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Pursuing Sustainable Development on Gau Island – Fiji

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SUMMARY

The project is located in Vanuaso Tikina, one of the three districts of Gau Island, Fiji. The people of Vanuaso Tikina (“tikina” means “district”), like those on the rest of Gau Island, are involved in commercial agriculture and intensive fishing. The activities of the community have been altering the coastal habitats such as mangrove forests and seagrass beds. In addition, changes in the villages such as population growth and the adoption of westernized lifestyles have resulted in coastal pollution and more exploitative uses of natural resources, thus threatening the people’s living conditions.

The aim of the project is to involve the people in sustainable development, initially in five of the villages in the district and ultimately in all of the 16 villages on Gau Island. The initiative also seeks to make Gau Island a place where the people use natural resources based on appropriate management plans developed for their villages and the island.

The project engages local communities in the management of their environmental resources. It empowers the villagers to make plans and take decisions that incorporate their social and economic aspirations and requirements and yet are holistic and consistent with known sustainable development practices. The local communities are assisted in adopting integrated resource management that enhances community livelihoods and promotes sustainable development practices in the use of their natural resources and associated land-use practices.

The project is an evolving collaborative effort that began in 2002. It involves the University of the South Pacific, IOI-Pacific Islands, and their partners, working with the people of Gau, who are represented by the Committee Lomani Gau, formed by the concerned villages in 2005. The project enjoys the support of the chiefs of the three districts, all the villages, the provincial administration and the Ministry of Health. The input of funds into the project has been about \$10,000 per year, raised from different sources, including IOI-Pacific Islands.

The project has encouraged the people in the individual villages to formulate resource management plans and use them as part of their development practices. The expected outputs of the project include the use and adoption of proper land-use guidelines, better-managed coastal habitats, protected water catchments to avoid contamination of drinking water, well-managed disposal of waste,

healthy water and safer drainage in villages, rehabilitated coastal vegetation, a participatory way of taking decisions, an integrated resource-management approach, use of appropriate and safe development technology, and adoption of new sources of livelihood and income.

BACKGROUND AND JUSTIFICATION

Gau Island lies 90 km east of the nation's capital, Suva, which is on Viti Levu, the main island in the Fiji group. Fifth largest in the group, it is in its pristine condition predominantly because the people live a semi-subsistence existence. A rugged mountain range runs along the interior of the island, and coastal lowlands and river plains feed off this central highland.

Gau Island has a virgin cloud forest in the interior where the endemic indigenous bird, the Kacau, or Fiji Petrel, is found. It is also the source of a wide range of endemic plants and contains the sites of ancient settlements. The forests cover nearly half the island and have never been logged. They provide the people with clean water and air, wild food, building materials and specialized goods such as herbal medicine, farming implements, materials for pillows and cushions, and scent for oil.

Like many islands in the Pacific, Gau is encircled by a barrier reef, which provides the people with a variety of seafood and other resources that are sources of income as well as building materials.

The environment in Vanuaso Tikina is threatened by the impact of development activities that degrade natural habitats. The construction of the road around the island and the airport in the 1970s constituted the largest shocks to which the island environment has been subjected. For a long time after this construction, extensive silt was found in the coastal areas. In recent times, the villagers have increased land-use activities that have resulted in more sediment offloading into the marine environment.

Semi-subsistence farming is the main activity and the practice of shifting cultivation has increased the islanders' impact on their surroundings. With better farming equipment and machines and the indiscriminate use of fire, villagers are rapidly progressing towards the virgin cloud forest that covers the mountainous interior.

People in rural areas such as Gau Island are faced with development challenges that they need to address adequately and appropriately. This is crucial because they make difficult resource-use decisions every day, and if they are not aware of what is best for them in the short and long terms, they are likely to lose their heritage.

The people of Vanuaso Tikina face challenges of environmental conservation in the management of their coastal habitats such as coral reefs, mangrove forests, sea-grass beds and littoral forests. Since 2002, the villages in Vanuaso Tikina have collaborated with IOI-Pacific Islands and the University of the South Pacific in preparing themselves to manage their

environmental resources during the difficult and challenging times ahead.

CHALLENGE ADDRESSED

The challenge in Vanuaso Tikina, as on the whole of Gau Island and in all rural areas in developing countries such as Fiji, is to engage the local people in the sustainable development of their environmental resources. This is why sustainable rural practices must be pursued in all facets of their development activities. This is particularly logical on Fiji, as on many other Pacific Islands, because the villagers own the resources on which they depend and have aspirations to benefit from their use. For the majority of these groups, their environmental resources also provide sustenance that needs to be maintained if the poverty that is rampant in many of the developing countries of the world is to be avoided on the small islands of the Pacific.

OBJECTIVES

The project goal is to make integrated resource management and sustainable development part of rural development planning and implementation in all villages in Vanuaso Tikina and on Gau.

The expected outputs of the initiative include:

- adoption of proper land-use guidelines;
- better-managed coastal habitats;

- protected water catchments to avoid contamination of drinking water;
- well-managed disposal of waste;
- healthy water and safer drainage;
- rehabilitated coastal vegetation;
- participatory decision-making;
- integrated resource management;
- use of appropriate technologies; and
- new sources of livelihood.

This initiative is called “Mositi Vanuaso”. The Fijian word “mositi” connotes an attachment to something of value. “Mositi Vanuaso” evokes a common commitment to protect and manage the resources of Vanuaso Tikina, which are intimately linked to the welfare and livelihood of its people.

PROJECT PLANNING AND DESIGN

The project first conducted a resource management workshop for Vanuaso Tikina where the participants discussed their aspirations, challenges and opportunities. The people at the workshop produced action plans on what they were to do and showed commitment by declaring no-take areas in each of the six villages and settlements and agreeing to management practices. The plans that were endorsed by all the villages became the basis of the project activities.

The potential was different in different villages and this needed to be carefully

exploited to ensure that the natural endowments would be the basis of the development activities.

The genuine involvement of people in the communities in the long-term management of resources is a precondition for the success of all initiatives that involve them. This approach is suited to people in the Pacific because of their ownership of most of the resources and the importance of these resources to the people in the communities. Community-based initiatives are emphasized because they are cost-effective and more appropriate. The intimate knowledge of local resources can be put to good use when methods of resource management determined by local people are applied to ensure the sustainable use of environmental resources.

In spite of all the reasons why local communities need to be encouraged to determine their own development strategies, it also is important that outside input be incorporated. This is to ensure that the local communities learn and benefit from the experience of others and not be left to learn only from their own first-hand experiences. In addition, many of the issues relating to the use of environmental resources are new to local communities. It is therefore logical for local communities to receive advice and assistance from outside the communities.

The project encourages the people in the individual villages to formulate resource-management plans that will be the basis of the resource-management guidelines for the whole island. These

villagers and therefore the island will incorporate resource-management activities as part of their development practices to ensure the integrity of their environmental resources and systems.

The outcomes of the “Mositi Vanuaso” initiative are expected to benefit the current and future inhabitants of the district.

ACHIEVEMENTS AND OUTCOMES

The people of Vanuaso Tikina have now begun managing their inshore and marine fisheries and are consolidating their activities by addressing the sources of threat on land. In addition to trying to care for their environment, which is the basis of all development activities, the people are attempting to have alternative sources of livelihood and income. Exploitation of the different development potential that exists in different villages is now carefully planned and implemented to ensure that

the natural endowments are the basis of the development activities.

The accomplishments of the “Mositi Vanuaso” initiative include the following:

- Long-term no-take marine areas have been established in all five villages. In 2006, Fiji Fisheries provided giant clams from Makogai to all of these protected areas.
- A stone breakwater has been built to protect the coast in Naovuka. In past cyclones, tidal waves caused devastation in the village. The breakwater now protects the coast and has resulted in reduced coastal erosion.
- The planting and management of coastal forests and native hardwood sources are undertaken in all the villages to protect the villages and provide a supply in the future. Native hardwood trees, namely, *vesi*, *dilo*, *dakua*, *dakua makadre*



A pit for waste disposal.

and tavola, provide shelter from salt spray and reduce coastal erosion.

- Mangrove forests are now protected and planted because of their importance to the fisheries resources and to the protection of coastlines.
- Deforestation has been reduced by controlling the cutting of trees and unnecessary burning.
- Wildfires, which have been common and very destructive, are now strictly monitored and prevented.
- A smokeless stove has been promoted among the villagers. This efficient stove has reduced the firewood requirement and smoke inhalation.
- The protection of water catchment areas is critical to the health of rural settlements. Domesticated animals such as cattle and pigs threaten the health of villagers and should not be raised in water catchment areas or left to roam around, freely damaging the best farming areas. Proper care of these animals has enabled people to plant crops in nearby lowland areas while improving animal husbandry.
- The involvement of villagers in the decision-making process is showing encouraging signs, with the women and youth taking a more active interest in village development activities.
- Village waste and effluents are being addressed by digging pits, building the drains through the

villages and promoting better waste-management practices such as sorting and composting.

- Planting of *pandanus* (voivoi) that is used for making mats and buildings is now emphasized in areas where it is becoming a major source of income for the villagers. Mats are now sold in Suva, bringing into the district up to about \$1,000 per month. Most of this income is shared by women who are asking their husbands to plant these plants to ensure an abundant supply.
- In Lamiti, the villagers are farming a village taro garden to provide income for the village.
- The Malawai Village Youth Council now operates a cattle farm for which it provided the land, the labour and the post. The French Embassy provided the funding to purchase the wire, the staples and the animals. The project has been in operation since 2003 and the villagers now keep their income in a Unit Trust account.
- Villagers are able to dry and sell copra outside of Gau for cash to help with education and household expenditures.

MONITORING AND EVALUATION

Evaluation and monitoring are conducted via the follow-up visits through the communities. The emphasis on this approach is associated with the desire to

demonstrate that the work undertaken on Gau Island is effective and that the people will benefit from their environmental management activities. The achievement of aims and objectives is analysed to determine the changes and progress.

The villagers are committed to the project and demonstrate pleasing results. People are making resource-management decisions and supporting them with real action. Mangroves and coastal habitats are being protected and rehabilitated while marine environments also are being protected. Effort has also been focused on land-based sources of threat such as waste management, agriculture and land-use practices as well as on long-term development activities.

STRENGTHS OF THE INITIATIVE

The strengths of the approach discussed in this case study include the following:

- involvement of people in the effective management of their environmental resources;
- promotion of self-determined initiatives;
- connection of resource management and development activities;
- attraction of new development partners; and
- promotion of new development options.

WEAKNESSES OF THE INITIATIVE

The main weaknesses include:

- limited funding, which slows progress;
- lack of government support for community development initiatives;
- poaching from community groups by well-off outsiders; and
- social and cultural pressures.

PARTNERSHIPS

Partnerships have been a special feature of this sustainable development initiative. The lack of success at the national government level has necessitated the focus on communities, which, while well placed to articulate sustainable development, must not be expected to defend their resource-management activities against outside forces that often have better access to capital and human resources. In addition, sustainable development necessitates the involvement of many stakeholders, including the owners of the resources, the users and civil society. Technical experts and funding agencies also provide advice on issues that are new in the communities that undertake resource management.

The project initiatives have succeeded only because of the partnership of community members, resource owners, conservation practitioners, researchers,

government officials and international funding agencies. The University of the South Pacific, IOI-Pacific Islands, the Japan International Cooperation Agency (JICA), the National Fish and Wildlife Foundation, and the French Embassy have been generous with their funding over the years. In addition, there is widespread support from all the chiefs, all the villages, the provincial administration and the Ministry of Health officials on the island.

The partnership has greatly boosted the number and skills of people practising and promoting effective community-based resource management while the pool of people has made the network responsive and workable. Through collaboration with external partners, important resource-management activities and training have been undertaken as international funding agencies now pay for resource management at the local level. Some villagers became licensed honorary fish wardens, demonstrating that the partnership helped in the preservation of natural biodiversity while providing opportunities for the livelihoods of the communities in the district.

Frontier-Fiji, a subsidiary of The Society for Environmental Exploration (United Kingdom), entered into a partnership with IOI-Pacific Islands to undertake a resource survey on the island. Other organizations such as the Planetary Coral Reef Foundation have also offered to assist the people of Gau.

INNOVATIONS

The work in Vanuaso Tikina is innovative in that it tries to integrate resource management into people's development activities. It is hoped that this approach will make the people realize that marine-resource management needs to be related to the management of the environment in general and that people can benefit from their resource-management activities. For instance, the project has made people aware of the extent to which they themselves can address many of the challenges that they face.

It emphasizes self-determined and integrated development that enriches the people while safeguarding the integrity of their environment, which provides for them.

SUSTAINABILITY

The project has been planned to involve the people in Vanuaso Tikina over the long term. Such a long association is designed to convince the people that resource management should be adopted by all communities. Emphasis is also placed on the idea that development activities involving communities should be led and paid for by the latter and that these communities should ask only for assistance to cover costs that cannot be borne by them.

The activities that have been undertaken up to this point support the

assertion that the people need to be convinced if they are to continue to manage their environmental resources.

REPLICABILITY

The work on Gau was undertaken initially in one of the three districts on the island and has now been adopted in the two other districts. The approach is also being promoted in other parts of Fiji and the Pacific Islands. It is simple and straightforward enough to have global application.

The project processes and outputs are reported in publications and papers that will enhance the mainstreaming of the project activities. This method has been tried and IOI-Pacific Islands is happy with the preliminary results. Some of the publications from the project are listed at the end of this case study.

The plan now is to incorporate the village plans into a Code of Conduct for Sustainable Living on Gau Island. The Code will be used to monitor the impact of the project. An external review process will be undertaken two years after the whole island is involved. The project activities should ensure that the people of Gau pursue rural development while retaining the integrity of their natural environment and its resources. The people will use their environmental resources to improve their lives while keeping these resources intact to provide the services that they support.

Environmental management on Gau, as in Vanuaso Tikina, will be pursued simultaneously with rural development to provide good lessons in sustainable living that can be promoted to other community groups in a similar situation.

LESSONS LEARNED

Community-based arrangements for resource use make resource conservation at that level more effective. By using the communities' resource-use traditions and close ties, the people are better able than government agencies to determine the level of resource use while their traditional cultural values allow for the effective implementation of management decisions. Close social relations that are lost in international and national resource-management initiatives are strengths that should be emphasized in resource management.

Biological, social and economic surveys and monitoring are necessary to determine and improve the effectiveness of communities' chosen interventions. These exercises are important to maintain people's commitment to resource-management initiatives. This commitment is crucial because local communities continue to live with the dilemma of choosing between incomes from the immediate and unsustainable use of resources and the more remote future benefits of conservation activities. People therefore must be continually reminded of the effectiveness of the conservation activities that they undertake.

Management actions must be given time to work as the lessons people learn from these resource-conservation efforts will be an inspiration for the continuation of conservation and resource management into the future. The partnerships in this project have enabled the people to collaborate and work together to make conservation better for the people involved and the environment. The core values that the partners have observed have enhanced the partnerships. Commitment, teamwork, transparency, empowerment, respect, fun and the belief that practitioners can make a difference have ensured that the people understand each other and trust each other to deliver on their responsibilities. They also can be barriers to genuine partnership that cannot be easily overcome through legal contracts but rather through a social commitment to doing better in terms of conservation and making a difference for the people.

Government agencies need to play an active role in involving community-based groups in the management of environmental resources. Government support brings legitimacy to the approach and assists in mainstreaming the process. It can also enhance funding with the provision of matching finance as well as address issues such as surveillance and control that currently hinder the performance of local resource-management initiatives. Without government support, the potential of the experience mentioned here will not be fully realized.

Resource management not only is a bulwark against poverty in rural commu-

nities, but it can also make economic development sensible. Resource management on Gau is aimed mainly at securing people's livelihoods and there are already signs that the social and economic conditions are improving. People are learning that the resources of the environment need to be used sustainably, which means that the resources are not overexploited and that genuine attempts are made to keep the production level below that which the stock can support on a long-term basis. In addition, more people are now aware that natural resources need not be extracted to be beneficial and that having well-managed environmental resources can be financially rewarding.

Government agencies need to commit resources to these initiatives involving local communities. Government cannot pay for most of the work that is required as part of the sustainable development initiatives and process but it can meaningfully assist the partners that are working in this area. Government can also help to promote the approaches that are proven to work so that other communities may be spared the anguish associated with failed initiatives.

The project on Gau provides a guide to how people are involved in the management of local resources and development activities. At all levels from the communities to the district, province, national government and the world, the people and their partners must promote and practise integration, collaboration and iterative management, which are the pillars of the integrated resource-

management approach. This approach should be adopted in all areas where the local communities are trying to manage marine resources. Since the coastal communities and resources are complicated and need to be managed in the best way possible, the integrated approach used by the partners of the “Mositi Vanuaso” and Lomani Gau projects should be taken into consideration. The aims of the conservation and management must reflect the need to manage environmental resources and involve people meaningfully in the process.

FUTURE PLANS

The future plan is to continue to encourage the villagers on Gau to undertake sustainable economic activities that would provide options that are presently unavailable.

The pursuit of sustainable development on Gau demonstrates that the care of the environment makes cultural, economic and ecological sense and will be continually promoted by the people attuned to it. This is part of the iterative learning that must be adopted on Gau and elsewhere because all development is dependent on environmental resources and the conservation of the environment ultimately determines the sustainability of development activities. To achieve long-term sustainable development goals, it is critical that rural communities be convinced of the importance of the rehabilitation of coastal habitats and the adoption of alternative sources of liveli-

hood. People must realize the intricate relationships between their development aspirations and the quality of their environmental resources. The attainment of these long-term sustainable development goals will be the ultimate test of success. The preliminary results on Gau are showing the promise that needs to be fully realized with a little more intensive support and effort.

RECOGNITION AND AWARDS

The success of “Mositi Vanuaso” has been internationally acknowledged twice since the project began. The project, which is a part of the Fiji Locally Managed Marine Area (FLMMA) Network, was one of the recipients of the Equator Prize of the Equator Initiative at the World Summit on Sustainable Development in Johannesburg, South Africa, in 2002 for successfully integrating poverty alleviation and biodiversity conservation.

“Mositi Vanuaso” also won the Energy Globe Award for Fiji in 2007. This award is given to projects from all over the world that make careful and economical use of resources and employ alternative energy sources. The Energy Globe Award is intended to inform the international public about as many sustainable projects that can be reproduced as possible.

In addition, in 2007, the project won the University of the South Pacific’s Vice-Chancellor’s Prize for Research Excellence for its innovative qualities.

CONCLUSION

The best reward for the partners involved with "Mositi Vanuaso" is the quality of life that is ensured for the people of Vanuaso Tikina. Collaborative partnerships such as this one have much to offer Fijian and Pacific communities and will be a model for future development efforts.

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