Fiji Ecosystem Based Management (EBM) = Healthy People, Processes and Systems



VATU-I-RA COMMUNITY BULLETIN



Ni sa bula vinaka! Welcome to the fourteenth edition of the VATU-I-RA COMMUNITY BUL-LETIN. The bulletin brings together news and results from ongoing activities by the Wildlife Conservation Society within the Vatu-i-Ra group.

Vol. 14. Jul 2010

KUBULAU STAKEHOLDERS MEETING

On 21st June, the Bose Vanua, Kubulau Resource Management Committee (KRMC), and community facilitators, met with stakeholders, including WCS-Fiji and CORAL, to get an update on the natural resource management activities in Kubulau and other related issues. The meeting was held in Savusavu and facilitated by the KRMC chairperson Mr. Paulo Kolikata.

This was the first time in 2010 for the stakeholders to meet with the Bose Vanua, KRMC, and other community reps. This was also the first time the whole Bose Vanua had convened with all the KRMC reps.

The meeting proceeded with all stakeholders giving presentations about their work update and future workplans. WCS-Fiji's rep Sunil Raj. Prasad presented the planned activities for the next quarter of 2010. He also mentioned the launch of the recently developed EBM Guide which will be done during the Convention of Biological Diversity's (CBD) 10th Conference of Parties (CoP) 2010 in Nagoya, Japan. The launch will be done in partnership with Fiji government's Department of Environment, International Union for the Conservation of Nature (IUCN), and other groups from the Pacific.

Apart from this, WCS-Fiji also presented and reminded the participants about the proposed





Participants of the stakeholders meeting that was held in Savusavu on June 21st.

Cetacean research in Kubulau by Dr. Cara Miller. This project is aimed at investigating number and movement pattern of Odontocetes (including spinner dolphins, shortfinned pilot whales, false killer whales, and sperm whales) in Kubulau.

One of the other important upcoming event discussed at this meeting was the CORAL and SeaWeb led 'train the trainer' workshop which was held from 22nd (see next page for full story on this).

Fiji's IYoB theme for June was '*waste and pollution*' and for July is '*Invasive species*'. Please keep reading the Vatu-I-Ra bulletin to get more information on these themes and how you can help to protect Vatu-I-Ra's unique biodiversity.

KEY EBM MESSAGES:

Preservation of functional integrity of Fiji's ecoscapes through community based management.

- Successful 'ridge-to-reef' management depends on broad stakeholder input
- Inland and coastal communities need to manage their actions and resources together
- 'Ridge-to-reef' management protects habitat for all stages of life
- The success of protected areas for conservation and livelihoods relies on combining bottom-up community engagement with top-down planning
- Public health and livelihoods depend on environmental health
- Healthy ecosystems are the best defense against climate change impacts to livelihoods

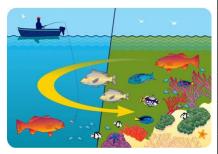
INSIDE THIS ISSUE: MPA EFFECTIVENESS MONITOR-ING SURVEYS ON VITI LEVU 2 CORAL TRAINING 2 GENTLE GIANTS OF THE SEA 3 THE CHANGING CLIMATE 3 KNOW YOUR INVASIVES: SOUTH 4 AMERICAN IGUANA 4

MPA EFFECTIVENESS MONITORING SURVEYS ON VITI

The WCS-Fiji team was recently invited to join FLMMA in conducting marine surveys to measure marine protected area (MPA) effectiveness in Rakiraki, Nakorotubu, and Navakavu. These surveys were conducted during the following dates: Rakiraki 24-19th May; Nakorotubu 30th May-5th June; and Navakavu 14-17th June.

MPAs can play a critical role in protecting marine biodiversity, ecosystem function and sustaining healthy coastal communities. However, MPAs globally face many challenges in achieving their objectives. For example, there may be insufficient financial and technical resources, lack of trained staff, or lack of data for management decisions. The surveys were designed and conducted to find out how well the MPAs in these 3 FLMMA sites were doing in relation to its objectives and targets (MPA effectiveness).

The management of MPAs must be effective in order to address the challenges mentioned above and to realize the benefits protected areas can provide. Well planned networks of MPAs provide important spatial links to maintain ecosystem processes and connectivity.



The image showing one of the benefits of MPAs-the spill over effect. If properly designed and large enough, MPAs provide refuges where fish can grow to maturity and breed, creating a "spill over" effect (populating surrounding areas). (source: <u>www.amcs.org.au/</u> <u>WhatWeDo.asp?active_page_id=401</u>)

CORAL TRAINING

THE GOAL OF ECOSYSTEM-BASED MANAGEMENT IS TO MAINTAIN AN ECOSYSTEM IN A <u>HEALTHY</u>, <u>PRODUCTIVE</u> AND <u>RESILIENT</u> CONDITION SO THAT IT CAN PROVIDE THE <u>SERVICES</u> HUMANS WANT AND NEED.



Participants of the 'train the trainers' workshop that was held by CORAL, SeaWeb and WCS-Fiji.

From June 22-26th, the Kubulau Resource Management Committee (KRMC), Turaga-ni-koros, Turaga-ni- Yavusas, community facilitators, Roko Tui Bua, and Cakaudrove provincial office reps met with participants from Coral Reef Alliance (CORAL) SeaWeb, and Wildlife Conservation Society-Fiji (WCS-Fiji) to attend the 'train the trainers' training.

The workshop was organized to train the Kubulau community members in carrying out training and awareness programs on various natural resource conservation issue for Kubulau. One of the aims of the workshop was the train the community members so that they can then train and make other community members aware of the important management issues for Kubulau.

The training covered: 1) presentation its plants and animals, and the mantechniques; 2) leading discussions with agement of these interesting plants target audience; and 3) using data to sup- and animals. port messages. The participants also practiced working in groups to address issues affecting their daily lives from environmental degradation to loss of traditional

values. They were then asked to present their work (as a group) to the trainers, observers and their peers in the form of: 1) a message box; 2) posters and charts; and 3) discussions.

The training also offered an interesting overview of the legends and traditional stories from Kubulau that was shared during the workshop. These stories have been recorded and will be presented in the EcoGuide for Kubulau, which is being developed by WCS-Fiji and CORAL.

As part of this work, a team from WCS-Fiji and CORAL were in Kubulau from 18-29th July to gather interesting stories about totem plants and animals from Kubulau, cultural associations of Kubulau communities to its plants and animals, and the management of these interesting plants and animals.

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GENTLE GIANTS OF THE SEA

In June this year, a group of divers onboard the Nai'a were lucky enough to jump in at the North Save-a-tack dive site to be greeted by not only a school of hammerheads, but also a 12 meter whale shark!

Whale sharks are extremely rare creatures. So rare in fact that they are listed on Appendix II of the Convention on Trade in Endangered Species of Wild Fauna and Flora (CITES), and on Appendix II on the Convention on Migratory Species (CMS).

The fact that they have been sighted within the Namena Marine Reserve confirms the health of the ecosystem within the Kubulau Qoliqoli. Johnny Singh from Cousteau confirms a sighting by L'Aventure divers around this time two years ago and once before that also. This suggests that the Namena Marine Reserve is on the migratory pathway for at least one individual.

Whale sharks are endangered for many reasons, including unsustainable fishing in parts of the whale shark's range. Whale sharks are caught for their meat, fins, liver, cartilage, skin and viscera. It is possible that increased levels of noise and pollution resulting from an increase in boat traffic may also have a negative impact on the migration patterns normally followed by whale sharks, through disturbance to habitat or through disturbance of individual sharks. Damaged ecosystems that the whale shark relies upon can result in changes to behavior and migratory routes, another great reason to protect the precious coral reefs within the Kubulau Qoliqoli.



Fun Facts about Whale Sharks:

- The whale shark is the world's largest fish (largest found to date measured 20 metres and weighed 34 tonnes!!!)
- can live up to 100 years
- primarily a suction filter feeders, feeding on small crustaceans, small schooling fishes (such as sardines, anchovies and mackerel), and occasionally on small tuna and squid.
- have very long migratory routes one was recorded traveling at least 13,000

THE CHANGING CLIMATE

In the coming decades, scientists expect climate change to have an increasing impact on human and natural systems. In a warmer world, accessibility to food, water, energy and other raw materials are likely to change. Human health, biodiversity, and ecosystem services are also likely to be affected by the climate change.

Reducing our vulnerability to these impacts depends not only upon our ability to understand climate science and the impacts of climate change, but also upon our ability to integrate and use that knowledge effectively.

As part of its effort to minimize the predicted impacts of climate change on the livelihoods and ecosystem services in Vatu-I-Ra, WCS-Fiji has started doing surveys to identify the most resilient reefs of Kubulau. Resilient reefs are reefs which have the tendency to recover quickly after a disturbance,



The or impacts of climate change may be: 1) physical e.g. increased extreme temperature such as drought (left); 2) ecological, sea temperature rise leading to coral bleaching (middle); and 3) social or economic, e.g. shift in production of agriculture and food production (right).

such as coral bleaching.

It is important to identify these area and incorporate them into the existing protected areas network as these reefs are likely to continue to support livelihoods and essential ecosystem services into the future.

Human activities have affected the land, oceans, and atmosphere, and these changes have altered global climate patterns. Burning fossil fuels, releasing chemicals into he atmosphere, reducing the amount of forest cover, and rapid expansion of farming, development, and industrial activities are releasing carbon dioxide into the atmosphere and changing the balance of the climate system.

Therefore, we should look after our ecosystems now to ensure that our livelihoods and important ecosystem services are maintained in the face of climate change.

FIJI ECOSYSTEM BASED Management (EBM) = Healthy People, Processes and Systems

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Ongoing and Upcoming Events

- Jul 2010 Collect stories from Kubulau for EcoGuide
- Jul-Oct 2010 development of enforcement protocols for terrestrial and marine habitats

NEW STAFF

WCS-Fiji welcomes Janette Kaipio, the new program manager, who has recently joined the WCS team. Janette has more then 13 years of general management and business development experience. Janette specializes in program management and planning, program evaluation and monitoring, and human resources.

- Jul-Sep 2010 Participation in provincial meeting
- **Oct 2010** Riparian and instream surveys.



KNOW YOUR INVASIVES: GREEN IGUANA

The green iguana (*Iguana iguana*) is native to South America, and was reportedly brought into Fiji by a foreign national. It is now found on the islands of Qamea, Laucala, Matagi, and Taveuni.

The American iguana has been labeled as a potential risk to the endangered and endemic iguanas through the spread of disease. It is also stated that the green iguanas can also pose threat to human lives. A report by the University of the South Pacific (USP) states that green iguanas can become aggressive and attack humans the moment they lose their fear of humans. There have been reports of these iguanas becoming extremely aggressive by chasing, biting and scratching people. The second threat is free roaming individuals can spread disease causing bacteria such as Salmonella. Reports mention that 'free roaming iguanas mean free roaming salmonella bacteria which should be avoided at all cost'.

The report says that "the green iguana is a known herbivore and at times feeds only on small insects and gastropods such as snails and slugs". Unlike our endemic iguanas (banded and crested iguanas) the green iguanas themselves are a good source of protein and can provide a healthy meal for a whole family. In central and South America, which is the native home range for these iguanas, the iguanas are still a source of meat and is often referred to as *gallina de palo*, which means 'chicken of the tree' as the meat is said to taste like chicken.

ANY QUESTIONS...?

Please send your questions and letters to the EBM Bulletin Editorial Team, using the contact details above. The deadline for submissions to the next newsletter is Friday 5^{th} May 2010. Please contact the Editor for further details.

TAQOMAKI NI NODA VEIKABULA



The Wildlife Conservation Society (WCS) is a U.S. based international NGO, with conservation programs all around the world, including Fiji. Over the past century, the WCS has worked to establish more than 130 parks and protected areas on land and at sea as well as working on threatened species. WCS works to save wildlife and wild places by understanding and resolving the critical problems that threaten key species and large, wild ecosystems around the world.