

## **Social assessment – indigenous peoples**

### **Sustainable management of ngali nut trees and threatened flying-foxes in the Solomon Islands**

#### **The University of Queensland**

This Social Assessment incorporates an Indigenous People's Plan for this project, for which The University of Queensland (UQ) is requesting funding support from the Critical Ecosystems Partnership Fund (CEPF). This social assessment includes background to the project, identifies Indigenous Peoples in the project area, assesses expected positive and negative project impacts on Indigenous Peoples, describes how free, prior and informed consultations have been carried out with affected communities, outlines measures to avoid adverse impacts and provide culturally appropriate benefits, explains how these measures will be monitored, and details a grievance mechanism.

#### **Background**

In our 2014-2015 CEPF project Status and Conservation of the Solomon Islands' Most Threatened Endemic Terrestrial Vertebrates we clarified the range, status, habitat preference, and current threats of the endangered New Georgia Monkey-faced bat, and collected data on these traits of the Makira flying-fox. In our 2015-2016 projects (funded by Lube Bat Conservancy and Bat Conservation International) we have been assessing the distribution, status and threats to two endangered monkey-faced bats on Guadalcanal. We consequently have unique, specialist knowledge of these species and their conservation requirements.

This project aims to develop species recovery and management plans for five species of monkey-faced bat and the Makira flying-fox. We will also aim to develop conservation and management recommendations for ngali nut (*Canarium indicum*), a plant species that is important for monkey-faced bat conservation (as food and roosting sites) and a valuable food resource for people throughout the country. This tree is flagged as a provisional priority species in need of control of exploitation in the EMI ecosystem profile.

Local communities rely on forests, because three quarters of people in the region survive by shifting subsistence agriculture and harvesting wild food plants, many of which are likely to be pollinated and dispersed by bats. People also hunt flying foxes, which can be an important source of protein in some areas, particularly for communities on Makira and Choiseul. Forests also contain historic former villages with ngali nut groves, which are valuable to both landowners and wildlife because of their cultural significance and high density of fruit, nuts and old trees with hollows. Since 1998, much of the Solomon Islands has been commercially logged and these resources are being lost.

This project will not involve involuntary resettlement of people. The amount of involuntary restriction of resources used by people will be very minimal in scope, limited to six species of naturally uncommon flying-foxes. Our past research suggests that these species do not form a common or essential part of people's diets, but that other factors are the major contributors to their decline (e.g. logging). The project will

work to prevent unsustainable hunting of these species, but will also seek to preserve natural resource use that is legal and sustainable.

### **Indigenous Peoples in the project area**

Small communities of indigenous customary owners typically manage Solomon Island forests and adjacent reefs. Our project will focus on forest remnants within 6 Key Biodiversity Areas:

Vangunu. Zaira is a village of fewer than 200 people on the south eastern weather coast of Vangunu. Zaira community members are customary landowners of three adjacent regions known as the Dokoso, Sunqili and Tavomai Tribal Land Areas, consisting of primary forest surrounded by steep ridges of the caldera of a dormant volcano. The total area of 6000 ha combines 3500 ha of forest, and 2500 ha of marine areas and Kavachi Reef. These three areas have recently been combined into a community conservation area declared by the landowners, the ‘Zaira Community Resource Management Area’. This region is being managed by the six tribal groups living in Zaira village and the nearby similarly small villages of Ninive, Tiqe & Mbopo, headed by village chiefs (These tribal groups on south Vangunu Island are known as Dokoso, Kale Vangunu, Suqili, Tavomai, Kadiki and Veala). The Zaira Community Resource Management Area is used for hunting, collecting wild fruit and nuts, and providing water and building materials. Sections are traditionally closed to hunting for five years at a time under a traditional management method known as ‘hopé’, for example the Dokoso section is currently closed to hunting, fishing and felling trees. Tyrone met with representatives from Zaira at Zaira village in March 2016 to discuss this proposal and ongoing collaborations.

Kolombangara. The Kolombangara Uplands priority region (~30000 ha), Western Province, includes the area above 400 m elevation of the island of Kolombangara, with a dormant volcano 1779 m high. The traditional owners of Kolombangara are known as the Dughore people, and the island has a population of around 6000. The lowlands of Kolombangara have been heavily and repeatedly logged, but a 19,400 ha conservation area of largely pristine forests has been declared since 2008, and is managed by the Kolombangara Island Biodiversity Conservation Association (KIBCA), with headquarters at Ringgi (a small town on the coast of the island). Indigenous people on Kolombangara live in ten zones around the island, which are all represented at regular KIBCA meetings. Traditionally in the Solomon Islands, people lived in the highlands, but on Kolombangara as on other islands, most villagers have lived on or near the coast since around 1910. All landowners signed the agreement to protect the area above 400m from logging and other threats. Tyrone met with Ferguson Vaghi, coordinator of the Kolombangara Island Biodiversity Conservation Association in December 2015 in Honiara to discuss the propose project.

Makira. Makira is a relatively remote island in Makira Ulawa Province in the eastern Solomon Islands. The East Makira Priority Area is a large area of intact forest (>150,000 ha), including a strip of lowland forest, and upland areas with steep ridges of >1000 m elevation. Within this area, the Kahua region of north east Makira has a population of around 4500 people in ~ 40 villages, mainly on or near the coast. Indigenous people on Makira have some of the lowest incomes in the Solomon Islands, and many people have no reliable source of income. As elsewhere in the Solomons, people rely on shifting agriculture, but due to population increases of >3%

per year, new flat lowland areas for gardens are becoming scarcer and gardens are increasingly being constructed on sloping land, which is prone to erosion. The customary owners of the Kahua region formed the Kahua Association in 2000, aiming to promote sustainable management of the community's resources, improvement of income and quality of life, communication between communities, and protection of the environment and indigenous knowledge from exploitation.

The Bauro region of Makira spans the inland areas south of Kira Kira and supports several inland villages (e.g. Nara, Hauta and Maroane). Each of these villages contains 50 – 100 people. Consultation with Makira communities was primarily undertaken during field visits in 2015. Tyrone has also been discussing the potential for collaborating with the Makira Community Natural Conservation Trust, a grass-roots organisation based in Bauro.

Guadalcanal. The Guadalcanal watersheds KBA is the largest KBA in the East Melanesian Islands region. It covers an area extending from lowland forest all the way to the highest point of the Solomon Islands Mt Popomanasau and covering a total land area of over 376,000 Ha. The project will work along side members of both the Uluna-Sutuhuri and Kakau tribes.

The CEPF KBA covers a region that is predominantly customary lands of the Uluna-Sutuhuri tribe. The high-ridgelines of Guadalcanal's spine (known locally as Haiaja) are extremely important from a cultural perspective and outsiders have rarely visited montane forests. Many former village sites occur at mid-elevations. Many of these sites were abandoned only recently (c. 1980's) and also very culturally important. The section of Uluna tribe that occupy the northern portion of the Uluna-Sutuhuri customary lands total approximately 800 people. Tyrone has been discussing mammal orientated research and conservation with Uluna tribal representatives Noelyn Biliki and Josh Kera. The last meeting was in Honiara in March 2016.

The Kakau tribe are landowners of a region from Tasahe to Lunnga River on northern Guadalcanal. Kakau is a relatively small tribe estimated to be around 100 people. This project will mainly work within the primary forests protecting the watershed for Honiara's water supply (Kovi River). This area is occupied primarily by a single extended family. The most recent consultation held was via phone call on 27 April 2016.

Choiseul. The Choiseul KBA covers a corridor from lowland forest to the island summit at Mt Maetembe of over 38,000Ha. Choiseul has a population of over 31,000 people in villages concentrated on or near the coast. Ecological Solutions Solomon Islands (ESSI) has undertaken a large body of work facilitating biological surveys and conservation initiatives on Choiseul. This organisation is thus a crucial partner in this project. On Choiseul there is recognition of a formal institution of traditional leaders – The Luru Land Conference of Tribal Chiefs. This provides an important channel for working and communicating with people of Choiseul.

The component of this project that focuses on the Choiseul species of monkey-faced bats will be led by Ecological Solutions Solomon Islands (David Boesto and Cornelius Qaqara). Both David and Cornelius are indigenous to Choiseul and have been working on the island to further develop conservation initiatives. David and Cornelius are in continual contact with representatives from various tribes in the Mt Maetembe Key Biodiversity Area.

Bougainville. Bougainville is the largest island in the biogeographic Solomon Islands. At its highest point, Bougainville reaches 2,685m in altitude. The Kunua Plains and Mount Balbi KBA covers an area of over 75,000Ha. In 1989, armed conflict broke out on Bougainville and endured for approximately 10 years. This stemmed partly from disagreement relating to the Panguna Mine site that was operated by a foreign company. This recent conflict still has tangible implications for working and communicating with people on Bougainville. Bougainville is now administered as an autonomous region of Papua New Guinea and will continue to transition toward full independence by 2020. The island is one of the most poorly surveyed islands of the region from a biological perspective.

The Kainake village community is located in the southwest of Bougainville Island. In 2013 the community founded a community-based organisation focused on environmentally sustainable development. The organisation has already established a conservation area covering 52 hectares of virgin lowland tropical rainforest. At least two species of monkey-faced bats are highly likely to occur in the Kainake Village region. Partnerships are being fostered with the Drug Discovery and Herbal Development Laboratory and the Centre for Conservation and Natural Products Research at the University of Papua New Guinea. The Kainake village itself has a population of 110. The project also incorporates 5 surrounding villages that support approximately 500 people. The organisation established a school in 2014 which now caters for 71 students who are attending early childhood learning, pre-school, grade 1 and grade 2. Consultation with Kainake representatives Jeffrey Noro and Junior Novera was undertaken between 03 and 09 of April 2016 at a workshop in Sydney.

### **Potential positive and negative impacts**

#### Positive

One major benefit of our project is income generation through payment of guides, landowners and trainee rangers, and buying local produce during the limited data collection activities. Although villagers in each of the priority areas live traditionally by subsistence farming, hunting, and using forest and marine resources, people need income typically for medical and school expenses, as well as manufactured materials such as clothes, fuel, soap and batteries. Sources of income in remote villages are very limited (mainly selling items in local markets).

Another important benefit will be education, capacity building and training, especially for young adults and school-aged children. There is a very high participation rate in primary school in the Solomon Islands, aided by Australian government education support, and so there is a demand for secondary schooling. There are 207 junior secondary schools in the Solomon Islands. We will contribute high school educational materials related to terrestrial biodiversity during the project.

Information collected in our surveys will promote the protection of forests from industrial logging and mining. This outcome can benefit entire communities through provision of clean water, building materials for the whole village, and healthy populations of terrestrial game animals and marine life for harvesting. Cultural heritage is also conserved (kastom sites /sacred sites).

Our proposal to manage species that are utilized as food sources will have benefits for Solomon Island communities as it will promote the long-term sustainability of these resources.

### Negative

Adverse impacts are likely to be very minor, if they occur. This is because our project would be less than two years in total, and less than a month of fieldwork in each site, our methods are driven by demand from communities, and are not prescriptive.

Because our work at each site is relatively brief and employment opportunities limited, one possible negative impact might be conflict between households or villages over who is hired. If payment and employment of local guides is not handled very carefully, disagreements could be a problem because communities are organised into hereditary groups (wantoks) and village governance is hierarchical. Outsiders have no opportunity to decide which members of the community will be hired and trained, this is decided by the chief or a council of elders.

A minor negative impact of hiring local guides may be an increase in tobacco use. Experience has shown that people often insist that guides are partly paid in tobacco.

We may conclude that any hunting of some threatened bats is unsustainable. In the longer term, prevention or regulation of hunting priority species such as the Makira flying fox could negatively affect the poorest households by reducing protein availability. Involuntary restriction on access to natural resources will be minimal and if implemented, will be limited among six species of naturally rare flying-fox that do not appear to be essential components of people's diets in the project areas. The project will implement conservation activities through voluntary agreements with communities. Through community consultations, the project will assess the level of infringement on customary rights.

### **Consultation with affected communities**

We have consulted extensively with all of these partner communities during the planning phase of this project. This includes visits to all of these communities in 2015 and 2016. All of our discussions have taken place in Solomons pidgin. In meetings to discuss the ideas put forward in this proposal, participants were free to express their views, and were therefore not dominated by project proponents or certain sections of community. In the Solomon Islands, there is a process of hierarchical discussions led by customary landowners and the local community that must be adhered to before anyone who is not an owner can work in forests (or to visit them for any purpose), even in cases of a simple observational visit to a site. Talks begin with the council of village chiefs and often also church leaders, who then take the proposal to a meeting of the whole community where permission and terms (payments etc) are freely discussed. Relatives of community members who live outside the area but consider that they may also have a claim to the land on which the work is planned also have rights to comment. These discussions can therefore take some time.

Several of the participants in the proposed project are indigenous to the Solomon Islands and the specific sites where we propose to conduct the project. Participants in this project have developed associations with the affected communities over many years. Communities in this project are happy for the project to occur and have given consent, including clear terms of access, verbally (we can obtain copies in writing if needed). Our requests for permission have been given in writing as well as verbally.

## Schedule of communications with affected Landowners

Date	Community	Island	Type of Communication	Estimated No. of people involved
09/04/16	Kainake Project	Bougainville	Meeting	2 (project coordinators Junior Novera & Jeffrey Noro)
03/03/16	Uluna Tribe	Guadalcanal	Meeting	Noelyn Biliki
15/03/16	Kakau Tribe	Guadalcanal	Meeting	12
21/04/16	Kakau Tribe	Guadalcanal	Phone call	2
11/03/16	Zaira Village	Vangunu	Meeting	10
17/05/15	Makira Community Natural Conservation Trust	Makira	Meeting	50 (across Nara, Hauta and Maraone Villages)
02/03/16 and April 2016	Ecological Solutions Solomon Islands	Choiseul	Meetings and email	David Boseto
20/12/15	KIBCA	Kolombangara	Meeting	1 (Ferguson Vaghi)

### Measures to avoid adverse impacts and provide culturally appropriate benefits

Our work involves communities in determining what is sustainable use of wildlife, through surveys and ecological research. This information is culturally appropriate: sustainable hunting appears to have been practiced traditionally by different communities in the project areas (e.g. Zaira), and local people have a strong interest in it.

Our collaboration with the SICCP and inclusion of local participants who speak indigenous languages should help to avoid conflicts over hiring (e.g. Edmund Batee and Cornelius Qaqara).

### Monitoring

We will use village level discussions to monitor local opinion, positive and negative outcomes of the project. We prefer to adopt culturally appropriate methods of monitoring the progress of our project. In Solomon Islands this is an ongoing process of meeting with people in their homes, formal meetings with village leaders and arranging village forums if that is what leaders deem is appropriate. Community consultation will continue throughout the life of the project.

## **Grievance mechanisms**

People will be encouraged to register any grievances: 1) Through village and community leaders and contacts, and 2) Directly at community forums. Dispute resolution between local groups will include the local village chief or council of chiefs (the usual accepted channel). Any grievances raised with the project team or third-party contact will be communicated to the CEPF Secretariat and the Regional Implementation Team at IUCN within 14 days, together with a plan for remedial action (if any required).