1.0 PURPOSE
The purpose of this paper is to request the Council to approve measures for the conservation and sustainable harvesting of Soga, the endemic Fiji sago palm Metroxylon vitiense.

2.0 BACKGROUND
Soga is an endangered species that currently only occurs in isolated populations all but confined to the Province of Serua where, in recent years, it has become an important source of income for rural communities. It is harvested for its palm-heart and for thatching, an occupation mainly undertaken by women. Palm Heart, Seko, harvesting is a non-traditional food industry and is currently not sustainable due to the fact that the palm has to be killed and there is no planting of Soga, only wild populations are harvested. The traditional thatch made from the Sago Palm leaves has, in the last decade, become a very popular building material for Fiji’s rapidly-growing tourist industry. Traditionally leaves were removed for making thatch 2 or 3 leaves per palm at a time, but growing demand has led to the now common practice of felling the palm to remove all the leaves and sometimes the palm heart as well. Approximately 300 rural families have been receiving some cash income from sago over the past decade. However, if the current unsustainable rate of harvest continues, Sago Palm will no longer be a source of income for these communities within the next 5-10 years.

3.0 ISSUES AND DISCUSSION
3.1 Absence of any Legal Protection
Although Fiji’s “National Environment Strategy” in 1993 recommended that the commercial sale of the Fiji Sago Palm Metroxylon vitiense, together with turtles should be prohibited, this was never applied to the Sago Palm, in contrast to the turtles. Further, unlike Fiji’s other endemic palms it is not protected under the Endangered & Protected Species Act (2002). Whereas the turtles in Fiji which are fully protected and their use for cultural purposes administered through a permit system, these are international species whose conservation Fiji shares with approximately 100 countries around the world. In contrast, Soga, is an endemic, Fijian species now seriously threatened, and Fiji has full and sole international responsibility for its conservation. Fiji has signed several international conventions obligating it to take measures to protect species such as Soga, but has not acted.
3.2 The Status of Soga

The completion in 2007 of a comprehensive MSc thesis by Isaac Rounds at the University of the South Pacific has confirmed that the current exploitation of the Fiji Sago Palm is totally unsustainable and that this endemic Fijian palm is now in seriously threatened with extinction.

Soga was once widespread throughout the Navua and Rewa River Deltas but today only 15 isolated populations survive mainly in pockets on the coastal plains in Serua, but with three significant inland populations along the Navua River.

The distribution of Soga has decreased dramatically to its current relict populations primarily through a gradual drainage of coastal wetlands and clearing of coastal forests for agriculture, gardens and pastures.

Until relatively recently, these threats acted at a gradual rate on a steadily diminishing stock of Soga. However, within the last thirty years they have been replaced by dramatic new threats in the form of:

- large scale coastal drainage schemes (Wainikalou and Toquru);
- new residential and agricultural subdivisions (Pacific Harbour, Dakunikoro);
- the growth of a non-traditional ‘palm-heart’ Seko trade; and,
- the introduction of unsustainable leaf harvesting for thatching brought about by demand from the tourist industry.

3.2 The Seko – Soga Palm Heart Trade

Approximately 200 Soga are felled weekly for the local Seko trade and to this are added occasional export of container loads of thousands to Canada. All of these require the felling of the palm and come from wild populations. No planting is undertaken. This represents completely unsustainable exploitation of an endangered, endemic species which Fiji has signed several international conventions.

3.3 The Use of Soga for Thatch

Thatching from a variety of species of sago palm has traditionally been an important building material throughout its range in Southeast Asia and Melanesia. If applied properly Soga can last much longer (c. 10-30 years) than many alternatives such as leaves from coconut, pandanus, sugarcane, duruka, gasau, duruka, makita and misimisi. Although Soga was traditionally very widely used in the Serua area for thatching purposes, currently, it is only very occasionally used because of the now near universal use of corrugated iron for roofing.

However, Soga’s recent (within the last 15 years) adoption and popularity for thatching in the tourist industry has resulted in the establishment of a significant rural industry and opportunity. Unfortunately, the opportunity is being abused and the current levels and methods being employed will see an all to familiar ‘boom and bust’ scenario of a wild natural resource with potential for sustainable harvesting.

Landowners with Soga resources have, until recently, been very slow to recognise the opportunity of soga and have been exploited by middlemen employing non-landowner harvesters. The latter have no interest in sustainable harvesting and regularly resort to felling the Soga with axes and chain.

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1 The most severe recent loss has been through the subdivision and drainage of the hitherto world’s largest remaining population in the world, that at Dakunikoro (behind Pacific Harbour) which was about 400 ha in area. Much Soga remains at this site but the drainage system has been installed with roads and most lots have been sold. The process cannot be reversed and the whole population is inevitably doomed in time.
saws. The sustainable use of a relative of Fiji’s *Soga* is very well developed in Vanuatu and the Solomons today where it is still widely used by local people and the tourism industry. There landowners have integrated the cultivation of their sago palm species into their traditional gardens and know how to harvest the leaves sustainably.

Not only is the harvesting in Fiji wasteful, its use by the tourism industry is also wasteful. Laucala Island Resort, for instance, lost its *Soga* roofing throughout the resort in Cyclone Tomas, because it did not take the simple precaution of using netting to protect its *Soga* roofing. Currently, Laucala has put out an order for over 100,000 shingles in Serua. This has put great pressure on the resource and there has been widespread theft and illegal entry such that the Police and Rapid Response Force have been called on several occasions to apprehend harvesters.

### 3.4 Consequences of Current Trends

Unless the harvesting of Soga is brought under control the following are likely eventualities:

1. The loss of sustainable income opportunity which has potential for significant growth and which currently provides some cash income to over 300 rural families annually;
2. The loss of what has become an iconic resource for the tourism industry;
3. The loss of a culturally important natural resource with a proud tradition of sustainable use;
4. The decline and possible extinction of an endemic species which Fiji is obligated to protect through its accession to several international conservation conventions;
5. Growing civil disruption and strife in Serua; and,
6. The abandoning of the use of *Soga* by the tourism industry in favour of other thatching materials (including plastic currently used by one resort) because of problems of supply, price and ‘negative green’ image.

### 3.5 The *Soga* Sustainable Harvesting and Conservation Project

Soon after its establishment in 2007, NatureFiji-MareqetiViti recognised Soga exploitation as an issue which personified its mission. A serious ‘local’ biodiversity conservation issue of an endemic species for which Fiji alone was responsible, and with no awareness at either the local level or by the regulatory authorities. In conjunction with its partners – Department of the Environment, the National Trust and the Serua Provincial Office, the project has been active at the local level in a variety of activities (refer Attachment 1 for Summary of Project Activities).

### 3.6 *Soga*: The Fiji Sago Palm Species Recovery Plan

The Department of Environment has chaired a Fiji Sago Palm Species Recovery Plan Committee and at its last meeting (June 8th 2010) endorsed the *Fiji Sago Palm Recovery Plan* (refer Attachment 2).

Species Recovery Plans are today the normal Government response for focusing multi-stakeholder activities for the conservation of endangered species. At its last meeting the Fiji Sago Palm Species Recovery Plan Committee resolved to make a presentation to the National Environment Council on the *Soga* issue and made two recommendations for the immediate government control of *Soga* exploitation.
4.0 DECISION

4.1 The National Environment Council is invited to endorse the Fiji Sago Palm Species Recovery Plan.

4.2 The National Environment Council is invited to consider and approve the need for an immediate prohibition on the commercial sale of Seko (palm heart of the Fiji Sago Palm).

4.3 The National Environment Council is invited to consider and approve the need for an efficient ‘Permit System’ to ensure the sustainable harvesting of Soga for thatch. How legislative support for this is achieved should be the result of on-going discussions between the Department of Environment, Department of Forestry, Department of Agriculture and the Solicitor-General’s Office.
Attachment 1:

Progress of the Fiji Sago Palm Conservation and Sustainable Harvesting Project

As at June 2010, 30 months after the start of the project the following have been achieved:

- Established good working relationships with partners, the Dept of Environment, National Trust of Fiji, Serua Provincial Office and other regulatory authorities (Agriculture, Biosecurity, Forestry).
- Completed the register of Soga wetland forests and their landowners;
- Completed the register of hotels and other commercial users of sago thatch;
- Completed the Fiji Sago Palm Recovery Plan – endorsed by Dept of Environment and Fiji Sago Palm Recovery Plan Committee;
- Commissioned and received an independent report on the Seko - sago palm heart trade;
- Established the following working groups or committees:
  o Implementing Partners Commitee
  o Fiji Sago Palm Recovery Plan Committee.
- Undertaken extensive consultation with all sago landowners and stakeholders
  o Held two sago landowners’ forums – workshops, attended by over 50 landowners and harvesters;
  o Held a women’s forum.
- Undertaken full consultation with tourism industry and commercial sago users
  o Held tourism industry and commercial sago users forum – workshop and communicated with major stakeholders on an individual basis,
- Drawn up Sustainable Harvesting Guidelines for Sago thatch harvesting
- Been proactive in raising national awareness of the sago palm issue including:
  o 4 major articles in the press media (in both Fijian and English);
  o 2 minor articles in the press
  o 1 English TV ‘In Depth’ report
  o 1 Fijian TV report on the sago issue
  o 1 Hindi TV report on the sago issue
  o NFMV website has information posted on the project and chat forum has been set up
- Identified an alternative to Seko the “palm heart” trade – peach palm Bactris gasipaes which is used internationally for this purpose. NFMV has received biosecurity clearance for its import, and now has 3000 seeds germinating and the full support of the Ministry of Agriculture in its establishment and dissemination;
- Undertaken a successful Soga rehabilitation and restoration project with the Culanuku community on their 30 has sago stand. Good progress with rehabilitation has been achieved, showing that landowners can rehabilitate some of the stands which are currently regarded as “lost beyond hope”. Guidelines for Soga restoration are currently being drawn up.
- Preparation of interpretive material – a well produced DVD to better integrate the tourism industry, as the single largest user of thatch, into the sustainable use project.
- Commissioned a financial analysis of Sago harvesting to be undertaken in 2010.
- Currently working with Serua Provincial Office to set up a Sago Palm Landowners’ Association.
Attachment 2:

Soga: Fiji Sago Palm Recovery Plan.