



REVIEW OF MARINE TURTLES LEGISLATION IN TUVALU

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PREFACE

The SPREP regional Marine Turtle Action Plan 2008-2012 places high priority to legislation as shown by the selection of the area "Policy and Legislation" as one of the nine themes of the Action Plan. The priority actions identified under this theme by member countries and territories as well as partners are:

- Action 5.1: Review and identify gaps and conflicts in current policies and legislation (in member countries and territories) that support / limit the RMTCP, including conventions, treaties, MOUs, agreements etc. [Priority: High].
- Action 5.2: Encourage the need to address gaps and conflicts found in the review of policies and legislation as described in action 5.1 where required. [Priority: High].
- Action 5.3: Encourage and support compliance mechanisms that are more effective at the community level, drawing upon and supporting existing laws and controls and conflict resolution systems, and using local community members. [Priority: High].
- Action: 5.4: Amend relevant policies and legislation regarding turtle size limits to better reflect the impact of removing mature females from populations and, where possible, to ensure that preference is given to using smaller-sized animals. [Priority: High].
- Action: 5.5: Incorporate relevant traditional knowledge, customary marine tenure and practices into policy, legislation management plans where appropriate. [Priority: Medium]
- Action 5.6: Ensure adequate protection is provided for nesting beaches and other known critical habitats for turtles through policy and legislation. [Priority: High].

This review then documents existing legislation and policies as well as the country's participation in international/regional agreements and conventions relevant to marine turtles. It attempts to identify gaps and then make recommendations for relevant legislation to improve and/or clarify existing ones and improve protection/management of marine turtles.

To help with the identification of legislation gaps, a team at SPREP constructed a matrix of legislation from existing legislation in the region dealing with turtles as well as creating new ones based on available information.

The involvement of national experts from relevant agencies is a vital component of this work.

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1. INTRODUCTION

Marine Turtle Species present: From records, there are three species of marine turtles found in Tuvalu waters. The green turtles (*Chelonia mydas*) are the most common species seen in waters and found on beaches nesting. The leatherback (*Dermochelys coriacea*) and the hawksbill (*Eretmochelys imbricata*) species are mostly seen in waters and caught by fishermen infrequently.

Marine turtle nesting: The green turtle is the only marine turtle species recorded nesting in Tuvalu. Turtle nesting takes place mostly in isolated areas or islets (*motu*) in the nine islands of Tuvalu. On very rare cases, the green turtles were reported to be found nesting very close on residential beaches. On the island of Nanumea, nesting is common on its islet called Lakena with rare cases on Te Motu Foliki, the much smaller islet. On Nui Island, nesting is highly common at Meang islet with rare cases on other smaller islets and on the main settlement island of Fenuatapu. On Nukufetau, nesting is also common on the bigger islets of Lafaga and Motulalo with rare cases on smaller islets. Funafuti, the capital of Tuvalu, nesting commonly occurs on its western *motus*, Vasafua and Fuakea with rare cases on other small islets (Fualopa, Fuafatu, etc). On Nukulaelae island, nesting seems to occur frequently on the bigger islets of Niuku and Fenualago with rare cases on other smaller islets. Niulakita island was the most common nesting site of green turtles as recorded in the past 30 years and beyond, but at present it is very uncommon due to human population increase coupled with anthropogenic activities on the island. The other three islands of Nanumaga, Niutao and Vaitupu, common sites for nesting occur on the distant part of the islands from the main settlements; now-a-days nesting is very rare.

Importance of marine turtles locally: Marine turtles had served an integral function to the traditions of Tuvalu. This is believed to have been received from the Samoan traditions through the influence of very early missionaries from Samoa who advocated the word of God in Tuvalu. Turtle fishing was very common in the past years for special occasions such as weddings, birthdays and bestowment to new high level title in the community, church and Government. This practice has now receded as a result of contemporary environmental conservation and awareness programmes. Nonetheless, poaching for turtle eggs and "silent" harvesting for mature turtles still occur. Also in past years when hunting for turtles was not yet traditionally regulated, some men just hunt turtles by leisure and used the carapace for handicraft and decorations on walls at households.

2. CURRENT MANAGEMENT/PROTECTION OF MARINE TURTLES IN TUVALU

2.1 EXISTING LEGISLATION

(i) Conservation Areas Act 1999 (Act No.3 of 1999).

This is the only legislation that provides some protection of marine turtles.

Section 4. Objectives of conservation areas

Any conservation area so designated under section 3 of this Act shall have one or more of the following objectives:

- (a) to protect the environment, including coastal, marine and terrestrial;
- (b) to conserve the living and non living natural resources of the island communities and to provide for their sustainable utilization by present and future generations;
- (c) to preserve the biological diversity of the conservation area, especially those species which are endemic, threatened, or of special concern and the coastal and marine habitats upon which the survival of these species depend;
- (d) to preserve and enhance the natural scenic beauty of the conservation area including sites that are already degraded or those that may become degraded if not protected;
- (e) to promote the enjoyment by the public of the conservation areas; and
- (f) to promote the scientific study and research in respect of the conservation areas.

Section 14. Offences

- (1) No person shall release or cause to be released into a conservation area any polluting or hazardous substances by dumping or through the atmosphere.
- (2) No person shall hunt, kill or capture any turtle, bird or fish in conservation areas designated under this Act.
- (3) No person shall collect or remove any non living material or resources from the conservation areas without the written approval of the Kaupule.
- (4) Any person who contravenes any provision of this Act shall be guilty of an offence, and shall be liable for a fine of \$5,000 or to imprisonment for 28 months.

Section 15. Regulations

The Minister may make regulations for the implementation of the provisions of this Act and in particular:

- (a) the protection of the flora and fauna within the conservation areas; and
- (b) the care, control and management of the conservation areas.

Section 16. Bye-laws

The Kaupule may issue bye-laws for the implementation of the provisions of this Act and in particular:

- (a) undertaking of any activity in the conservation areas;
- (b) regulating the use and enjoyment of the conservation areas including charges of fees for the same;
- (c) the licensing of boats and crafts, employed in transportation of people within the conservation areas;
- (d) the licensing of any guides required by the visitors; and
- (e) securing the observance of sanitary and cleanly conditions and practices at and in respect of conservation areas including beaches within the area.

(ii) Marine Resources Act 2006:

The definition of "fish" in this Act includes turtles and their eggs. It does not have specific provisions for the management of turtles but the Minister may take measures for the conservation and management of fish in the fishery waters, including prohibiting the taking of fish from an area, limiting the amount, size or weight, prohibiting the disturbance or interference with the breeding or nesting area etc. In addition, "the Minister may, by Order, declare any stock or species of fish as protected which is designated as endangered by international agreement, or which is identified by any other generally recognized scientific criteria as endangered or likely to become endangered if fishing, or fishing by any specified method, continues".

(iii) Environment Protection Act 2007:

This Act was passed in Parliament in 2008. The functions of the Department responsible for this Act, include (i) formulation, application and enforcing policies, programs and management plans for the protection of the biodiversity including the protection, conservation and monitoring of endemic and threatened species, and (ii) implementing systems for the monitoring of and reporting on issues and matters relevant to or affecting biodiversity. Among other things, the Minister may also make regulations to protect the biodiversity.

(iv) By-laws

There is no by-law so far that directly protects the conservation of marine turtles. However, a draft by-law had just been developed by the Funafuti Town Council or *Kaupule o Funafuti* to manage their resources both for the marine and terrestrial. One section covers the prohibition of turtle harvesting but again not in detail. This draft has yet to be passed by the Community Members of Funafuti in their next month assembly before submission to the Legal Office through the Ministry of Home Affairs for proper endorsement. The by-law is in Tuvaluan version only.

2.2 OTHER MARINE TURTLE PROTECTION/MANAGEMENT MECHANISMS

(i) Local customary/traditional practices that protect/manage turtles

There is no particular traditional routine to protect turtle harvesting. However, each island may develop its own rule and procedures that is normally passed during any monthly assembly which consists of island members from and above 18 years old.

Currently, the island of Nukulaelae had passed a traditional rule that no one is allowed to harvest any nester on no-take zone beaches, nor take any egg from those nesting site. The no-take zone beaches usually take rounds or rotated throughout the year. For example, from March to October the northern beaches are declared as no-take zone while the southern beaches are open. It is also encouraged that juvenile turtles (*keakea*) of less than 70cm length of shell or carapace, measured from shell close to head to the tip of its tail must not be harvested.

On Nui island, the *Fale Kaupule* created a rule by declaring Meang Islet (biggest islet) as a no-take zone for turtles and turtle eggs. They also discouraged the harvesting of juvenile turtles or *keakea*.

Nanumea Island declared their biggest islet (Lakena) as a no-take zone for turtles and turtle eggs. They also discouraged harvesting juvenile turtles and matured turtles within their conservation boundaries.

Funafuti Island also declared their Conservation Area as no take zone and discouraged harvesting within the conservation area.

(ii) Regional arrangements

There is no specific regional agreement to exclusively deal with turtle protection and conservation. However, Tuvalu is a member to regional organizations like FFA and SPREP that have certain plans, agreements or programmes that Tuvalu must adhere to and implement. For instance, the SPREP turtle programme for TREDs is a regional programme that Tuvalu is taking part in.

The TREDs programme runs in parallel with the Cetacean and Sharks programme that is managed and fully funded by the New Zealand NGO institution. Such programmes highly alleviate the awareness and understanding of local people to manage and conserve turtles.

(iii) International conventions/agreements

Tuvalu is a party to the Convention on Biological Diversity (CBD) and therefore, it has obligations under the convention to fulfil but none direct to turtle protection and conservation. However, there are species-specific conventions that Tuvalu might be a party to but have not yet confirmed. These conventions *inter alia*;

- The Convention on the Conservation of Migratory Species of Wild Animals (also known as CMS or Bonn Convention), and
- The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

3. GAPS IN LEGISLATION

Given a huge gap from the fact that there is no specific legislation for the management and conservation of turtles in Tuvalu, it is therefore suggested that a specific legislation be developed and to incorporate all the necessary information that are highlighted from the matrix of protection for turtles in Table 1. These include:

- *Protection of nesting sites:* While traditional practices are quite common in all islands by closing nesting sites within certain periods, it will be more effective and sustainable if these practices can be integrated into national legislation. This will also avoid poaching and other "cruel" attitudes. The presence of predators such as pigs and dogs must be avoided.
- *Prohibition to harvest:* All juvenile turtles (*keakea*) of about 70cm length of shell or carapace, nesters and other mature female turtles of about more than 70cm length of shell or carapace must not be harvested; no turtle eggs to be destroyed nor taken for food; and tagged turtles are to be released whenever caught.
- *Prohibition of the use of certain fishing gear to catch turtles:* The use of spear and net to catch turtles must be prohibited at all times to avoid unnecessary death and injuries.
- *Local sales of turtles:* The sales of turtle meat and living turtle of more than 70cm shell size must be well regulated to avoid unsustainable hunting of both mature and juvenile and other under size species of less than 70cm length of shell or carapace, measured from shell close to head to the tip of its tail. As well to avoid sales of nesters or any female turtle producing eggs.
- *Protection of foraging areas:* Proper assessment of important turtle foraging areas must be taken and declare them as non fishing zones.
- *Translocation of eggs:* Traditional translocation of eggs must be encouraged to avoid turtle egg lost to tides, heat and destruction due to climate change and sea level rise impacts. (This should be done only by those who have been trained or highly obtained traditional expertise to do so to avoid loss through improper handling. It is being practiced in the past and so must be encouraged).
- *Euthanizing marine turtles:* It is appropriate to incorporate euthanizing of turtles as protection from injuries and infections.
- *Power to declare when the catching of turtles is prohibited:* The Minister of Natural Resources and Environment may delegate certain power as authorised to him in the Environmental Act, Fisheries Act, Conservation Act and other relevant Acts, to Officers (Fisheries Director/Officers, Environment Director/Officers, and other relevant Officers) who are directly involved in the management and conservation of turtles to declare periods or a period when fishing for turtle species is prohibited to avoid stresses during nesting seasons.
- *Incorporation of relevant traditional knowledge and practises:* As highlighted above, it is very effective and more sustainable if traditional knowledge and practices are incorporated into legislations. Such traditional practices may include: non harvesting during nesting periods, closure of beaches during nesting periods, chase and catch of mature turtles is relevant only during special occasions when given authority by the Minister or Authorised Officers.

- *Research and Assessments*: Further implementation of activities and programmes such as tagging, monitoring of nesters and other related researches for turtles in Tuvalu is very essential.
- *Awareness*: More awareness through workshops and proper dialogues, media presentations and provision of leaflets, newspapers, posters, etc. are very essential for the protection and management of turtles. Such awareness may include: Turtles are Extinct and Reasons; People to Aware of Turtle Biology; Why Sustainable is Vital and other relevant topics of Conservation.

4. KEY RECOMMENDATIONS

The following are the major recommendations for consideration:

- Development of a legislation that comprehensively regulate the protection and conservation of turtles. This legislation to incorporate all the information that are highlighted from the matrix of protection for turtles in Table 1. The Department of Environment in collaboration with the Fisheries Department and Kaupule to take the lead in developing such legislation as authorised under the Environmental Protection Act, the Conservation Area Act and the Fisheries Act. The Kaupule should also develop a necessary by-law under the Conservation Area Act.
- Strengthening of traditional rules and practices through development of by-laws on each island. Kaupule on each island shall develop by-laws under the Conservation Area Act.
- Increase the frequency of public awareness on turtle management and conservation. Monthly radio programmes should be conducted through collaborative effort by the Department of Environment, Fisheries, Tuvalu Association of NGOs and the Kaupule. These institutions should also consider opportunities for workshops at community levels on all the islands.
- Prohibitions of certain fishing methods (eg; spear and net) that may cause severe damaging or injuries to escape turtles.
- Plastic wastes are major concerns to turtle suffocating and poisoning after consumption. Therefore, it is highly recommended that proper consideration to prohibit dumping of plastics into the sea is priority as well to develop a specific regulation to properly managed dumping of plastics.
- Sales of turtle meat must be prohibited or highly regulated and must prioritize as one major component in the legislation. Specific recommendations for conservation and sustainable are the priority issues to be incorporated. For instance, only once in awhile turtle meat must be consumed when authority is given by the Minister responsible and not to be sold.
- To mainstream turtle management and conservation into other environmental related legislations as appropriate.
- Enforcement is really a constraint due to very limited manpower and funds. It is therefore highly supported that Government Institutions, Island Councils (*Kaupule o Fenua*) and individual communities to work collaboratively and support each other. Seeking for assistance from overseas donors is essential.
- The establishment of a Marine Sanctuary Management Plan is a way forward to strengthen the implementation of turtle management and conservation. Given the essential location of Niulakita from past history, it is therefore recommended to be declared as Tuvalu Turtle Sanctuary.

CHECK-LIST FOR RELEVANT LEGISLATION

Matrix of areas covered concerning marine turtle protection in current legislation
and traditional practices of Tuvalu.

LEGISLATION		Reference/Comment
HARVEST / DIRECT TAKE		
• Minimum size limit	√	Traditional rule/practice
• Maximum size limit		
• No egg taking/disturbing	√	Traditional rule/practice
• No taking of Nesting Turtle	√	Traditional rule/practice
• No taking from within management area	√	Conservation Area Act 1999 Section 14 (2).
• Taking for traditional purposes only (permit required?)	√	Traditional rule/practice
• No taking for commercial purposes		
• Permit to taking for research/educational purposes		
• No taking at all	√	Traditional rule/practice
• Quota/limited number		
• No taking during nesting (closed) season	√	Traditional rule/practice
• No taking when a period or periods are declared when fishing is prohibited		
• Moratorium		
• Taking not allowed in certain zones e.g. territorial seas, EEZs,???? MPAs		
FISHING GEAR (specifically for catching turtles)		
• Spearing not allowed		
• Net not allowed		
TAGGED TURTLE		
• Right to remove tags		
• Prohibit the sale of any tagged marine wildlife		
• Release when caught	√	Result of awareness from Cetacean & Sharks and TREDS programmes
• Report with particulars to authorities when caught/seen	√	Result of awareness from Cetacean & Sharks and TREDS programmes
INDIRECT TAKE (BY-CATCH)		
• Release when accidentally caught and is alive		
• Reporting to relevant authorities		
• Use of turtle friendly gear (TEDs, circle hooks etc)		
• De-hooking gear mandatory on long-line fishing vessels		
KEEPING TURTLES IN CAPTIVITY		
• Not allowed at all		
• Not allowed except through a permit (for research, educational, income generating, hobby, rehabilitation), with guidelines		
• Minimum/maximum size of a turtle allowed to be kept		
• Maximum size of a turtle allowed to be kept		
TOURISM-RELATED ACTIVITIES		
• In the wild-Permit required (nesting and foraging)		
• Guidelines for best practice available		
• Turtle kept in captivity requiring permit		
• Guidelines available and enforced		
• Head-start requiring permit with conditions		
TRADE		
• Local sale of turtles prohibited		
• Export of turtles prohibited unless through a permit, e.g. CITES		
• Local sale of any products derived from turtles prohibited		
• Export of any products derived from turtles prohibited		
HABITAT PROTECTION		
• Nesting beaches protected	√	Traditional rule/practice
• Foraging grounds protected		
• Sanctuary for turtles		
• Nesting beaches considered in coastal development plans and EIAs		
RESEARCH METHODOLOGIES		
• Only non-lethal research methodologies allowed		
Exceptions:		
• Parts and samples from turtles legally harvested or dead stranded can be used for research		
• Hatchlings resulting from incubation under controlled conditions can be sacrificed for gonad histology etc under an approved project or research		
• Hatchlings trapped in nests that would otherwise die may also be sacrificed for research into sex ratio etc		

EUTHANIZING MARINE TURTLES		
• Veterinarians or other suitably qualified biologists shall determine if a sick or an injured stranded turtle should be euthanased and necropsied to determine the cause of the illness/disease or whatever is impact in the turtle internally		
TRANSLOCATION OF TURTLE EGGS		
• Turtle eggs can be translocated to suitable areas by suitably qualified biologist or trained personnel, upon approval, if the nest is on a high risk area		
• Moving of eggs for incubation under controlled conditions requires permit/approval		
TAGGED TURTLES		
• Limit the right to remove tags	√	Result of awareness from Cetacean & Sharks and TREDIS programmes
• Prohibit the sale of any tagged turtle	√	Result of awareness from Cetacean & Sharks and TREDIS programmes
• Require the reporting of any matter upon the taking or finding a tagged turtle	√	Result of awareness from Cetacean & Sharks and TREDIS programmes
• Require the release and reporting of any tagged turtle	√	Result of awareness from Cetacean & Sharks and TREDIS programmes
• Application of all above to tagging activities done elsewhere and by other agencies etc		
COMMUNITY/CUSTOMARY		
• Incorporates relevant traditional knowledge, customary marine tenure and practices	√	Traditional rule/practice
• Effective at the community level, using local community members	√	Traditional rule/practice
ENFORCEMENT		
• Enforcement provisions	√	Conservation Area Act 1999 Section 4, 15, and 16.
• Fine provisions	√	Conservation Area Act 1999 Section 14 (4)
AGREEMENT AFFILIATIONS		
• Party to CITES	?	
• Party to CMS	?	
• Signatory to MoU for the conservation of marine turtles in the Pacific Islands region (hopefully in the next few years!!)		