



# CAUGHT BETWEEN TWO WORLDS

A Social Impact Study of Large and Small Scale Development  
in Marovo Lagoon, Solomon Islands

GREENPEACE PACIFIC

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## **Conclusion:**

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# Summary Findings

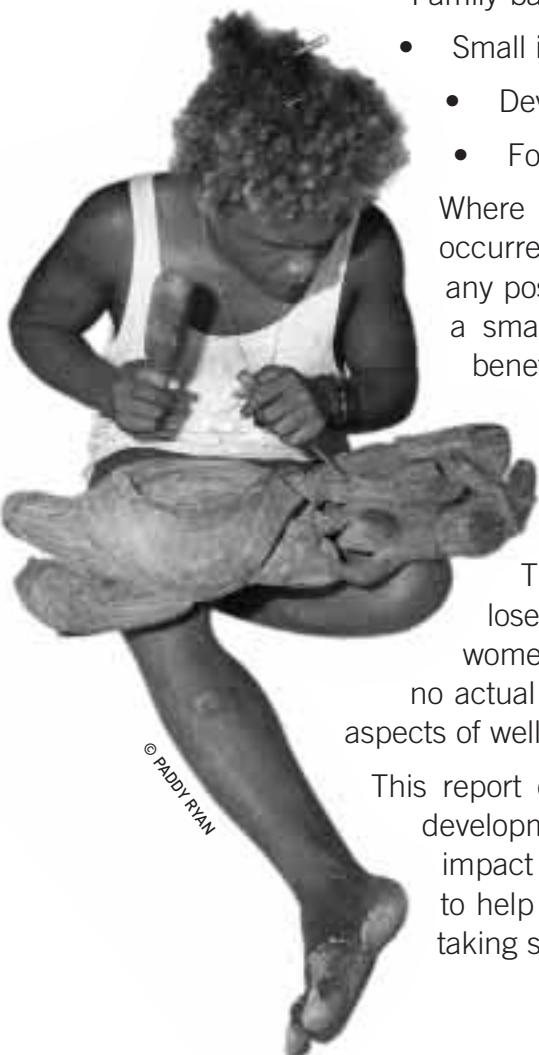
Commercial development in the Marovo Lagoon is having a powerful impact on village society and culture, as Western-style materialism infiltrates and overtakes traditional living. The introduction of the cash economy has been escalating over the last 50 years.

A few villagers see this shift to ‘modern living’ as positive. The majority of Marovo people interviewed in this study saw the erosion of traditional values as damaging to the well-being of their communities. They saw any commercial activity as having harmful effects. Their main concerns are:

- Traditional skills loss, including cultural and life skills (eg. food production, weaving)
- Traditional authority and leadership structures erosion, and less respect for elders
- The erosion of their collectivist culture, where working together is essential to villagers’ well-being and even survival
- An excessive reliance on cash and an increasing reluctance amongst men to contribute to primary production of food and housing
- Fears about where these trends will lead in the future.

Some positive impacts of commercial activity were evident where small-scale, village or family based enterprise such as eco-tourism, paper-making and ecoforestry had been developed relatively slowly, including:

- Family-based, rather than village-based
- Small in scale and manageable by one family group
  - Developed gradually with minimal control by outsiders
  - Focused on conservation of natural resources.



Where large-scale, foreign-owned enterprise development has occurred, the majority of villagers have been unable to identify any positive social or economic outcomes for themselves. While a small number of individuals have received some financial benefit, most have not shared in that gain. Even years after foreign loggers had left, villagers have not found ways of generating income or other ways to provide themselves with housing, food and transport, nor for remedying the loss of trust in each other and their authority structures.

The study indicates that, in general, women have been the losers. Most economic benefits went to the men, whereas women almost invariably ended up with a heavier workload and no actual benefit in terms of their own health, education or other aspects of well-being.

This report explores people’s experiences of large and small-scale developments in Marovo. It is the result of a qualitative social impact study [see Detailed Findings and Appendix 2] that aims to help others make informed planning and policy decisions by taking social consequences into account.

**Table 1: Summary of comparative social impacts**

TRADITIONAL ACTIVITIES	EXPERIENCE OF LARGE-SCALE INDUSTRIAL ENTERPRISES	SMALL-SCALE ENTERPRISES
Bartering, shell and feather money.	Money is desirable and can replace traditional subsistence lifestyle.	Money seen as a useful addition to traditional resources.
Reliance on subsistence gardening, gathering, hunting lifestyles.	Money is used for non-essential and status symbol items like 'label' clothes, TVs, and alcohol.	Money trickles in and is shared by the whole family.
The little money gained is focused on essentials such as bride-price and schooling.	Money is earned, generally individually by men and often not shared, leading to conflict and resentment.	Money adds value where new skills are developed and local people trained.
Resources are controlled and used by customary owners.	Families and relatives fight over money.	The whole village or clan may work together in the business.
Labour and natural resources like food and housing materials tend to be shared.	Loss of control of resources through involvement of foreign companies.	Village enterprises strengthen culture by using traditional materials and skills for food, bush medicines, bush stories and handcrafts.
Food, water, housing products and bush medicines are abundant.	Logging and plantations permanently damage food sources, water, housing and bush medicines.	Money is used for schooling, taking sick babies and elders to hospital, water supply, toilets, housing and put back into the business.
Extended family activities are common.	Distrust and suspicion are common.	Small-scale enterprises can improve extended family life – or it can leave business owners with less time to visit family members and relatives.
Strong belief systems are the centre of community life.	Less joint village activities like shellfish collecting and house building.	Continued belief systems and church-going.

## TRADITIONAL ACTIVITIES

continued

People respect their chiefs, 'bigmen' and elders.

Villagers respect one another (men for women, women for men, young people for elders).

Tambu (sacred) sites are protected.

Traditional diet of vegetables and tubers, fruits and nuts, seafood from near-shore fishing and collecting fresh water.

Bush foods (wild pigs, birds and flying foxes) and bush medicines supplement diet.

Traditional crafts and practices are common.

## EXPERIENCE OF LARGE-SCALE INDUSTRIAL ENTERPRISES

continued

People stop respecting chiefs and elders who are motivated by greed and short term gains (ie. sell off land rights) and/or squander village income.

Respect for one another breaks down in some villages.

Women's workloads increase – leaving them tired, angry and less time to talk to one another. Greater laziness among men.

Tambu (sacred) sites damaged by large enterprise like logging.

Traditional skills and methods lost and less time spent on these activities – children can lose basic survival skills.

Elders are upset about young peoples' loss of connection with traditional skills and culture and worried about increases in suicide, alcohol abuse and prostitution.

More malaria, rotten teeth, and other health problems.

## SMALL-SCALE ENTERPRISES

continued

Traditional village chief and leadership remains – in individual households, women and children become involved in decision making.

Respect for one another is reinforced through working together and valuing traditional skills.

More work for women but work divided between men and women.

Change is slower so people can adjust and plan for the future.



# Challenges and Solutions

## The challenges

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- Stop large-scale industrial logging and clearing forests for plantations
- Conduct a comprehensive and independent social impact assessment of the Sylvania Plantation Products Ltd's (SPPL) oil palm operation on Vangunu Island
- Delay decisions over mining in the Marovo area until there is an independent audit of social, economic and environmental impacts
- Adopt Forest Stewardship Council (FSC) standards for any forestry or plantation operations

## The solutions

- Adopt small/medium scale business models
- Stop funding and promoting large-scale plantation developments and industrial logging
- Set up a community compensation and restoration program for villages badly affected by logging or plantation development
- Establish a financial package to compensate governments who move away from large-scale industrial logging
- Assist communities to set up, manage and market village-based enterprises such as eco-timber, eco-tourism, carving, papermaking and sustainable marine harvesting

 Current Logging	 Tree Plantations
 Former Logging	 Ecotourism lodge
 Carving	 Mining
 Small-scale 'ecotimber' milling	 Papermaking
 Villages surveyed	 Oil Palm Plantation
 Approx. area of Oil Palm Plantation Proposal	

# Introduction

## Solomon Islands

Solomon Islands is made up of 992 islands spread over 28,000 square kilometres. The major islands – Guadalcanal, Malaita, San Cristobal, Santa Ysabel, Choiseul, and New Georgia – feature forest clad, rainfall soaked mountains, fringed with rich coral reef and lagoon systems.

Almost all (90 percent) of Solomon Islanders live in rural villages and survive on food from their own garden plots, near-shore fishing and some hunting and gathering. The forest provides housing, fuel, transport and other needs. Local markets for produce, craft and timber and, in some areas, tourism, supplements village income.

Some 89 percent of the land and near-shore waters are ‘owned’ by local clans: groups of shifting membership linked by relationships of blood and marriage. This customary tenure is recognised in the courts.

The Solomon’s population (approximately 430,000<sup>1</sup>) is growing at above 3 percent per year – one of the highest rates in the world. Almost 60 per cent of the population is 20 years old or younger. The government can only afford to provide children with up to six years of education, and thus the Solomon’s has one of the Pacific’s highest rates of illiteracy. However, most speak at least three or four languages out of the 60-70 found in the country.

The young and growing population demand ‘development’ (public services and jobs), yet at most around 20 percent of the labour force have a paying job. The vast majority of the population is occupied in subsistence cultivation<sup>2</sup>, yet only a third of the land is suitable for agriculture.



## Marovo Lagoon

Marovo is the world's best defined double-barrier-island lagoon, and one of the largest.<sup>3</sup> It is described by James Michener as the "eighth wonder of the world". It stretches for 100 kilometres, sheltering twelve major and 200 smaller islands from deep waters. The three largest islands – New Georgia, Vangunu and Ngatokae – cover an area of about 2,500 square kilometers, and the area of the lagoon shelf is about 700 km<sup>2</sup>.

Its human history began around 30,000 years ago, with island hopping migration from New Guinea in the west.<sup>4</sup> Almost 90 percent of the area is owned by indigenous subgroups called "butubutu". Each of the 15 Marovo butubutu controls a "pauva" or section of land and lagoon guaranteed to them through ancestral rights. Butubutu have claims from the top of mountains to the open sea immediately beyond the barrier reef.

Within a butubutu, people either have ownership or a 'right to use' the land/sea and its resources. The 'right-to-use' is passed by matrilineal or patrilineal means, depending on the clan.

The butubutu system doesn't allow outsiders to exploit marine resources for commercial purposes. If they sense commercial exploitation, a butubutu will increase its regulations.<sup>5</sup>

Marovo's approximately 11,000 people live in more than 50 villages. Almost all villages or hamlets are now found on the coastal fringe, following:

- Encouragement by missionaries over the last 150 years<sup>6</sup>
- Colonial-induced change factors (such as the decline of inland taro and yam gardening and the increase in other garden and tree (coconut) crop cultivation)<sup>7</sup>
- Availability of new technology (ie steel tools) for clearing vegetation and tillage<sup>8</sup>.

The villages range in size from two to more than 100 households, with an average of 11 people per household.<sup>9</sup> Several clans, related by blood ties (spanning 4-5 generations) or by marriage, usually live in each village.

Marovo people traditionally eat garden tubers and vegetables, fruits and nuts, and fish.<sup>10</sup> Bush foods – wild pigs, flying foxes, wild birds, and a variety of plants – still play an important dietary role, even though tinned fish, bread, biscuits, noodles, rice, tea and sugar are common. Imported rice has become a staple food.

Some villages have water tanks filled from a house roof but most still depend on natural watercourses.<sup>11</sup> Men

harvest the forest for wood to use for fires, medicine, handcrafts, tools and for building shelters and canoes.

## Culture and society

Marovo's culture revolves around core values of sharing, trust, community responsibility, mutual protection and religious beliefs. Social structures are based on:

- The traditional authority system of chiefs ("bigmen") and elders, and
- The authority structure of Christian religions.

Day-to-day activities are shared amongst households (cooking, house building, child and elder care) and the village (church building, establishing a new food garden and building a village wharf). Child rearing is shared across extended families. Children acknowledge multiple parenting, and first and second cousins are seen as "cousin-brothers" and "cousin-sisters". In general, men do the decision-making according to tradition, even in matrilineal clans, as is common in Melanesia.<sup>12</sup>

Sharing the load and calling upon others is important to the survival of 'subsistence' cultures. Marovo's reciprocal social system (dubbed "wantok" – or one talk – relatives of the same language group) traditionally protects people in times of drought, poverty or hardship. Communal activities are essential to the fabric of the lagoon society with cooking, house-building, child and elder care shared amongst several households, and church-building, making a new food garden or constructing a new village wharf shared by the village.

Wantoks barter and exchange food, wood, medicines and labour. These interactions strengthen community responsibility, interdependence and obligation. They are in effect social, not economic, exchanges.

## Religion

Religion is important to Marovo people. Nearly every village has at least one church and people devote several hours per week to religious activities. The main two churches are Seventh Day Adventist (SDA) and the (largely Methodist) United Church. The Christian Fellowship Church, South Sea Evangelical Church and others are found in a few villages.

Religion has been found to have a strong influence on people's attitude to natural resources, where Adventists have been more supportive of potential economic activities than other Christian religions.<sup>13</sup> It can be observed that virtually all past logging in Marovo on customary land has been on SDA-affiliated land.

## **Commerce**

Marovo's expansion into the cash economy began in the 20th century, through involvement or work with:

- Copra (coconut) production until the poor prices of the early 1990s
- The Seventh Day Adventist Church sawmill in Mbatuna from the 1960s to late 1980s.

The limited cash villagers' made supplemented their traditional lifestyles. However, money – small pieces of paper or numbers in a bank account book – was not given the same status as more tangible wealth such as a large garden, pigs or rich reef resources.

More recently villages and households have also earned some cash by selling one or more of the following:

- Reef fish, baitfish, beche-de-mer, shells, shellfish and crayfish
- Garden produce, vegetables and fruit
- Ngali and betel nuts
- Eggs and chickens
- Carving, weavings and house materials.

Over the past two decades, the Solomon Islands Government has increasingly licensed logging, plantation development and mining prospecting on customary land – often despite opposition from local people. Significant negative social and environmental impacts have been recorded where logging has occurred in Marovo and elsewhere in Solomon Islands.<sup>14</sup>

Meanwhile, the villagers have developed more organised income generating enterprises of their own, including:

- Village-based ecoforestry and small-scale sawmilling
- Small scale commercial fishing
- Tourism/eco-tourism ventures.

For the most part, village-based enterprise and large-scale commercial operations are mutually exclusive, as large-scale logging, plantations and mining:

- Reduces the area's appeal to tourists, and
- Reduces the viability of small-scale fishing or eco-timber production.

More importantly, recent research found the net economic benefit of small-scale enterprises to landowners far exceeded that of industrial activities in the Marovo Lagoon area<sup>15</sup> and in Choiseul Island.<sup>16</sup>



# Social Impacts

## Case Studies

### Case study 1: Industrial Logging and Plantation Development in Viru

Some 25,000 hectares of Viru's land was 'acquired' by the colonial government, logged extensively, then partly converted to plantations between 1964 and the mid 1980s. Local landowners agreed to the logging of some adjacent customary lands.



Most people anticipated logging to bring both personal wealth and positive developments for their village. They imagined Viru blossoming into a small town with modern facilities such as roads, electricity, a medical clinic, a high school, a new church and permanent housing for all.

They expected industrialisation to follow the logging and provide jobs. The villagers believed the logging company "promised" all this and more during the negotiations for the sale of land.

Twenty years later, Viru struggles economically, socially and spiritually. Few of the villagers' hopes have been realised. The promised buildings were only partly built, using low-grade materials that have already decayed. A wide road leading inland to the exotic plantations was completed. A large church was built but ironically it has become a symbol of the folly that the logging is now seen as. Only a few local men got jobs.

Attendance at the church, which was once the centre of the village's spiritual and social activity, has dropped sharply. The church bell, which once drew the entire community, now draws virtually no one when it is rung.

The people of Viru are reminded daily of the environ-

mental, social and economic damage caused by the logging. The lagoon is polluted with oil and silt and no longer supports edible fish life. The second-hand iron used to build the roofs of their houses is rusting and leaky.

Villagers must pay to drive the community's truck along the logging company's road and out to their gardens. The soil is badly damaged and produces little per acre. Gardening in hot sun without trees for shelter is exhausting and much of the planted vegetation dies. Fresh, nutritious food is hard to obtain, and rice and Taiyo (tinned, flaked tuna) accounts for 80% of their diet. Health continues to deteriorate – dental problems, malaria and hepatitis cases are rising.

Now that their forest is gone, villagers don't have the resources to build houses, make canoes or prepare natural medicines. They can't earn cash in the traditional way (selling carving and weavings made with bush materials) either. And they have nothing to trade for the things they need.

As a result, villagers fight over scarce resources they once freely shared, like the fish they catch and vegetables they grow. Children are growing up without knowing traditional skills such as gardening, bushcraft and hunting.

More damaging are the longer-term impacts on the social structures and patterns of the village, and the villagers' spiritual and mental health.

Once friendly to outsiders, the villagers are now suspicious of strangers. Even their daily social circles are mostly limited to immediate family. Men in the village are still squabbling over payments from the logging company, and their wives and children are socially distant from one another. Women who had relationships and illegitimate children with employees of the company are stigmatised.

The land available for housing is finite, but the population continues to grow. Overcrowding places a physical and emotional strain on everyone. Without the bush resources for building and other tasks, men (who are role models for the boys) are becoming lazy and unmotivated. With no work, drinking is becoming a big problem amongst both men and, to some extent, women.

Traditional systems of respect – men for women, women for men, and youngsters for elders – have broken down, and decision-making by consensus has become rare. Villagers voiced a sense of hopelessness about their futures, not knowing how to reverse the social breakdown.

Tambu (sacred) sites have been devastated, so villagers can no longer visit their ancestors. Some of these problems might be resolved when the land is again under

their control, but this will not happen for several more decades.

*"For myself, I can't see how we can ever get back to what it was like before. Money has spoiled us. People have become selfish, and only looking after themselves. But also we've lost our land, and without our land, we don't have a way back" – Viru Village elder*

## Case Study 2: Paper Making at Tenggomo

Tenggomo is a small island village. Three generations of one family – two brothers and a sister, their mother, their spouses and children make up its four households. The village has been making paper from natural fibres for the past four years.

They heard about other village paper making projects, and with information from local NGOs got started with a small grant from the New Zealand Government for equipment and tutoring from an experienced paper-maker.

The paper – made of banana leaf fibre from the family's palms grown in their gardens, and printed with Marovo cultural designs – is sold to tourists, both locally and in outlets in Gizo and Honiara, for around US\$6 per sheet. The venture is very successful and demand constantly exceeds supply.

Each family member contributes their labour and they all see a wide range of benefits in return – both for themselves, their family and the wider community.

*"The good thing about paper making is that women, children and older people can work on it and equally benefit. The money we have earned is divided among the families. They have used it to buy basic needs like soap and exercise books for school." – Jerry Tekopo, a Tenggomo Chief*

Benefits that members of the family identified include:

- Whole family ownership, pride and a sense of achievement
- A greater sense of security in relation to their future
- A business that supports their culture and wins community respect
- Income for education of girls as well as boys, medical and dental care and secure housing
- Contributions to community projects, such as building a new church
- New skills, including mechanical and business skills
- Enhancing their work ethic and motivation
- Reduced desire for children to seek opportunities elsewhere, such as the main city Honiara

- Providing employment opportunities for others in the wider community
- Providing a successful business model to the community
- Relief at no longer being tempted to sell their forest to commercial loggers
- Enhanced respect for the family within their community

They offer these tips for setting up a successful small business:



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- A strong work ethic and entrepreneurial sense, together with being willing to work hard
- Keep the business within a relatively small family unit to avoid money conflicts
- Work in your own back yard, so all the family can get involved and fit the work around other activities
- Share the profits equally and make decisions with all family members by consensus
- Seek help to develop management, business and marketing skills
- Put profits back into the business so that the business keeps growing

# Detailed Findings

## Generic Social Impacts of Commercial Enterprise

The most pervasive social impacts of commercial enterprise in the Marovo Lagoon are those which occur irrespective of the nature or scale of the enterprise. These revolve around a dramatic shift in understandings of value; from a focus on using the traditional resources of the people, bush and sea, to a focus on a cash economy, ways to obtain money and what it can purchase.

No matter whether the village has experienced a large-scale, foreign-owned enterprise such as logging, or a village-based enterprise such as a guest lodge, people report a greater reliance or anticipation of reliance on cash and purchased products for everyday survival (eg. food and cooking, housing, transport) than on traditional resources.

Once people in Marovo have seen what they can buy with their increasing amounts of money, their attitude changes, to earning money becoming not only more desirable but preferable to their traditional lifestyle. This is in spite of cash having been part of the life of many villages for decades with copra production and sales of logs to the Mbatuna sawmill.

While some of the people interviewed are seemingly oblivious to this shift in attitude, others, typically elders and women, are concerned about the growing materialism apparent in their villages. This is evident in particular amongst men, especially the younger men, who are the labour backbone of the village. They come to believe in money rather than traditional resources and their own labour as the solution to all their needs. This shift in attitude and values has several flow-on effects [see detail below], which in turn perpetuate the attitude.

Preference for a modern, Western lifestyle is often motivated by a desire to enhance security and reduce the harsher aspects of subsistence life. For example, a very common desire is to have a house with an iron roof, simply because, compared with a roof made from sago palm leaves, it requires less effort to make and install, is a more effective shelter, lasts much longer and is low maintenance.

People interviewed are often undecided about whether these changes are for better or for worse. They are attracted to the aspects of the Western world. However, people of all ages could also see the dangers of squandering their limited resources on things that would add little to their quality of life and potentially damage it.

*"Yes, I'd like a TV. Yes, I'd like a generator. But I know very well that my children and their children are going to get lazy and lose the ways we have if they are working only to make money to watch the same video every night. Now we spend our evenings talking together and praying together and talking with our children, and that is our time for making sure that everything is well in our family and in our village... I've seen my grandchildren in Honiara and they watch the TV and they have no respect for their parents, and that's not good for our village." – Village elder*

The social impacts described most commonly are generally seen as negative. Some people who obtain a direct financial benefit from commercial enterprise can see some positive impacts for themselves, mainly in areas of health and education. However the majority believe that the increasing focus on generating cash income damages their social balance.

The changes described most often in all of the villages are as follows:

- **Increased focus on ways to earn cash:** Lesser focus on production for family needs is resulting in the men doing less gardening, fishing or other work (eg. weaving leaf) for their own everyday survival. Instead, men are becoming focused increasingly on ways in which they might make money, irrespective of how unrealistic that might be. For example, working long hours to produce carvings or waiting for tourists (who often never arrived), and looking for ways to build guest lodges or set up visits to tambu sites, even though the tourist numbers to their particular part of the Marovo Lagoon might be minimal. This shift in activity inevitably placed a larger load of the village work onto women.

- **Anticipation of or reliance on cash income:**

There is a 'cargo cult'<sup>17</sup> sense that money will somehow become available to provide what is currently lacking and that individual or village effort is no longer necessary. For example, in one village, logging ceased some time ago but the logging company failed to build the school and clinic it promised. The possibility that it still might, however remote the reality, is sufficient for many people to justify not traditionally constructing the buildings they need in their community.

- **Increase in individual activity:** This is evident, again especially amongst men, to obtain cash, rather than in shared activity for production of family and

village resources. While men share resources other than money quite freely, money is not so readily shared with others, which leads to resentments and sometimes conflicts. Conflicts happen particularly over large amounts of money.

- **Increased focus on buyer consumer goods:** Men in particular described themselves as more concerned than previously with ways to acquire a whole range of unnecessary goods – commonly alcohol, ‘label’ clothing, shoes and boots, plastic fishing flies, radio-cassette players and electronic musical equipment, TVs and VCRs, and solar panels to operate electrical items. In villages where logging has occurred, these kinds of items are more in evidence, not only in use but also as litter. Even defunct items are kept on display in people’s homes, as evidence not only of their wealth but also of their ‘modernness’.

This change in focus shifts their attention from finding money for essential expenses, particularly school fees, clothing and materials for food preparation. Again, the brunt falls on the women to undertake more work – extra gardening to sell produce, or weaving in the evenings – to generate the money for these essential expenses.

- **Increased workload for women:** With the environmental damage from logging, especially loss of topsoil, trees, shade and silting up of rivers and streams, women in areas which have been logged have to walk much longer distances to their gardens, to get firewood, to do laundry or fetch clean water. They describe having to work twice as long in soil impoverished by the run-off from logging to produce the same amount of food essential to their families’ survival. Women assisting in running guest lodges have to extend their gardens to feed guests as well as their families, and are cooking, cleaning and doing laundry for the guest accommodation as well as for their own families. Rarely is this work compensated in any way from the business income.

As women’s days became busier, they find less time, and fewer opportunities, to talk with other women. Reduced time with other women means less satisfaction with their lives and, in some cases, real loneliness. In the villages, women describe having less time than previously to spend at church or in prayer groups, and their feelings that they are neglecting their spiritual development results in a strong sense of guilt from not fulfilling their responsibility to God.

- **Reduced focus on traditional living skills and activities:** As people come to believe that they can rely on some cash income, however unrealistic that belief, they lose either the time or motivation for their

traditional ways of providing for their needs. People operating guest lodges, for example, find less time available to garden, fish or forage for bush food, or to weave mats and baskets for everyday use, and instead begin to buy in food even for their own family’s use. The longer these operations have been in existence, the less likely it is that the operators will be primary producers for their own needs. The actual skills needed begin to be eroded or lost, as the next generation is not exposed to those traditional activities.

Some families voiced concerns and fears over the trend that their children could lack basic living skills for village life, while others feel they had outgrown village life and wanted to move on to bigger enterprise in a town or city, seeing the trend as part of ‘modern progress’. However all of them recognise that important skills are being lost.

- **Less sharing of resources:** In particular less sharing of income with women and joint landowners. Villagers’ report that income gained from logging and mining prospecting typically remains in the hands of just one or only a few men, and is commonly squandered at casino tables and in hotels in Honiara. Rarely does any of this money trickle down to others. In small, family-run guest lodges, where women often do the majority of the work, the income remains in the hands of the men of the family. It is often spent on unnecessary and even whimsical items, rather than on necessities. In some cases, having a successful small business makes people more generous towards their communities; in others, however, the opposite happens. In one village-based enterprise, established by and intended to benefit all families, it was evident that only one or two families were receiving any significant benefit from the enterprise. The other families resented the unfair distribution of benefits.

- **Underlying resentment amongst villagers:** Resentment evidently builds between people over unequal distribution of the earnings from enterprise in each village. In some cases resentments are overt and cause schisms in whole families. Much more commonly, however, resentments are gradually building, as those who were not receiving any benefits begin to feel angry, not only at the lack of personal benefit but also at the extra burdens they carry because of the selfishness of the few who receive benefits. In conversations with the women interviewers, village women talked openly about the anger they felt at having lives which are worse off than before the advent of the commercial enterprise in their village.

Elders are also angry at the selfishness of the younger generations in their villages, and fearful of the increasing

individualism that they identified. They are worried about the loss of respect for the traditional authority of elders, and that control over village resources will fall into the hands of powerful individuals (often the bigman) who will squander those resources at the expense of the welfare of the village as a whole.

There are social status implications of the above changes that affect whole villages. As people involved in enterprise receive cash income, they are able to acquire expensive articles. Consequently those who formerly may have had little authority are able with money to assume a higher status. Thus the traditional status criteria of their culture are being eroded.

Although it is not possible to draw a direct causal relationship between the above factors and some other current social trends observed in Marovo, it was believed by many interviewed that these factors are also contributing to an apparent increase in domestic violence, sexual abuse, marital breakdown, and reduced church-going.

While these trends were seen in all villages visited, the negative impacts are significantly greater in villages that have experienced large-scale, foreign-owned commercial enterprise, rather than village-controlled enterprises.

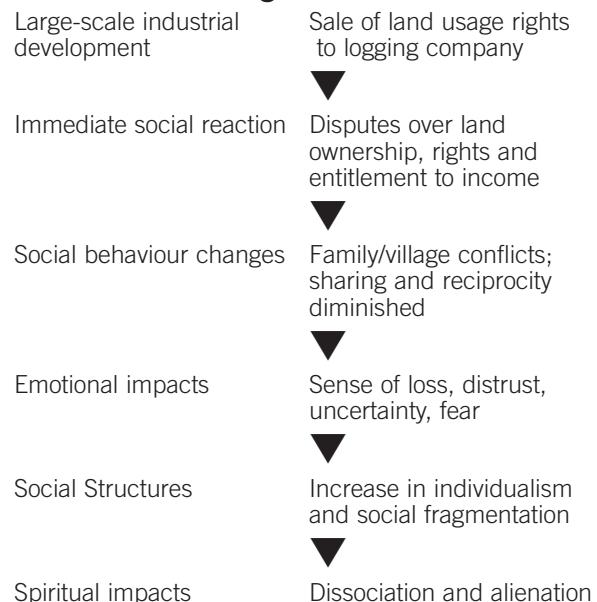
## **Social Impacts of large-scale industrial development**

From the stories of people interviewed in villages that have experienced logging, oil palm plantation development or mining prospecting, very similar impact patterns appeared. Severe and apparently permanent damage has occurred in all of the villages effected by large-scale industrial development. The differences are in degree, depending on the extent of both environmental damage and breach of community faith that has happened, and how long since the damage first occurred.

Two main strands of damage combine to produce social effects. Firstly, extensive damage to forests means the loss of critical resources of food, housing, transportation and economic security, resulting in impoverishment. Secondly, betrayal by village leaders selling off the forest and control of the land produces its own social upheaval. These two strands of trauma combine in complex ways.

The effects which villagers describe reveal a consistent and apparently irreversible pattern of change. This begins with changes in the social behaviour of people in the village, followed by emotional reactions to that behaviour, then affects social structures, and finally impacts at a spiritual level as people begin to realise the full implications of the changes in their lives. The pattern is illustrated in the diagram below as it has occurred in villages which have experienced large-scale logging.

## **Pattern of change**



The pattern of social impacts is described in more detail as:

## **Reduced sharing and reciprocity**

As forest resources essential to survival are lost people became less able, and less willing, to share them.

For example, a whole village relies on perhaps one or two major sources of sago palm leaf and lawyer cane. Both are vital to roofing, and are available to others by its owners in a loosely acknowledged exchange for resources which others in the village own. As sago palm leaf and lawyer cane becomes scarce following logging, the owners ration its use to immediate family. This reluctance to share, however reasonable at a rational level, is seen as a breach of collective entitlement, and people needing those resources urgently, to mend a leaking roof or wall, might simply take them, acting in a belief in their entitlement through blood or other relationship.

## **Conflicts and loss of village harmony**

As each of these breaches of ownership occurs, conflicts arise within families or across the whole village, as people argue out their rights to resources which have hitherto been freely and plentifully available. As these conflicts increase and escalate, the whole village becomes divided, sometimes in very complicated ways, as people are obliged to take sides with spouses or siblings.

Women interviewed speak of the huge sadness they feel at cousins who are no longer allowed to talk to one another or play together because their fathers are in conflict. Nieces and nephews they had been rearing with their own children were reclaimed by a father in dispute with his brother, or sisters with whom they could

no longer share their prayers or their food or their children. Families are becoming fragmented, and in some cases taking on a more nuclear family structure.

At a deeper level, women are also aware that these conflicts are distancing them from supports that will become more important as resources are even further depleted over time. Some women voiced profound despair at their powerlessness to change things, and their collective depression in logged villages is tangible. Similar patterns emerge in villages where mineral prospecting has occurred, as a result of money being received by only one or two men in the family who kept it for themselves.

### **Blaming, scapegoating and suspicion**

When a village becomes impoverished and socially fragmented, people look for someone to blame. In the two villages that have experienced logging, women speak of being blamed for their inability to sustain their previous level of food production. Some men blame women for consorting with logging company employees, thus “attracting” the company to the village.

Exacerbated no doubt by the contemporary tribal tension in Guadalcanal, some people are inclined to blame people from Malaita Island, who are often part of the logging company’s imported labour force. This anti-Malaitan feeling is generalised even to villagers who have one Malaitan parent, or have married a Malaitan. All of these attempts to blame create further conflict within the village community. But they also create an insidious culture of scapegoating which villagers say didn’t exist prior to their economic problems.

Related to this is a generalised suspicion of outsiders<sup>18</sup> – villagers acknowledged that they are more suspicious not only of outsiders but also of one another.

### **Loss of trust and respect for leadership structures**

Possibly the most damaging impact on villages experiencing logging and mineral prospecting is a loss of respect and faith in their leadership – the people and the systems. The pattern common to each of the villages visited is a sense of betrayal by a chief and/or other elders who sold off rights to land use. The sense of being betrayed by the very people who are supposed to be the ultimate protectors of the community is profound. The bigman and elders of a village are invested with enormous respect and trusted to make decisions which will be wise and always in the best interests of the village as a whole.

In the villages concerned, these men are the very ones who put their own personal gain before the welfare of the

village, taking large sums of money and not passing that gain on to others in any equitable way. Worse, they are responsible for decisions that removed resources crucial to villagers’ physical and social well-being, decisions which are seen as not only foolish and self-indulgent, but also negligent and reprehensible.

Moreover, as chiefs and elders, they are beyond accountability. The villagers had no established systems for making these men accountable for their acts or seeking an appropriate resolution, because these same men are the usual arbiters of complaints and village disputes. As a consequence, at one village the dispute is with Solomon Islands High Court for arbitration. However this process promises to be lengthy, expensive and will probably not produce a useful outcome, while doing nothing to improve the impoverishment into which some villagers are heading through loss of their forest.

A more disturbing consequence is the gradual disintegration of the authority structures of the villages. As people lose respect for their traditional leaders, they consult elders less about village decisions, and decision-making is occurring in more fragmented ways. Traditional authority systems are breaking down through villagers’ disenchantment, but no alternative cohesive leadership system is available to replace it.

### **Loss of community pride**

At a collective level, community pride is affected in these villages by a combination of factors: social fragmentation caused by disputes, less time to put into community effort because of more time needed for essential tasks such as gardening and carrying water, and a loss of motivation caused by disillusionment. As a result, these villages quickly begin to look run down, leading to further loss of motivation to try to improve things.

*“Our river used to look beautiful and we were always there to wash and fish and get water to drink. So we would all cut the grass and keep the area clean. Now no one goes to the river because it’s full of oil and mud and its not safe even for our children to swim in... People gather rainwater from the roof in buckets and do their washing at home, but we have no drains so the paths are always muddy, and we have a lot more mosquitoes... Now we just don’t go to that place.”*  
– Woman at Sobiro

As pride disappears, so does a sense of responsibility. Villagers acknowledge that there are many ways in which they have ceased to operate as a community, such as no longer taking responsibility for keeping the publicly used areas of the village attractive and free of litter.

### **Sense of grief and loss, and increasing isolation**

It is evident that many people in these villages are grieving – the loss of their forests, their land, their sense of community, and their previous harmonious lifestyle, as well as loss of cohesiveness and closeness with family. Without a way to talk through these losses or express their concerns, women in particular were repressed, and many said they have become more withdrawn from village life and focus more on their own household. Their sense of withdrawal is exacerbated because they spend less time in the company of other women.

### **Sense of helplessness, and apathy**

One of the most disturbing impacts for villagers is realising their lack of ability to solve the problem. Because these circumstances are both new and far-reaching, people lack the ability to develop strategies for resolving or improving their situation. Some people voiced shame at their inability to find a way out of their current social problem. The sense of powerlessness and helplessness felt by both women and men contributes further to their apathy in the face of a problem without an obvious solution.

### **Fear about the future**

Virtually all of the adults interviewed voiced fears for the future. The problems of greatest immediate concern to most are their inability to produce sufficient food, over-crowding, degradation of existing housing and lack of materials for replacement housing.

However, older people also spoke of social breakdown and increasing social problems in their villages. While no one made a direct link explicit, several people nonetheless believed that the loss of their forest and lands is the underlying cause of perceived increases in wife-beating, child incest, prostitution and suicide, and they are afraid of where these trends could lead.

A further fear is that, ultimately, all the forest in the Marovo Lagoon would disappear and they will be completely reliant on cash, but without resources to generate it. A few men believed the answer lay in getting their children university educated; a few others believed that a solution will be provided by foreign investors. The majority, however, realised that that was unrealistic. In the meantime, people simply waited, because they didn't know what else to do.

### **Disillusionment**

A common expectation amongst people in villages who have experienced logging is that they will receive wealth sufficient to build a permanent house. It is a common

promise, amongst others, from logging companies to villagers when negotiating an agreement to log. The lack of a permanent house has become a symbol to many people interviewed – seeing their existing leaf dwelling growing older and more in need of repair is a daily reminder of their folly in allowing their forest to be destroyed. People voiced a strong sense of shame and embarrassment at their foolishness, rendering them cautious and sceptical. Some people also voiced a quiet despair about the future and their ability to rebuild a decent standard of living without any forest or alternate resource for housing.

### **Dissociation and alienation**

As time passes, people are forced to adapt to their changed circumstances. As a new generation grows up in these villages without access to important aspects of their traditional culture and lifestyle, there is an evident shift in people's understanding of values and social patterns. The two examples most commonly given by villagers of ways in which younger people become alienated from essential cultural values are:

- Desecration of tambu sites by villagers taking tourists to see them, disturbing the sites, allowing photos to be taken, and even selling sacred artifacts, demonstrating that these younger villagers are losing the meaning of tambu and of the importance and roles of their ancestors
- Prostitution, where young women who are raised without an understanding of the sacredness of their bodies were willing to sell sexual favours, typically for articles of Western clothing or alcohol

## **Impacts of small-scale, village-based enterprises**

In contrast with the large-scale industrial enterprises, small-scale enterprises tended to produce benefits for a majority of the people involved. While the immediate economic benefits are not always great, over a period of three to four years families and villages are seeing an incremental and continuous trickle of benefits. Also, with good management they realise they can provide themselves with consistent improvement in income.

The main impacts are uniformly positive. The only negative impacts reported are jealousies experienced between clans or within families over the distribution of monetary gains from the enterprise. Within family-based enterprises, which constituted the majority of those in this study (and in the Marovo area), these issues are usually resolved amicably. It is only in enterprises involving a whole village that these issues become significant or unresolvable.

The main benefits, reported by the majority of respondents including both men and women, are set out below.

### **Cash seen as a useful addition to traditional resources**

People involved in small-scale enterprises have to put a great deal of their own resources into setting up the enterprise, especially labour and bush materials, but also money hard-earned from other labour. Financial gain is not quick or immediately significant, but rather it trickles in. As a result, their usual means of survival remains essential and is not interrupted. Cash is seen as something that is still hard-earned but can be used to obtain relatively small goods or benefits. The time taken to earn it also means that a lot of discussion occurs amongst family members on the potential uses of the income once it is received.

### **Traditional production and skills valued**

Many of the small-scale enterprises in the Marovo Lagoon are small eco-tourist ventures – guest lodges and activities for visitors to the Marovo Lagoon. Eco-tourism affirms the value of their traditional resources, not only traditional value as a means of living, but also the economic value of sharing these resources with tourists. People operating these ventures grow larger gardens with more diverse foods to cater for tourists' interest in their culture and way of life, as well as for their food needs. More weaving and carving occurs for sale to lodge visitors. Others are revaluing the stories told by their elders and their knowledge of bush medicines and bush craft.

### **Acquisition of new, versatile skills**

As a result of contact with outsiders assisting in the projects, and through their own initiative, many people involved in the small-scale enterprises are acquiring new skills and developing ways to apply them locally. Examples are the use of local materials to make western-style furniture for guest lodges, and skills in building and hospitality.

### **Whole families share in financial benefits**

Due to the time needed to establish these enterprises before any income is gained, whole families tend to have input into how the income will be used. Families mostly plan constructive activities for its use, typically for advanced schooling or building permanent dwellings. Input into the projects by family members establishes their stake in the enterprise and is seen as creating an entitlement to a share in the benefit.

### **Enhanced collectivity and village harmony**

The participation of large numbers of wantoks and villagers in family-based projects results in spin-off benefits, in that their help is repaid with a range of benefits associated with the projects. For example, the availability of motorised canoe transport, learning new skills, and in particular, access to ideas and information. Villagers develop a sense of village pride in these enterprises as a result of their participation.

### **Family cohesiveness enhanced**

In all of the small-scale projects visited, those managing the projects obtain significant help from wantoks in establishing the project. This assistance is seen as a usual part of the system of reciprocity that operates amongst wantoks. In addition, those who help feel that they are an important part of a new and exciting development in their village or family. Cooperative activity often extends over days, weeks and sometimes months in order to complete some aspect of the project. After its completion, wantoks continue to feel that they are an important part of the project, as do all family members, including children.

### **Greater sharing of work between men and women**

As women become involved in these enterprises, men's perception of the value of women changes. For example, guests at guest lodges often demonstrate a preference for women to show them around. In addition, contact with visitors means that men are often required to undertake chores normally the domain of women. Men come to realise that there is a benefit to all if they undertake work as it's needed, rather than according to traditional sex roles, resulting in more sharing of the workload.

### **Enhancement of democratic decision-making**

As the projects are established, people discover that the input and ideas of younger people and women are just as valuable as those of the men, who tend to hold the decision-making power in Solomon Island families. As they are often dealing with completely new concepts, input is needed from a wide range of people, and family groups report greater sharing of ideas and decisions.

### **Improved access to education and health services**

The income from these projects tends to be focused on education and dwellings. All families involved in these projects have been able to send more children to high school, and in some cases to tertiary colleges. The income obtained also means they can now afford more health services such as sending very sick babies and elders to hospital in Honiara.

### **Families less vulnerable to greed or bad decisions of bigmen**

A major advantage of family-based enterprises is that families are not subject to any obligation to others in the village, and income from the enterprise comes directly to the family. This avoids the potential of the benefit being diverted or misused by others.

### **Strong confidence in a secure future**

A major benefit reported by all people involved in these small-scale enterprises is a sense of advantage over people who sold their logging rights. They are highly aware of the need to retain their basic resources and what the loss of those resources might mean, having seen the outcomes in logged villages. In contrast, these people feel secure that they not only have a project providing them with a small, sustainable income for the future, but that they are also developing new skills that they can potentially extend and develop in the future.

*“How I see it from our perspective is that eco-forestry is much better than logging. I prefer ecoforestry because it does not spoil our sea, land, rivers and water catchment.” – Reedle Gebe, Lobi Village Ecoforestry Project.*

### **Comparative impacts**

While a number of generic social impacts on village life have been recorded as a result of any enterprise, immediate and substantial differences are observed in the social impacts of large-scale, industrial enterprises (ie. logging, tree and oil palm plantations and mining prospecting) compared with small-scale, village-based enterprises (ecotimber milling; eco-tourism; paper-making; carving). Key differences are summarised in Table 1. While not all of the small-scale enterprises involved in the study are benefiting from all of the advan-

tages set out in the table, all are enjoying a majority of those benefits and anticipating more. In contrast, where villages have been logged or subject to mineral prospecting, the only benefits mentioned are the monetary gain achieved by a very few individuals, while the vast majority of respondents could identify only damage.

## **Conclusions**

This social impact study shows a clear contrast between the different types of development and the effects they have on the quality of village life in Marovo Lagoon.

There are a number of generic impacts of any commercial activity. Social change is constant and unstoppable, and will increasingly involve money for village cultures. However, the social situation in villages experiencing or recovering from logging is dire.

The impacts of logging, mineral prospecting and oil palm plantations are of a scale and speed that are impossible to manage, especially while maintaining key, desired aspects of kaostom<sup>19</sup>, culture and society.

The impacts and changes that result from small-scale enterprises are manageable and adaptable. Communities can respond to these impacts more easily, and the net effect remains positive and empowering.

The findings of this study, together with the previously recorded economic advantages of small-scale enterprises to Marovo landowners<sup>20</sup> clearly challenge national and provincial governments, institutions, foreign companies, investors and aid donors who continue to support large-scale industrial development as being appropriate for village-based indigenous communities.

# Appendix: 1 Background Information to the Study

## Logging and Industrial Development

Transnational loggers (primarily two companies from Australia and the U.K.) have operated on the northern and western parts of New Georgia Island (just to the North and West of Marovo) since the early 1960s – initially on land alienated by the government then, after negotiations with resource owners, on customary land.

The first company, Australian-based Kalena Timber Company, logged large tracts of coastal plain and lowland hill land adjacent to Viru Harbour from 1964 through both agreements with landholding butubutu, and on alienated land purchased by the colonial government.<sup>21</sup> In the 1990s, Asian interests<sup>22</sup> took over Kalena and continued to expand logging and plantation development.

The second company, Levers Pacific Timbers Ltd<sup>23</sup>, faced opposition from the beginning by local people.<sup>24</sup> This led to occasional acts of protest and sabotage. Levers finally closed its operations in north New Georgia<sup>25</sup> as they became unworkable. The company stopped logging in the Solomon's altogether in 1986.

In 1992, on alienated land sold to the colonial government in the 1960s by resource owners on Vangunu Island, a Malaysia-based holding company called Sylvania Products Ltd began a controversial logging operation.

A survey of Sylvania's logging practices by Australian foresters in mid 1993 states: "The degree of canopy removal and soil disturbance was the most extensive seen... in any logging operation in tropical rainforest in any country"<sup>26</sup>.

The consequences of the project include:

- Damage to over 100 Tambu (sacred) sites on the southern side of Vangunu in the area
- Deposits of silt in Marovo lagoon from rivers flowing down from the eastern slopes of Vangunu Island<sup>27</sup>

Local landowning groups twice confiscated company chainsaws when logging crews were found illegally logging their lands.<sup>28</sup>

More recently Omex, a subsidiary of Malaysian logging company Golden Springs International, began felling trees at Nggepae village in the centre of the Lagoon.

Provocatively, the company barged logs to a ship at the southeastern end of the Lagoon every few days. After several disputes with landowners – culminating in landowners boarding and detaining a log ship in March, 2000<sup>29</sup> – the logging was abandoned. From late 2000 to early 2001

logging activities by Omex and Golden Springs on North New Georgia and Ngatokae Islands reportedly continued.

Several significant foreign-owned developments are currently beginning operations or are under negotiation with land-owners. Dwarfing any logging proposal is Malaysian company Silvania Plantation Products Ltd's (SPPL)<sup>30</sup> large-scale industrial oil palm project on Vangunu Island. Clearing and planting began on the (up to) 7000 hectare plantation on alienated land [see map, page 7] in 1999.

An Environmental Impact Assessment is yet to be completed<sup>31</sup> and there are major deficiencies in basic environmental data and social impact analysis. The project poses a major risk/threat to both the natural resources of the lagoon, and to the social fabric and local culture and kastom. Moreover, the company plans to expand the plantation onto a further 20,000 hectares of customary land.<sup>32</sup>

Finally, mining prospecting is also being carried out on Vangunu<sup>33</sup> and South New Georgia Islands.

## Social and cultural impacts of logging – summary

There are numerous examples of the cultural and social impacts of logging in Solomon Islands, including direct desecration of Tambu (sacred) sites through the bulldozing of roads, tree extraction and other logging activity.

Rukia (1989)<sup>34</sup> records a number of complaints lodged by local landowners at Aola, in Eastern Guadalcanal. Fitzgerald's (1993)<sup>35</sup> survey of 28 villages where logging occurred notes that 58% had experienced their Tambu sites being disturbed. More recently, an independent Environmental Impact Assessment of Choiseul Island<sup>36</sup> noted desecration of burial sites by South Korean company Eagon, where bones were unearthed by bulldozers and left strewn on the ground. Logging has been blamed for causing disputes and "...destroying Melanesian communalism as the basis of our societies".<sup>37</sup>

Women have been identified as bearing the brunt of the negative impacts of logging, in particular through their self-esteem being eroded by:

- Men largely making the decisions<sup>38</sup>
- Increased domestic workloads brought about by the depletion of important natural resources<sup>39</sup>
- Other changes including an increase in the level of domestic violence.<sup>40</sup>

While there has been some research into social impacts of logging in Solomon Islands, for Marovo a comprehensive social picture is lacking of the actual and potential impact on local people as a result of the different development options.

## Appendix 2: Research approach and objectives

### Social impact assessment methodology

Social impact assessment<sup>41</sup> was first developed as a research methodology in the late 1960s and early 1970s, as an adjunct to environmental impact assessment.<sup>42</sup> The early social impact studies took place in the United States in relation to major environmental disasters such as oil spills and toxic chemical leaks.

Over the past three decades social impact studies have become common practice to complement environmental impact studies for potentially harmful projects. In many developed countries social impact assessment is required by legislation in relation to particular events, actual or planned. The United States' National Environmental Policy Act 1969 was the first such legislation and became a model for other countries. The US legislation now requires social impact assessment in relation to a whole raft of proposed activities where there is potential for unforeseen effects on people and communities.

Initially there were difficulties in developing methodologies that would have 'objective' credibility and be considered rigorous. Many of these problems arose from the unwillingness of the research and business communities, and governments, to accept qualitative research methods as credible. As these methods developed across disciplines, particularly sociology and anthropology, and their robustness has been demonstrated and supported, they have gained wide acceptance. The past decade has seen the development of a range of research instruments and technologies specifically for social assessment research and the testing of those methods.

In addition, social impact assessment has become accepted and developed as a set of methodologies used to examine both the negative and positive effects of actual change, and also to predict likely impacts of potential change. It is now used not only in relation to environmental assessments but also to examine the social effects of social and economic (cf. environmental) projects and programs per se.

Social impact assessment focuses mainly on whole communities or reasonably large groups of people with a common environment, activity or interest.<sup>43</sup> It aims to identify actual or potential effects of specific events (eg. a program, project, or enterprise). While some quantitative assessment can be

included in social impact assessment, the research methods employed are substantially qualitative, and holistic in their analysis. That is, social assessment does not try to measure impact by assessing changes to a large number of individual variables. Rather, it looks for the patterns of impact or change which appear commonly across the community under study.

Bryan and Hendee (1983)<sup>44</sup> developed the following set of enduring principles for guiding the process of social impact assessment:

- Focus should be restricted to the major social concerns revealed in the scoping process
- Social effects should be sought in an analytic rather than encyclopedic manner, representative of four broad categories of variables: lifestyles; attitudes, beliefs and values; social organisation; and population/land use
- Before collecting new data, all existing databases should be utilised
- There should be explicit recognition that the social effects may be positive or negative depending on the context in which they are viewed
- Both direct and indirect social effects should be addressed
- No one method or approach for gathering data should be recommended. Rather it is recognised that the appropriate methods and approaches for social analysis will vary with the kinds of impacts anticipated
- It should be recognised that individual social effects sometimes may be subtle and defy precise interpretation, but cumulatively these effects may be very large. Therefore, the assessment of cumulative effects is an important and necessary process.

The main message in these principles is that social impact assessment methods and approaches must be tailored to the particular community and its issues, must not presume particular effects, and must look for cumulative or holistic effects rather than a collection of individual impacts. These kinds of principles have been reiterated in procedures manuals for impact assessment by a wide range of international organisations, such as the Asian Development Bank (1994)<sup>45</sup>, Food and Agricultural Organisation (1992)<sup>46</sup> and Environmental Department of the World Bank (1991)<sup>47</sup>.

In the present study, the scoping phase focused on developing a methodology that would be both culturally appropriate and empowering.<sup>48</sup>

### Research design

The research was designed by an experienced social impact researcher with knowledge of the Marovo region, in consultation with representatives of Marovo people. A triangulation

- approach was adopted, where information would be sought:
- From Marovo people of different villages, village leadership status, ages, sexes, religious affiliation, and experience of different kinds of commercial enterprise
  - Through a range of interview configurations (eg. with individuals, small groups, families)
  - By interviewers from different parts of the Marovo Lagoon representing different clans and religions.

A village-based approach to data collection was adopted because the village is the fundamental social and economic unit of Marovo society, commercial enterprises have tended to occur at a village level, and impacts of those enterprises have therefore necessarily affected whole villages.

## Scoping

The purpose of scoping was to identify:

- The study area boundaries and communities within those boundaries
- Relevant existing information resources and gaps in that information
- The main potential impact issues and their likely scale.

From this information, a strategy would be developed for the research. Preliminary parameters for the study were determined from four main sources:

- The economic impact study undertaken in 1998 in Marovo Lagoon area.<sup>49</sup>
- The experience of the principal researcher as a part-time resident of the Marovo area over the past seven years
- Preliminary discussions with the research interviewers, all of whom were Marovo people<sup>50</sup>
- Discussions with key informants from the Marovo area

The methods were developed by the principal researcher in consultation with members of Greenpeace Pacific, Greenpeace Honiara, and the Village Demonstration Workers (VDWs) who later became research interviewers. The participation of VDWs at this stage was crucial to the success of the project, as their networks were necessary for access to participants and their knowledge of local issues essential in framing research objectives and questions.

## Research objectives

The key objectives of the research were to:

- Identify the kinds and degree of social impact, both positive and negative, on the lives of villagers in the Marovo Lagoon area, of:
- Commercial logging, and mining prospecting
- Plantation operations (eg. palm oil production)

- Small scale village-based enterprises (eg. tourist-related enterprises)
- Compare the positive and negative social impacts of the above activities on village life and well being.

## Table 1:

Based on the review of existing information, the following impact indicators were identified:

### Relationships

- Social relationships (eg. family, church, generations, genders)
- Community relationships (eg. within the village; between villages)
- Social roles

### Well-being

- Physical and mental health
- Emotional and spiritual well-being

### Daily life and activity

- Employment
- Education
- Recreation

### Social structures

- Leadership
- Community development

### Resource distribution and prosperity

- Income, and income sources
- Distribution of wealth
- Housing
- Availability of traditional food and medical resources

### Spiritual/cultural resources

- Value and uses of Tambu sites
- Traditional cultural practices
- Traditional crafts
- Religious practices
- Integrity of land and community.

## Sample

The best way to assess the social impacts of an event is to examine that event. In the absence of that particular event having occurred, the best approximation of that event should be examined. Villages were selected which had experienced the following events:

- Significant industrial logging
- Prospecting for minerals
- Eco-timber production
- Adjacent to palm oil plantation development

- Eco-tourism
- Other small scale, village-based industries.

**Table 2** sets out the villages involved in the study and the commercial activity relevant to each at the time of the survey. The proximity of villages to one another in the Marovo Lagoon, and the frequent economic and social commerce amongst these villages (for example through marriage and other wantok<sup>51</sup> connections), meant residents in virtually all of the villages were familiar with many of the impacts of different kinds of commercial activity in villages other than their own.

The villages were selected, based on the knowledge of VDWs and other key informants, to represent both the full range of commercial enterprises (logging; mining prospecting; fishing; weaving and carving; sustainable milling; eco-tourism), and a wide geographic coverage of the Lagoon. The villages spanned the northwest to southeast regions of the Marovo Lagoon, and were selected to ensure that people from both major religions in the Marovo village – Seventh Day Adventist Church and United Church – were represented. An average of 11% of households were surveyed in villages involved.

## Table 2: Villages involved in the research

A “triangulation” approach was used, where information is gathered from people representing a range of complementary perspectives. The research sample included, in each village, a representation of the following social groups (representing groups which were likely to have different perspectives and have derived benefits differentially):

- Women (21-50)
- Men (21-50)
- Young people (15-20)

- Elders (women and men)
- Villagers who have had personal financial gain from the commercial enterprises, and their associates
- People who have not had any gain from commercial enterprises involving their village

Extended interviews were held with individuals and small groups of people in eight villages in the Marovo Lagoon. In each village, two to four people in each of the above categories were interviewed. In addition, the village bigman and other people with status in the village (eg. church elders) were interviewed. A considerable amount of information was gathered from informal discussions (in Solomon’s known as ‘storying’) in the village outside of the actual interviews.

## Data collection

The study applied an empowerment approach; both to enhance the quality of information obtained by creating a context of trust, but also to ensure that the information parameters were appropriate to the Marovo Lagoon.<sup>53</sup> The following design features were included:

- The interviewers – four men and two women – were all people from the Marovo area who had credibility within their communities from their existing status as VDWs for the Solomon Islands Development Trust (SIDT), and were also well known across the Marovo Lagoon. Using local interviewers meant that village people could use their own Marovo language and felt confident to express their views freely. However, being from SIDT which is known to be anti large-scale logging may have influenced the willingness of respondents to be interviewed and their response.
- The interviewers were consulted in the construction of the interview questions and in the selection of an appropriate research sample – both the villages selected and the people chosen for interview.

Village	Approximate number of households <sup>52</sup>	Number of households surveyed	Church Denomination(s)	Commercial activity
Sombiro	80	4	Seventh Day Adventist (SDA)	Industrial logging
Merusu Village and Merusu Island	30	2	Mixed	Industrial logging Oil palm plantation
Tenggomu	5	2	SDA	Paper making; weaving
Lolovuro	10	4	SDA	Eco-tourism; carving and weaving
Chuchulu / Abu	10	3	United Church/SDA	Mining prospecting
Lobi	5	5	United Church	Small-scale ecotimber milling
Michi	30	3	United Church and others	Eco-tourism; carving and weaving
Viru / Tetemara	55	2	SDA	Industrial logging & tree plantations
Totals	225	25		

- The interviewers were fully involved in the analysis phase of the research, and in reviewing this report.
- The questions were phrased broadly around the chronology of the industrial experience, so that people could spontaneously raise issues of importance to them, rather than being constrained by focused questions.

## Interview questions

From the research objectives, a set of simple questions was developed which would encompass all of the information sought while allowing villagers to respond in culturally appropriate ways. For example, villagers were able to "story" – that is, relate their perceptions and views through anecdote, which is a common way of voicing opinion in the Solomon Islands. Conversations were mostly in Marovo language, but occasionally in Pijin to include non-Marovo speakers (eg. spouses).

The key interview questions were:

- How did the (relevant commercial enterprise) come about in your village?
- What did you expect from it?
- What changes have happened in your life and for your family as a result of the (relevant commercial enterprise)?
- What have been the benefits for you?
- What kinds of problems have happened as a result of the (relevant commercial enterprise)?
- What do you see for your village in the future?

Within each of these questions, additional probes by the interviewers focused on areas of: health, education and employment, welfare, relationships, village social systems and structures, distribution of income, traditional culture and religion.

## Interviewers

Interviews were conducted by six VDWs and the principal researcher (a New Zealander who has lived in the Marovo Lagoon and is known there). The VDWs were trained in use of the interview questions and ways in which to probe. They were also trained to avoid asking leading questions and to ask for multiple perspectives, to minimise the potential for interviewer bias.

## References and endnotes

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- 48 The process of empowerment for women can be defined as "Having control, or gaining further control; having a say and being listened to; being able to define and create from a woman's perspective; being able to influence social choices and decisions affecting the whole society (not just areas of society accepted as women's place); and being recognised and respected as equal citizens and human beings with a contribution to make." (Griffen 1989 cited in Scheyvens and Lagisa (1998) [see note 14])
- 49 Lafranchi, C. & Greenpeace Pacific (1999) [see note 15]
- 50 One of the interviewers is originally from Malaita, but married into the Marovo area and has lived there for 30 years.
- 51 The Pijin term "wantok" refers to people who are connected by family ties, literally of "one talk" or language group with one another.
- 52 Village size was reckoned by the bigman in each village, except Sombiro (estimate only) and Tetemare (from MFEC 1995).
- 53 A note on the political context at the time of the research: The study was undertaken in August of 1999, at a time when the Solomon Islands was under a state of emergency declared by the government as a result of civil unrest in Honiara, the capital. This unrest, although arguably caused by national political and economic factors, centred on conflict between the people of Guadalcanal Island and the people of the island of Malaita, and was portrayed as the result of an ethnic or tribal tension. While the unrest was localised to Honiara and the island of Guadalcanal, there was some spin-off effects in the Marovo Lagoon area, where some strong anti-Malaitan feelings were voiced. In particular, suggestions at the time that Malaitan people might be brought to the Marovo Lagoon to staff a palm oil plantation on Vangunu at Merusu were seen as a threat to the safety and cultural integrity of the Lagoon.