance.

Further details on the above actions are contained in Annex 3. In addition, Niue has three specific forestry policy devices-

1. The National Forest Policy Statement
2. The Code of Harvesting Practice
3. The Forest Management Plan.

The *National Forest Policy Statement for Niue* (NFPS) was approved in 2004. The key guiding principles in the policy are as follows.

- To maintain and use the natural resources in our forests in a sustainable manner, keeping in mind future generations so that equity between the generations can be maintained.
- To maintain and develop the ecological, cultural and economic value of Niue's forests and to ensure that any forest development respects the livelihood of the present generation without compromising on the needs of future generations.
- To safeguard the plants, animals and genetic resources of Niue and to maintain endangered habitats, as well as sacred and historic sites.
- To ensure that the forests can meet essential subsistence needs — namely for food, water, fuel, building materials, medicines, cultural materials, and recreation.
- To foster a nationwide consensus on the value of forests, by promoting individual and collective responsibility for their control and management while respecting the *magafaoa* ownership of land and resources.
- To provide opportunities for a range of sustainable forest-based industries to the extent that the forest resource is able to contribute to Niue's economic growth.

The Code of Harvesting Practice for the Indigenous Forests of Niue (CoHP) was approved in 2004. It prescribes the manner in which timber harvesting must be conducted.

The *Forest Management Plan for Niue* (FMP) was endorsed by Cabinet in 2013. It is intended to be implemented as far as practicable through a co-operative approach between government, landholders and other stakeholders. It contains-

- A description of the forests of Niue, the values and forest use
- The setting of an annual allowable cut (AAC) for the forests
- Provision for the preparation of harvesting schedules and THPs
- Silvicultural guidelines and diameter cutting limits
- A commitment to provide education and training to landholders to assist them manage their forests sustainably
- Provision for monitoring and reporting on the implementation of the FMP
- Templates for preparing THPs, checklists for monitoring implementation and for reporting on the implementation of the FMP.

The FMP was prepared following a national forest inventory (NFI) in 2008. The NFI provided comprehensive baseline data on forest areas, species composition and timber volumes. However, the absence of periodic measurements from permanent growth plots means that there are no data on the growth rates of the forest and individual species. Accordingly, the estimate of growth increment in the AAC is based on data from comparable forests within the Pacific.

The NFPS, CoHP and FMP are not currently recognised in legislation. However, the draft Forests Bill contains specific reference to the preparation of a forest management plan.

2.3 Forests

The current area of native forest is about 19,000 hectares, comprising approximately 70% of the island's land area. About 30% of the forest (5,566 ha) is classified as 'mature dense forest' with a height of 18-35 metres and a high wood volume of 275 m³ per hectare. This forest is dominated by *Kolivao* and *Kafika* trees with an understorey of ferns such as *Palatao* (*Angiopteris* spp.). It has no signs of recent agricultural activity. Most of this forest is found in the central east of the island within the area between the villages of Mana, Lakepa and Hakupu.

The mature dense forests are highly productive and are estimated to be growing at a rate of 5,000 to 7,500 m³ of wood per hectare per year. They regenerate well from disturbance such as cyclones, land clearing and logging. The FMP prescribes an annual allowable cut (AAC) of 1,500 m³ per year. This rate of cut is about 7 times higher than the highest rate of logging over the last 20 years.

The remaining 70% of forest (13,191 ha) is classified as 'regenerating medium dense forest' with a height of 12-20 m. This forest type is also dominated by *Kolivao* and *Kafika*, with a slightly higher diversity of other species than is found in the mature forest. The understorey generally comprises ferns such as *Mohuku* (*Nephrolepis* spp.) and the forest structure is variable, depending upon the period of recovery since previous agricultural activity. This forest contains only very low amounts of commercial timber. It is primarily used for *Tugitugi* shifting agriculture, which incorporates periods of fallow during which the land naturally regenerates to native pioneering species but is generally re-cleared before the forest and its associated biodiversity reach maturity. For the purposes of the Forest Management Plan this forest is regarded as agricultural land. However, there are

opportunities for this extensive area to enhance the overall conservation of biodiversity within Niue by retaining more trees within the areas being cropped.

The forests of Niue are highly valued by the landholders and people of Niue. The forests provide important economic, social and environmental benefits, including food, medicines, timber for houses, canoes and crafts, and habitat for the conservation of biodiversity, water and cultural sites.

In addition to the native forests, Niue has a very small plantation area of 290 ha established in the 1990s across 50 small woodlots. The main species is mahogany (*Swietenia macrophylla*), comprising about 75% of the plantings. Other species include Australian Red Cedar (*Toona australis*). The plantations are seen by many as a failure; growth rates and form are variable and are poor on many sites due to cyclone damage, shallow soils and other causes (Wilkinson, 2011). The perceived failure of the plantation program has discouraged many landholders from further tree planting programs. In the absence of financial incentives, such as those that may be provided by carbon investment schemes, there is likely to be little interest in further tree planting or rehabilitation of ex-agricultural sites.



The forests of Niue contain highly productive mature forests (*left*) and forests that have regenerated from agricultural clearing (*right*)

2.4 Land tenure and forest rights

Section 3 of the *Niue Amendment Act 1968* provides that *all land in Niue is Crown land or Niuean land*. Section 2 defines “Niuean land” as *land in Niue held by Niueans according to the customs and usages in Niue*. Niuean land comprises 95% of the total land area; the remaining 5% is Crown land. The Niuean land is held by family kinship groups (*mangafaoa*). However, less than 10% of the properties on the island are titled.

All members of the *mangafaoa* have rights to use the land and participate in decisions, such as the harvesting and sale of timber from the land. In some cases, members may appoint a representative, the *leveki mangafaoa*, to administer the land on their behalf. The *leveki mangafaoa* may grant a lease, such as a timber sale agreement, for up to five years without the consent of *mangafaoa* members but the lease is required to be confirmed with the Land Court under the *Land Act 1969*

(see Christy (2008)). The management of land and forests is complicated by a lack of agreed boundaries and by the complications inherent in having a large proportion of family members being resident overseas (primarily in New Zealand).

Niuean law firmly protects the private rights of the traditional landholders. However, there is also recognition by Niue's government and society that the forests are an important public resource. The forests are part of the 'clean and green', unspoilt character of Niue, which contributes to the pleasant lifestyle of residents and underpins the reason why Niue is an attractive destination for visitors. The forests are critical to the conservation of biodiversity and water quality, the storage of carbon and for maintaining the ecological health and productivity of the land.

The tension between private and public interests is exemplified by the management of three forest species that are of particular importance for biodiversity and culture- the *uga* or coconut crab (*Birgus latro*), the *peka* or flying fox (*Pteropus tonganus*) and the *lupe* or Pacific pigeon (*Ducula pacifica*). These species are dependent upon the forest environment. The hunting of these animals maintains an important cultural tradition and provides a highly valued food delicacy. The *peka* and *lupe* are highly mobile animals that move around the island to forage and take advantage of geographic variations in the flowering of their food sources. Hunting is restricted to a hunting season and hunters are limited by a quota on the issue of ammunition by the government. However, there are no programs to formally monitor the population of these animals and there are concerns that any increase in hunting or loss of habitat could be unsustainable. The conservation of the species is therefore a public value that requires some constraints on private rights in order to maintain sufficient habitat and breeding populations.

Niue faces the challenge faced by other countries within the region: how to respect the private rights to land whilst protecting the public interest in conserving important environmental values. The FMP is part of the legislative and policy framework that includes the draft Forestry Act and Regulations, the National Forest Policy and the Code of Harvesting Practice. This framework, once fully implemented, provides a means to achieve a sustainable balance between private and public rights; a balance that can be adjusted and refined over time on the basis of new information and experience.

2.5 Institutional arrangements and capacity

The structure of government in Niue is shown in Annex 4.

A Ministry of Natural Resources was established in 2014 comprising the Departments of Environment, Agriculture, Forestry and Fisheries and Meteorology and Climate Change.

The key parties involved in forest management in Niue are as follows-

- Niue landholders, *magafaoa* and the 14 village communities: The people of Niue have a vested interest in their forest resources. Because the *magafaoa* decide how land and associated resources are used and managed, their consent and participation are necessary for the success of any forest management programme.
- The Department of Agriculture, Forestry, Fisheries (DAFF) is established "to promote and protect the development of a sustainable and viable agriculture, fishing and forestry base and to monitor the use of natural resources to ensure sustainability within the framework of a dynamic economy, while recognising the contribution of its environmental and cultural

values". The Forestry Division of DAFF is the lead support organisation for the forestry sector.

- The Department of Environment (DoE) and Taoga Niue are established "to promote respect for Niue's cultural values and unique environment through conservation and sustainable development". These departments have an advisory role to play in identifying priority areas and species for biodiversity and cultural heritage conservation.
- The Department of Justice, Lands and Surveys is established "to administer land tenure, resource access, property and individual rights to facilitate Niue's economic and social development". The department plays a collaborative role in implementing the National Forest Policy, providing support in Geographic Information Systems (GIS) mapping for land capability and land use in Niue.
- The role of the private sector is to work in close collaboration with the Forestry Division in implementing codes, regulations and silvicultural prescriptions. Niue Timber Ltd is currently the sole timber processor.
- Donors and development agencies will continue to play a role in providing technical advice and assistance on forest management and research.

Niue is a very small country with a population of less than 1,700 residents and fifteen times that number living overseas, predominantly in New Zealand. The institutional resources are, not surprisingly, very limited. The Forestry Division (FD) is part of the Department of Agriculture, Forests and Fisheries (DAFF). The division has a small number of officers (currently two). Forestry officers have other duties within DAFF and do not always have formal qualifications in forestry. They do, however, have skills relevant to forest regulation, such as inspections and enforcement of laws (e.g. quarantine regulations).

The NFPS of 2003 noted-

Until recently, despite repeated recommendations over the last three decades, there has been a lack of government recognition of the forestry sector's importance and of how it interacts with land-use and biodiversity conservation on Niue. The Forestry Division, with the exception of its one-off status as the executive agency for the NZODA Plantation Forestry Project, has no statutory function within DAFF. It lacks the legislative base, organisational structure, mandate, resources and funding in the recurrent budget to fulfil functions related to forest development, natural forest management and forest conservation.

The NFPS called for more staff for the FD but this has not eventuated.

2.6 Current programs relevant to Sustainable Forest Management

Current programs within the Forestry Division include-

Forestry and Protected Area Management project with Fiji, Samoa and Vanuatu (GEFPAS-FPAM) (2013-17). The project's global environmental objective is to strengthen biodiversity conservation and reduce forest and land degradation. The project's development objective is to enhance the sustainable livelihoods of local communities living in and around protected areas. It has six components: (i) policy and legal reform; (ii) extension and consolidation of the protected area network; (iii) strengthening capacity for community-based conservation management; (iv) developing mechanisms for sustainable protected area financing; (v) sustainable use of biodiversity; and (vi) sustainable land management in forest margins.

Programs within the Environment Department include the following-

- FPAM – Huvalu Conservation Area Project
- GEF-PAS Regional Invasive Species Project
- Pacific Adaptation to Climate Change project - PACC
- Implementation of this Biodiversity Strategy and Action Plan
- Implementation of an Environmental Education and Awareness Programme
- Facilitation of the implementation of the Cartagena Protocol on Biosafety
- Facilitation of the implementation of the Nagoya Protocol on Access and Benefit Sharing for the protection of traditional knowledge and access to genetic resources and benefit sharing on Niue
- Implementation of the Waste Management Strategic Plan.

2.7 Threats to sustainable forest management

The main threats to sustainable forest management (SFM) include the following.

Clearing of forest for agriculture

It has been estimated that the forest cover of Niue declined from 90% in the 1950s to 70% in 2008 due to high levels of clearing in the 1980s and early 1990s. About 70% of the forest cover has been used for *Tugitugi* shifting agriculture, which incorporates periods of fallow in which the land naturally regenerates to native pioneering species but is generally re-cleared before the forest and its associated biodiversity reach maturity. The traditional slash and burn method has been replaced by the use of large bulldozers. The Niue Government has imposed limits on the size of bulldozers that are used for clearing in order to encourage the retention of large trees.

Overall, the rate of clearing for agriculture is relatively low compared with other countries in the region due to low population pressure and the very rocky nature of land occupied by mature forest.

Inappropriate change in land use

A decade ago there were rumours relating to overseas interests in conducting large scale, industrial logging and clearance of Niue's forests for the development of palm oil plantations. Community concern about the potential impact of such developments acted as a catalyst for the development of a framework for sustainable forest management, including the drafting of a Forests Bill and the formulation of the Forest Management Plan.

Extending road access into mature forest

The construction of new road access into mature forest for logging operations could open up more forest for hunting, agricultural activity and invasive species, which could have negative impacts on the conservation of other forest values.

Over-exploitation of forest products

The rate of timber harvesting has been well below the sustainable capacity of the forest for many decades. The harvesting of wildlife species is an important cultural tradition for Niueans. However, there are concerns that over-hunting is threatening the populations of species such as Pacific Pigeon (*lupe*) and the Tongan flying fox (*peka*) and Coconut Crab (*uga*). There is an annual hunting season of between two and three months but hunting out of season is regularly reported.

Lack of institutional capacity

Niue's small population means that institutional capacity is limited across all facets of government, including forestry.

Processing and marketing

The current sawmilling capacity is very limited but with upgrading would be capable of processing 2,500 m³ of sawlogs per year, which would be adequate to handle most of the potential annual cut from the forests. However, substantial upgrading of the old mill and extraction equipment would be required. In addition, there would be a need to recruit and train local people if the capacity of the mill is to be extended beyond the current one-person operation.

There is a need to develop a marketing strategy for local timbers. Many Niueans prefer to work with green sawn local timber which has much better working properties than when it is dried. However, dried timber is essential for higher value products and for export.

Cyclones and climate change

Cyclones are the major natural cause of disturbance in Niue's forests, resulting in defoliation, stem breakage and uprooting of trees. However, natural recovery is rapid providing that the damage is not followed by clearing or burning activities.

Global climate change will have serious implications for Niue with expected temperature rises, increased frequency and intensity of cyclones and more periods of drought. These factors will place additional stress on the resilience of the forest ecosystem, highlighting a need for a conservative approach to the removal of forest products.

Invasive species

Primary threats to terrestrial biodiversity include rats, feral cats, feral pigs and weed species such as Taro vine (*Epipremnum pinnatum* and Fuevao (*Merremia peltata*) (Department of Environment, 2014).

Pollution

Small scale impacts are associated with waste dumps, coastal run-off, the use of pesticides, and seepage from septic tanks.

3. Analysis of the legal and policy framework

Annex 2 provides an assessment of the current status of the regulatory framework, including the proposed changes to legislation contained in the draft Forests Bill 2016. The draft bill contains no specific requirements for persons to comply with any of the provisions of the NFPS or CoHP. It does, however, recognise the FPM as an 'environmental standard' (s 7(4)) and it requires persons holding a license for timber cutting or timber processing to comply with any conditions attached to that licence. The power to impose conditions is vested in the Director of DAFF under sections 11(1)(a) and 16(1)(a) of the bill. For the purposes of this report (and subject to legal clarification) it has been assumed that the above provisions of the bill provide a legal mechanism for the implementation of the whole or (relevant) parts of the FMP and CoHP.

The assessment of the regulatory framework is based on seven key components of a regulatory framework (listed below) following the methodology developed by the author for previous studies (Wilkinson, 1999).

The status of the regulatory framework is summarised as follows-

1. Legal and policy framework
 - There is currently no forestry law in Niue.
 - A draft Forests Bill has been prepared; it primarily covers the preparation of a FMP, the issue of licences, the appointment of forestry officers and offences/penalties.
 - A NFPS is in place.
 - A FMP and CoHP are in place but are not currently legally enforceable but could be under the draft Forests Bill (subject to clarification).
2. Planning
 - Processes are laid down in the FMP for the preparation of timber harvesting plans (THPs), including requirements to take account of natural and cultural values.
 - THPs are not being prepared due to the current absence of timber harvesting operations.
3. Implementation
 - There is the potential for duplication of requirements across different laws and government agencies. However, in general, governmental resources are well integrated in Niue by virtue of the small size of government and the multi-tasking of many officers
 - The Forestry Division has very limited capacity to deliver the core functions of a regulatory framework.
4. Monitoring
 - There is no provision for monitoring other than through the requirements of the FMP.
5. Enforcement
 - The enforcement provisions under the draft Forests Bill are limited to compliance with the licencing requirements, which may provide a legal basis for the enforcement of the FMP and CoHP (see above comments in this section).
 - Operating procedures and training will be required.
6. Review and improvement
 - The draft Forests Bill provides for the review of the FMP every five years.
7. Reporting
 - There is no provision for reporting other than through the requirements of the FMP.

Overall, the current regulatory framework lacks most of the key components required for the sustainable management of forest and tree resources. The draft Forests Bill, if and when enacted, will substantially improve the framework.

4. Issues relevant to the design of a regulatory framework for Niue

The following issues are considered relevant to the development and implementation of a regulatory framework for the management of forests and trees in Niue-

1. Niue has a significant area of forest, occupying 5,500 ha or 21% of the island. A further 51% of the island contains forest regeneration within lands that are used for rotational agriculture.

2. 95% of land is under customary Niuean ownership. Niuean law firmly protects the private rights of the traditional landholders.
3. The forests are highly valued by the customary landholders and the people of Niue. The forests are used for hunting, gathering food and traditional medicines, and collecting timber for housing, canoes and crafts. The forests are also valued for the protection of biodiversity, groundwater and cultural sites.
4. More than one-quarter of landholders are currently interested in logging their forests and another one-third are potentially interested (Wilkinson, 2011).
5. The most suitable harvesting regime for Niue's forests is a light selective logging that removes no more than 30% of commercial-size stems, with cutting cycles 20 years apart.
6. Current processing capacity is limited to one sawmilling business, which in the past has produced local construction timbers and furniture.
7. Local timbers are high quality and are very suitable for value-added products such as furniture and interior linings for local and export markets.
8. Annual domestic consumption of timber products is low (less than 700 m3 per year) and most is radiata pine imported from New Zealand.
9. The implementation of the AAC under the FMP and associated timber harvesting plans will provide a 'low risk' strategy that will provide opportunities for economic development whilst maintaining the important natural and cultural values of the forests.
10. Government has limited (and probably diminishing) capacity to allocate and maintain adequate resources for forestry. Increasing reliance must be placed on building the capacity of landholders and industry to self-manage.
11. Forestry officers have other duties within DAFF and do not always have formal training qualifications in forestry. They do, however, have skills relevant to forest regulation, such as inspections and enforcement of quarantine regulations.
12. Niue does not have the economy of scale or capacity to provide ongoing in-house training for forestry officers in monitoring and law enforcement.
13. Niue is a very small community, which makes it difficult for governmental officers to avoid personal conflict of interest and 'regulatory capture'¹.
14. Forestry officers by their nature are often averse to assuming the role of 'policeman'. It is therefore important to ensure that they are given appropriate training and that reasonable boundaries are laid down beyond which investigation and enforcement actions are handed to the police.
15. The forest industry is small and limited to one company (NFP), which has not operated in recent years and its future is uncertain.
16. International markets are increasingly demanding evidence of sustainability and legality. Market-based instruments such as forest certification schemes have a role to play in meeting market demand but the cost of these instruments can be prohibitively high for small holdings.

¹ Regulatory capture occurs when officers or agencies begin to act in the interests of the persons or bodies that they are intended to regulate rather than in the broader public interest. It commonly occurs where an officer is in a close living or working environment with his/her constituents and personal relationships make it difficult to impose sanctions. In the worst cases it involves the corruption of the officer for personal gain.

5. Analysis of options for a regulatory framework

Regulation is a function of –

1. The degree of control exercised by government, varying from full governmental control at one extreme to fully unregulated by government at the other.
2. The degree of self-regulation practiced by the players within the industry under individual, group or market-driven approaches (such as forest certification schemes).
3. The degree to which reliance is placed on various combinations of mandatory and non-mandatory approaches.

In practice, most regulatory frameworks for forestry are based on co-regulatory systems, which comprise a mixture of self-regulatory procedures that are backed up with governmental controls. Co-regulation works best where the forestry sector has adequate skills and resources, together with the motivation to achieve high standards. Responsible self-regulation by the forestry sector allows the government to focus its limited resources on high level oversight of compliance. In Niue, the sole forestry company, NFP, has demonstrated a very high degree of self-regulation. However, there is currently negligible capacity for self-regulation elsewhere.

An analysis of three options for a regulatory framework for SFM in Niue is presented in Table 1. The analysis of the three options can be summarised as follows-

1. *Predominantly governmental management and control* – Not likely to be a sustainable option due to limited capacity within government.
2. *Predominantly self-regulation* - Not likely to be a sustainable option in the short to medium term due to the limited knowledge of sustainable forest management within the private and community sectors.
3. *Enhanced co-regulation with a targeted transition to higher levels of self-regulation* - This is a sustainable option because it provides for the building of self-management capacity, allowing the government to focus its limited resources on the following-
 - a. Developing and administering an appropriate legal and policy framework for sustainable forest management;
 - b. Encouraging investment in the processing and value-adding of forest products;
 - c. Providing information to landholders; and
 - d. Monitoring and enforcing the legal and policy framework.

6. Settings and drivers for enhanced co-regulation

Enhanced co-regulation requires the following settings and drivers-

1. Government is willing to provide adequate funding to implement the actions required to foster increased capacity for self-management within the private and community sectors.
2. Government officers, particularly forestry officers, support the required actions and receive adequate training and resources to implement them.
3. Industry and community groups are motivated to achieve higher levels of self-regulation.

The motivation for industry and community groups to strive for high levels of self-regulation is a function of reward and punishment, commonly referred to as the 'carrot and stick'. The potential rewards include-

- Reduced governmental controls and bureaucracy, allowing more efficient management systems and reduced business costs.
- Improved capacity of the forestry sector to further develop and self-manage their businesses without continued reliance on government support.
- Improved public support ('social licence') for forestry activities.
- Improved access to markets that require evidence of sound management systems and legality.

Rewards by themselves, however, may not be sufficient to motivate all players. Individuals or groups who fail to comply with rules and regulations bring the system of co-regulation and the reputation and standing of the forestry sector into disrepute. Such players may seek to profit by avoiding the normal costs of regulatory compliance and unfairly competing with those who are seeking to comply. Accordingly, all regulatory systems require statutory enforcement actions that will provide a sufficient deterrent to those who fail to achieve acceptable compliance standards. These actions include measures such as a requirement for corrective actions to be taken, suspension of licences, fines and imprisonment.

A well-designed co-regulatory system will have the right combination of 'carrot and stick'. Experience in Tasmania, Australia, has found that 85% of non-compliances are best addressed through increased efforts in the areas of training, education and improved management systems whilst 15% require the imposition of penalties (Wilkinson, 2007).

7. Potential actions for implementing an enhanced co-regulatory model

The potential actions for implementing an enhanced co-regulatory model for Niue are presented in Table 2. In summary, the development and implementation of an enhanced co-regulatory model would have the following features-

1. Establishing a register of potential timber production lands (PTPL)
2. Attracting businesses for the harvesting and processing of timber
3. Re-focussing the need for forestry expertise in government
4. Building the capacity of forest owners to self-manage their forests through a system of 'Accredited Forest Managers'
5. Improve the estimates of forest growth and sustained yield
6. Promoting SFM for multiple benefits
7. Monitoring and enforcement of the Forest Management Plan, Code of Harvesting Practice, Forests Act and regulations
8. Transparent reporting of the standards of forest management being achieved.

Further details on these actions are presented below.

7.1 Establishing a register of potential timber production lands (PTPL)

Background- The extrapolation of data from the 2008 national forest inventory (NFI) indicates that the mature dense forest is growing at a rate of about 5,000 to 7,500 m³ per year. A survey of landholder attitudes to logging in July 2011 found that about 27% of landholders are currently interested in logging, with 36% undecided and 36% not interested. Using a conservative estimate of 45% of the resource being potentially available, the FMP prescribes a maximum annual allowable cut (AAC) of 3,000 m³ per year. However, greater certainty of the timber availability is required in order to attract potential investment in harvesting and processing of the resource on a long term, sustainable basis.

In addition to the natural forests, Niue has a very small plantation area of mainly mahogany. In general, the growth and form of the plantations have been relatively poor. Nevertheless, the plantations contain some potentially valuable timber for carving, craftwood and sawmilling to supplement timber supplies from the natural forests.

Potential action – Landholders should be encouraged to lodge their interest in having their land voluntarily registered as ‘potential timber production lands’ (PTPL). The register of PTPL would serve the following functions-

- Provide a database to better quantify the potential resource availability
- Allow for the determination of a more precise sustainable yield from the forests
- Allow for the scheduling of wood flows to take account of the needs of both forest managers and the industry.

7.2 Attracting businesses for the harvesting and processing of timber

Background- Niue has a very small resident population of about 1,500 and the local consumption of timber is low - about 700 m³ per year. There is only one sawmill on the island, which prior to Cyclone Heta in 2004 employed six staff to cut about 200 m³ of logs per year into general purpose timber and furniture. The current mill is not operating because it lacks an operational kiln, which is essential for the processing of high value products. The Niuean timbers are very high quality and whilst the returns to growers are currently relatively low they should rise if an investor is able to develop a market for higher value products. However, the small size of the resource will limit the potential opportunities for investment in harvesting and value-adding.



Niue Timber's conventional sawmill (*left*) and portable sawmill (*right*)

Potential action – The government of Niue should call for expressions of interest (EOI) in the harvesting and utilisation of the timber resource. The EOI process should make it clear that the harvesting is to be done on a sustainable basis in accordance with the AAC and other provisions of the FMP and CoHP. The EOI should be promoted internationally, with a focus on the Asia-Pacific area, including New Zealand and Australia.

7.3 Re-focussing the need for forestry expertise in government

Background- As noted in section 2.5 above, Niue is a very small country with limited resources and capacity across all facets of government, including forestry. In the absence of a viable timber industry, there will be little justification for the maintenance of forestry expertise within government. However, the growth and development of a viable forestry sector in Niue will only occur if the private sector acquires the skills and capacity for SFM, including aspects such as seed collection and nursery techniques, silviculture, management of natural and cultural values, harvesting and utilisation. Under a co-regulatory model, the role of government is not necessarily to directly undertake these activities or to ‘hold the hand’ of the private sector, but to foster improved capacity for responsible self-management.

Potential action- DAFF should continue to maintain at least one dedicated officer with skills and knowledge of forestry. Ideally, this should be a person with formal training in forestry, but if not, it should be a person who has received training and awareness of forestry matters through participation in regional training workshops and forums etc. In particular, it is important that officers in Niue are able to maintain effective networks with other forestry organisations within the region so that they can access technical support (e.g. through SPC) and collaborate/share resources with other neighbouring countries.

The key role of forestry officers should be to foster capacity building for SFM within the private sector, by focussing on providing information, education and training.

7.4 Building the capacity of forest owners to self-manage their forests through a system of ‘Accredited Forest Managers’

Background- Forest management in Niue is firmly based on the principles of respecting the private ownership of the land and the private rights to the resources of the forest. Landholders have a long tradition of managing the forests for multiple benefits, although the use of the forests for commercial timber harvests has been very limited. In common with other countries within the region, Niue faces the challenges brought about by social changes such as migration and depopulation of rural areas, which often result in a decline in traditional inter-generational knowledge and consequent changes in the management of land and natural resources. At the same time, most governments within the region have a limited and declining capacity to support forest management and regulate forestry activities.

Potential action- DAFF (with external assistance as required) should provide training on the FMP and CoHP to forest owners who have registered their land as PTPL (see section 7.1 above). Once trained, such persons should be authorised as ‘Accredited Forest Managers’ (AFMs). This authorisation would allow them to prepare, supervise and monitor timber harvesting operations on their land in accordance with the requirements of the FMP and timber cutting license (as proposed under the Forests Bill).

DAFF should collaborate with a landholder to establish a 'demonstration forest' to allow other landholders to view and discuss practical aspects of SFM, such as timber harvesting, conservation of natural values and forest regeneration.

7.5 Improving the estimates of forest growth and sustained yield

Background- The 2008 national forest inventory provided comprehensive data on forest areas, species composition and timber volumes. The inventory has provided important baseline information on the status of the forests. However, the absence of permanent growth plots means that there are no data on the growth rates of the forest and individual species. This is a major limitation to the determination of an annual allowable cut (AAC), requiring an estimate of growth increment to be based on other forests within the Pacific. The establishment of growth plots will greatly assist the determination of a more accurate AAC for Niue.

Potential action- DAFF, with external support (e.g. SPC) should establish a series of permanent growth plots for periodic measurement to determine the increment of the mature dense forests.

7.6 Promoting SFM for multiple benefits

Background- The forests of Niue provide important economic, social and environmental benefits, including food, medicines, timber for houses, canoes and crafts, and habitat for the conservation of biodiversity, water and cultural sites. Niue currently has no schedule of rare, vulnerable and endangered species (RVE) and there are no systematic monitoring programs in place. There are challenges in sustaining the needs of both conservation and traditional hunting for species such as the *uga*, *peka* and *lupe*.

Potential action- DAFF should continue to investigate opportunities to promote tree planting and the rehabilitation and reforestation of un-used agricultural land for multiple benefits, including biodiversity, timber production and carbon sequestration. DAFF and the Department of Environment should evaluate the conservation status of the elements of forest biodiversity, beginning with tree species and other rare, vulnerable and endangered species that warrant special management through education programs and through provisions in timber harvesting plans.



Sustainable management of the multiple values of the forests provides opportunities for landowners to obtain a continuing economic benefit through the sustainable harvesting and processing of timber resources (*left* - rocking chair made locally from Kafika wood) whilst maintaining the social and environmental values of the forests (*right*)

7.7 Monitoring and enforcement

Background- Niue has made significant progress towards the establishment of a robust legal and policy framework for the sustainable management of its forests. However, to be effective, laws and policies need to be implemented through appropriate regulatory systems. A credible system of regulation will ensure that Niue's forest assets are conserved and managed for the benefit of current and future generations. It will also provide a basis for responding to international requirements for SFM and verification of legal timber transactions. Such requirements are an important consideration for the development of any prospective timber industry in Niue.

Potential action- The government should ensure that the provisions of the CoHP and FMP are legally enforceable with respect to timber harvesting operations e.g. by clarifying that the new Forests Act allows for the application of them as a condition of a timber license under s 11(1)(a). Monitoring and enforcement capacity should be upgraded through the development of formal procedures (protocols) and the training of forestry officers.

7.8 Transparent reporting

Background- The natural and cultural values of forests include 'common pool resources' such as biodiversity and carbon storage, which are important to landholders, local communities, as well as regional and international communities. Information about the status of forest values and SFM, and changes over time as collected through monitoring programs, should be publicly reported in a transparent manner.

Potential action- The Annual Report of the DAFF should include the results of monitoring and enforcement. Such reports should be readily available to the public, e.g. through government websites.

8. Conclusions

Niue has a unique resource of forests. In common with other countries within the region, Niue faces significant regulatory challenges because of limited capacity to support sustainable forest management (SFM) within government and the private sector.

It is unlikely that government or the private sector alone will have the resources and capacity to implement an effective system of forest management and regulation. Regulatory models of predominantly governmental regulation and predominantly self-regulation are therefore not considered to be appropriate or viable for Niue for the foreseeable future. Instead, it is concluded that Niue should actively pursue an enhanced co-regulatory model as part of a strategy to build the capacity for self-management and self-regulation within the private sector whilst allowing the government to maintain core functions in the areas of training, education, monitoring, enforcement and reporting.

Table 1. Analysis of options for the regulatory framework in Niue

Option	Main features	Risks	Actions to manage risks	Likelihood of success
Predominantly governmental management and control	Increased funding for the Forestry Division (FD)	Funds are not available and may decrease over time due to other priorities within government	Continue to seek supplementary funding through external projects	Low; this is not a sustainable option in the long term
	Continuing reliance of industry and landholders on governmental support	Continuing governmental support may stifle entrepreneurship, competition and investment by the private sector	Create incentives to encourage private developments and investments	Low if the government creates an uneven playing field
		The capacity of government may still not be sufficient to cater for the multitude of small holdings	Continue to seek supplementary funding through external projects	Low; this is not a sustainable option in the long term
	Increased governmental control of commercial activities	Over-regulation may constrain business efficiency and discourage investment	Regulatory impacts need to be carefully evaluated and excessive regulation avoided	Low to moderate depending upon the efficiency of regulatory impact evaluations within government
Predominantly self-regulation	Decreased funding for the FD	The FD will probably disappear as an identifiable unit within DAFF, further diluting the forestry skills and capacity within government	Institutional arrangements will need to be re-structured to recognise and retain forestry expertise within government	Low to moderate depending upon the institutional arrangements
	Greater reliance on self-management and regulation by the industry and landholders	Industry and landholders do not have the capacity to achieve reasonable standards, resulting in a decline in the environmental, social and economic value of the forests and trees	Provide government support for building capacity within the private sector	Low in the absence of adequate governmental or external funding over a reasonable transition period
			Use enforcement measures to ensure legal requirements by industry and landholders are met	Low in the absence of governmental support for upgrading the skills and capacity of industry and landholders

Option	Main features	Risks	Actions to manage risks	Likelihood of success
Enhanced co-regulation with a targeted transition to higher levels of self-regulation	Government funding for the FD to be maintained at current levels for the medium term	Funds are not available and may decrease over time due to other priorities within government	Demonstrate to government that long term benefits and budget savings will accrue through a transition to higher levels of self-regulation	Reasonable, particularly if the new regulatory environment encourages higher levels of investment and business activity by the private sector.
			Continue to seek supplementary funding through external projects	Moderate to reasonable
	Role of the FD to be focussed on capacity building of the private and community sectors, through information, education, training and accreditation.	FD may not have the skills and capacity to provide the necessary programs	Seek external support and partnerships with other governmental agencies	Reasonable
	Increasingly, greater reliance will be placed on self-management and regulation by the industry and landholders, including community-based groups.	Poor uptake due to a lack of incentives for the private and community sectors	Ensure that information programs highlight the potential benefits from sustainable forest management	Reasonable to good
			Promote the availability of government training programs/support for business development projects	Reasonable
			Use enforcement measures to ensure legal requirements by industry and landholders are met	Reasonable to good

Table 2 – Potential actions for implementing an enhanced co-regulatory model in Niue

Actions	Methods
1. Establishing a register of potential timber production lands (PTPL)	1. Seek expressions of interest from landholders who wish to be included in a voluntary register of land that may be available for timber harvesting in accordance with the FMP and CoHP.
2. Attracting businesses for the harvesting and processing of timber	2.1 Call for expressions of interest from persons who are able to harvest and utilise timber from the PTPL. 2.2 Grant Timber Processing License(s) (as per sections 14-18 of the Forests Bill) to person(s) who are able to process timber in accordance with the FMP and CoHP, with preference to person(s) who are prepared to invest in local value-adding activities.
3. Re-focussing the need for forestry expertise in government	3.1 Ensure that DAFF maintains at least one dedicated officer with skills and knowledge of forestry. 3.2 Develop a training strategy* to clarify the type of training that can be resourced within existing institutions within Niue and specialist training that may require access to overseas institutions. 3.3 Enhance the in-house training skills of forestry officers so that they can conduct education and training for landholders on the establishment and management of forests and trees, including seed collection and nursery techniques, silviculture, management of natural and cultural values, harvesting and utilisation.
4. Building the capacity of forest owners to self-manage their forests in accordance with the FMP and CoHP.	4.1 DAFF (with external assistance as required) to provide training on the FMP and CoHP to forest owners who have registered their land as PTPL. 4.2 DAFF to authorise such persons as 'Accredited Forest Managers' (AFMs) to prepare, supervise and monitor timber harvesting operations on their land. 4.3 DAFF to ensure that a timber harvesting plan is prepared and submitted by an AFM as part of the application for a timber cutting license (under the draft Forests Bill). 4.4 Establish a 'demonstration forest' with a willing landholder to demonstrate the nature of sustainable logging.
5. Improving the estimates of forest growth and sustained yield	5.1 Establish a series of permanent growth plots to measure the increment of mature dense forests.

Actions	Methods
6. Promoting SFM for multiple benefits	<p>6.1 Continue to investigate opportunities to promote tree planting and the rehabilitation and reforestation of unused agricultural land for multiple benefits, including biodiversity, timber production and carbon sequestration.</p> <p>6.2 Conduct a program in collaboration with the Department of Environment to evaluate the conservation significance of forest biodiversity, beginning with tree species. Identify rare, vulnerable and endangered species that warrant special protection or management status. Ensure that these species are conserved through education programs and through provisions in timber harvesting plans.</p>
7. Monitoring and enforcement of the Forest Management Plan, Code of Harvesting Practice, Forests Act and regulations	<p>7.1 Ensure that the provisions of the Code of Harvesting Practice and the Forest Management Plan are legally enforceable with respect to timber harvesting operations e.g. by clarifying that the new Forests Act allows for the application of them as a condition of a timber license under s 11(1)(a).</p> <p>7.2 Develop Monitoring Protocols* to guide monitoring and reporting of compliance and standards in a consistent and objective manner</p> <p>7.3 Forestry officers to be trained in monitoring and reporting. *</p> <p>7.4 Enforcement Protocols to be developed* to guide the conduct of investigations, roles and responsibilities of forestry officers and police officers, decision-making, application of enforcement options and reporting of outcomes.</p> <p>7.5 Forestry officers to be trained in investigations and enforcement*, including the collection of evidence, conflict of interest, natural justice and the preparation of reports.</p>
8. Transparent reporting of the standards of forest management being achieved	<p>8.1 Ensure that the Annual Report of the DAFF includes the results of monitoring and enforcement; and that the reports are readily available to the public, e.g. through government websites.</p>

* These matters are planned as part of the current APFNet Project

9. References

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Annex 1 - Legislation relevant to forestry

1. Current Legislation

The following summary of legislation is taken from Christy (2008) and Government of Niue (2015), with updates from a reading of Government of Niue (2016).

Animal Trespass Act 1997

This act was established to control the ever-increasing feral pig population, a problem not only to taro plantations but also a major threat to other plant and animal species on the island.

Agriculture Quarantine Act 1984 and associated regulations

The Act provides for the prohibition of the importation of plants, plant materials, animals and animal products, organisms and biological products into Niue. A provision also provides for the administration and enforcement of the Act. The Act and associated regulations mitigate, prevent, control and eradicate the intentional and unintentional introduction of alien species. The Act and the regulations also prevent the impact of invasive species that threaten Niue's ecosystems, habitat and native species.

The Act provides generally for the powers of quarantine officers, and it requires a permit for the import of any plant or plant material. Regulations provide specifically for "forest tree species", the import of which is limited to "seeds which are inspected and treated as prescribed." (Plant Quarantine Regulations reg. 19(2)). The import of all planting material of certain orchard species is prohibited.

Arms Act 1975

A permit is required for both import and possession of arms and ammunition. Although there is no mention of quantitative limits, in practice the amount of ammunition for which a permit will be issued is limited according to the number of firearms a person possesses. This is used as an indirect limit on hunting.

Commissions of Inquiry Act 1968

Commissions of Inquiry are appointed by the Cabinet and have the powers of judges to summon witnesses. The Constitution requires a Commission of Inquiry to examine any legislation that affects ownership of Niuean land.

Criminal Law Code

The criminal law and procedure provisions of the Niue Act and the General Laws Act have been consolidated and reprinted as the Criminal Law Code. The crimes of particular interest for forestry are theft (which includes conversion and would apply to the theft of standing as well as cut timber); arson, trespass and animal trespass. Arrest without a warrant is permitted in the case of an offence punishable by imprisonment. In such cases or where "immediate and serious injury" is likely the arresting officer may enter premises as well. Seizure of evidence, on the other hand, is only permitted on the authority of a warrant.

The Proceeds of Crime Act applies to crimes punishable by one year or more of imprisonment. It provides for "forfeiture" of "tainted property" (the instruments or proceeds of a crime), as well as

for the “confiscation” of the value of the benefit from a crime. It provides for the seizure of tainted property with a warrant.

Development Investment Act 1992

A foreign enterprise (defined in terms of shareholding) must be registered under the Act to do business in Niue. The Cabinet determines the incentives to be granted. The incentives override the Customs, Customs Tariff, Entry, Residence and Departure, and Income Tax Acts.

Domestic Fishing Act 1995

The Act prohibits taking or possessing coconut crabs of less than the size prescribed by regulations. The currently prescribed size is 36 millimetres thoracic length. It is also forbidden to export coconut crabs from 1 October to 1 March. The Domestic Fishing Act also provides a precedent for declaring a reserve.

Environment Act 2003

This is Niue’s principal environmental law that establishes the Environment Department and makes provisions for the administration of environment related matters and the enactment and enforcement of related legislation. It identifies that the following are to be taken into account in its application:

- Sustainable development
- Protection of indigenous flora and fauna
- Protection of coastal zones
- Protection of historic areas
- Preservation of culture and traditions
- Conservation and sustainable use of biological resources
- Compliance with multilateral agreements.

The Act provides for the appointment of “any appropriately qualified person to be an Environment Officer, including constables, quarantine officers, fisheries officers and public health inspectors.” Officers have powers of inspection, but a warrant is required to enter “private residential premises”. So far only biosafety regulations have been made.

Interpretation Act 2004

The Act defines a number of terms, including “owner” which, “in relation to Niuean land other than land held under lease or licence as defined in the Land Act 1969, means the mangafaoa or a member of the mangafaoa”. “Niuean land” is not defined in the Interpretation Act, but it is clearly defined in the Niue Act. Unless otherwise specified, no enactment binds the Crown.

Mining Act 1997

The Act declares minerals on or under the surface of the land (but not sand or gravel, to which it does not apply) to be Crown property. Cabinet may take land for mining or require the owners to open it to mining. Landholders are compensated for losses, not including the value of minerals extracted. Mining requires a licence, which is issued by the Cabinet.

Pesticides Act 1991

This provides for the assessment and issuing of permits for the importation and sale of a pesticide and the promotion of efficient, prudent and safe use of pesticides by the public.

The Act would apply to forest pest control, although it does not make any specific mention of forest pests.

Pig Control Act 1998

The Act requires the owners of pigs to keep them enclosed or tethered.

The Village Council's Ordinance 1967

Includes identification of the function of Village Councils to undertake, provision, construct and maintain, manage and regulate in the following biodiversity related areas:

- Bush roads (excluding public roads)
- Public parks, gardens, recreation areas, scenic resorts and lookouts and other public places, reserves and land vested in the Council or placed under the control either permanent or temporary
- Supply of water, light and power, water conservation and storm water drainage
- Establishment and maintenance of forest plantation and natural forest reserves
- Establishment of pounds and impounding of animals in accordance with the Niue Island Impounding Ordinance 1967
- Agricultural, pastoral, horticultural and forestry industries and the economic use of Niuean Customary land
- Protection of fish resources, in accordance with the Niue Island Fisheries Protection Ordinance 1965, and flora and fauna

Village Councils Act 1967

The Act provides for local government. Each Village Council has the power to make bylaws, including for “agricultural, pastoral, horticultural and forestry industries and the economic use of Niuean customary land”. Bylaws must be approved by the Cabinet before they are effective. A Council may also make recommendations to Cabinet.

Taoga Niue Act 2012

This establishes the Department of Taoga Niue whose responsibilities include the protection of traditional knowledge and expressions of culture.

The Land Ordinance 1969

This includes a provision to allow the court, on application of any Leveki Magafaoa and with the consent and the majority of the members, to set aside any Niuean land for a reserve, fishing ground, village site, land place, place of historical interest, water supply, church site, building site, recreation ground, bathing place or any other specified purpose.

Water Act 2012

The Act vests all groundwater in the Crown (note: there is no surface freshwater in Niue). It makes the Environment Director responsible for water quality and its protection. A “water pollution control licence” issued by the Director is required for a number of activities, including logging operations and timber milling.

Wildlife Act 1972

The Act empowers the Cabinet to protect any species of bird or mammal partially or absolutely (note that the important forest species coconut crab is regulated under the Domestic Fishing Act.) The Wildlife Protected Species Notice 1991 declares wood pigeons and fruit bats to be “partly protected species throughout Niue, except for the period commencing on 1 December and ending on 31 December in each year.” The Act does not provide for monitoring of wildlife, for planning, or for management measures other than control of hunting.

2. Legislation under development (as at 2015)

Environment Bill

This Bill provides for the preservation and protection of the environment of Niue. It introduces the making of environmental standards and ensures that all government departments and public authorities take environmental matters into account when making decisions. It also addresses activities involving living modified organisms. It will act as overarching legislation for natural resource management and protection. It is expected that it will be submitted to the Niue Assembly for passing in September 2015. Regulations, including those covering Environment Impact Assessment, are expected to be developed subsequently.

Biosecurity Bill

The Biosecurity Bill addresses the prevention of the entry of animal and plant pests and diseases into Niue; the control of their establishment and spread; and international cooperation in this area. It contains detailed measures related to border control, movement of vessels and aircraft, import and export procedures, quarantine and control measures within the country. It establishes the Niue Biosecurity Service and defines the powers of its officers.

Forest Bill

The Forest Bill provides for the sustainable utilisation of Niue’s forests. It requires the development of a Forest Management Plan containing inventory of the forest resource including its biodiversity values, and a maximum allowable cut of timber and the logging methods to be used. Anyone logging timber on forestry land will require a licence and the Bill sets out the procedures in relation to this.

Wildlife Amendment Bill

This is to amend the Wildlife Act 1972 for increased protection and recovery of the wildlife flora and fauna of Niue. International Union for Conservation of Nature (IUCN) Guidelines for Applying Protected Area Management Categories will be included in this amendment. A Wildlife Policy and Management Plan will be developed under this Bill once enacted.

Annex 2 - Status of the components of the forestry regulatory framework in Niue

Component	Current status ²	Current situation	Status under proposed legislation ³
1. Legal and policy framework			
Does the framework make provision for the following-			
1.1. Clear objectives, e.g. sustainable forest management	partly	a) There is currently no forestry law. b) The National Forest Policy Statement 2003 (NFPS) provides an explicit set of policy objectives, including the objective of sustainable management. However, the NFP is not presently recognised in legislation. c) The draft Forests Bill 2016 contains no explicit reference to the NFPS.	no change
1.2. Applicability to different tenures	yes	The framework applies to all tenures.	no change
1.3. Appropriate blend of co-regulatory strategies	partly	a) The current act conforms to the traditional approach of governmental control through the issue of licences. b) The FMP places responsibility on the licensee to prepare timber harvesting plans (THPs).	no change, unless the administrative process for the issue of licences requires applicants to follow the approach in the FMP for the preparation of THPs.

² Current status is assessed as 'yes'/'no' or 'partly' in existence

³ "proposed legislation" refers to the draft Forests Bill 2016 version dated 24/2/15. The status is assessed as likely to 'improve' or 'no change'

Component	Current status ²	Current situation	Status under proposed legislation ³
1.4. An integrated or streamlined approach with respect to other acts and planning systems	no	<p>a) In contrast to other countries within the region, the lack of legislative integration is not currently a major problem. This is probably due to the relatively simple nature of current legislation and the fact that governmental resources are well integrated in Niue by virtue of the small size of government and the multi-tasking of many officers.</p> <p>b) Notwithstanding the above, some overlap and potential duplication exists e.g. the Water Act requires logging operations to operate under a water pollution control licence. In addition, it is not clear under the proposed amendments to the Environment Act whether environmental impact assessments (EIAs) will be required for logging operations. In both cases, the assessments and controls should be streamlined through the licensing and timber harvesting planning system under the proposed Forests Act and the FMP and CoHP.</p>	no change
1.5. Forest policy	partly	See 1.1 above	no change
1.6. Forest management plans	no	<p>a) There is no mention of a FMP in the NFPS.</p> <p>b) The draft Forests Bill contains explicit provision for the formulation of a FMP.</p>	Improve, by recognising the FMP in legislation and by providing for the implementation of the FMP via conditions of a timber licence under the draft Forests Bill ⁴ .

⁴ The draft Forests Bill provides that the Director of DAFF may impose conditions on a timber cutting licence (s 11(1)(a)) and timber processing licence (s 16(1)(a)). For the purposes of this report it has been assumed that such conditions could include a requirement to comply with the whole or parts of the FMP and CoHP .

Component	Current status²	Current situation	Status under proposed legislation³
1.7. Code of harvesting practice	partly	a) There is no mention of a code of harvesting practice (CoHP) in the draft Forests Bill. b) The NFPS provides for the development and implementation of a CoHP (s 7.1.2).	Improve, providing that the CoHP, or parts of it, are inserted as conditions of a timber licence under the draft Forests Bill.
1.8. Operational plans	partly	a) The NFPS and draft bill do not specifically mention the need for operational plans. b) The FMP requires the preparation of THP for all harvesting operations and for such plans to be submitted to the FD for approval.	Improve, providing that the provisions in the FMP relating to THPs are inserted as conditions of a timber licence under the draft Forests Bill.
1.9. Monitoring	no	a) The NFPS and draft bill do not specifically mention the need for the monitoring of operations or for monitoring the implementation of the legal and policy framework. b) The FMP prescribes operational monitoring and evaluation of harvesting operations.	Improve, providing that the provisions in the FMP relating to the monitoring of timber harvesting operations are inserted as conditions of a timber licence under the draft Forests Bill.

Component	Current status ²	Current situation	Status under proposed legislation ³
1.10. Enforcement, including rights of appeal and alternatives to prosecution	partly	<p>a) The NFPS contains very little on enforcement, other references for the FD to enforce compliance with the CoHP by the forest-based industries (note: it does not include compliance by landholders) (s 7.1.2) and the enforcement by the government of the Code of Building and Development Bank specifications regarding the use of local timber (s 7.4).</p> <p>b) The draft bill contains enforcement provisions, including the designation and powers of forestry officers (s 19 to 22), offences and penalties (s 23 and 24) and additional penalties (s 25) relating to remedial action, forfeiture, compensation, and cancellation of licence. The 'additional penalties' are, as the name implies, additional to, not an alternative to, the imposition of penalties under s 23 and 24.</p> <p>c) The offences under the draft bill are limited to persons operating without, or in contravention of, a licence issued under the act.</p> <p>d) There are no specific rights of appeal under the draft bill in relation to administrative decisions such as the granting or suspending of licences,</p>	<p>Improve</p> <p>The enforcement provisions rely almost solely on the timber licence provisions of the draft bill. This is probably adequate providing that all licences contain a standard requirement to comply with the CoHP and the FMP, particularly in relation to THPs.</p>
1.11. Review and improvement	partly	<p>1. The NFPS notes the need for forest research (s 5.6 and 7.6) but is silent on the need for periodic review of forest policies and procedures.</p> <p>2. The draft bill requires the NFP to be reviewed every five years (s 8).</p>	improve
1.12. Involvement of stakeholders	partly	<p>a) The NFPS recognises the fundamental right of the <i>magafaoa</i>, as land owners, to decide how their land and associated resources are to be used and managed (s 4, 6, 8.1). One of the guiding principles of the NFPS is <i>to foster a nationwide consensus on the value of forests, by promoting individual and collective responsibility for their control and management while respecting the magafaoa ownership of land and resources.</i></p> <p>b) The draft bill contains requirements for consultation with prescribed bodies on the preparation of a FMP.</p>	improve

Component	Current status ²	Current situation	Status under proposed legislation ³
1.13. Public reporting	no	a) The NFPS and draft bill do not contain any requirements for public reporting on forest management. b) The FMP requires an annual report on its implementation to be prepared by the Director of DAFF and submitted to parliament and made available to the public.	No change
2. Planning			
2.1. Are comprehensive standards and guidelines available in a code of practice?	yes	Yes, the CoHP was issued in 2004. The FMP contains additional technical guidelines.	no change
2.2. Is the code supported by technical manuals (e.g. silviculture manual)?	no	No other manuals are currently available	no change
2.3. Are natural and cultural values, including biodiversity, soils and cultural sites, adequately assessed before any operations commence?	partly	The FMP contains the following provisions- a) A licensee in preparing a THP must identify and protect sensitive or significant areas such as cultural sites, important habitat and caves. b) The Director of DAFF may amend a THP if necessary to ensure that it complies with any policies that relate to the protection of sensitive areas. c) Forest harvesting must be done in a manner that maintains the natural forest structure. d) Trees that are important for biodiversity (e.g. old trees with hollows and significant epiphytes) must be retained.	Improve, providing that the provisions in the FMP relating to THPs are inserted as conditions of a timber licence under the draft Forests Bill.
2.4. Are operational plans prepared for all forestry operations?	no	No THPs have been prepared since the introduction of the FMP in 2011 due to the absence of timber harvesting.	See 1.8 above

Component	Current status ²	Current situation	Status under proposed legislation ³
3. Implementation			
3.1. Are the institutional roles clearly defined?	partly	<p>a) The Government has recently changed its departmental structure to enhance delivery of the <i>Niue National Strategic Plan</i>. This included the merging of the three agencies with particular involvement in biodiversity conservation, the Department of Environment, Department of Agriculture, Forestry and Fisheries and Niue Meteorological Service into a single agency, the Ministry of Natural Resources.</p> <p>b) Departmental officers generally have multiple roles within the agency. This helps to break down jurisdictional and knowledge boundaries but at the risk of losing the technical focus of more specialist officers.</p>	no change
3.2. Does the FD have well-trained and adequately resourced staff?	no	<p>a) The FD does not always have access to persons with formal training in forestry.</p> <p>b) NPFS in 2003 noted that <i>the FD lacks the legislative base, organisational structure, mandate, resources and funding in the recurrent budget to fulfil functions related to forest development, natural forest management and forest conservation</i> (s 4). It proposed a major re-organisation with enhanced capacity but this has not eventuated.</p> <p>c) The draft bill provides that forestry officers may be appointed. However, the bill is silent on the role of the department and/or division responsible for forestry.</p>	no change Training will be required for forestry officers in the provisions of the new legislation if and when enacted
3.3. Do the forest industry and contractors have self-management systems in place?	partly	<p>a) Logging in the recent past has been carried out by one company, Niue Forest Products. This company is very experienced and has largely self-managed its operations from logging to sawmilling and processing. However, the future of the company is in doubt and there is currently no succession plan or alternative capacity within Niue to undertake timber harvesting and processing.</p>	no change Training will be required for the forest industry and contractors in the provisions of the new legislation if and when enacted

Component	Current status ²	Current situation	Status under proposed legislation ³
3.4. Are information and training programs available for landholders and forest workers?	partly	There is little in-house capacity for ongoing information and training program and most are reliant on externally-funded projects.	no change Education and information programs will be required for landholders and forest workers in the provisions of the new legislation if and when enacted
4. Monitoring			
4.1. Are formal monitoring systems in place to evaluate compliance and standards being achieved?	no	The FMP contains a template monitoring checklist for timber harvesting operations but none have been done due to the absence of harvesting operations.	no change Training will be required for forestry officers if and when timber harvesting operations re-commence
4.2. Are reports prepared on the standards being achieved?	no	None have been done due to the absence of harvesting operations	no change Training will be required for forestry officers if and when timber harvesting operations re-commence
4.3. Do senior managers read the monitoring reports and take appropriate action?	n/a ⁵	None have been done due to the absence of harvesting operations	no change

⁵ Not applicable

Component	Current status ²	Current situation	Status under proposed legislation ³
4.4. Are the reports made available to the public?	n/a	None have been done due to the absence of harvesting operations	no change
5. Enforcement			
5.1. Are formal enforcement protocols in place?	no	There are no written procedures or protocols in place.	no change Formal protocols will be required if and when the new legislation is enacted
5.2. Are forestry officers trained and equipped to take enforcement action?	no	Forestry Officers do not currently have the training or resources to carry out enforcement activities.	no change Training will be required for forestry officers in the provisions of the new legislation if and when enacted
5.3. Are the outcomes of investigations made available to the public?	n/a	The current absence of a forestry law obviates the basis for any investigations	no change

6. Review and improvement			
6.1. Is research (including monitoring the efficacy of management prescriptions) being undertaken to improve guidelines and practices?	partly	Limited research is undertaken through externally funded projects.	no change
6.2. Are stakeholders involved in ongoing reviews and changes to the components of the regulatory framework?	yes	Consultative processes are highly developed in Niue. Although not currently a legal requirement, the FD has developed excellent networks with stakeholders and it has used consultation workshops very effectively for all projects and policy developments.	Improve (see 1.12 above)
7. Reporting			
7.1. Does the FD publish an annual report on the operation of the regulatory framework, particularly in relation to components 3.2, 3.4, 4.4, 5.3, 6.1 and 6.2 above)	no	There is no annual reporting on the policy and regulatory framework.	no change

Annex 3 – Relevant objectives from the Niue National Biodiversity Strategy and Action Plan 2015

copied from Government of Niue (2015)

Objective 1: Conservation and management of natural habitats

Actions	Activities	Targets	Means of Verification	Responsibility
1.2 Promote sustainable management of forestry, water and wildlife resources through legislation.	<p>Review existing legislation, identify issues that need to be addressed and consult on the proposed new laws and regulations.</p> <p>Draft laws and finalise through usual procedures.</p> <p>Train all relevant stakeholders on the requirements of the new laws (enforcement) and raise awareness generally amongst stakeholders.</p>	<p>Forest Bill to be enacted by end of 2015.</p> <p>15 government staff trained in implementation of the new laws by 2016.</p>	<p>Forestry Act.</p> <p>Wildlife Ordinance and Domestic Fishing Regulation.</p> <p>Water Act.</p>	DOE, DAFF, CLO
1.3 Strengthen public awareness and support for biodiversity conservation.	<p>Develop and implement an awareness raising programme, including activities in schools and village meetings, song quests, competitions and events, etc.</p> <p>Produce and disseminate a range of materials about the biodiversity of Niue.</p> <p>Install interpretative facilities on biodiversity conservation at key sites in and around the protected areas.</p>	<p>Publish educational and public awareness materials about threatened and endangered species.</p> <p>Publish 'Guide to the Trees of Niue' book by 2016.</p> <p>Information on biodiversity conservation integrated into school curriculum by 2020.</p> <p>Interpretative facilities installed and maintained.</p>	<p>Report on Documentation of Traditional Knowledge and threatened species.</p> <p>Guide to the Trees of Niue publication.</p> <p>Education Department curriculum.</p> <p>Billboards / posters.</p>	DOE, DAFF, Education

Actions	Activities	Targets	Means of Verification	Responsibility
1.5 Manage any timber harvesting to ensure a sustainable operation that does not threaten native biodiversity or the integrity of forest ecosystems.	Manage harvesting according to Forest Management Plan. Develop guidelines to assist those developing THPs to identify important habitat areas to be excluded and to select trees for felling.	All logging operators to fully implement Forest Management Plan and Code of Logging by 2016. THPs to be developed by 2016.	Forest Management Plan. Code of Logging. THPs.	DAFF, DOE, CLO
1.6 Suspend any logging operations following cyclones and undertake forest surveys to determine if they can resume and with what allowable cut.	Prohibit logging after cyclones. Carry out surveys to re-assess sustainable take after forest recovery.	No logging permitted until sustainable harvesting can resume.	Code of Logging.	DAFF, DOE

Objective 2: Establish and manage conservation areas

2.1 Finalise and map the boundaries of existing Protected Areas and give them legal protection.	Declare Huvalu Conservation Area under the Forest Act. Review and formalise existing conservation arrangements with stakeholders of Huvalu Conservation area. Using cultural mapping and other techniques, establish and map the Tapu Areas within the protected areas.	All existing Protected Areas legally declared by 2018. Tapu and sustainable use areas within existing protected areas agreed and mapped by 2016.	Forestry and Protected Areas Management Project Document. Environment Bill 2015. Wildlife Amendment Bill 2015.	DOE, DAFF, CLO, Taoga, DJLS
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Actions	Activities	Targets	Means of Verification	Responsibility
Objective 3: Manage land clearance to minimise adverse impacts on biodiversity				
3.1 Complete and implement Environment Impact Assessment (EIA) Regulations (as amendment to Environment Act).	<p>Complete regulations and pass into law.</p> <p>Ensure that EIAs are conducted as specified.</p>	<p>Environment Bill enacted by September 2015.</p> <p>EIA Regulations enacted by February 2016.</p>	<p>Environment Act 2015.</p> <p>EIA Regulations 2016.</p>	DOE, CLO
3.2 Develop a code of practice for land clearance.	<p>Restrict D8 bulldozers to public infrastructure work or land clearance in previous fallow areas.</p> <p>Ensure that operators keep their bulldozers away from reserve land, burials, historical sites, and traditional forts.</p> <p>Ensure that bulldozer operators are made aware of which trees are useful food sources for wildlife and which are used as boundary markers between landholders.</p> <p>Ensure that bulldozer operators leave a litter layer and do not disturb the soil.</p> <p>Discourage or ban the use of fire to clear land.</p>	<p>Land Clearing code developed by December 2015.</p> <p>Restricted sites mapped and declared off-limit for agricultural use by December 2015.</p> <p>Develop awareness materials for Land Clearing Code by February 2016.</p>	<p>Land Clearing code.</p> <p>DAFF Corporate Plan and Annual reports.</p> <p>DOU Corporate Plan and Annual reports.</p>	DAFF, DOU, DJLS, Landholders, DOE

Annex 4- Structure of government

