

Regulating Fiji's Coastal Fisheries

Policy and Law Discussion Paper



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EXECUTIVE SUMMARY	5
1. ANALYTICAL FRAMEWORK: GOALS, OBJECTS, PRINCIPLES, TOOLS & MECHANISMS, GOVERNANCE AND INSTITUTIONS	10
1.1 GOALS	10
1.2 OBJECTS	10
1.3 PRINCIPLES	11
1.3.1 <i>Design principles</i>	11
1.3.2 <i>Directing principles</i>	13
1.4 TOOLS & MECHANISMS	13
1.5 GOVERNANCE AND INSTITUTIONS	14
2. INTERNATIONAL AND REGIONAL OBLIGATIONS AND GUIDELINES: KEY CONCEPTS ..	14
3. INSHORE FISHERIES IN FIJI: KEY CHALLENGES AND KEY POLICY AND LAW ISSUES .	19
3.1 KEY CHALLENGES	20
3.1.1 <i>Policy related challenges</i>	20
3.1.2 <i>Challenges related to legislation</i>	20
3.1.3 <i>Challenges related to customary rights and local communities</i>	21
3.1.4 <i>Governance and institutional challenges</i>	23
3.1.5 <i>Data and science challenges – lack of data collection, research and analysis</i>	25
3.1.6 <i>Climate change</i>	25
3.2 KEY POLICY AND LAW ISSUES	26
4. ANALYSIS AND RECOMMENDATIONS IN RELATION TO KEY POLICY AND LAW ISSUES	27
4.1 A COMPREHENSIVE POLICY FOUNDATION FOR COASTAL AND OCEANS MANAGEMENT, TOGETHER WITH A CLEAR ROADMAP FOR ACTION	27
4.1.1 <i>An integrated oceans policy for Fiji</i>	27
4.1.2 <i>Clear roadmap for action</i>	29
4.2 UPDATING AND STRENGTHENING INSHORE FISHERIES LEGISLATION.....	30
4.2.1 <i>Ensuring that legislative goals, objects, and principles are clear and appropriate</i>	31
4.2.2 <i>Ensuring that legislative tools and mechanisms are effective</i>	32
4.3 AN EFFECTIVE GOVERNANCE AND INSTITUTIONAL FRAMEWORK.....	41
4.3.1 <i>Addressing institutional issues in fisheries management</i>	42
4.3.2 <i>Funding</i>	44
5. NEXT STEPS	45
APPENDIX A. INTERNATIONAL AND REGIONAL OBLIGATIONS AND GUIDELINES: IDENTIFYING KEY CONCEPTS.....	1
REFERENCE LIST	21

1999 MPA Guidelines	<i>IUCN Guidelines for Marine Protected Areas, 1999¹</i>
2011 PA Guidelines	<i>IUCN Guidelines for Protected Areas Legislation²</i>
CBAM	Community-based adaptive management
CBD	Convention on Biological Diversity
CBRM	Community-based resource management
CFMDPs	Customary fisheries management and development plans
CFRO	Customary fishing rights owner
Code of Conduct	<i>FAO Code of Conduct for Responsible Fisheries</i>
COP	Conference of the Parties to the CBD
FAO	Food and Agriculture Organisation of the United Nations
Fisheries Act	<i>Fisheries Act 1942 (Fiji)</i>
FLMMA Network	The Fiji Locally Managed Marine Areas Network
IMCAM	Integrated marine and coastal areas management
IOM	Integrated oceans management
IPOA-Capacity	<i>FAO International Plan of Action for the Management of Fishing Capacity</i>
IPOA-IUU	<i>FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing</i>
ITQ	Individual transferable quota
IUU fishing	Illegal, unreported and unregulated fishing
IUCN	The International Union for the Conservation of Nature
LMMAs	Locally Managed Marine Areas
MCPA	Marine and coastal protected areas
MCS	Monitoring, compliance and surveillance
MSY	Maximum sustainable yield
NFA	National Fisheries Authority

¹ Graeme Kelleher (ed) *Guidelines for Marine Protected Areas* (IUCN, 2009).

² Barbara Lausche and Françoise Burhenne, *Guidelines for Protected Areas Legislation* (IUCN, 2011).

Offshore Decree	<i>Offshore Fisheries Management Decree 2012 (Fiji)</i>
Proposed Law	<i>Draft Inshore Fisheries Decree</i>
Regional Roadmap	Melanesian Spearhead Group roadmap for inshore fisheries management and sustainable development 2015-2024
SPC	SPC – Pacific Communities
SSF Guidelines	<i>FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication</i>
TAC	Total allowable catch
UNCLOS	<i>United Nations Convention on the Law of the Sea</i>

EXECUTIVE SUMMARY

Background

The sustainable management of Fiji's fisheries is critical to Fiji's future. Inshore fisheries are of particular importance as they are central to the food security and livelihoods of most coastal communities. Despite this, the management and regulation of inshore (or coastal) fisheries has not kept pace with the growing threats.

One of the key challenges in Fiji is regulating inshore fisheries in the context of a dual governance system which comprises both western and traditional elements. This dual governance system is particularly complex in relation to inshore fisheries: whilst the State owns the foreshore and the seas, *iQoliqoli* owners or customary fishing rights owners (**CFROs**) retain their customary rights to access and fish in their *iQoliqoli* areas. This overlap of customary and 'modern' law presents special challenges for regulating inshore fisheries and striking the right balance between resource use, biodiversity conservation and protecting customary rights.

Two key national initiatives have sought to address the gaps in inshore fisheries policy and law in recent years:

- The work undertaken to develop the draft *Inshore Fisheries Decree* [Third Draft for National Consultation in 2011] (**the Proposed Law**).
- The preparation of Fiji's National Fisheries Policy, facilitated by a team comprising the Food and Agriculture Organisation of the United Nations (**FAO**), the Pacific Community (**SPC**) and Pacific Islands Forum Fisheries Agency (**FFA**).

In addition, progress has been made developing an Aquaculture Bill³ which was tabled in the first sitting of parliament of 2016.⁴ The Bill regulates '*fresh water, brackish water and marine aquaculture and ... related matters*'. Its objective is '*the management and development of aquaculture to ensure long term benefits to the people of Fiji*'. Sustainable aquaculture is part of the Government's strategy to alleviate pressures on fish stocks⁵.

Whilst these initiatives are positive steps, there is still significant work that needs to be done to strengthen the regulation of inshore fisheries in Fiji.

³ Bill No. 9 of 2016.

⁴ Fiji, *Government of Fiji Gazette*, No 9, 5 February 2016; see also *2016 Bills* (2016) Parliament of the Republic of Fiji <<http://www.parliament.gov.fj/Parliament-Business/Bills/2016-Bills>> (accessed 4 October 2016).

⁵ In 2015, the Department of Fisheries assessed the fish consumption among Fiji's coastal communities as being as high as 113kg per person per year. The Minister responsible for fisheries had declared to the media that sustainable aquaculture would be the only way to meet this growing demand and reduce the pressure on declining stocks. He added that Fiji had the foresight and political will to drive aquaculture in a more productive and sustainable manner through its aquaculture programs. <http://www.fijitimes.com/story.aspx?id=324774> , accessed 7 October, 2016.

Purpose and methodology

This paper forms part of Fiji Environmental Law Association's submission to Fiji's National Fisheries Policy stakeholder consultations. The preparation of this paper has also been endorsed by the Fiji National Protected Areas Committee.

This paper:

- outlines a framework for analysing environmental law (section 1);
- presents key concepts relevant for best practice fisheries management derived from international and regional policy (section 2);
- identifies key challenges in relation to inshore fisheries management in Fiji and the related policy and law issues arising from these challenges (section 3);
- analyses and makes recommendations for addressing the main policy and law issues relating to inshore fisheries management (section 4), by reference to the framework and key concepts outlined (in sections 2 and 3); and
- identifies the next steps for making progress in relation to the policy and law aspects of fisheries management (section 5).

Key policy and law issues and recommendations for action

Broadly, the key policy and law issues arising from the challenges related to inshore fisheries management are:

1. the need for a comprehensive policy foundation for coastal and oceans management;
2. the need to update and strengthen inshore fisheries legislation; and
3. the need for an effective governance and institutional framework.

A comprehensive policy foundation for coastal and oceans management

It appears that Fiji's National Fisheries Policy, to be developed with the assistance of the FAO, will only relate to fisheries (inshore, offshore and aquaculture) and will not directly cover the full range of uses and impacts on oceans, including industrial activity and marine protected areas.⁶ Further, whilst Fiji has an Integrated Coastal Management Framework (ICMF), this framework is focussed on ridge to reef management rather than oceans management as a whole. Accordingly, there may be a need for a comprehensive, holistic and integrated policy foundation for coastal and oceans management. In addition, a clear roadmap or plan of action will assist coordination of stakeholders to achieve common goals.

Clearly, any policy developed will need to be consistent with Fiji's national policy framework, including the Peoples Charter for Change, Peace and Progress, the National Development

⁶ Marine protected areas and challenges and threats outside the fisheries sector are however identified as cross cutting issues in Draft 3 of the Fiji National Fisheries Policy.

Plan (2017-2021) and Fiji's Green Growth Framework. Further, if an integrated oceans policy for Fiji is developed, it could operate under the Green Growth Framework and above the proposed Fiji National Fisheries Policy.

Recommendation 1

Fiji investigate developing an integrated oceans management policy which extends beyond fisheries and covers all major uses and impacts on coasts and oceans.

Recommendation 2

Fiji develop and finalise Fiji's National Implementation Plan under the Melanesian Spearhead Group roadmap for inshore fisheries management and sustainable development 2015-2024, in consultation with all key stakeholders, including industry, community representatives and non-government organisations.

Updating and strengthening inshore fisheries legislation

It is widely accepted that large parts of the *Fisheries Act 1942* [Chapter 158] (***Fisheries Act***) are outdated and the legislation needs to be strengthened. Whilst considerable work has been done to develop the Proposed Law, there is also scope for that instrument to be further developed.

Recommendation 3

Fiji update and strengthen inshore fisheries legislation, in particular:

- (1) ensure that legislative goals, objects, and principles are clear and appropriate.***
- (2) ensure that legislative tools & mechanisms are effective, in particular:***
 - (a) implement an effective permit and licensing regime, which will involve:***
 - (i) investigating options for transparent, consistent and fair methods for compensating CFROs;***
 - (ii) considering what are appropriate fees for fishing licences;***
 - (iii) investigating the appropriateness of introducing total allowable catch requirements; and***
 - (iv) maintaining a public register of commercial fishing licences.***
 - (b) increase penalties for fisheries offences and introduce a civil sanction regime based on an administrative penalty regime.***
 - (c) expand and strengthen the powers of Fisheries Officers and other***

relevant officers, especially in relation to fish retailers.

- (d) *investigate the possibility of incorporating locally managed marine areas (LMMAs) into the formal legal system.*
- (e) *establish a comprehensive marine protected areas regime.*

An effective governance and institutional framework

There appears to be considerable scope for improving the governance and institutional arrangements for inshore fisheries management at national, provincial and community levels in Fiji. One of the key challenges in this context has been the higher priority given to offshore as compared to inshore fisheries by the Ministry of Fisheries. Governance and institutional arrangements will further be assisted by more innovative funding mechanisms to support inshore fisheries management.

Recommendation 4

Fiji implement an effective governance and institutional framework for fisheries management, in particular, by:

(1) Addressing institutional issues in fisheries management, including:

- (a) *strengthening inshore fisheries activities within the Ministry of Fisheries, including by establishing a distinct inshore fisheries division;*
- (b) *separating resource development from conservation functions within the Ministry of Fisheries;*
- (c) *consider what is the most appropriate agency for managing marine protected areas, including whether it would be appropriate to establish an independent statutory authority for this purpose;*
- (d) *strengthening community level governance, through:*
 - (i) *promoting co-management and LMMAs;*
 - (ii) *better support to fish wardens;*
- (e) *improving enforcement of fisheries laws;*
- (f) *consistent and predictable implementation of fisheries legislation.*

(2) Improving funding arrangements for the Ministry of Fisheries, for example, by:

- (a) *Investigating the adoption of a system similar to the funding mechanism for Papua New Guinea's National Fisheries Authority (NFA), which allows the NFA to fund its own operations through monies received from fees, levies, etc.*
- (b) *Investigating the possibility of linking payments for fishing rights in iQoliqoli areas to community level fisheries management, for example supporting fish wardens.*

Next steps

There is growing momentum for improving inshore fisheries management in Fiji. Some possible next steps for progressing these issues may be:

- Finalising and adopting Fiji's National Fisheries Policy (currently under development).
- Continuing the implementation of the Integrated Coastal Management Framework, with the development of additional integrated coastal management sites towards the establishment of a National Coastal Management Plan.
- Finalising Fiji's Draft National Implementation Plan under the MSG Regional Roadmap which may include:
 - Reviewing the progress of actions undertaken to date.
 - Developing a program for the preparation of an integrated oceans management policy for Fiji.
 - Developing a program for the drafting, consultation and implementation of a new inshore fisheries legislation.
 - Developing a program for the drafting, consultation and implementation of a new MPA or general protected areas legislation.

1. ANALYTICAL FRAMEWORK: GOALS, OBJECTS, PRINCIPLES, TOOLS & MECHANISMS, GOVERNANCE AND INSTITUTIONS

This paper adopts an analytical framework that views environmental legislation as comprising 5 elements:⁷

- goals;
- objects;
- principles;
- tools & mechanisms; and
- governance and institutions.

Analysing legislation by reference to these elements may assist in a logical and consistent approach to the development of legislation. Further, clarity and appropriateness in respect of these elements is likely to promote effective implementation of the relevant legislation.

1.1 Goals

Goals operate as a foundational basis for environmental law.⁸ Goals reflect the values of a community. Identification of goals will be supported by processes such as consultations and discussions that are inclusive and representative.

Once a goal or goals are identified, policy and law can be drafted to reflect and operationalise them. This offers a principled and systematic approach to legislative drafting and directed policy development.

The current national review of fisheries policy will be an excellent forum to discuss relevant goals.

1.2 Objects

The objects of legislation are its aims or intended outcomes. Objects serve to strengthen and give some legal effect to the chosen goal/goals. They are typically included in an objects clause and give legal effect to the goal or goals by:

- (a) requiring administering agencies to take the objectives into account when undertaking their activities;⁹ and
- (b) guiding Courts when statutory interpretation is necessary.¹⁰

⁷ This framework is based on the analytical framework recently developed by the Australian Panel of Experts in Environmental Law (**APEEL**): APEEL, *The Foundations for Environmental Law: Goals, Objects, Principles & Norms – Technical Paper 1* (APEEL, forthcoming).

⁸ APEEL, above n 7, pt 1.

⁹ There is no clause in the Offshore Decree or the Proposed Law that specifically requires authorities, the Minister, Permanent Secretary, or Director to take the objects into account. However, both require the authorities administering the Decree or the Proposed Law to do so in accordance with a number of 'principles': Offshore Decree, cl 6; Proposed Law, cl 5.

However, objects cannot generally be used to override the meaning of a provision that is clear on its face.

Two types of objects clauses can be used in legislation:¹¹

- (a) objects that elaborate the agreed goal or goals of environmental law (e.g. an object to promote ecologically sustainable development); and
- (b) a limited number of objects that are specific to a particular Statute (e.g. a fisheries statute could include objects to conserve fish stocks, promote ecologically sustainable fishing, etc.).

It is not uncommon for environmental laws to contain objects that are conflicting.¹² If this happens, one object may be prioritised to the detriment of the other. For example, in some countries, in cases where objects clauses have referred to both environmental protection and economic development, there has been a trend for economic outcomes to be prioritized to the detriment of environmental sustainability.¹³ This is also a potential risk in Fiji. One example of a clear conflict between the need for economic development and sustainable fisheries management is the incidence of overfishing for commercial purposes, which has been widely reported as placing significant pressure on inshore fisheries. Ultimately however, it needs to be recognised that in the long term, unsustainable fishing is not compatible with economic development in Fiji. For this reason, if proposed legislative objects (such as economic development and sustainable management) have the potential to be conflicting, it may be helpful to provide for a hierarchy of objects or some guidance as to how the conflicting objects are intended to interact.

1.3 Principles

A principle for the purposes of this analysis is something that is capable of either guiding 'how something happens or works', or operating 'as a rule that is to be followed'.¹⁴ Two types of principles can be identified: design principles and directing principles.¹⁵

1.3.1 Design principles

Design principles do not need to be explicitly stated in legislation; instead, they guide the design of the content of legislation. They also provide guidance for policy development and implementation.

In terms of legislative content, design principles will influence the choice of legislative objects, directing principles, and tools & mechanisms.

The following are some examples of design principles, including how they might be operationalised using particular tools & mechanisms.¹⁶

¹⁰ This would occur in cases of uncertainty, applying the 'purposive approach' of statutory interpretation. This is an accepted method of statutory interpretation in Fijian courts: See, e.g., *Suva City Council v R B Patel Group Ltd* [2014] FJSC 7, [62]-[64], [68].

¹¹ APEEL, above n 7, pt 2.

¹² Ibid.

¹³ Ibid.

¹⁴ Ibid pt 3.

¹⁵ Ibid.

1.3.1.1 The polluter/user pays principles

Recognition of the 'polluter pays' principle can be operationalised:

*through legislative provision for regulatory measures that enable the recovery of the costs of pollution incidents from responsible parties or the legislative prescription of market-based mechanisms that place a price on particular forms of pollution.*¹⁷

The user pays principle is a variation of the polluter pays principle and requires the user of a natural resource to bear the cost of running down natural capital.¹⁸

1.3.1.2 Smart regulation¹⁹

Smart regulation essentially provides that environmental law should utilise a 'range of regulatory actors to implement complementary combinations of policy instruments, tailored to specific environmental goals and circumstances', in order to 'produce more effective and efficient policy outcomes'.²⁰ The term 'Smart regulation' captures a number of principles, including the following:²¹

- The 'policy mix principle'. This would result in the use of a range of complementary tools & mechanisms to address a single issue: e.g. economic, information-based, and self-regulation.
- The 'parsimony principle'. This would see the adoption of tools & mechanisms that promote a least resource-intensive approach to regulation.
- The 'escalation principle'. This would see legislation with a 'hierarchy' of tools & mechanisms options available to deal with different situations. Laws would be structured so that lower-scale options are deployed first, with escalation an option in the case that lower-scale options are unsuccessful.

1.3.1.3 Environmental democracy

The design principle of environmental democracy will be reflected in tools & mechanisms that promote or provide for:

- access to information (e.g. legislation enabling the community to request access to specific government documents);
- public participation (e.g. public notification requirements and comment opportunities); and
- access to justice (e.g., 'open standing' provisions, or protect/maximum adverse costs order provisions).

1.3.1.4 Endorsement of specific tools & mechanisms

A design principle can simply involve the endorsement of particular tools & mechanisms (e.g. marine protected areas).

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ *Glossary of Environmental Statistics* (Organisation for Co-operation and Development, 2007) <<https://stats.oecd.org/glossary/download.asp>>.

¹⁹ 'Smart regulation' is a set of principles developed by Neil Gunningham; see Neil Gunningham and Peter Grabosky, *Smart Regulation: Designing Environmental Policy* (Clarendon Press, 1998).

²⁰ Gunningham and Grabosky, above n 19, 15.

²¹ APEEL, above n 7, pt 3, relying on Gunningham and Grabosky.

1.3.2 Directing principles

Directing principles guide the application and implementation of legislation. They exist as stated principles within the law in legislative principles clauses. The clauses often require that the exercise of responsibilities be consistent with the stated principles.²²

The precautionary principle is one of the most recognised directing principles in environmental law. Another directing principle prominent in environmental law is the prevention principle.²³

1.4 Tools & mechanisms

In this paper, the phrase ‘tools & mechanisms’ refers to practical processes and systems that are used to achieve legislative goals and objects, and to operationalise principles. Tools & mechanisms can include large-scale processes (e.g. environmental impact assessment), as well as single elements of larger processes (e.g. warning letters or public consultation processes). Examples of tools & mechanisms in the fisheries context can include:

- performance standards;
- licences and permits;
- imposing caps that limit impact (e.g. a ‘total allowable catch’);
- technology design and specification standards;
- reporting requirements;
- environmental impact assessment;
- management plans;
- penalties such as warning letters and fines;
- co-management arrangements (e.g. government together with CFROs);
- protected areas;
- rights to information access; and
- rights to bring legal challenges.

Not all tools & mechanisms need be created by legislation. Tools & mechanisms can be non-mandatory and sit outside of legislation. Examples could include:

- voluntary reporting for the purposes of strengthening a company’s ‘social licence to operate’;
- education and awareness programs;
- voluntary industry commitments; and
- government-backed voluntary programs, and voluntary product certification.

²² Examples of directing principles appear in section 6 of the *Offshore Decree* and section 5 of the Proposed Law.

²³ The prevention principle is described as ‘closely related’ to the precautionary principle, and ‘calls for action to be taken to prevent known risks of environmental harms from materialising’: APEEL, above n 7, pt 3.

In its current form, Locally Managed Marine Areas (**LMMAs**) are an example of an informal (i.e. not recognised or enforceable under statute), voluntary environmental management tool that receives some government recognition and support.

1.5 Governance and institutions

Effective implementation of environment laws requires strong governance and institutional frameworks.

Governance refers to the system(s) used to govern. In the present context, governance refers to the systems and processes that determine how power and authority are exercised to manage Fiji's resources. One aspect of governance is the institutions or agencies that are created to support and implement the laws and the systems of governance.

In relation to Fiji's inshore fisheries, a reference to governance and institutions could include a reference to, for example:

- the functions of relevant government Departments (i.e. those that have powers and responsibilities in relation to inshore fisheries, such as the Ministry of Fisheries);
- the powers of members of the Executive (e.g. the range of powers of the Minister for Fisheries);
- bodies such as a fisheries advisory council, which may have statutory functions (e.g. the Inshore Fisheries Advisory Council, as envisaged by the Proposed Law);
- the courts, including their dispute resolution powers in relation to inshore fisheries;
- any locally-based governance systems, such as locally managed marine areas and fish wardens, whether formally recognized (i.e. under statute) or not.

2. INTERNATIONAL AND REGIONAL OBLIGATIONS AND GUIDELINES: KEY CONCEPTS

Inshore fisheries regulation should reflect international best practice and Fiji's international and regional obligations.

This section identifies key concepts for best practice inshore fisheries management. These concepts have been derived from a range of international and regional agreements and guidelines, with a focus on those that are directly relevant to fisheries and sustainability. Key among these include:

- the *United Nations Convention on the Law of the Sea*;
- the *Convention on Biological Diversity (CBD)*²⁴;
- the *United Nations Sustainable Development Goals*;
- relevant decisions made by the Conference of the Parties to the CBD;

²⁴ *Convention on Biological Diversity (CBD)*, opened for signature 5 June 1992, 1760 UNTS 79 (entered into force 29 December 1993).

- the FAO *Code of Conduct for Responsible Fisheries* (and related FAO guidelines and documents);²⁵
- the FAO *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication*;²⁶
- the regional instrument *A New Song for Coastal Fisheries – Pathways to Change, The Noumea Strategy*;²⁷ and
- the *Melanesian Spearhead Group roadmap for inshore fisheries management and sustainable development 2015-2024*.²⁸

The concepts identified in this paper may be useful to guide the analysis, development and implementation of inshore fisheries policy and law.²⁹ This section lists and briefly describes these concepts. The concepts are discussed in more detail, with references, in **Appendix A**.

These concepts are also consistent with the concepts and principles underlying Fiji's key domestic policies, in particular, the Peoples Charter for Change, Peace and Progress, the National Development Plan (2017-2021) and Fiji's Green Growth Framework.

The Key Concepts

1. *Obligation of States to protect and preserve the marine environment*

Article 192 of the *United Nations Convention on the Law of the Sea* explicitly requires State Parties to '*protect and preserve the marine environment*'. Article 61 expands on this, describing the obligations of coastal States to conserve living resources in their Exclusive Economic Zone (**EEZ**).³⁰

2. *The ecosystem approach*

The 'ecosystem approach' has become central to inshore fisheries management. As described in the CBD, there are twelve 'principles' of the ecosystem approach:

- (a) Natural resource management objectives are a matter of societal choice.

²⁵ *FAO Code of Conduct for Responsible Fisheries (Code of Conduct)*, FAO Doc 95/20/Rev/1 (1995) <<http://www.fao.org/docrep/005/v9878e/v9878e00.htm>>, Introduction.

²⁶ *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines)* (FAO, 2015) <<http://www.fao.org/3/6a80106c-d579-4fdc-876c-04ff29c3d106/i4356e.pdf>>

²⁷ *A New Song for Coastal Fisheries - Pathways to Change: The Noumea Strategy (The Noumea Strategy)* (Secretariat of the Pacific Community, 2015) <http://www.spc.int/DigitalLibrary/Doc/FAME/Reports/Anon_2015_New_song_for_coastal_fisheries.pdf>.

²⁸ *Melanesian Spearhead Group roadmap for inshore fisheries management and sustainable development 2015-2024 (MSG roadmap)* (Melanesian Spearhead Group Secretariat, 2015).

²⁹ It is important to note that whilst the concepts provided here are significant, they are not necessarily exhaustive. This area of policy and law is complex and far reaching and other concepts or principles may be found to be relevant. Further, whilst this paper has sought to use the terms most widely used in international policy and law, other terms may be used to describe similar concepts and there is some degree of overlap between concepts. What is important, of course, is not how concepts are labelled but whether the substance of the key relevant concepts is reflected in policy and law.

³⁰ The EEZ begins at the end of Fiji's Territorial Waters and it is unlikely that what is understood as Fiji's 'inshore fisheries' extends into the EEZ.

- (b) Management should be decentralised.
- (c) Impacts beyond the managed ecosystem should be considered.
- (d) Management design and implementation should occur in an 'economic context'. This incorporates application of the polluter pays and user pays principles.
- (e) The conservation of ecosystem services should be prioritised.
- (f) Ecosystems should be managed within the limits of their functioning.
- (g) Management should be designed to suit the relevant ecosystem.
- (h) Objectives should be set for the long term.
- (i) Management should be 'adaptive'.
- (j) Conservation and use of biological diversity should be balanced.
- (k) All forms of relevant information should be considered when making management decisions. This includes scientific, indigenous and local knowledge, innovations, and practices.
- (l) All relevant sectors of society should be involved in management decisions.

The concept of adaptive management (item (i) above) is significant in its own right and is identified as a separate key concept for the purposes of this paper. Further, the ecosystem approach informs many of the other key concepts identified in this paper, including community based resource management, integrated marine and coastal areas management, robust governance frameworks, protecting the rights of small-scale fishers and CFROs, and research, data collection and analysis.

3. Community based resource management (CBRM)

Resource management should reside in the local community, to the extent possible. It requires legal and regulatory frameworks that recognise and enable community management, and the development of community management programs. These in turn require communities to be informed and empowered. The concept of CBRM is sometimes combined with the concept of adaptive management (see below) to create the concept of community-based adaptive management (**CBAM**). CBAM is the approach used by the Fiji Locally Managed Marine Areas Network (**FLMMA Network**), as best suited to the conditions and social context in the Pacific.

4. Integrated marine and coastal areas management (IMCAM)

Integrated marine and coastal areas management (**IMCAM**) overlaps with CBRM. It endorses multi-sector approaches to marine resources management, recognising that marine and coastal ecosystems are connected. It requires broad participation of both coastal and marine resource stakeholders.

5. The precautionary approach

The precautionary approach provides that the absence of adequate scientific information should not be used as a reason for postponing or failing to take conservation and management measures.

6. Adaptive management³¹

As identified among the key concepts of the ecosystem approach, management should be 'adaptive'. Fisheries management should be under continuous review and there should be processes that require and/or enable measures to be reviewed or replaced, as necessary.

A simplified way of describing adaptive management is as a system of 'learning by doing', allowing new knowledge and experience to be incorporated into management systems dynamically, during implementation. A key component of adaptive management is the use of clear and measurable goals and objectives. These provide something against which outcomes can be measured and in turn require monitoring, data collection and analysis. Together, the use of measurable goals and ongoing monitoring and analysis enables management to be 'adapted' to improve outcomes and to respond to changing circumstances. Adaptive management is at the heart of the FLMMMA Network's CBAM approach, on the basis that "*Adaptive management is well-suited to the conditions prevailing in much of the Pacific, where ecological and social systems are complex and unpredictable and where there is little chance of obtaining complete scientific information but resource managers/owners often have in-depth local knowledge of their marine resources*"³².

7. Best available science

Management measures and decisions should be grounded in the best available scientific information.

8. Research, data collection and analysis

Reliable and directed research, data collection and analysis, as well as dissemination of research and data, are critical to operationalising many of the concepts described here. Collection and access to up-to-date data is a challenge that the Fiji Government and NGOs in Fiji are attempting to address.

9. Effective legal and administrative frameworks

Sustainable fisheries management requires an effective legal and administrative framework. This requirement comprises at least 3 elements:

- (a) **Good governance:** 'Good governance' is a term that is used with some flexibility and it does not appear to have a widely accepted definition. Nevertheless, some elements of good governance have been recognised more broadly, including for example public participation, accountability and transparency. 'Environmental

³¹ FAO, 'Fisheries management, 2. The ecosystem approach to fisheries. 2.2 Human dimensions of the ecosystem approach to fisheries', *FAO Technical Guidelines for Responsible Fisheries*, No. 4, Suppl. 2, Add. 2, Rome, 2009, 50-3. Other references to adaptive management and the importance of developing 'adaptive capacity' more generally include: Code of Conduct [7.6.8]; Convention on Biological Diversity Conference of the Parties, *Decision VII/5 Annex II*, UN Doc UNEP/CBD/COP/DEC/VII/5 (13 April 2004).; SSF Guidelines, above n 25, 9.6, 12.3; *Transforming our world: the 2030 Agenda for Sustainable Development*, GA Res 70/1, UN Doc A/RES/70/1 (21 October 2015) [54]-[59] (**Sustainable Development Goals**), Goals 17.18-17.19, available at <http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E> (accessed 25 May 2016); *MSG roadmap*, above n 29, 2; Nigel Dudley, (ed), *Guidelines for Applying Protected Area Management Categories* (IUCN, (2008), 12, 78

³² LMMA Network website, at <http://lmma.network.org/what-we-do/cbam/>, accessed on 7 October, 2016.

Democracy' (discussed earlier) falls within the scope of good governance. Concepts that are at the core of environmental democracy are:

- (i) access to information;
 - (ii) public participation;³³ and
 - (iii) access to justice.
- (b) **Smart regulation:** Smart regulation (also discussed above) is the principle that environmental law should utilise a 'range of regulatory actors to implement complementary combinations of policy instruments, tailored to specific environmental goals and circumstances', in order to 'produce more effective and efficient policy outcomes'.³⁴
- (c) **Clear and consistent laws:** Laws should be:
- (i) internally consistent;
 - (ii) clear and coherent;
 - (iii) consistent with other laws; and
 - (iv) free from "loopholes".

10. Protecting the rights of small-scale fishers and CFROs

Protecting the rights of small-scale fishers and CFROs, including through the recognition of resource tenure rights,³⁵ is a fundamental concept in the context of fisheries management and in particular small island developing countries.

11. Addressing identified target-issues

The following target-issues have been identified as requiring specific attention in order to manage inshore fisheries sustainably:

- (a) destructive fishing practices;
- (b) illegal, unreported and unregulated (**IUU**) fishing; and
- (c) over-fishing and excess fishing capacity.

12. Marine and coastal protected areas

Protected areas, including marine and coastal protected areas, are internationally recognised as an important tool for protecting marine biodiversity and biodiversity in associated ecosystems. Protected areas can exclude extractive uses entirely (i.e. 'no take zones') or manage and restrict extractive activities and other uses (i.e. 'partial protection zones').

³³ Stakeholder participation arises as an element of a number of the key concepts, including the ecosystem approach, CBRM, and IMCAM.

³⁴ Gunningham and Grabosky, above n 19, 15.

³⁵ In the local context, the rights of CFROs on the one hand, and small-scale fishers who are not customary rights holders on the other, may raise unique issues and require separate consideration. This is adverted to in section 3 of this paper, which identifies some of the important contextual factors relevant to developing new inshore fisheries policy and law.

13. Management plans

Management plans are an important tool in the context of the ecosystem approach and can be used to support a goal of sustainable fisheries management. Management plans can take different forms. For example, they can:

- (a) be fishery-specific (e.g. a beche-de-mer management plan);
- (b) operate at the community level (e.g. a LMMA management plan);
- (c) operate nationally; or
- (d) operate regionally (internationally).

14. Monitoring, compliance and surveillance (MCS) and enforcement

Effective monitoring, compliance and surveillance (**MCS**) and enforcement systems are critical to sustainable management of inshore fisheries.

15. Maximum sustainable yield (MSY)

The goal of restoring stocks to levels that can produce 'maximum sustainable yield' (**MSY**) remains embedded in relevant international agreements.

It should be noted however that although MSY has been commonly used as a fisheries management goal for many years around the world, it should be used with care. It has been the subject of much criticism resulting in a view that while MSY may be useful, on its own it provides 'incomplete policy guidance' to enable sustainable marine ecosystem management'.³⁶ It should be used in combination with other broader concepts including the ecosystem based approach.

16. Providing education, training, resourcing and support to communities

A number of concepts (e.g. CBRM, CBAM and IMCAM, and protecting the rights of CFROs) all require communities to be adequately resourced, educated, and supported in order to meaningfully participate.

3. INSHORE FISHERIES IN FIJI: KEY CHALLENGES AND KEY POLICY AND LAW ISSUES

This section identifies a range of challenges that have been highlighted by commentators and stakeholders in relation to the management of Fiji's inshore fisheries.³⁷ Key policy and law issues have then been drawn out from these challenges.

³⁶ Chongliang Zhang, Yong Chen, and Yiping Ren, 'An evaluation of implementing long-term MSY in ecosystem-based fisheries management: Incorporating trophic interaction, bycatch and uncertainty' (2016) 174 *Fisheries Research* 179, 180, citing Sarah Gaichas, 'A context for ecosystem-based fishery-management: Developing concepts of ecosystems and sustainability'(2008) 32 *Marine Policy* 393.

³⁷ These contextual factors have been identified through a review of existing literature that discusses both Fiji's inshore fisheries management, as well as Fiji's political, social, cultural and economic climate. This section also incorporates some of the views canvassed by participants during the Fiji Environmental Law Association (**FELA**) Fisheries Forum, held in Suva in February 2016 and the

3.1 Key challenges

There are a range of social, legal and environmental challenges that affect inshore fisheries in Fiji. In this paper, the key challenges have been organised into the following interrelated categories:

- policy;
- legislation;
- community and customary fishing;
- governance;
- data and science; and
- climate change.

3.1.1 Policy related challenges

A current policy gap in relation to inshore fisheries

Currently in Fiji, while there are some high level policies relating to development and sustainability generally, and fisheries related priorities contained in the corporate plans of relevant government agencies, there is no overarching national fisheries policy. The Ministry of Fisheries started developing Fiji's national policy with the assistance of the FAO, and FFA in 2015 but it appears that the policy will only relate to fisheries (inshore, offshore and aquaculture) and will not directly cover the full range of uses and impacts on oceans, including land based activities that impact marine ecosystems (e.g. agriculture and other land developments) and marine protected areas.

3.1.2 Challenges related to legislation

The Fisheries Act needs to be updated and strengthened

It is widely acknowledged that the *Fisheries Act* 1942 [Chapter 158] (***Fisheries Act***) needs to be updated and strengthened. This should be done in a way that ensures that legislative goals, objects, principles, tools & mechanisms are clear, appropriate and effective.

Strengthening the Proposed Law

The implementation of the Proposed Law has been on hold for a number of years.³⁸ The Proposed Law seeks to build on the strengths of the *Fisheries Act*; however, there is scope for the Proposed Law to be strengthened. Some of the key areas for strengthening both the *Fisheries Act* and the Proposed Law are discussed in Part 4, below. These areas include clarity of drafting, tensions between legislative objects, implementing an effective permit and

Packard Foundation's April 2014 Planning Sessions, *Toward a Healthy and Productive Coastal Marine Resources in Fiji* (The Packard Foundation, 2014).

³⁸ Note that the Green Growth Framework expressly provides that completion of the review of the Proposed Law is a key short term goal: *Fiji Green Growth Framework* (Ministry of Strategic Planning, National Development & Statistics, 2014) 51.

licensing regime, regulation of customary fishing and fishing in customary areas, and the proposed 'customary fisheries management and development plans' (CFMDPs).

3.1.3 Challenges related to customary rights and local communities

Dual governance system

In Fiji, whilst the State owns the foreshore and the seas, CFROs retain the fishing and access rights in their *iQoliqoli* areas. This overlap of customary and 'modern' law presents special challenges for regulating inshore fisheries and striking the right balance between resource use, biodiversity conservation and protecting customary rights.

This dual governance system is reflected in a number of aspects of the *Fisheries Act* and *Fisheries Regulations*.³⁹

- Determining *iQoliqoli* areas: The *Fisheries Act* provides for a comprehensive regime for determining the boundaries and the rightful owners of *iQoliqoli* areas across Fiji.⁴⁰
- Permitting and Licensing: The *Fisheries Act* comprises two types of approvals for fishing: permits which relate to fishing in customary areas; and, licences which relate to commercial fishing.
- Fish wardens: The *Fisheries Act* provides for the appointment of Honorary Fish Wardens, who are selected by the Ministry of Fisheries in consultation with Provincial and Village Councils. Fish Wardens are almost always selected from the village who owns the relevant *iQoliqoli* fishing rights. Although Fish Wardens are formally appointed by the Permanent Secretary for Fisheries, they are not paid by the Ministry of Fisheries and therefore are not considered Government employees. This arrangement raises a number of questions around whether they are to represent the Ministry of Fisheries or their community. Understandably, this situation may give rise to conflicts where the activities of the community may not be consistent with the requirements of the *Fisheries Act*.
- Restricted areas: Although the *Fisheries Act* recognises CFROs, there is no legislative requirement under the *Fisheries Regulations* to consult with, or compensate, CFROs before creating restricted areas (noting that in practice such consultation takes place).

The question of marine tenure underlying the dual governance system is a sensitive issue. It has been suggested that handing back the tenure of coastal marine areas to customary owners may legitimise community governance mechanisms such as locally managed marine areas (LMMA's).⁴¹ However, granting legal tenure alone will not render LMMA's legally

³⁹ See James Sloan and Kevin Chand, *A Review of Near Shore Fisheries Law and Governance in Fiji* (Siwatibau & Sloan, 2015) 20-24.

⁴⁰ *Fisheries Act* ss 13-20.

⁴¹ Erika Techera and Shauna Troniak, *Marine Protected Areas Policy and Legislation Gap Analysis: Fiji Islands* (IUCN Regional Office for Oceania, 2009) 39-42.

enforceable.⁴² Therefore, issues related to sustainable management will need to be addressed irrespective of how the question of tenure is approached.

Overfishing and poaching

It is widely recognized that overfishing and poaching remain one of the most significant challenges for inshore fisheries management in Fiji.⁴³ Poaching has been reported to take place within communities (by CFROs within their *iQoliqoli* areas) and between communities.⁴⁴

CFROs are rightfully provided with certain privileges in relation to fishing in their *iQoliqoli* areas. However, customary management measures do not always provide adequate protection from overfishing. This can occur either because of difficulties enforcing customary restrictions (e.g. if elders lack the necessary authority within a community) or where customary restrictions are not sufficient to achieve sustainable management (e.g. if fishing restrictions are lifted too frequently, or for too long at a time). The question then arises as to how best to negotiate this sensitive issue and facilitate sustainable management of fisheries in customary areas.

Community level governance and LMMAs

The FLMMA Network has successfully supported the development of a large network of LMMAs. As at 2014, the FLMMA Network reported that 466 no-take zones (*tabus*) had been established in 136 *iQoliqoli* across Fiji's 12 provinces, covering an area of 79% of Fiji's inshore fisheries.⁴⁵ LMMAs often synthesise local custom with scientific knowledge, 'incorporating a diverse range of management strategies, including permanent and temporary closures, size limits of harvested species, bans on harvest of particular species, and gear restrictions.'⁴⁶

LMMAs have the potential to address many of the challenges related to community based marine management at the local level, including ensuring that management measures:

- are effective given the remoteness of many communities from government and urban centres;⁴⁷

⁴² Ibid 34-36.

⁴³ Robert Gillett, Antony Lewis, and Ian Cartwright, *Coastal Fisheries in Fiji: Resources, Issues, and Enhancing the Role of the Fisheries Department* (2014) 34-36.

⁴⁴ <http://www.iccaregistry.org/en/explore/Fiji/vueti-navakavu>

⁴⁵ FLMMA, 'FLMMA Strategic Plan 2014-2018' (FLMMA, 2014), 4; *Fiji Green Growth Framework*, above n 38, 44, 48-49.

⁴⁶ Rebecca Weeks & Stacey Jupiter, 'Adaptive Comanagement of a Marine Protected Area Network in Fiji' (2013) 27(6) *Conservation Biology* 1234, 1235.

⁴⁷ See, e.g., Pepe Clarke and Stacy Jupiter, 'Law, custom and community-based natural resource management in Kabulau District (Fiji)' (2010) 37(1) *Environmental Conservation* 98, 98; Annette Muehlig-Hoffman, 'Ownership of Fijian Inshore Fishing Grounds: Community-Based Management Efforts, Issues of Traditional Authority and Proposed Changes in Legislation' (2008) 22(1) *Ocean Yearbook Online* 291, 318. The same article additionally indicates that the framework will also need to be capable of responding to changes to local sources of leadership, with 'changing leadership and

- respect and ‘reflect local knowledge, traditions and priorities’;⁴⁸
- respond to a range of needs at the community level (that is, not just sustainable fisheries, but broader issues such as community health and wellbeing).⁴⁹

However, whilst LMMAs have been recognised by many local communities, there is very limited capacity for these to be legally enforceable, and this can substantially limit their effectiveness.⁵⁰ The question of whether, and how, to incorporate LMMAs into fisheries law has been a key issue of debate and discussion in recent years.

Community capacity and awareness

Education, training and other support are important both in terms of capacity-building as well as to encourage communities to embrace laws and principles set at the national level. It has been observed that education and training would be useful to help communities understand such matters as the boundaries of their *iQoliqoli* areas, the boundaries of protected areas, protected species and prohibited fishing practices.⁵¹

3.1.4 Governance and institutional challenges

Priorities and conflicting responsibilities within the Ministry of Fisheries

Under current institutional arrangements, the Ministry of Fisheries is responsible for both supporting the exploitation of fishery resources and also the protection and conservation of those same resources and related ecosystems. This arguably creates a conflict of interest within the Department.

The Ministry of Fisheries has placed more emphasis over the years on developing fisheries rather than sustainable management.

Disproportionately low government resource allocation to inshore fisheries as compared to offshore fisheries

Coastal fishing is critical to Fiji’s economy. It has been estimated to contribute nearly 50% of GDP and is estimated to be worth significantly more than offshore fishing.⁵² Further,

community instability’ sometimes having ‘a distorting effect on CBMRM and conservation efforts’. Ibid 294, 301.

⁴⁸ Clarke and Jupiter, above n 47.

⁴⁹ See, e.g., Hugh Govan (ed), *Good Coastal Management practices in the Pacific: Experiences from the field* (SPREP, 2011) 11.

⁵⁰ The only scope for enforceability is if restrictions are incorporated into permits as conditions of the permit issued under the *Fisheries Act*.

⁵¹ Stacey Jupiter, et al, *Non-compliance with management rules and its implications for traditional inshore fisheries in Fiji* (Wildlife Conservation Society, 2010) 2.

⁵² This includes both locally-based and foreign-based offshore fishing: Hugh Govan, *Strategic Review of Inshore Fisheries Policies and Strategies in Melanesia: Fiji, New Caledonia, Papua New Guinea, Solomon Islands and Vanuatu, Part I: General overview* (SPC, July 2013), 3. See also, e.g., Gillett, Lewis, and Cartwright, above n 43, 13.

subsistence fishing (that is, fishing for personal consumption) accounts for about half of all inshore fishing (in dollar-terms).⁵³

Despite these statistics, it is apparent that a disproportionately low level of resources is allocated to inshore fisheries as compared to offshore fisheries.⁵⁴ For example:

- There is no dedicated inshore fisheries division within the Ministry of Fisheries.
- Consultations in relation to the *Offshore Decree* and the Proposed Law started at the same time in around 2009. However, the *Offshore Decree* was brought into force in 2012 whilst progress on the Inshore Decree has been on hold for a number of years.

It is clear that a measure of balance needs to be restored in the Governments' approach to inshore fisheries.

Capacity within the Ministry of Fisheries

The Ministry of Fisheries has indicated the existence of capacity and skills gaps within the Ministry. Addressing this issue will require identification of key skills gaps and customised capacity-building programs.⁵⁵ One area that has been mentioned for particular attention is monitoring, control and surveillance (**MCS**), including the need for staff to have the skills necessary to facilitate the successful prosecution of inshore fisheries offences.⁵⁶

Enforcement

Enforcement is one of the key challenges under the *Fisheries Act*. Enforcement difficulties are in part a result of the geographical spread of Fiji's coastal communities. Inadequate resourcing for enforcement, including training for enforcement officers, including fisheries officers, wardens and police officers, are also factors.

The issue of poaching is one that has been identified as problematic in customary fishing areas, with prosecutions being rare and, where successful, attracting inadequate fines. Further, overfishing for commercial purposes has been widely reported as being a significant cause of the pressures placed on inshore fisheries, and effective management measures will need to be implemented to curb overfishing.

Key issues for improving the enforcement of fisheries laws in Fiji include:

- increasing MCS and enforcement capacity in the Ministry of Fisheries, possibly with the development of a legal team comprising a prosecutions unit;
- improving interagency coordination and cooperation; and
- improving the effectiveness of community based MCS and enforcement, including fish wardens.

⁵³ Gillett, Lewis, and Cartwright, above n 43, 6.

⁵⁴ Ibid 27, 34-35, 37.

⁵⁵ This has been addressed in the Ministry of Fisheries Annual Business Plan for 2016.

⁵⁶ Gillett, Lewis and Cartwright, above n 43, 36-37.

3.1.5 Data and science challenges – lack of data collection, research and analysis

It is widely understood that quality data collection, research and analysis are all critical to ensuring fisheries management tools can be effectively implemented. However, there is inadequate data, research and analysis in relation to Fiji's inshore fisheries.

The importance of data is acknowledged in the Green Growth Framework.⁵⁷ Data collection can relate to the state of fisheries as well as to management tools. For example, data about the number and type of licences issued can be used to inform licensing decisions, as well as other fisheries management decisions.

The lack of data and analysis is a consequence of the lack of resourcing and support for inshore fisheries at the central Government level. Accordingly, this issue should be approached with the local context as well as resource limitations in mind.⁵⁸ The challenge here will be how best to strategically deploy limited resources for the effective collection, research, analysis and use of relevant data.

In this respect, simple data collection techniques may be cost effective and sufficient to achieve improved outcomes.⁵⁹ Similarly, fisheries management measures can build on and take advantage of pre-existing or traditional fisheries management tools,⁶⁰ and engaging local communities in data collection, assessment, and resource management can have positive outcomes.⁶¹ This offers a natural link with the concept of CBRM.

3.1.6 Climate change

The impacts of climate change pose the most significant and recognised environmental threat to fisheries around the globe, including Fiji's inshore fisheries.⁶² Inshore fisheries are likely to experience:⁶³

warmer air and sea surface temperatures, ocean acidification, rising sea levels and higher rainfall. These changes are expected to cause significant losses of the coral reef, mangrove, seagrass and intertidal habitats that provide shelter and food for coastal fish and shellfish. This is expected to cause progressive reductions in the productivity of inshore fisheries.

⁵⁷ Green Growth Framework, above n 38, 23.

⁵⁸ See, e.g., Govan, above n 49, 4.

⁵⁹ Ibid 9.

⁶⁰ Many 'modern' fisheries management tools have now been documented within existing customary management frameworks. Examples include spatial or temporal prohibitions and bans, catch-quantity limits, equipment bans, effort-limits, and reservations of areas or species: see, e.g., Hugh Govan, *Status and Potential of Locally-Managed Marine Areas in the South Pacific: Meeting nature conservation and sustainable livelihood targets through wide-spread implementation of LMMAs* (CRISP, April 2009) 23. Jeremy Prince has noted that activities focused on strengthening traditional systems of sustainable resource management have had positive management outcomes. Jeremy Prince, 'Rescaling Fisheries Assessment and Management: A Generic Approach, Access Rights, Change Agents, and Toolboxes' (2010) 86(2) *Bulletin of Marine Science* 197, 198.

⁶¹ See, e.g., Jeremy Prince, above n 60, 201.

⁶² See, e.g., *Pacific Islands Regional Ocean Policy and Framework for Integrated Strategic Action* (2005) 4, at <<http://www.forumsec.org/resources/uploads/attachments/documents/PIOP.pdf>>.

⁶³ Gillett, Lewis and Cartwright, above n 43, 18.

Climate change also carries the anticipated risk of extreme weather events, 'such as tropic storms, cyclones, droughts, floods, and heat waves'.⁶⁴

Notably, although climate change poses threats of a particular nature and severity, many of the actions required in relation to climate change are in fact actions that should be taken in any case to maintain healthy fisheries.⁶⁵ This said, it is now universally accepted that the impacts of climate change cannot in any way be underestimated and every effort must be made to mitigate against, prepare for, and adapt to, these impacts.

3.2 Key policy and law issues

Broadly speaking, in light of the preceding discussion, the key policy and law issues related to inshore fisheries management are:

1. the need for a comprehensive policy foundation for coastal and oceans management;
2. the need to update and strengthen inshore fisheries legislation; and
3. the need for an effective governance and institutional framework.

⁶⁴ Asia Development Bank, *Corporate Evaluation Study: ADB Support to Small Pacific Island Countries* (ADB, 2015) 56 (app 2, Linked Document E, at <http://www.adb.org/sites/default/files/linked-documents/E-Pacific-Risks-Vulnerabilities-Climate-Change.pdf>).

⁶⁵ Gillett, Lewis, and Cartwright, above n 43, 19.

4. ANALYSIS AND RECOMMENDATIONS IN RELATION TO KEY POLICY AND LAW ISSUES

This section provides analysis and recommendations in relation to the key policy and law issues identified in section 3. The analysis applies the analytical framework and key concepts outlined in sections 1 and 2, respectively.

4.1 A comprehensive policy foundation for coastal and oceans management, together with a clear roadmap for action

Recommendation 1

Fiji investigate developing an integrated oceans management policy which extends beyond fisheries and covers all major uses and impacts on coasts and oceans.

Recommendation 2

Fiji develop and finalise Fiji's National Implementation Plan under the Melanesian Spearhead Group roadmap for inshore fisheries management and sustainable development 2015-2024, in consultation with all key stakeholders, including industry, community representatives and non-government organisations.

4.1.1 An integrated oceans policy for Fiji

To date, oceans management policy in Fiji has largely been sector based and therefore somewhat fragmented. Other than high-level government policy, sectoral policies appear in the corporate plans of the relevant ministries, most notably the Ministry of Fisheries and Forests.

Fiji, with the support of the FAO, is currently in the process of developing an overarching national fisheries policy covering coastal, oceanic and aquaculture fisheries. The development and implementation of a national fisheries policy will undoubtedly be a positive step forward. Further, whilst Fiji has an Integrated Coastal Management Framework (**ICMF**), this framework is focused on ridge to reef management rather than oceans management as a whole.⁶⁶

However, given the multitude of interrelated interests and uses affecting the coast and oceans, there is an argument for the development of a national integrated oceans management (**IOM**) policy. An IOM policy can be said to be a 'planned system-wide

⁶⁶ The ICMF promotes a multi-sectoral integrated approach in decision making relevant to the sustainable use, development and protection of coastal and marine areas through the development of provincial integrated coastal management plans. With Asian Development Bank funding, the first comprehensive provincial coastal management plan was developed and piloted in the Ra Province, a project that was led by the Institute of Applied Sciences, University of the South Pacific.

approach to ocean management'⁶⁷ designed to cover all sectors and levels of government whose scope of activity relates to the use of marine resources. In addition to supporting the harmonisation of relevant laws and policies, an IOM policy would provide the framework for an integrated, holistic, and place based (rather than a sector by sector based) approach to managing activities affecting oceans.

An IOM policy would not be limited to fisheries but would extend to all major uses and impacts on oceans, including:

- mining, logging, marine construction and other industrial activity, including deep sea mineral mining;
- marine protected areas and conservation of marine biological diversity
- climate change;
- customary landowners' interests;
- natural and cultural heritage;
- offshore petroleum and minerals;
- pollution;
- harbours and ports;
- shipping;
- tourism
- pharmaceutical, biotechnology and genetic resources; and
- alternative energy sources.

The development of an IOM policy is consistent with the concept of integrated marine and coastal areas management (**IMCAM**) identified in section 2. A number of countries have developed IOM policies (including the United Kingdom, Canada and Australia) in line with this concept. The Solomon Islands is also considering the development of an IOM policy. The experience of these countries can provide useful lessons learned for the development of an integrated oceans policy for Fiji.

Developing an integrated oceans policy will inevitably involve considerable time and cost. Different approaches may be available, ranging from high level to more comprehensive and detailed strategies. However, given that it appears that an IOM policy would have a useful role to play in Fiji, there would be merit for some investigatory work, for example, in the form of a scoping or issues paper, to be undertaken in this area.

Clearly, any policy developed will need to be consistent with Fiji's national policy framework, including the Peoples Charter for Change, Peace and Progress, the National Development Plan (2017-2021) and the Green Growth Framework. Further, if an integrated oceans policy for Fiji is developed, it could operate under the Green Growth Framework and above the proposed Fiji National Fisheries Policy.

⁶⁷ Martin Tsamenyi, A Pacific Regional Ocean Policy (Working Paper, Centre for Maritime Policy, University of Wollongong, 2000) 1.

4.1.2 Clear roadmap for action

In addition to an overall IOM policy, a clear roadmap or plan of action will assist coordination of stakeholders to achieve common goals.⁶⁸

A number of initiatives have gone some way to developing a regional roadmap for the improvement of fisheries resources, including the 2010 Secretariat of the Pacific Community report titled *The future of Pacific Island fisheries*⁶⁹, *A new song for coastal fisheries – pathways to change: The Noumea strategy*, and the *Melanesian Spearhead Group roadmap for inshore fisheries management and sustainable development 2015-2024 (Regional Roadmap)*.⁷⁰ Under the Regional Roadmap, member countries have committed to preparing national implementation plans that will give effect to its terms. Draft implementation plans have now been prepared by member countries. Fiji's Draft National Implementation Plan which appears to have been prepared in early 2014 contains outcomes, outputs and activities relating to the following objectives:⁷¹

- Objective 1: Development of an effective policy, legislation and management framework, empowering coastal communities to manage their marine resources
- Objective 2: Education, awareness raising and the provision of information on the importance and responsible management of inshore fisheries
- Objective 3: Capacity building to sustainably develop and manage coastal resources
- Objective 4: Adequate Resources to Support Inshore Fisheries Management and Best Available Science & Research
- Objective 5: Secure long term economic and social benefits to Coastal Communities from the Sustainable use of Inshore resources
- Objective 6: Establish effective collaboration with stakeholders and partners

This implementation plan has the potential to form the basis of firm action in relation to coastal fisheries in Fiji and should be completed as soon as possible in close consultation with key stakeholders.

⁶⁸ See Gillett, Lewis, and Cartwright, above n 43,33, in which the authors noted there was very little coordination between the Ministry of Fisheries and NGOs, and raised the question as to whether there is an overall coastal fisheries strategy.

⁶⁹ Robert Gillet and Ian Cartwright, *The future of Pacific Island fisheries*(SPC, 2010).

⁷⁰ *The Noumea strategy*, above n 28.

⁷¹ *FIJI'S DRAFT Implementation Plan for the MSG Roadmap on Sustainable Inshore Fisheries 2014 - 2023* <<http://www.msgsec.info/index.php/latest-developments>>.

4.2 Updating and strengthening inshore fisheries legislation

Recommendation 3

Update and strengthen inshore fisheries legislation, in particular:

- (1) ensure that legislative goals, objects, and principles are clear and appropriate.**
- (2) ensure that legislative tools & mechanisms are effective, in particular:**
 - (a) implement an effective permit and licensing regime, which will involve:**
 - (i) investigating options for transparent, consistent and fair methods for compensating CFROs;**
 - (ii) considering what are appropriate fees for fishing licences;**
 - (iii) investigating the appropriateness of introducing total allowable catch requirements in Fiji; and**
 - (iv) maintaining a public register of commercial fishing licences.**
 - (b) increase penalties for fisheries offences and introduce a civil sanction regime based on an administrative penalty regime.**
 - (c) expand and strengthen the powers of Fisheries Officers and other relevant officers, especially in relation to fish retailers.**
 - (d) investigate the possibility of incorporating locally managed marine areas (LMMAs) into the formal legal system.**
 - (e) establish a comprehensive marine protected areas regime.**

There is a clear need to update coastal fisheries legislation and for this to be supported by relevant policy and action planning. A logical way forward would be to retain and build on the strong elements of the *Fisheries Act* (and the Proposed Law) to ensure that any new regime is appropriate for the current and future needs of Fiji. Accordingly, options for proceeding include:

- Option 1: Retain the *Fisheries Act* and make necessary amendments and regulations to strengthen its operation.
- Option 2: Replace the *Fisheries Act* with the Proposed Law with amendments to the Proposed Law to strengthen its operation.
- Option 3: Draft a new fisheries law from first principles through to the preparation of clear drafting instructions for Parliamentary Counsel. This could incorporate MPA

provisions or be designed to sit alongside standalone MPA or protected areas legislation.

The discussion below considers some of the main ways in which both the *Fisheries Act* and the Proposed Law can be strengthened.⁷² However, a comprehensive and consultative review of the *Fisheries Act* and the Proposed Law will be required in order to progress the law reform process.

4.2.1 Ensuring that legislative goals, objects, and principles are clear and appropriate

In order to promote the effective development and implementation of legislation, any new fisheries legislation should be developed with clear and contextually appropriate goals, objects and principles. This approach is based on the analytical framework set out at section 1 of this paper and is consistent with concepts of implementing effective legal and administrative frameworks discussed in section 2 of this paper.

The *Fisheries Act* does not expressly contain objects or principles. As a result, under the current regime, confusion may arise as to how the *Fisheries Act* should be applied in certain circumstances. For example, should fisheries development be prioritised over biodiversity conservation under the *Fisheries Act*?

The Proposed Law, on the other hand, does contain a reasonably comprehensive set of objects and principles (Part II, sections 4 and 5). These broadly address the key concepts set out at section 2 of this paper.

However, the objectives and principles contained in the Proposed Law contain internally conflicting concepts. For example, section 5 of the Proposed Law requires all authorities and responsibilities under the Proposed Law to be exercised consistently with the listed principles, including the following:⁷³

The sustainable use of Fiji Islands fisheries resources so as to achieve economic growth, human resource development, employment creation and sound ecological balance, consistent with its national development objectives.

The prospect of tensions arising between the concepts of “economic growth”, “sound ecological balance” and “national development objectives” may create challenges for those implementing the Proposed Law when seeking to achieve each element of this objective. A less conflicted formulation may be for the different objectives and principles to be ranked in order of priority, or for there to be some statutory guidance on the intended interaction between objectives or principles that have the potential to conflict.

⁷² The present analysis is limited to coastal fisheries. However, under a separate paper, there may also be scope for considering ways in which the *Offshore Decree* can be strengthened. Further, any amendments to the *Fisheries Act* would need to be developed so that they are compatible with, and complementary to, the *Offshore Decree* and any other relevant legislation.

⁷³ Proposed Law s 5(a).

4.2.2 Ensuring that legislative tools and mechanisms are effective

(a) Implementing an effective permit and licensing regime

The permit and licensing system under the *Fisheries Act* (and the Proposed Law⁷⁴) is the main tool or mechanism used to manage fisheries in Fiji. This system is unique to Fiji and arises by reason of the dual governance system. Permits relate to fishing in customary areas and licences relate to fishing for commercial purposes. This customised system has the potential to serve Fiji well, however, there are a number of areas in which it can be strengthened. Whilst not an exhaustive analysis, some of the key areas are discussed below.

(i) ***Transparent, consistent and fair methods for compensating CFROs for giving others the right to fish in iQoliqoli areas***

Until recently, there has been a practice of applicants for permits and licences paying an unofficial “goodwill payment” to CFROs. This has been in exchange for CFROs giving consent to the issue of permits and licences for fishing in their *iQoliqoli* areas. However, this practice was prohibited at the beginning of 2016, and nation-wide consultation is taking place to establish a new system to compensate CFROs who open their traditional fishing grounds to commercial fishers.

If CFROs are to be compensated for providing consent for external parties to fish in their *iQoliqoli* areas, appropriate laws will need to be introduced to facilitate it. Further, the proceeds of these payments would need to be applied transparently, consistently, and fairly. One possible option may be for a portion of the proceeds of payments for permits to be paid to the State, and another portion to be paid to the CFROs. The State would be required to use the funds only for certain specified purposes related to supporting community based fisheries management initiatives. For example, this could include supporting the work of fish wardens, such as providing them with equipment, training and pay. Similarly, CFROs would be required to use the funds to support conservation and alternative livelihoods.

(ii) ***The licensing regime***

The licensing regime under the *Fisheries Act* (and the Proposed Law) provides for the issue of licences upon payment of a nominal fee of FJD\$12.00 for a single fisherman with their own boat without any reference to fish stock levels or the number of licences issued. This arguably conflicts with many of the concepts identified in section 2 of this paper, including:

- the ecosystem approach; and
- adaptive management that is based on research, data collection, analysis and the best available science.

⁷⁴ It should be noted that whilst there are some minor differences, the permit and licensing system adopted under the *Fisheries Act* and the Proposed Law are essentially the same.

The licensing regime can be strengthened by employing one or more of the following strategies:

- **Increasing licence fees**

It is widely agreed that the licence fee needs to be increased. The question of a suitable amount will need to be determined after appropriate research and consultation. Factors to consider in determining the fee include concepts such as the ecosystem approach, the importance of protecting the rights of small-scale fishers and CFROs, the precautionary principle, sustainable yield, and addressing target issues in particular over-fishing and excess fishing capacity. Further, it would be appropriate to provide for a system by which the licence fee is reviewed and adjusted annually.

- **Total allowable catch requirements**

Total allowable catch (**TAC**) can be an effective tool for maintaining maximum sustainable yield. TAC requirements can be administered in one of three ways: as a notional TAC; as a competitive TAC; and, as an individual transferable quota (**ITQ**):⁷⁵

- **Notional TAC:** represents an ideal level of catch that should not be exceeded. If the notional catch is exceeded, pre-determined management actions or responses to reduce catch are triggered within subsequent quota years. The minimum requirements to operate a notional TAC include catch monitoring or estimates of annual catch from a sector, and mechanisms to reduce catch if the TAC limit is exceeded.
- **Competitive TAC:** Under a competitive TAC system, eligible fishers compete to take the total allowable catch during the quota year. If the TAC is reached before the end of the quota year, the fishery is closed until the next quota year. A competitive TAC is most appropriate where the number of fishers (eligible licence holders) is relatively small compared to the TAC; where the TAC is high and unlikely to be taken in a quota year; or where there are no appreciable economic or social costs associated with the TAC being caught in a short period of time.
- **ITQ:** Under an ITQ system, units of quota are allocated to each eligible licence holder, which represents their share of the TAC which may be caught at any time during the quota year. These units of quota may be transferred to other eligible licence holders.

TAC requirements may be appropriate for regulating commercial fishing in Fiji's coastal areas. Jurisdictions in which TAC requirements have been adopted include the European Union (TAC and ITQ)⁷⁶, New Zealand⁷⁷ (ITQ), and Australia (TAC and

⁷⁵ Department of Employment, Economic Development and Innovation - Fisheries Queensland, *Regulatory Impact Statement (RIS) relating to the review of the Rocky Fin Fish Fishery* (2011) <https://www.daf.qld.gov.au/_data/assets/pdf_file/0018/70164/Rocky-reef-consultation-web.pdf>.

⁷⁶ European Commission, *TACs and quotas* (14 November 2016) <http://ec.europa.eu/fisheries/cfp/fishing_rules/tacs/index_en.htm>.

ITQ).⁷⁸ Developing and applying TAC requirements that are suitable for customary and subsistence fishing may be more challenging. However, exclusion of customary and subsistence fishing from TAC requirements would be likely to significantly undermine the effectiveness of TAC measures used in commercial fisheries, since customary and subsistence fishing accounts for a very significant proportion of all fishing in Fiji's inshore fisheries.

Best practice is likely to involve the adoption of a combination of TAC and non-TAC approaches. Non-TAC approaches include: temporal closures, size and bag (catch) limits, and restricting fishing gear.

- **Investigating innovative approaches to improving fisheries management, including limiting the number of licences issued, maintaining a public register of licences, and requiring applicants for fishing licences to pass a test covering sustainability issues before being issued with a fishing licence**

Currently, there does not appear to be any limit to the number of fishing permits or licences that can be issued. Limiting the number of licences issued as part of an appropriate TAC system will assist in achieving maximum sustainable yields. Further, a public register of licences may assist in managing and ensuring appropriate scrutiny of commercial fishing licences. Another strategy which could be considered is requiring applicants for fishing licences to pass a test covering sustainability issues before being issued with a fishing licence.

- **Strengthening licencing conditions**

Fisheries Officers under the Fisheries Act have broad powers to impose conditions on a fishing licence and the position appears to remain the same in the Proposed Law. However, this power shifts to the Permanent Secretary under the Proposed Law who may attach any conditions that he or she thinks fit so long as they are within that which may be prescribed to any licence or permit. A more pro-active approach when imposing conditions could benefit marine resource conservation. One such approach could include the imposition of standard conditions on fishing licences. An example might be the prohibition of catching threatened species of fish during their breeding season, e.g., the Kawakawa or Donu species from June to September.

⁷⁷ Kelly Locke and Stefan Leslie, *New Zealand's Quota Management System: A History of the First 20 Years* (Motu Economic and Public Policy Research, 2007)

<http://papers.ssrn.com/sol3/papers.cfm?abstract_id=978115>.

⁷⁸ *Fisheries Management Act 1994* (NSW) ss 26-34.

(b) Expanding and strengthening the powers of Fisheries Officers and other relevant officers

Currently under the *Fisheries Act* and the Proposed Law, the powers of examination and detention of Fisheries Officers and other relevant officers are focussed on persons engaged in fishing and fishing vessels.⁷⁹ The powers of examination and detention are not expressly directed at fish retailers or other actors in the fish supply chain. The effectiveness of fisheries enforcement work can be strengthened by expanding the powers of Fisheries Officers and relevant officers, by among other things, expressly directing their powers to all key actors in the fish supply chain, including fish retailers and consumers.⁸⁰

Powers of Fisheries Officers and other relevant officers will also be strengthened by providing for the ability of these officers to give directives to facilitate inspections. The *Fisheries Act* does not contain such powers. The Proposed Law gives relevant officers powers to issue directives, however, these powers are limited to persons engaged in fishing and fishing vessels. Again, the power to issue directives should be extended to allow relevant officers to issue directives to all key actors in the fish supply chain.

(c) Penalties

Penalties are an important tool for preventing non-compliance with fisheries legislation. There is scope for the penalties under the *Fisheries Act* and the Proposed Law to be increased.

The current penalty for the taking of fish without a licence is imprisonment of 3 months or FJD\$500 or both. Under the Proposed Law, the penalty for the same offence is a fine of between 50 and 1000 penalty units (currently FJD\$5,000 - FJD\$10,000).⁸¹ An imprisonment penalty is not available for this offence under the Proposed Law and this may weaken the deterrence effect of this provision. Further, the penalty range is significantly lower for the offences of taking fish from a customary rights area without a licence or permit as required (50-100 penalty units).⁸² Such penalties may not be adequate to prevent illegal fishing, especially for commercial operations.

In contrast, the *Offshore Decree* provides for far greater penalties.⁸³ For example:

- under s 25(6), a person who engages in or assists in any driftnet fishing activity in Fiji fisheries waters is liable on conviction to a fine of between FJD \$50,000 and FJD \$100,000 and/or imprisonment for up to 6 months; and

⁷⁹ *Fisheries Act* s 7 and Proposed Law s 33. This and related issues has been highlighted by Advisers to the Pacific Fisheries MCS and Enforcement project from the Ministry for Primary Industries, New Zealand.

⁸⁰ Arguably, where there is reasonable suspicion that an offence has been committed, there is a power to take retailers to the nearest police station or port. However, it would nevertheless be helpful to expressly detail and expand the powers of examination and detention in relation to fish retailers: *Fisheries Act* s 7(1)(c) and Proposed Law s 33(1)(c).

⁸¹ Proposed Law s 21.

⁸² *Ibid* s 13.

⁸³ Penalties under the *Offshore Decree* were significantly increased by the *Offshore Fisheries Management (Amendment) Decree 2014*.

- under s 26(3), if a fishing vessel used for sport or recreational fishing is used for fishing, related activities, or any other activities, ‘unless under the authority of a valid licence, authorisation or fishing right as may be required under [the] Decree, a Fisheries Management Plan or any access agreement or fisheries management agreement entered into pursuant to [the] Decree’ the operator or masters is liable on conviction of a fine between FJD \$200,000 and FJD \$1,000,000.

The adoption of a civil sanction regime based on an administrative penalty scheme would be a useful addition to the penalty regime under the *Fisheries Act*. Administrative penalties provide an effective means of enforcing laws as they avoid the need for costly criminal proceedings. The Proposed Law seeks to introduce an administrative penalty scheme.⁸⁴ One key issue with the proposed scheme, however, is that it does not provide for fixed penalties but rather a discretionary sum to be agreed by the Permanent Secretary with the consent of the Director of Public Prosecutions. Discretionary penalties leave open the possibility that penalties may not be consistently and equitably applied. A more effective approach would be for penalties for specific offences to be prescribed in the regulations and reviewed on a regular basis, for example, every 3 years.

(d) Customary fishing, community level governance and recognition of LMMAs in the formal legal system

Customary fishing is largely unregulated under the *Fisheries Act* (and the Proposed Law). Under the *Fisheries Act*, CFROs fishing in their *iQoliqoli* do not require a licence or a permit:

- when fishing for purposes other than by way of trade and business, namely, customary and subsistence purposes, and can use any fishing method⁸⁵
- when fishing for the purposes of trade or business with a line from the shore or a spear.⁸⁶

Under the Proposed Law, CFROs fishing in their *iQoliqoli* do not require a licence or a permit, when fishing for customary fishing purposes.⁸⁷

Given that fishing by CFROs can place a significant amount of pressure on fishery resources, the question arises as to how best to manage customary fishing. One possible solution that has been suggested in this context is the formal adoption of the LMMA (or a similar CBRM) model under fisheries or other legislation.⁸⁸ LMMAs could be used not only to manage customary fishing but fishing in and around *iQoliqoli* areas generally. LMMAs have the potential to solve one of the most challenging issues arising from the dual governance system, that of balancing customary rights with State governance of coastal fisheries. LMMAs could allow local communities to retain customary governance, whilst promoting conservation and sustainable fisheries management, and at the same

⁸⁴ Proposed Law ss 36, 37.

⁸⁵ *Fisheries Act* s 13.

⁸⁶ *Ibid* ss 5, 13.

⁸⁷ *Ibid* s 3(2).

⁸⁸ This has been advocated by a number of commentators. See for example, Hugh Govan, ‘Achieving the potential of locally managed marine areas in the South Pacific’ in Kenneth Ruddle (ed) *Traditional Marine Resource Management and Knowledge Information Bulletin No 25* (SPC, July 2009) 9-10; Techera and Troniak, above n 41, 34-36 and 39-42.

empowering fisheries officers and fish wardens to enforce community coastal fisheries management plans.

Effective adoption of LMMAs into the formal legal system will require balancing many factors, including simplicity and flexibility,⁸⁹ consistency, comprehensiveness, and effectiveness.

A number of options may be available for recognition of LMMAs into the formal legal system, including:

- amendment to the *Fisheries Act* and/or regulations under that Act;
- separate legislation dealing specifically with LMMAs;
- separate legislation for MPAs or protected areas more generally, incorporating LMMAs;
- amendments to the *Environmental Management Act*;
- enactment of the Proposed Law (with amendments); or
- new fisheries legislation.⁹⁰

Whichever approach may be adopted, a central issue to be addressed is how the existing LMMAs in Fiji – established in 136 *iQoliqolis*, and including 466 no-take zones – can be transitioned into the new regime with minimal time and cost, whilst at the same time ensuring the system is robust. The regime under the Proposed Law relating to customary fisheries management and development plans (**CFMDPs**) (Part IV, section 12) may be one way of incorporating LMMAs into fisheries legislation and addressing the issue of existing LMMAs. Analysis of the CFMDP regime usefully highlights the issues likely to arise in any regime seeking to incorporate LMMAs into the formal legal system.

In short, the CFMDP regime operates by setting out broad topics that must be contained in a CFMDP, including identifying the fishery and fishing rights area, the objectives to be achieved in the management of the fishery, and the requirements for monitoring, reporting and assessment. Further, the Proposed Law provides for the establishment of CFMDPs by the Minister by notice in the Gazette.

Three key observations can be made about the CFMDP scheme:

- Firstly, s 12(8) of the Proposed Law states that “the management measures in a customary fisheries management plan do not have legal effect unless stipulated otherwise by the Minister by notice in the Gazette”. This provision appears to undermine the purpose of including CFMDPs in the Proposed Law. If CFMDPs are not likely to have full legal effect, then there is little incentive for communities to embark upon the process of establishing and procuring gazettal of a CFMDP. An alternative approach would be to provide for a system which:

⁸⁹ Govan, above n 88, 9-10.

⁹⁰ See also Techera and Troniak, above n 41, 39-42.

- expressly states that CFMDPs will have legal effect; and
 - combined with a rigorous process of ensuring that CFMDPs have been appropriately established in accordance with certain specified best practice principles.
- Secondly, the Proposed Law does not provide any guidance on the process for developing CFMDPs and only limited guidance on the structure and content of a CFMDP. Given the well-known sensitivities around the management of customary resources, more detailed guidance on how CFMDPs should be developed is appropriate. In addition, detailed guidance on the structure and content of CFMDPs would also assist to eliminate any uncertainties and confusion in relation to these matters. Further in this regard, it may be useful to establish a model CFMDP, the provisions of which would apply in cases where a CFMDP does not address a particular issue, much like the clauses of model articles of associations in the corporations law of some jurisdictions.
 - Thirdly, given that LMMAs have been established in 136 *iQoliQolis*, there is a serious question as to whether the Ministry of Fisheries and the Minister have the capacity to review and gazette all of the existing LMMAs, not to mention new ones, in a reasonable timeframe. In order for this to happen, the Ministry of Fisheries would require a significant injection of resources. In the absence of significant resources, an alternative option may be to establish a regime that outsources part of the CFMDP regime to certain certified external experts. Such a regime may comprise the following components:⁹¹
 - A provision in the relevant law or regulations that CFMDPs must be established in accordance with the processes set out in a guidance manual approved by the Minister. A document similar to the FLMMA publication titled “Locally-Managed Marine Areas: A guidebook, such as the “Guide to supporting Community-Based Adaptive Management”,⁹² that was developed by the FLMMA Network, could be developed for the specific Fiji context and used for these purposes.
 - A certification system for CFMDPs whereby certain accredited individuals are authorised to certify that CFMDPs have been developed in accordance with the approved process. The experts could be paid by the Government for each CFMDP certified.
 - A process for accrediting individuals to enable them to certify CFMDPs.

⁹¹ A useful reference for an accreditation and certification scheme may be contaminated land consultant certification for contaminated site investigations and remediation under the *Contaminated Land Management Act 1997* (NSW) <http://www.austlii.edu.au/au/legis/nsw/consol_act/clma1997238/>. See also an outline of the scheme at <<http://www.epa.nsw.gov.au/clm/selectaclmcons.htm>>.

⁹² LMMA Network, ‘Locally-Managed Marine Areas: A guide to supporting Community-Based Adaptive Management’, 2008, <http://lmmanetwork.org/category/resources/>

- A template certification form.
- Gazettal by the relevant Minister after all certification steps have been completed.

The issue of LMMAs and how they can be effectively bridged with, and empowered under, the formal legal system appears to be one of the most pressing issues facing inshore fisheries in Fiji. It has been alluded to or discussed in a great number of reports, articles, and meetings and it is now clear that it needs to be resolved urgently. The CFMDP regime offers a good starting point for analysing this pressing issue.

(e) Establishing a comprehensive marine protected areas regime⁹³

The absence of a comprehensive marine protected areas regime is another key gap in the current fisheries management framework in Fiji. The Conference of the Parties of the Conservation on Biological Diversity uses a stand-alone definition of marine and coastal protected areas (**MCPAs**), with a MCPA defined as:

an area within or adjacent to the marine environment, together with its overlying waters and associated flora, fauna and historical and cultural features, which has been reserved by legislation or other effective means, including custom, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings.⁹⁴

MPAs provide various levels of protection for marine ecosystems ranging from habitat protection to comprehensive protection of all biodiversity, with the highest level of protection being ‘no-take’ MPAs. It is widely recognized that “marine protected areas, particularly no-take marine reserves, can help restore ecosystem structure and function...and help protect marine biodiversity and associated ecosystem services.”⁹⁵

A threshold issue in this context is whether existing fisheries legislation should be used to create MPAs in Fiji, or whether separate legislation dealing specifically with MPAs should be introduced.

Both the *Fisheries Act* and the Proposed Law contain only very basic provisions for the establishment of marine protected areas through the making of regulations. Under the *Fisheries Act* the Minister has the power to make regulations “prescribing areas within which the taking of fish is prohibited or restricted, either entirely or with reference to named species” (*Fisheries Act*, section 9(b)). Under the Proposed Law, the Minister has the power to make regulations “prescribing areas including but not limited to aquatic protected areas

⁹³ For a further detailed discussion of this issue refer to FELA’s forthcoming paper entitled “***Towards an effective legal framework for marine protected areas (MPAs) in Fiji – How can MPAs be established under existing legislation and what are the possible scenarios for future MPAre regulation?***”

⁹⁴ CBD COP, above n 31.

⁹⁵ Brian D Keller, et al, ‘Climate Change, Coral Reef Ecosystems, and Management Options for Marine Protected Areas’ (2009) 44 *Environmental Management* 1069, 1070.

and seasons within which the taking of fish is prohibited restricted, either entirely or with reference to a named species” (Proposed Law, section 38(2)(d)).⁹⁶

In this connection, it is relevant to note the *Offshore Fisheries Management Decree 2012 (Offshore Decree)* also contains provision for the Permanent Secretary to designate marine protected areas (section 8(1)(b)).⁹⁷ This power is supported by regulation-making powers in ss 21 and 104.⁹⁸ Whilst an MPA regime could be created using the regulation-making powers under these instruments, the lack of detail in the primary legislation, in particular the *Fisheries Act*, may limit the amount of detail that could be reasonably (and validly) included in regulations. In particular, it is notable that the regulation-making power under the *Fisheries Act* is unlikely to enable the creation of an independent statutory authority to manage MPAs. An independent body is much more strongly placed to effectively manage an extensive network of marine protected areas, compared to, for example, a division or unit within the Ministry of Fisheries, an agency which has its origins in developing fisheries rather than conserving marine ecosystems.

For this reason, there is a strong case for a separate and comprehensive MPA legislation to be developed. However, this may be a long term goal. A practical way forward may be to establish an MPA regime using existing laws in a way that it can be readily transitioned into a new regime that is suitable for Fiji’s long term needs.

A further and important consideration in this context is the question of whether MPA legislation in Fiji should be part of a broad ranging protected areas regime which includes both terrestrial and marine areas. This is a matter for further consideration by policy makers and stakeholders.

4.2.3 The merits of drafting a new fisheries law

Taking note of the challenges raised by both the *Fisheries Act* and the Proposed Law, this option would provide the opportunity to completely rethink and revitalise fisheries management in Fiji, while leaving scope to retain stronger elements of the current framework.

In addition, another advantage of drafting a new fisheries legislation is that it would provide the opportunity to start afresh from first principles and in line with the key concepts that underlie legislative drafting today; simplicity, clarity and the use of plain English. The *Fisheries Act* was drafted in the mid-1900s and while the Proposed Law has been drafted in recent years, it reproduces large parts of the *Fisheries Act* using much of the same language, sometimes word for word. However, drafting a new fisheries law may take time

⁹⁶ The regime under the Proposed Law relating to customary fisheries management and development plans (**CFMDPs**) (Part IV, section 12) may be a potential mechanism for creating a community-managed type of MPA.

⁹⁷ Further, there have been very limited instances where the foreshore leasing mechanism under the *State Lands Act* (formerly the *Crown Lands Act*) has been used to establish marine protected areas.

⁹⁸ Notably, s 21 seems to *require* the Minister to make regulations ‘as considered necessary or expedient for the purpose of giving effect to – (a) international conservation and management measures adopted by regional fisheries management organisations; or (b) treaty or arrangements to which Fiji is a member’; whereas s 104 creates a power (rather than a duty) to make regulations in relation to a broad range of matters.

and may be more appropriately approached as a long term rather than an immediate goal. If so, it may be possible for the current system to be adjusted through minor legislative amendments and by making subsidiary legislation, in a way that allows for a manageable transition to a best practice, contextually appropriate regime.

4.3 An effective governance and institutional framework

Recommendation 4

Fiji implement an effective governance and institutional framework for fisheries management, in particular, by:

(1) Addressing institutional issues in fisheries management, including:

- (a) strengthening inshore fisheries activities within the Ministry of Fisheries, including by establishing a distinct inshore fisheries division;***
- (b) separating resource development from conservation functions within the Ministry of Fisheries;***
- (c) consider what is the most appropriate agency for managing marine protected areas, including whether it would be appropriate to establish an independent statutory authority for this purpose;***
- (d) strengthening community level governance, through:***
 - (i) promoting co-management and LMMAs;***
 - (ii) providing better support to fish wardens***
- (e) improving enforcement of fisheries laws;***
- (f) consistent and predictable implementation of fisheries legislation.***

(2) Improving funding arrangements for the Ministry of Fisheries, for example, by:

- (g) Investigating the adoption of a system similar to the funding mechanism for Papua New Guinea's National Fisheries Authority (NFA), which allows the NFA to fund its own operations through monies received from fees, levies, etc.***
- (h) Investigating the possibility of linking payments for fishing rights in iQoliqoli areas to community level fisheries management, for example supporting fish wardens.***

4.3.1 Addressing institutional issues in fisheries management

(a) Strengthening inshore *Fisheries Activities* within the Ministry of Fisheries

The major governance issues that need to be addressed to enhance the performance of the Ministry of Fisheries in relation to the management of coastal fisheries are discussed in the comprehensive 2014 study undertaken by Gillet, Lewis, and Cartwright.⁹⁹ In that study, the authors stated that it would be logical for a division dedicated to coastal fisheries to be established. However, they further explained that simply creating a new division will not be sufficient to meet ongoing challenges and two further fundamental changes are required:

- *Acceptance by senior government leaders that i) landings from coastal fisheries are approaching their limits in other than isolated areas and ii) urgent management action is required to safeguard existing production. Where stocks are heavily depleted, reduced fishing may well increase production.*
- *Fisheries staff must be committed to the suggested new, more focused, approach to coastal fisheries management. This will not be easy given the decades of efforts to increase and subsidise production through development activities.*

Encouragingly, it is understood that discussion is currently underway within the Ministry of Fisheries for an inshore fisheries section to be established within that Ministry.

(b) Separating resource development from conservation functions

On one view, it is incompatible for resource use legislation to also contain conservation provisions. In a similar way, it is problematic for one agency to undertake resource development as well as conservation functions without an appropriate separation of functions and officers. Accordingly, there is a case for shifting the conservation functions of the Ministry of Fisheries to another agency, for example, the Department of Environment. Alternatively, another approach may be for a separate conservation Division or unit to be established within the Ministry of Fisheries.

(c) Establishing a dedicated agency to manage MPAs

The management of a network of marine protected areas will require a significant commitment by the Fijian Government. Independence from fisheries management is important to avoid conflicting interests and, as discussed above, there are various governance options for MPAs, including the option of establishing an independent statutory body. However, as already noted, it does not appear to be possible to establish an independent statutory authority dealing specifically with MPAS under existing legislation. In other words, in order to establish such an authority the relevant act would need to be amended or new (perhaps MPA or protected areas-specific) legislation would be required.

⁹⁹ Gillett, Lewis, and Cartwright, above n 43, Executive Summary.

(d) **Strengthening community level governance**

(i) **Co-management and LMMAs**

As discussed above, there is a strong case for investigating the possibility of including LMMAs into the formal legal system in Fiji. Giving legal effect to LMMAs has the potential to improve the operation of LMMAs and enhance fisheries management at the community level. This issue needs to be urgently investigated and addressed.

(ii) **Fish wardens**

The effective deployment of fish wardens has the potential to significantly boost compliance with fisheries legislation. However, fish wardens are not provided with adequate training or funding to undertake their responsibilities effectively. Further, fish wardens face challenges when seeking to enforce laws against members of their own family and/or community. Key to the success of any new fisheries regime in Fiji will be addressing these challenges.

(e) **Improving enforcement of fisheries laws**

Effective and strategic prosecution of fisheries offences will reduce the incidence of non-compliance and help to curb illegal and unreported fishing. Enhancing enforcement practices will require multi-agency cooperation and mobilisation of resources, including the Fisheries Department, Police, the Department of Public Prosecutions and the Courts at national level, as well as at provincial and district level (including through the YMST (Yaubula Management Support Teams) and Conservation Officers, and most importantly the strong support and involvement at the community level. Useful developments in this area could include:¹⁰⁰

- a dedicated prosecutions unit within the Fisheries Department,
- memoranda of understandings between the Fisheries Department, Police, and the Office of the Director of Public Prosecutions regarding the process for prosecuting fisheries offences, and
- increased capacity and resources in all relevant agencies.

(f) **Consistent and predictable implementation of fisheries legislation**

In addition to the enforcement of fisheries offences, there is scope to improve the administration of fisheries legislation. Effective administration of fisheries legislation will assist in ensuring the legislation operates fairly and will engender confidence in, and compliance with, the regulatory regime.

Two examples of anomalous implementation of the fisheries legislation can be identified. Firstly, the emergence of “goodwill payments” for rights to fish in *iQoliqoli* areas. This practice has been stopped and may be replaced by a new permit fee system.

The second issue has yet to be addressed. Under the Act, the permit and licensing regimes are two separate regimes (although commercial fishing in *iQoliqoli* areas will require both a permit and a licence). However, it appears that in administering the Act, the Ministry of

¹⁰⁰ See also Annabelle Minter, *Compliance and Enforcement for Coastal Fisheries Management in Fiji* (IUCN, 2008), which contains a range of useful recommendations for strengthening compliance and enforcement for coastal fisheries.

Fisheries has merged the process for issuing a permit into the licensing process, with the result that permits are only issued as a precondition to the issue of a licence.¹⁰¹

It appears the merger of the permit and licensing system in this way has had two consequences which were not intended under the Act:

- Firstly, non-CFROs who are not fishing for commercial purposes but are using methods other than a hook and line, spear or portable fish trap, are not being required to obtain permits.¹⁰²
- Secondly, as a pre-condition to securing a fishing licence commercial fishers applying for a licence must apply for a permit although they may have no intention of fishing in *iQoliqoli* areas.¹⁰³

Further, there is an issue relating to CFRO consent, since although the permit system requires the Commissioner to consult with CFROs and Fisheries Officers prior to granting permits, ultimately the decision is at the discretion of the Commissioner.

Given this situation, it is appropriate for the administration of the *Fisheries Act* to be reviewed. One option for addressing this issue may be to formally merge the permit system into the licence system, so there can be effectively two classes of licences: one with an authority to fish in customary areas and another without such an authority. However, introduction of any such system would need careful consideration and wide consultation, in particular, to ensure the rights of CFROs are not prejudiced.

4.3.2 Funding

The effectiveness of any regulatory regime is fundamentally connected with the resources available to maintain that regime. Given scarce Government funding, there is constant pressure to identify innovative ways to finance Government operations. Two possible options for raising revenue in the fisheries context in Fiji are discussed below. The first relates to adopting a funding model similar to that used by the National Fisheries Authority in Papua New Guinea (**NFA**). The second concerns the responsible collection and application of funds which may be collected for rights to fish in *iQoliqoli* areas.

(a) PNG National Fisheries Authority model

One of the most well-resourced fisheries agencies in the Pacific is the PNG NFA. The reason for this is because the NFA is in the unique position of being able to fund its own operations through monies it receives from fees, levies and other related sources. Most of the NFA's revenue comes from tuna fishing access fees paid by partner countries, including Japan, Korea, China and Taiwan.¹⁰⁴

¹⁰¹ Minter, above n 100, 26-28.

¹⁰² Ibid.

¹⁰³ This applies to commercial fishermen operating within what is considered by the Ministry of Fisheries to be inshore areas rather than offshore commercial fishermen who are given an offshore fishing licence.

¹⁰⁴ National Fisheries Authority of Papua New Guinea, 'NFA Pays K50 Million Dividend Payment to the National Government' (media release, undated)

The funding arrangements for the NFA are established under the PNG *Fisheries Management Act 1998* (PNG). The relevant section essentially states that the funds of the NFA are those lawfully appropriated for the NFA and monies that it lawfully collects, which includes monies received for access fees.¹⁰⁵ Further, the act states that the monies of the NFA must only be expended to carry out the functions of the Authority or purposes consistent with those functions.¹⁰⁶

The funding model for the NFA has proven to be very successful. Whilst the NFA model is based on an offshore fishery, it remains open for the Government to adopt aspects of this model for coastal fisheries in Fiji.

(b) Payments for permits and licences.

As discussed earlier, the practice of making “goodwill payments” has been prohibited. However, if a formal payment system for rights to fish in *iQoliqoli* areas is introduced, this may provide an additional revenue stream for the Ministry of Fisheries. Further, it may be possible to legislate for a system by which such payments must be applied for certain prescribed purposes. For example, supporting community based initiatives, such as funding the various activities related to fish wardens. One possible option may be to increase the licence fee so that it explicitly incorporates a payment to CFROs. The legislation could then require that this portion be distributed to support administration of *iQoliqoli* areas and to support community based resource management.

5. NEXT STEPS

There is growing momentum for improving inshore fisheries law and policy in Fiji. Some possible next steps for progressing on these issues may be:

- Finalising and adopting Fiji’s National Fisheries Policy (currently under development).
- Continuing the implementation of the Integrated Coastal Management Framework, with the development of additional integrated coastal management sites towards the establishment of a National Coastal Management Plan.
- Finalising Fiji’s Draft National Implementation Plan under the Regional Roadmap which may include:
 - Reviewing the progress of actions undertaken to date.
 - Developing a program for the preparation of an integrated oceans management policy for Fiji.
 - Developing a program for the drafting, consultation and implementation of new inshore fisheries legislation.
 - Developing a program for the drafting, consultation and implementation of new MPA legislation.

<http://www.fisheries.gov.pg/FisheriesAuthority/NFAPaysK50MDividendPaymenttotheGovernment/tabid/335/Default.aspx>. Payment was made in October 2015.

¹⁰⁵ *Fisheries Management Act* s 22.

¹⁰⁶ *Ibid* s 22(2).

APPENDIX A. INTERNATIONAL AND REGIONAL OBLIGATIONS AND GUIDELINES: IDENTIFYING KEY CONCEPTS

This appendix identifies 17 major concepts of inshore fisheries management. These have been identified by reviewing a range of binding international and regional agreements (such as the Convention on Biological Diversity (**CBD**), as well as non-binding agreements and associated guidelines (such as the FAO *Code of Conduct for Responsible Fisheries* (**Code of Conduct**), and related FAO guidelines and documents).

1. There is an obligation to protect and preserve the marine environment

Most treaties applicable to fisheries build on the *United Nations Convention on the Law of the Sea* (**UNCLOS**).¹ Although little of UNCLOS relates directly to the management of coastal fisheries, Articles 192 ('General obligation') and 193 ('Sovereign right of States to exploit their natural resources') set the overarching rights and duties of States in relation to ocean resources. Article 192 gives States the right to exploit their natural resources, and Article 193 explicitly subjects that right to the obligation to '*protect and preserve the marine environment*'.² Article 61 expands on the general obligation, describing obligations of coastal States to conserve living resources in their Exclusive Economic Zone.³

2. The 'ecosystem approach'

The 'ecosystem approach' has become central to coastal fisheries management.⁴ It was endorsed and described by the Conference of Parties (**COP**) to the CBD in 2000:⁵

¹ *United Nations Convention on the Law of the Sea* (**UNCLOS**) 1833 UNTS 3 (entered into force 16 November 1994) <http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf> (accessed 25 May 2016); William Edeson, et al, *Framework Study for Model Fisheries Legislation in South East Asia – Report on Australian Legislation* (Australian National Centre for Oceans Resources & Security, 2010) 66, <[http://www.apip-apec.com/files/Australia-Study_for_Model_Fisheries_Legislation_\(Final\).pdf](http://www.apip-apec.com/files/Australia-Study_for_Model_Fisheries_Legislation_(Final).pdf)> (accessed 26 September 2016). Among other things, UNCLOS sets out how archipelagic states such as Fiji are to define the various marine territorial boundaries (e.g. archipelagic baselines, territorial sea, exclusive economic zone): see UNCLOS arts 47-48, 50.

² UNCLOS, arts 192-193. This is expressed in Article 6.1 of the *FAO Code of Conduct for Responsible Fisheries* (**Code of Conduct**) FAO Doc 95/20/Rev/1, Introduction <<http://www.fao.org/docrep/005/v9878e/v9878e00.htm>> (accessed 25 May 2016): '*The right to fish carries with it the obligation to do so in a responsible manner so as to ensure effective conservation and management of the living aquatic resources*'.

³ UNCLOS art 61, includes references to 'taking into account the best scientific evidence available' and 'maximum sustainable yield'.

⁴ See, e.g., *Elaborated Programme of Work on Marine and Coastal Biological Diversity* (**Elaborated Programme of Work**), in *Marine and coastal biological diversity* (**COP Decision VII/5**), Conference of the Parties to the Convention on Biological Diversity, *Decision VII/5*, 7th Meeting, Agenda item 18.2, UNEP/CBD/COP/DEC/VII/5 (13 April 2004) Annex I <<https://www.cbd.int/doc/decisions/cop-07/cop-07-dec-05-en.pdf>> (accessed 25 May 2015); Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets', (**Aichi Biodiversity Targets**), Conference of the Parties to the Convention on

*The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Thus, the application of the ecosystem approach will help to reach a balance of the three objectives of the Convention: conservation; sustainable use; and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.*⁶

The same decision describes 12 'principles' of the ecosystem approach. These are described briefly below:

- (a) The objectives of natural resource management are a matter of societal choice. These choices should reflect the different perspectives of the various stakeholders and should be expressed as clearly as possible. Further,

[e]cosystems should be managed for their intrinsic values and for the tangible or intangible benefits for humans, in a fair and equitable way.

- (b) Management should be decentralized and brought as close as possible to the ecosystem. This will maximise 'responsibility, ownership, accountability, participation, and use of local knowledge'.⁷
- (c) Management should consider the actual or potential effects of actions on other ecosystems.
- (d) Management should occur 'in an economic context'. This includes ensuring that economic incentives are aligned to reflect the 'polluter pays' principle. Those who control a resource should be able to benefit from it, 'and those who generate environmental costs [should] pay'.
- (e) Management should prioritise conserving 'ecosystem structure and functioning, in order to maintain ecosystem services'.⁸

Biological Diversity, *Dec X/2*, UNEP/CBD/DEC/X/2 (29 October 2010) <<https://www.cbd.int/doc/decisions/cop-10/full/cop-10-dec-en.pdf>> (accessed 25 May 2016); *Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem (Reykjavik Declaration)* FAO Doc C 2001/INF/25 (2001) <http://www.fao.org/docrep/meeting/004/Y2211e.htm> (accessed 18 May 2016); *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines)* (FAO, 2015), available at <<http://www.fao.org/3/6a80106c-d579-4fdc-876c-04ff29c3d106/i4356e.pdf>> (accessed 25 May 2016), [6.1].

⁵ *Ecosystem approach (CBD Decision V/6: Ecosystem Approach)*, Conference of the Parties to the Convention on Biological Diversity, *Decision V/6*, 5th Meeting, Nairobi, Kenya, UNEP/CBD/COP/5/23 (15 - 26 May 2000) [1] <<https://www.cbd.int/decision/cop/?id=7148>> (accessed 25 May 2016).

⁶ CBD Decision V/6: Ecosystem Approach, above n 5, Annex, pt A, [1], [3]. This relies on the definition of 'ecosystem' in the CBD: '*Ecosystem*' means a dynamic complex of plant, animal and micro-organism communities and their non-living environment interaction as a functional unit.'. Applying this definition, an ecosystem is not of a defined size or range of sizes and '*the scale of analysis and action should be determined by the problem being addressed*'.

⁷ See also, e.g., *Recommendation to enhance the community procedures to improve the management of coastal fishing (IUCN WCC Recommendation 170 (2012))*, IUCN WCC 2012 Rec 170, 5th sess (6-15 September 2012), [5] <https://portals.iucn.org/library/sites/library/files/resrecfiles/WCC_2012_REC_170_EN.pdf> (accessed 23 May 2016).

⁸ 'Ecosystem services' are '*the benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as flood and disease control; cultural*

- (f) 'Ecosystems should be managed within the limits of their functioning', and 'attention should be given to the environmental conditions that limit natural productivity, ecosystem structure, functioning and diversity'.
- (g) Management should be designed to suit the relevant ecosystem at the appropriate '*spatial and temporal scale*'. Management boundaries should be defined by 'users, managers, scientists and indigenous and local peoples'.
- (h) Objectives for ecosystem management should be set for the long term, so that management can take into account the 'varying temporal scales and lag-effects' of ecosystem processes which conflict 'with the tendency of humans to favour short-term gains and immediate benefits over future ones'.
- (i) 'Management must recognise that change is inevitable' and should 'utilize adaptive management'.⁹
- (j) The ecosystem approach should try to balance conservation and use of biological diversity.
- (k) All forms of relevant information should be considered, 'including scientific and indigenous and local knowledge, innovations and practices'.
- (l) All relevant sectors of society should be involved, because '[m]ost problems of biological diversity management are complex, with many interactions, side-effects and implications'.¹⁰

A number of the other themes and issues described in this section can be considered to fall within the broad scope of the ecosystem approach, namely:¹¹

- community based resource management (**CBRM**);
- integrated marine and coastal areas management (**IMCAM**);
- the precautionary principle;
- adaptive management; and
- protected areas.

3. Community based resource management

Community based resource management (**CBRM**) is resource management that resides in the local community (rather than, for example, in a distant government agency).

CBRM features significantly in regional agreements and guidelines.¹² Regionally, the Noumea Strategy¹³ identifies a number of the 'immediate outcomes' that relate to CBRM, including:

services such as spiritual, recreational, and cultural benefits; and supporting services, such as nutrient cycling, that maintain the conditions for life on earth.: Joseph Alcamo et al (eds) *Millenium Ecosystem Assessment – Ecosystems and Human Well-being: A Framework for Assessment* (Island Press, 2003) 49.

⁹ See also, e.g., CBD Decision V/6: Ecosystem Approach, above n 5, Annex, Part A, [4] (emphasis added).

¹⁰ See also, e.g., IUCN WCC Recommendation 170 (2012), above n 7.

¹¹ See, e.g., Secretariat on the Convention on Biological Diversity, *Integrated Marine and Coastal Area Management (IMCAM) Approaches for Implementing the Convention on Biological Diversity* (CBD Technical Series No 14, 2004).

- (a) achieving '[i]nformed and empowered communities';
- (b) implementing legal and regulatory frameworks that recognise community empowerment; and
- (c) implementing community management programs.¹⁴

Under the Noumea Strategy, these 'immediate outcomes' are to be measured by indicators such as:

- (a) the number of laws that have been updated to support community-based management;
- (b) the number of community-based management or action plans that have been implemented; and
- (c) the number of community management plans have been legally recognised.¹⁵

CBRM is also encouraged in the FAO *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines)*.¹⁶ For example, the SSF Guidelines state that:

*... States should involve small-scale fishing communities ... in the design, planning and, as appropriate, implementation of management measures, including protected areas, affecting their livelihood options. Participatory management systems, such as co-management, should be promoted in accordance with the law.*¹⁷

Importantly however, the Noumea Strategy also notes that community based management will not always be appropriate:

¹² See, e.g., *Melanesian Spearhead Group roadmap for inshore fisheries management and sustainable development: 2015-2024 (MSG Roadmap)* (SPC, 2015) 3. CBRM is described in the *MSG Roadmap* as being 'widely agreed to be a fundamental approach'; however, the Roadmap also notes that 'its implementation and support still requires refining if it is to be fully effective'. CBRM could also involve establishing community protocols, see UNEP and EDO NSW, *Community Protocols for Environmental Sustainability: A Guide for Policymakers* (UNEP, Nairobi and EDO NSW, Sydney, 2013).

¹³ In the Noumea Strategy, CBRM also explicitly incorporates the ecosystem approach, referring to the 'community-based ecosystem approach to fisheries management' (**CEAFM**): *A New Song for Coastal Fisheries - Pathways to Change: The Noumea Strategy (The Noumea Strategy)* (Secretariat of the Pacific Community, 2015)

<http://www.spc.int/DigitalLibrary/Doc/FAME/Reports/Anon_2015_New_song_for_coastal_fisheries.pdf> (accessed 25 May 2016).

¹⁴ The Noumea Strategy, above n 13, 12.

¹⁵ Ibid.

¹⁶ *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines)* (FAO, 2015) <<http://www.fao.org/3/6a80106c-d579-4fdc-876c-04ff29c3d106/i4356e.pdf>> (accessed 25 May 2016).

¹⁷ Ibid n 16, 5.15. Similarly, at 5.5, the SSF Guidelines provides that: 'States should recognise the role of small-scale fishing communities and indigenous people to restore, conserve, protect and co-manage local aquatic and coastal ecosystems'.

*For example, CEAFM is difficult to implement in urban areas or places with contested marine tenure. Where [CBRM] is not appropriate, government will have a more critical role.*¹⁸

CBRM overlaps with integrated marine and coastal areas management (**IMCAM**), described below.

4. Integrated marine and coastal areas management

Integrated marine and coastal areas management (**IMCAM**) responds to the limitations of 'sectoral approaches' to marine resource management. It considers both marine and coastal areas together and seeks to take a 'systems' approach, regulating multiple, interacting uses.¹⁹

IMCAM:²⁰

[is] a participatory process for decision-making to prevent, control, or mitigate adverse impacts from human activities in the marine and coastal environment, and to contribute to the restoration of degraded coastal areas.

[it] involves all stakeholders, including: decision-makers in the public and private sectors; resource owners, managers and users; non-governmental organizations; and the general public.

IMCAM overlaps with and incorporates other principles identified in this paper, in particular the ecosystem approach, community based resource management (**CBRM**), and stakeholder participation.²¹

In 1995, the COP to the CBD identified IMCAM 'as the most suitable framework for addressing human impacts on marine and coastal biological diversity and for promoting conservation and sustainable use of this biodiversity'.²² In 2004, it was adopted as one of the elements of the elaborated programme of work on marine and coastal biological

¹⁸ *The Noumea Strategy*, above n 13, 7.

¹⁹ *The Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPAM)* is relevant to IMCAM, in that it addresses threats to marine environments from land-based activities such as forestry and mining run-off, and erosion: GPAM, UNEP(OCA)/LBA/IG.2/7 (1995) <<http://unep.org/gpa/documents/meetings/Washington/GPAFullTextEn.pdf>> (accessed 25 May 2016).

See also, e.g., The *Barbados Declaration* which refers, in Part IV, to developing and implementing integrated coastal zone management plans: *Report of the Global Conference on the Sustainable Development of Small Island Developing States (Barbados Declaration)*, Global Conference on the Sustainable Development of Small Island Developing States, Bridgetown, Barbados, UNGA A/Conf 167/9 (25 April-6 May 1994) <http://www.un.org/esa/dsd/dsd_aofw_sids/sids_pdfs/BPOA.pdf> (accessed 25 May 2015).

²⁰ See, e.g., Secretariat on the Convention on Biological Diversity, above n 11, iii.

²¹ See: *Integrated Marine and Coastal Areas Management (IMCAM)*, Convention on Biological Diversity <<https://www.cbd.int/marine/imcam.shtml>> (accessed 25 May 2016).

²² *Conservation and Sustainable Use of Marine and Coastal Biological Diversity*, Conference of the Parties to the Convention on Biological Diversity, *Decision II/10*. UNEP/CBD/COP/2/19, 16 <<https://www.cbd.int/doc/decisions/cop-02/full/cop-02-dec-en.pdf>> (accessed 25 May 2016).

diversity.²³ Regionally, the Noumea Strategy has noted that fisheries management needs to address the impacts of non-marine activities on coastal ecosystems, such as mining and logging.²⁴

5. The 'precautionary approach'

In 2000, the international community identified the precautionary approach as having a central role in coastal fishery management.²⁵ As described in the Code of Conduct, the precautionary approach provides that:

*[t]he absence of adequate scientific information should not be used as a reason for postponing or failing to take conservation and management measures.*²⁶

In applying the precautionary approach, fisheries management frameworks should:²⁷

- (a) take into account uncertainties relating to the size and productivity of fish stocks, environmental conditions and socio-economic conditions;
- (b) identify stock specific target points and action to be taken if they are exceeded;
- (c) identify stock-specific limit points and actions to be taken:
 - (i) if a limit is approached, to avoid exceeding it; and
 - (ii) if a limit is exceeded; and
- (d) adopt conservation and management measures to be applied in emergency situations, if a 'natural phenomenon has a significant impact on the status of living aquatic resources' and 'where fishing activity presents a serious threat to the sustainability of such resource'. These measures should be temporary and 'be based on the best scientific evidence available'.

The precautionary approach is a directing principle but can also operate as a design principle, in that it can be incorporated into tools and mechanisms (e.g. by including stock-specific catch limits).

²³ See, e.g., *Elaborated Programme of Work*, above n 4, programme element 1. See also *Marine and Coastal Area Conservation (IUCN Recommendation 19.46 (1994))*, IUCN GA 1994 Rec 19.46, 19th sess (17-26 January 1994) [1(a)]

https://portals.iucn.org/library/sites/library/files/resrecfiles/GA_19_REC_046_Marine_and_Coastal_Area_Conservation.pdf> (accessed 25 May 2016).

²⁴ *The Noumea Strategy*, above n 13, 7.

²⁵ COP Decision VII/5 acknowledges the importance of both the precautionary approach and the ecosystem approach: Conference of the Parties to the Convention on Biological Diversity, *Decision VII/5*, above n 4, Annex 1, [4]. Notably, in the Reykjavik Declaration, the parties acknowledged that it can be 'necessary to take action to address particularly urgent problems on the basis of the precautionary approach, it is important to advance the scientific basis for incorporating ecosystem considerations': *Reykjavik Declaration*, above n 4, [5].

²⁶ Code of Conduct, above n 2, [6.5], [7.5.1]. Along the same lines, at [10.2.3] the Code of Conduct states: 'In setting policies for the management of coastal areas, States should take due account of the risks and uncertainties involved.'

²⁷ Code of Conduct, above n 2, [7.5].

6. Adaptive management

Adaptive management is recognised as one of the 12 'principles' of the ecosystem approach, as identified in the Annex to Decision V/6 of the Conference of Parties to the CBD.

Adaptive fisheries management requires that fisheries management remain under continuous review and incorporate processes that require and/or enable management measures to be reviewed or replaced, as necessary. A simplified way of describing adaptive management is as an iterative approach to environmental management, involving 'learning by doing' and enabling the incorporation of new knowledge and experience into management systems. It enables management systems to respond to unavoidable uncertainty and unpredictability of natural ecosystems, arising from both immediate unexpected changes (e.g. extreme weather events) and longer-term environmental variability (e.g. climate change and overfishing). The FAO describes adaptive management not as a single 'tool', 'but rather an approach to the entire [ecosystem approach to fisheries] management system'.²⁸

A key component of adaptive management is the use of clear and measurable goals and objectives. These provide something against which outcomes can be measured and in turn require monitoring, data collection and analysis.²⁹ Together, the use of measurable goals and ongoing monitoring and analysis enable management to be 'adapted' to improve outcomes and respond to changing circumstances

7. Best science available

Management measures and decisions should be grounded in the best available scientific information. This concept is drawn from many of the concepts and materials referred to above, including:

- (a) Article 61 of UNCLOS;
- (b) the ecosystem approach;
- (c) the precautionary approach;
- (d) the use of marine and coastal protected areas; and
- (e) the importance of research, data collection and analysis.

²⁸ FAO, 'Fisheries management, 2. The ecosystem approach to fisheries. 2.2 Human dimensions of the ecosystem approach to fisheries', *FAO Technical Guidelines for Responsible Fisheries*, No. 4, Suppl. 2, Add. 2. Rome, 2009, 50-51.

²⁹ Ibid 52-3. Other references to adaptive management and the importance of developing 'adaptive capacity' more generally include: Conference of the Parties to the Convention on Biological Diversity, *Decision VII/5*, above n 23, Annex II, [3]; SSF Guidelines, above n 16, 9.6, 12.3; *Transforming our world: the 2030 Agenda for Sustainable Development*, GA Res 70/1, UN Doc A/RES/70/1 (21 October 2015) [54]-[59] (**Sustainable Development Goals**), Goals 17.18-17.19 <http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E> (accessed 25 May 2016)]; *MSG Roadmap*, above n 12, 2; Nigel Dudley (ed), 'Guidelines for Applying Protected Area Management Categories' (IUCN (2008), 12, 78.

8. Research, data collection and analysis

Reliable and directed research, data collection and analysis are fundamental to grounding management decisions in scientific evidence.³⁰ This is necessary to operationalise many principles and can be implemented through tools and mechanisms, as well as general policy.

The Code of Conduct makes a number of recommendations that relate specifically to how research, data and analysis should be conducted. The following are particularly relevant:

- (a) Research should be multidisciplinary and should consider a range of aspects of fisheries, such as biological, social, cultural and economic factors.³¹
- (b) Investigation and documentation of traditional fisheries knowledge and practices should be undertaken in order to assess their application to sustainable coastal marine resource management.³²
- (c) Research should enable meaningful comparison of alternative management options.³³
- (d) Data on catch, fishing effort, and stocks should be collected in a timely and regular fashion, to enable sound analysis and response.³⁴
- (e) Data and research results should be used as the basis for setting management objectives.
- (f) Research should allow continuous review of conservation and management measures (to enable adaptive management).³⁵
- (g) Research results should be shared and made available and accessible.³⁶

³⁰ See, e.g., Code of Conduct, above n 2, [6.4], [7.4.2], [7.4.3], [7.4.4], [12]. See also *Agenda 21: Programme of Action for Sustainable Development (Agenda 21)*, UN Doc A/Conf 151/26 (14 June 1992) [17.8], available at <<http://www.unep.org/Documents.Multilingual/Default.asp?documentid=52>> (accessed 25 May 2016) ; *World Summit on Sustainable Development: Plan of Implementation of the World Summit on Sustainable Development (Johannesburg Plan of Implementation)*, UN Doc A/Conf.199/20 (4 September 2002) [4], [138] <<http://www.un-documents.net/jburgpln.htm>> (accessed 25 May 2016), [36(a)]; *SSF Guidelines*, above n 16, [11.1]; *The Noumea Strategy*, above n 13, 5, 10. Notably, research and analysis is important in order to both: better understand traditional knowledge and practices; and develop sound, up-to-date scientific knowledge.

³¹ Code of Conduct, above n 2, [7.4.2], [7.4.5], [10.2.4], [10.2.5].

³² See specifically Code of Conduct, above n 2, [12.12]. See also the IPOA-IUU. For examples, cl 77 specifically refers to research: 'States should encourage scientific research on methods of identifying species from samples of processed products. FAO should facilitate the establishment of a network of databases of genetic and other markers used to identify fish species from processed product, including the ability to identify the stock of origin where possible'. *SSF Guidelines*, above n 16, [11.6].

³³ Code of Conduct, above n 2, [7.4.3].

³⁴ *Ibid* [7.4.4].

³⁵ See, e.g., *ibid* [7.6.8].

³⁶ See, e.g. Aichi Biodiversity Targets, above n 4, Target 19: 'By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.'

9. Effective legal and administrative frameworks

Sustainable fisheries management requires an 'effective legal and administrative framework'.³⁷ This requirement comprises at least two elements: good governance and clear and consistent laws.

Good governance

A range of international agreements identify good governance as a necessary condition for sustainable development.³⁸ A discussion paper prepared by the United Nations Economic and Social Commission for Asia and the Pacific summarises the characteristics of 'good governance' as follows:

It is participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive and follow the rule of law. It assures that corruption is minimised, the views of minorities are taken into account and that the voices of the most vulnerable in society are heard in decision-making. It is also responsive to the present and future needs of society.

Environmental democracy also falls within the scope of good governance. The Environmental Democracy Index project identifies 'three mutually reinforcing rights' that sit at the core of environmental democracy:³⁹

1. *the right to freely access information on environmental quality and problems*
2. *the right to participate meaningfully in decision-making*
3. *the right to seek enforcement of environmental laws or compensation for harm.*

In relation to stakeholder participation specifically, this concept arises as a key element of the ecosystem approach, CBRM and IMCAM. It is also specifically identified as an important principle in a range of international and regional documents.⁴⁰ Stakeholder participation:

- (a) supports equitable benefit-sharing;
- (b) promotes inclusive and transparent decision-making;
- (c) increases the likelihood that management decisions will be successful;

³⁷ Code of Conduct, above n 2, [7.7.1].

³⁸ See, e.g., *Transforming our world: the 2030 Agenda for Sustainable Development*, GA Res 70/1, UN Doc A/RES/70/1 (21 October 2015), [35]; *The Future We Want*, GA 2012 Res 288, 66th sess, Agenda item 19, UN Doc A/RES/66/288 (27 July 2012), Annex <http://www.un.org/ga/search/view_doc.asp?symbol=a/res/66/288&lang=e> (accessed 25 May 2016), Annex, [10]; *Mauritius Declaration*, UN Doc A/Conf. 207/11 (10-14 January 2005) Annex I [12] <<http://unohrrls.org/UserFiles/File/SIDS%20documents/mauritius.pdf>> (accessed 25 May 2015); *Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States*, UN Doc A/CONF.207/11, ch 1, Annex II, [72], [91] (2005) <<http://unohrrls.org/UserFiles/File/SIDS%20documents/mauritius.pdf>> (accessed 25 May 2015); Johannesburg Plan of Implementation, above n 30, [138]

³⁹ Environmental Democracy Index, *Background and Methodology* <http://www.environmentaldemocracyindex.org/about/background_and_methodology> (accessed 25 May 2016).

⁴⁰ See also, e.g., *MSG Roadmap*, above n 12, 8: The *MSG Roadmap* includes the objective of establishing 'appropriate mechanisms for effective collaboration with all relevant stakeholders'; IUCN Recommendation 19.46 (1994), above n 22, [1(b)], [1(c)].

- (d) enables recognition of the interests of all stakeholders, including traditional rights and customs; and
- (e) allows decentralisation of decision making and management processes.⁴¹

Stakeholder participation is a design principle that should be operationalised through context-appropriate tools and mechanisms in legislation. Legislation should provide for stakeholder participation at various stages of fisheries policy development and implementation will include:⁴²

- (f) fishers, in particular small-scale fishing communities;
- (g) local communities;
- (h) environmental and other interested organisations;
- (i) the general public; and
- (j) Indigenous communities.⁴³

The following are additional examples of ways that inshore fisheries law can promote and reflect the principle of good governance:

- (a) Frameworks should establish clear procedures and mechanisms for settling conflicts that arise between fisheries resource users and other coastal area users.⁴⁴
- (b) Fisheries agencies and decision making processes should be transparent and decision makers accountable.⁴⁵ Processes should also promote timely decision-making, including for circumstances that require urgent action.⁴⁶
- (c) Legal frameworks should ensure transparency. This can be achieved, for example, through:

*... free and timely access to information in accordance with relevant protocols governing data confidentiality to increase awareness and accountability for the sustainability of natural resources.*⁴⁷

and:

⁴¹ COP Decision VII/5, above n 4, [4], [10].

⁴² See, e.g., Code of Conduct, above n 2, [6.13], [6.16], [7.1.2], [7.1.9], [7.2.2(c)], [10.1.2], [10.2.1]; COP Decision VII/5, above n 4, [27], Appendix 1 [7]; The Noumea Strategy, above n 13, 6, 10, 11, 14. SSF Guidelines, above n 16, 5.17.

⁴³ See also, e.g., *Rio Declaration on Environment and Development (Rio Declaration)* A/CONF 151/26 (vol 1) (13 June 1992), Principle 22: 'Indigenous people and their communities and other local communities have a vital role in management and development because of their knowledge and traditions and practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.'

⁴⁴ Code of Conduct, above n 2, [10.1.5].

⁴⁵ *The Noumea Strategy*, above n 13, 10.

⁴⁶ Code of Conduct, above n 2, [6.13]: provides that States should, to the extent permitted by national laws and regulations, ensure that decision making processes are transparent and achieve timely solutions to urgent matters.

⁴⁷ *Promoting transparency to achieve sustainable fisheries*, IUCN WCC 2008 Res 4.030, 4th Sess. (5-14 October 2008), [1(b)]

<https://portals.iucn.org/library/sites/library/files/resrecfiles/WCC_2008_RES_30_EN.pdf> (accessed 25 May 2016).

[p]ublic dissemination of information on state of stocks, licensing and effectiveness of management⁴⁸

As will be clear, some of the fishery-specific concepts identified in this appendix adopt principles of good governance (e.g. by incorporating a reference to stakeholder participation).

Clear and consistent laws

Ensuring that legislation is clear and consistent and involves checking for:

- internal consistency;
- clarity of provisions;
- consistency with other laws; and
- avoidance of ‘loopholes’.

This can also be supported by applying a best practice approach legislative drafting, with a particular focus on plain English drafting.⁴⁹

10. Protect the rights of small-scale fishers and customary fishing rights owners (CFROs)

The traditional knowledge and practices of CFROs and local communities should be recognised, respected, integrated and protected. This includes particular recognition of the important contributions they make to small-scale fisheries.⁵⁰

The Code of Conduct, under its general principles, provides at paragraph 6.18:

Recognizing the important contributions of artisanal and small-scale fisheries to employment, income and food security, States should appropriately protect the rights of fishers and fish workers, particularly those engaged in subsistence, small-scale and artisanal fisheries, to a secure and just livelihood, as well as preferential access, where appropriate, to traditional fishing grounds and resources in the waters under their national jurisdiction.

Further, the SSF Guidelines specifically identifies the importance of small-scale fishing communities enjoying ‘secure tenure rights to the resources that form the basis for their social and cultural well-being, their livelihoods and their sustainable development’.⁵¹ Further,

⁴⁸ *MSG Roadmap*, above n 12, 9. See also, e.g., *Code of Conduct*, above n 2, [7.19]

⁴⁹ Some useful references which are available on the Internet include: *Drafting Manual of the Australian Government Office of Parliamentary Counsel*, *Drafting Manual of the New Zealand Parliamentary Counsel Office*, *Drafting Directions of the Australian Government Office of Parliamentary Counsel*, and the *Plain English Manual of the Australian Government Office of Parliamentary Counsel*.

⁵⁰ See, e.g., *Aichi Biodiversity Targets*, above n 4, Target 18; *Code of Conduct*, above n 2, [6.18], referred to in the *Elaborated Programme of Work*, above n 4; *SSF Guidelines*, above n 16, 11.6; IUCN WCC Recommendation 170 (2012), above n 7, [3].

⁵¹ *SSF Guidelines*, above n 15, cl 5.1; see also cl 5.3. The SSF Guidelines uses the ‘tenure right’ in accordance with the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security* (2012) FAO <<http://www.fao.org/docrep/016/i2801e/i2801e.pdf>> (accessed 25 May 2016). *The Noumea Strategy*

*When necessary, in order to protect various forms of legitimate tenure rights, legislation should take appropriate measures to identify, record and respect legitimate tenure right holders and their rights.*⁵²

To this end, the SSF Guidelines state the following:

*Where appropriate, specific measures, inter alia, the creation and enforcement of exclusive zones for small-scale fisheries, should be considered.*⁵³

In relation to tenure rights, the SSF Guidelines specifically provide that:

*States should provide small-scale fishing communities and individuals ... access through impartial and competent judicial and administrative bodies to timely, affordable and effective means of resolving disputes over tenure rights in accordance with national legislation, including alternative means of resolving such disputes, and should provide effective remedies, which may include an entitlement to appeal ... Such remedies should be promptly enforced in accordance with national legislation and may include restitution, indemnity, just compensation and reparation.*⁵⁴

11. Target-issues

Certain issues have been identified at the international level as particularly important to achieving sustainable fisheries, namely:

- (a) eliminating destructive fishing practices;
- (b) eliminating illegal, unreported and unregulated (**IUU**) fishing; and
- (c) preventing of overfishing and eliminating excess fishing capacity.⁵⁵

These can be incorporated into legislative objectives and operationalised through tools & mechanisms.

Destructive fishing practices

States should explicitly prohibit 'dynamiting, poisoning and other comparable destruction fishing practices'.⁵⁶ Laws and regulations should specifically 'take into account the range of selective fishing gear, methods and strategies available'.⁵⁷

also identifies the need to empower coastal communities 'with clearly defined user rights': *The Noumea Strategy*, above n 12, 10. See also Code of Conduct, above n 2 [6.18].

⁵² *SSF Guidelines*, above n 15, 5.3.

⁵³ *Ibid* 5.7.

⁵⁴ *Ibid* 5.11.

⁵⁵ See, e.g., *International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU)*, (FAO, 2001)

<<http://www.fao.org/docrep/003/y1224e/y1224e00.htm>> (accessed 25 May 2016); *International Plan of Action for the Management of Fishing Capacity (IPOA-Capacity)* (1999), FAO

<<http://www.fao.org/docrep/006/X3170E/X3170E00.HTM>> (accessed 25 May 2016); Code of Conduct, above n 2 [8.4.2]; *The Future We Want*, above n 38, [168], [176]; *MSG Roadmap*, above n 12, 3.

⁵⁶ Code of Conduct, above n 2 [8.4.2]. See also commitments to eliminate destructive fishing practices in: *Johannesburg Plan of Implementation*, above n 38, [32(c)]; Conference of the Parties to the

Illegal, unreported and unregulated (IUU) fishing

The FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU)⁵⁸ is largely focused on offshore fishing. However, IUU fishing is relevant to coastal fisheries⁵⁹ and key areas for attention include:

- (a) implementing national legislation to address all aspects of IUU fishing;⁶⁰
- (b) ensuring that national legislation addresses (among other things) evidentiary standards and admissibility;⁶¹
- (c) implementing penalties that are sufficiently severe 'to effectively prevent, deter and eliminate IUU fishing and to deprive offenders of the benefits accruing from such fishing'. The IPOA-IUU notes that '[t]his may include the adoption of a civil sanction regime based on an administrative penalty scheme.'⁶²
- (d) implementing a comprehensive and effective MCS framework (see section 14, below);⁶³ and
- (e) implementing and reviewing a national plan of action on IUU fishing.⁶⁴

Over-fishing and excess fishing capacity

Where relevant, addressing excess fishing capacity and reducing over-fishing are necessary for sustainable fishery management.⁶⁵ The FAO International Plan of Action for the Management of Fishing Capacity (IPOA-Capacity) elaborates on this issue.⁶⁶ Although much of it is directed towards offshore fisheries, the following key areas for attention are relevant to coastal fisheries:

- (a) conducting and supporting research;⁶⁷
- (b) monitoring and assessing fishing capacity and resource imbalances;⁶⁸
- (c) development of national plans of action;⁶⁹ and

Convention on Biological Diversity, *Decision VII/5*, above n 23, [19], [61]; *Elaborated Programme of Work*, above n 4, [2.1(h)], [2.4(b)].

⁵⁷ Code of Conduct, above n 2 [8.5.2].

⁵⁸ IPOA-IUU, above n 55,

⁵⁹ See, e.g., *SSF Guidelines*, above n 16, 5.16: 'States should ensure effective monitoring and enforcement mechanisms to deter, prevent and eliminate all forms of illegal and/or destructive fishing practices having a negative effect on marine and inland ecosystems.'; *The Noumea Strategy*, above n 13, Outcome 5, 13.

⁶⁰ IPOA-IUU, above n 55, cl 16.

⁶¹ *Ibid* cl 17.

⁶² *Ibid* cl 21.

⁶³ *Ibid* cl 24. This includes, among other things, maintaining records of authorised vessels and their owners, providing training and education to all persons involved in MCS, promoting knowledge and understanding of MCS within the judicial system, and setting up systems for MCS data collection and sharing.

⁶⁴ IPOA-IUU, above n 55, cl 25-26. See also *Johannesburg Plan of Implementation*, above n 38, [31(d)], [31(f)]; *The Future we Want*, above n 38, Annex [170], [173].

⁶⁵ See, e.g., Code of Conduct, above n 2 [6.3], [7.1.7], [7.2.2(a)], [7.6.3].

⁶⁶ IPOA-Capacity, above n 55, cl 11.

⁶⁷ *Ibid* cl 11.

⁶⁸ *Ibid* cl 19-20.

⁶⁹ *Ibid* cl 19.

(d) regular review of national plans of action.⁷⁰

12. Marine and coastal protected areas.

Protected areas, including marine protected areas (**MPAs**),⁷¹ are internationally recognised as an important tool for protecting biodiversity in marine and other ecosystems.⁷²

In the 1980s-1990s the International Union for the Conservation of Nature (**IUCN**) developed and used the following definition of an MPA:

*Any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment.*⁷³

More recently, the IUCN has adopted a catch-all definition of Protected Areas that captures both MPAs and terrestrial protected areas. However, the Conference of the Parties of the Conservation on Biological Diversity uses a stand-alone definition of marine and coastal protected areas (**MCPAs**), which is more relevant in the Fijian context:

*... an area within or adjacent to the marine environment, together with its overlying waters and associated flora, fauna and historical and cultural features, which has been reserved by legislation or other effective means, including custom, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings.*⁷⁴

MPAs are a complex topic in their own right. However, for the purposes of this paper, the following brief notes are provided:⁷⁵

(a) Marine protected areas.⁷⁶

⁷⁰ Ibid cl 24.

⁷¹ As noted in Graeme Kelleher (ed) *Guidelines for Marine Protected Areas* (IUCN, 1999) at xviii (**IUCN Guidelines**): 'An MPA always includes the marine environment but may also include coastal land areas and islands.'

⁷² The development of a focus on MPAs is illustrated by a series of documents and decisions. These include: IUCN Resolutions and Recommendations made in 1988 and 1998 (*Protection of the Coastal and Marine Environment*, IUCN GA 1988 Res 17.38, 17th sess (1-10 February 1988) https://portals.iucn.org/library/sites/library/files/resrecfiles/GA_17_REC_038_Protection_of_the_Coastal_and_Marine.pdf) (accessed 25 May 2016); IUCN Recommendation 19.46 (1994), above n 23, [1(g)] the IUCN Guidelines, above n 71, published in 1999 (these guidelines replaced an earlier version, published in 1991); *COP Decision VII/5*, above n 4, made in 2004.

⁷³ *Protection of the Coastal and Marine Environment (IUCN Recommendation 17.38 (1988))*, IUCN GA 1988 Res 17.38, 17th sess (1-10 February 1988) [2.b.], reaffirmed in IUCN Recommendation 19.46, above n 23, [3].

⁷⁴ Convention on Biological Diversity, COP 7 Decision VII/5: Marine and coastal biological diversity. (2004) [10] n 1.

⁷⁵ Note: these notes draw on the 1999 IUCN MPA Guidelines: *IUCN MPA Guidelines*, above n [##], Chapter 2 ('Developing a legal framework'), as well as *COP Decision VII/5*, above n 4 (including in particular Appendix 3 ('Elements of a marine and coastal biodiversity management framework')), both provide information and recommendations about MPA legal frameworks. Both are relevant and legitimate sources of guidance, and there are clear areas of overlap. However, another important source is the 2011 IUCN document which goes into significant detail specifically on protected areas legislation: Barbara Lausche and Françoise Burhenne, *Guidelines for Protected Areas Legislation* (IUCN, 2011).

- (i) should be based on scientific information;
- (ii) need to be effectively managed; and
- (iii) must manage human activities:

*particularly through national legislation, regional programmes and policies, traditional and cultural practices, and international agreements, to maintain the structure and functioning of the full range of marine and coastal ecosystems in order to provide benefits to both present and future generations.*⁷⁷

(b) Marine protected areas can be designed as:⁷⁸

- (i) areas where extractive uses are entirely excluded (i.e. ‘no-take zones’ or sanctuaries), and other ‘significant human pressures ... removed or minimised’;
- (ii) areas where threats are ‘managed’ and where extracted uses may be permitted (i.e. ‘partial protection zones’); or
- (iii) multi-zone areas where restrictions on use vary, and may include select no-take zones.

(c) MPA legal frameworks can be created by enacting purpose-specific legislation, or by inserting MPA provisions into existing legislation.⁷⁹

(d) Primary legislation can be more or less prescriptive, leaving varying amounts of detail to be worked out in regulations and other management tools such as management plans.⁸⁰

(e) The IUCN Recommendations recommend that MPA legal frameworks:⁸¹

- (i) should explicitly state that conservation is the primary objective of the MPA/s;
- (ii) should use terminology that reflects the ‘intentions, goals, objectives and purpose of the legislation’, that will be easily understood by those who are affected by MPAs and, where relevant and practicable, that reflects standard international terminology;
- (iii) should address how boundaries of an MPA/s will be established (which in some cases may be achieved by setting out the boundaries within legislation);
- (iv) should require the development of MPA management plans and prescribe the minimum required content of management plans;
- (v) must be enforceable (taking account, for example, of the possible need for community based enforcement officers and/or action);
- (vi) must incorporate penalties that are likely to be effective;
- (vii) should ‘identify and establish institutional mechanisms’ and ‘establish specific responsibility, accountability and capacity for’ MPA management;
- (viii) should provide for coordination of planning between and across all relevant agencies;

⁷⁶ COP Decision VII/5, above n 4, [18], [19].

⁷⁷ Ibid [18].

⁷⁸ See, e.g., IUCN Guidelines, xix, 48. For a detailed discussion of ‘zoning’ MPAs, see IUCN Guidelines, above n 71, ch 7; COP Decision VII/5, above n 4, [21] and app 3, [5].

⁷⁹ IUCN Guidelines, above n 71 11-12.

⁸⁰ Ibid xi, 11

⁸¹ Ibid 11-19.

- (ix) should provide for surveillance, research, and periodic review of all management, zoning, and other applicable plans;
- (x) may incorporate compensation measures if the creation of MPAs is likely to result in the loss of ‘firmly established’ ‘local rights and practices’;
- (xi) should identify financial arrangements for MPA management;
- (xii) should incorporate a role for education and public awareness; and
- (xiii) should ‘be shaped by and support regional, international and other multilateral treaties and obligations designed to protect these’.

13. Management plans (fishery plans, national plans, regional plans)

Management plans for sustainable fishery outcomes can be designed at various levels, including:

- (a) local, community or geographically based plans;
- (b) fishery-specific plans;
- (c) national plans; and
- (d) regional (international) plans.

Management plans could potentially be categorised as a specifically endorsed design principle, or simply as a tool & mechanism that operationalises objects and design principles such as CBRM and IMCAM.

Local, community, geographically and fishery based plans

The Code of Conduct identifies the importance of management frameworks and procedures. It states that:

*Long-term management objectives should be translated into management actions, formulated as a fishery management plan or other management framework.*⁸²

Various international and regional agreements and guidelines refer to the use of management plans. For example, in 2015 in *The Future We Want*, State parties committed to ‘urgently develop and implement science based management plans, including by reducing or suspending fishing catch and effort’.⁸³ The Barbados Declaration also refers to the need to establish and/or strengthen ‘integrated coastal zone management plans’.⁸⁴ The FAO Model Plan for a Pacific Island Country also specifically identifies the need to develop management plans to manage both subsistence fisheries (in which case it refers to community fishery management plans) and coastal commercial fisheries.⁸⁵

⁸² Code of Conduct, above n 2, [7.3.3].

⁸³ *The Future we Want*, above n 38, Annex [168].

⁸⁴ See *Barbados Declaration*, above n 19, Part IV.

⁸⁵ FAO, *Model plan for a Pacific Island country: National plan of action to prevent, deter and eliminate illegal, unreported and unregulated fishing* (2005), 5-6, 10-11.

As discussed below, there is already an informal network of community based management plans in Fiji – the FLMMA network. This network offers a starting point for developing a more formalised system.

National and regional plans of action

The FAO has prepared a number of International Plans of Action under the Code of Conduct. It has been recognised at the international level that national plans of action and, where appropriate, regional plans of action, should be developed and implemented as a matter of urgency.⁸⁶

14. Monitoring, compliance and surveillance, and enforcement

Monitoring, compliance and surveillance (**MCS**) and enforcement have a key role in effective fisheries management.⁸⁷ MCS and enforcement are operationalised through tools & mechanism which can take a number of forms.

Monitoring programs should be developed in accordance with local capacity. Coastal monitoring programs will incorporate ‘physical, chemical, biologic, economic and social parameters’.⁸⁸ The Noumea Strategy specifically identifies the importance of ‘[d]eveloping and resourcing relevant and effective monitoring, control and surveillance mechanisms’ and notes that approaches must be ‘simple, realistic and implementable’.⁸⁹

Effective **enforcement** requires, at least:

- (a) enforcement capacity;
- (b) adequate penalties; and
- (c) effective integration between enforcement, voluntary compliance, and management.⁹⁰

Enforcement **capacity** requires:

- (a) clear identification of responsibilities;
- (b) coordination between relevant agencies;
- (c) training and equipping enforcement officers; and
- (d) providing suitable enforcement powers (which may include customary enforcement powers).⁹¹

In relation to **penalties**, these should be severe enough so as to be effective. They should also ‘allow for the refusal, withdrawal or suspension of authorisation to fish in the event of non-compliance with conservation and management measures...’.⁹²

⁸⁶ *Johannesburg Plan of Implementation*, above n 38, [31(d)].

⁸⁷ Code of Conduct, above n 2 [6.10], [7.1.7]; *COP Decision VII/5*, above n 4, Operational objective 3.3(a) (referring specifically to compliance and enforcement of protected areas), also Annex II, [4] (referring specifically to protected areas); *SSF Guidelines*, above n 16, 5.16.

⁸⁸ Code of Conduct, above n 2 [10.2.4].

⁸⁹ *The Noumea Strategy*, above n 13, 7.

⁹⁰ *COP Decision VII/5*, above n 4, Annex II, [4].

⁹¹ *COP Decision VII/5*, above n 4, [8]; this is has a focus particularly on marine and coastal protected areas but these principles can apply broadly to enforcement.

15. Restore stocks to levels that enable ‘maximum sustainable yield’ (MSY)

The concept of ‘maximum sustainable yield’ dates back to the 1930s.⁹³ It is currently recognized in Art 61 of UNCLOS and, more recently, in the 2015 Sustainable Development Goals. Article 61 of UNCLOS provides that measures taken by coastal States in their Exclusive Economic Zone to conserve and manage living resources should:

... be designed to maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield, as qualified by relevant environmental and economic factors, including the economic needs of coastal fishing communities and the special requirements of developing States.

In the Sustainable Development Goals, the language is somewhat different and appears to be more focused on addressing depleted fish stocks. Goal 14.4 reads as follows:⁹⁴

By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.

Although MSY has ‘long been used as the management goal for many fisheries around the world’,⁹⁵ and current references to it in international agreements suggest it remains an important concept, it should be used with care. MSY has been the subject of much criticism, including blame for the overexploitation of marine resources.⁹⁶ This criticism has resulted in a view that while MSY may be useful, on its own it provides ‘incomplete policy guidance’ to

⁹² Code of Conduct, above n 2, [7.7.2].

⁹³ See, e.g., Carmel Finley, *All the Fish in the Sea: Maximum Sustainable Yield and the Failure of the Fisheries Management*, (University of Chicago Press, 2011) 2; Pamela Mace, ‘A new role for MSY in single-species and ecosystem approaches to fisheries stock assessment and management’ (2001) 2 *Fish and Fisheries* 2, 4.

⁹⁴ *Sustainable Development Goals*, above n 29, Goal 14.4. See also, Code of Conduct, above n 2, [7.2.1], [7.2.2(e)], [7.6.10]; *Johannesburg Plan of Implementation*, above n 38, [31(a)]; *The Future We Want*, above n 38, Annex [168]. Mace (2001) argues that the ‘evolution of the precautionary approach has resulted in a new interpretation of MSY, that also is more consistent with [ecosystem based management], but also notes that in practice, ‘single-species approaches are still applied more often than ecosystem approaches’: Mace, ‘A new role for MSY’, above n 93, 4. At page 9 of the same article, Mace describes the interpretation of MSY passing through three stages: ‘from (i) a fixed amount that could be taken each year indefinitely (the maximum constant yield, to (ii) the maximum average yield (or an approximation to it) that can be taken by varying catches in response to fluctuations in stock size (e.g. by fishing at a constant rate of F_{MSY} [fishing mortality associated with MSY], to (iii) F_{MSY} being a limit to be avoided, rather than a target that can be routinely exceeded. F_{MSY} and related proxies are now an integral part of harvest control rules designed to foster rational exploitation of marine resources.’

⁹⁵ Chongliang Zhang, Yong Chen, and Yiping Ren, ‘An evaluation of implementing long-term MSY in ecosystem-based fisheries management: Incorporating trophic interaction, bycatch and uncertainty’ (2016) 174 *Fisheries Research* 179, 179-180.

⁹⁶ See, e.g., Finley, *All the Fish in the Sea*, above n 93, 3. Notably, this criticism is not recent, and stems back to when MSY was first being introduced into international agreements: see Benoit Mesnil, ‘The hesitant emergence of maximum sustainable yield (MSY) in fisheries policies in Europe’ (2012) 36 *Marine Policy* 473, 473-4.

enable sustainable marine ecosystem management'.⁹⁷ It should be applied with caution, recognising in particular the shortcomings of taking a single-species approach and the difficulties of obtaining the sort of data that an MSY approach relies on.⁹⁸ It should be incorporated amongst or as part of other, broader concepts such as the ecosystem based approach.⁹⁹

16. Provide education, training, resourcing and support to communities

Maximising stakeholder participation and protecting the rights of coastal communities requires relevant stakeholders to be adequately resourced, educated, and supported in order to meaningfully participate.¹⁰⁰

The Noumea Strategy emphasizes that:

*It is vital that ... communities are empowered, motivated, and adequately resourced if CEAFM [community-based ecosystem approaches to fishery management] is to be successful. Traditional and local management will often be effective in their own right, but governments have a role, both in CEAFM and in those instances where different forms of coastal management are required.*¹⁰¹

The State has an important role in facilitating, training and supporting small-scale fishing communities.¹⁰² It should undertake or support activities that will:¹⁰³

⁹⁷ Zhang, Chen, and Ren, above n 95, 180, citing Sarah Gaichas, 'A context for ecosystem-based fishery-management: Developing concepts of ecosystems and sustainability' (2008) 32 *Marine Policy* 393.

⁹⁸ See, e.g., Thomas Essington, 'The precautionary approach in fisheries management: the devil is in the details' (2001) 16(3) *TRENDS in Ecology & Evolution* 121, 121.

⁹⁹ See discussion of the 'ecosystem approach' above. See also, e.g., Zhang, Chen & Ren, 'An evolution of implementing long-term MSY', above n 95, 179-180; Mace, 'A new role for MSY', above n 93, 18-20; Mesnil, 'The hesitant emergency of MSY', above n 96, 478.

¹⁰⁰ See, e.g., Code of Conduct, above n 2, [6.16], recognising 'the paramount importance to fishers and fishfarmers of understanding the conservation and management of the fishery resources on which they depend' and requiring States to 'promote awareness of responsible fisheries through education and training'. See also, e.g., Code of Conduct, above n 2, [8.1.7], [8.1.10]; *Johannesburg Plan of Implementation*, above n 38, [7(j)] which refers to transferring 'basic sustainable agricultural techniques and knowledge, including natural resource management, to small and medium scale farmers, fishers, and the rural poor...'; *MSG Roadmap*, above n 12, see Guiding Principles I & II, requiring 'the empowerment of coastal communities' and the provision of government support to communities 'at, or as close as possible to, community level, using provincial/local government and other mechanisms and collaborations'; *SSF Guidelines*, above n 16, [12.1], which provides that 'States and other parties should enhance the capacity of small-scale fishing communities in order to enable them to participate in decision-making processes'. See, e.g., Code of Conduct, above n 2, [10.2.1], which identifies the importance of 'public awareness of the need for the protection and management of coastal resources and the participation in the management process by those affected.'

¹⁰¹ *The Noumea Strategy*, above n 13, 6.

¹⁰² *SSF Guidelines*, above n 16, 5.15. This process should take into account the 'legitimate tenure rights and systems' of these communities.

¹⁰³ *MSG Roadmap*, above n 12, 5. Objective 1.2 provides further detail and envisages training, education, mentoring and support activities for community leaders and authorised officers, as well as at the sub-national government level.

- (a) provide information to communities;
- (b) educate and train communities; and
- (c) raise awareness about the importance and status of marine protection in communities.

This can be seen as an element of the design principle of environmental democracy. It is also an area likely to require significant policy direction.

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