

during the war such as bombing and of the post-war agricultural practices and population growth.

A study on the impact of orange/dioxin on mammal diversity in Ma Da forest (Dong Nai province) found a clear decrease, only 29 genera and 38 species, compared with 39 genera and 52 species recorded before spraying. Orange/dioxin destroyed forest ecosystems and mammals lost their habitats and food sources. Many species had fled to other areas.

A study in 2000-2002 on the long-term effects of orange/dioxin on biodiversity in Aluoi district found that these compounds, used in the war by the American army, destroyed natural ecosystems by breaking the fragile ecological structure and nutrient web, resulting in pollution and deterioration of habitats and a strong decline of biodiversity. More than 30 years after the end of the war, the long-term impacts are still clear: in Dong Son commune, for example, there are only grasses and bushes where there was multi-storey primary forest before herbicide spraying. Species composition and quantity of mammals, birds, reptiles, amphibians, soil macrofauna and soil microorganisms is lower than in an unsprayed area with the same landscape. There are morphological abnormalities in some species of fish, earthworms and springtails. The specific causes of these abnormalities still need to be studied. However, some aquatic ecosystems have been gradually rehabilitated. Communities of algae, macrophytes, zooplankton and benthos recovered in species composition and in quantity.

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LOGGING IN THE SOLOMON ISLANDS – THE LOST LEGACY

By Jim Sandoms

In 1893, in response to pleas of missionaries to put an end to inter-tribal warfare and headhunting, the British Government declared the Solomon Islands a Protectorate. Exactly 110 years later, and after 4 years of violence and ethnic tension, the Solomon Islands turned to its neighbours and begged them to send help to re-establish peace.

The reasons behind the country's political, social, and economic disintegration are largely cultural and historical – but the management, or mismanagement, of the

nation's forest resources has been a critical contributory factor.

Land in the Solomon Islands

Though the declaration of a Protectorate eliminated headhunting and established order the subsequent Colonial Government failed to provide a solution for the principal source of the disputes, the problems of land tenure and resource use.

Disputes over land are a common feature of life in the Solomon Islands. Traditional land ownership is communal and based on 'possession' by tribes or families. Life has traditionally depended on agriculture and fishing. Land was the root of a community's existence and had crucial and deep ancestral and spiritual roots. Ancestors were venerated in special sites and these were cardinal reference points of ownership. Private land or 'ownership' was an alien concept. Before the protectorate was established land was sold, but is uncertain if the custodians knew what they signed away. In 1896 a regulation was issued requiring that the resident commissioner to oversee and validate all land sales. This regulation was based on the flawed assumption that there was '...plenty of spare land available after ample provision for the natives...'

The islands lacked the capital, population, skills, and institutions required for a stand-alone economy and the colonial administration was not in a position to provide them. It identified many areas as unoccupied but suited to agricultural or commercial development. These 'wastelands' were declared Government property and the administration enticed entrepreneurs to kick-start development by allocating land to companies or individuals.

The plan ignored the traditional rights of 'ownership' and was fiercely resisted. This necessitated a major revision under a Land Commission started in 1919 where land settlements and alienations over the previous 20 years were reviewed.

Large tracts of land were returned to customary owners. However, areas that remained appropriated provided a source of continued resentment to those who claimed the rights of original ownership. In the 1950s another commission attempted to develop an equitable approach by establishing three categories of land ownership: land with written title (held almost exclusively by Government or expatriates); land owned customarily; and land that was neither but which could become the basis of a 'national resource' managed for public good. The third category was never identified.

Forestry in the Solomon Islands

A colonial Forest Department was established in 1952, but issues of land ownership and the absence of any forest legislation constrained its activities. The Government approved a Forest Act in 1960 to promote the export of logs and serious commercial logging began in 1963. Between 1961 and 1968, a 'production forest estate' was established on Government Land. After several failures, efforts to include customary land within the forest estate were abandoned.

Commercial forestry thus developed almost exclusively on the Government-owned national forest estate of around 120,000 hectares: but land whose ownership was still disputed. Until the late 1970s, three companies dominated logging of natural forests though one accounted for 70% of timber exports. From the 1960s onward,

forest revenues became increasingly important. Harvests rose steadily from an estimated 200,000 m³ in 1977 to 230,000 m³ per year in 1985. Sustainable harvest was probably in the order of 300,000 – 350,000 m³. A Timber Control Unit was established in the early 1980s to monitor logging on Government and customary land.

After exhausting the forest estate, the Government and logging companies were obliged to explore logging on customary land. Earlier attempts to do this had failed. It proved impossible to negotiate agreements under the existing Land and Titles Ordinance, but a Forest Policy Review Committee in 1976 proposed a mechanism that permitted landowners to negotiate timber harvest rights directly with companies.

Post independence

The Solomon Islands gained independence in 1978. Many believed the country was ill-prepared and the departing colonial power had not done enough to ensure an educated and appropriately trained society or a viable economy. A significant problem was the over-reliance on Government. The colonial Government had engaged in many activities commonly fulfilled by commercial companies: agriculture (such as oil palm, rice and cattle), fishing, mining, and service industries such as shipping and sea and air transport.

In forestry the most immediate effect was to confirm the rights of landowners to negotiate the rights to the timber on their land, though this required new legislation. The first beneficiaries of independence were the people of North New Georgia and the country's largest logging company.

Opening areas under customary landownership to logging provided new opportunities, but the changes were slow at first. Substantial volumes of timber were still available from Malaysia, Indonesia and the Philippines and The Solomon Islands had lower quality timber, higher transport costs and higher wages. Additionally the four resident logging companies had already monopolized the most accessible forest resources.

Lacking any experience of independent Government, Solomon Islands politics rapidly became volatile and unstable. Party and political leadership changed frequently and personal friendships and enmities were often played out on the floor of the house. Alliances formed, broke and reformed, and members frequently crossed the floor to side with the opposition. Government and party leadership were increasingly challenged with votes of no confidence. Resource issues concerning land, agriculture, forestry, mining and fishing dominated the political agendas.

Between 1981 and 1983 the number of logging licences quadrupled. By the late 1980s the international timber market changed. Traditional timber sources such as Thailand and the Philippines were disappearing. Malaysian and Indonesian companies sought to expand their forest resource towards started to the Solomons Islands, where there were few limitations to exploitation.

Some companies had already become established in the Solomons under the successive Governments of Prime Minister Solomon Mamaloni in 1981-3 and 1989-93. During the late 1980s, permitted harvest

levels increased dramatically and exceeded the most optimistic estimates of sustainability. The character of logging changed accordingly. A new generation of Malaysian, Indonesian, and Korean companies set up operations. It was often difficult to establish who owned these companies with partnerships and local front companies obscuring the ultimate owners. Politicians became involved in attracting companies and some were accused of being directors of logging companies or their subsidiaries. In 1989, 311,000 m³ was reported as harvested (though 924,000 m³, had been licenced). One year later, despite a licence reduction of 30%, production rose by 40% to 436,000 m³.

The early 1990s provided an opportunity to reverse this trend. Parliament approved a new Forest Policy in 1989 and donor agencies were again prepared to support the sector. The policy called for the re-establishment of the Timber Inspectorate to oversee logging. But Prime Minister Mamaloni favoured expansion of foreign investment in forestry and harvesting expanded rapidly during his second and third terms (1989-93 and 1994-97). The Forest Policy was stillborn and the Timber Control Unit powerless. In 1994 harvesting increased to 659,000 m³ and in 1995 to 748,500m³.

Forestry provided 56% of export revenues and totalled over 30% of Government revenue in 1994. While log exports rose by SI\$ 16.7 million in 1995, export duties fell by SI\$ 12.6 million, in part because of Government issued tax exemptions. The period 1990-1996 saw increased levels of conflict and controversy related to the logging. Evidence of dubious practises mounted, including transfer pricing, failure

to declare accurate information, and frequent exemptions from taxes and duties.

In 1994, Billy Hilly replaced Solomon Mamaloni and promised a ban on logging. His Presidency ended prematurely when politicians sided with the opposition. It was alleged that logging companies helped bring this about by paying politicians to change sides. A Malaysian company director was deported in relation to these allegations.

In 1995, members of the Pavuvu Community objected to logging by Maving Brothers of Malaysia. Police were sent to enable the logging to continue. Community members responded by seizing chainsaws and burning company bulldozers. Later that year, a community leader opposed to logging was murdered. Government halted an inventory on a plantation it planned to sell, and subsequently sold, to a Korean company that harvested the timber and moved into the adjacent natural forests. But the Solomon Islands were to endure yet more conflict, fueled by chronic misuse of the country's resources, corruption and maladministration.

The breakdown of law and order

In 1997, the Solomon Islands Alliance for Change (SIAC), led by Bartholomew Ulafa'alu, replaced the 3rd Mamaloni Government. Reforming the forest sector was key to Ulafa'alu's Government. But the SIAC Government was overwhelmed by problems and reliance on unsustainable levels of logging had unbalanced the economy. In 1997, the Asian financial crisis resulted in the collapse of timber prices. Revenues slumped and the government experienced a crisis.

Independence had not resolved land issues or inter-island rivalry. These continued to provide a long term, if sporadic, threat to harmonious relationships between Solomon Islanders. One particular issue concerned people from Malaita who dominated the employment market. Malaitan communities occurred on many islands including Guadalcanal where the capital and much of the local industry are located. This sparked resentment and, in 1999, violent conflict.

Solomon Mamaloni and Ezekiel Alebua, two politicians who had lost power to the SIAC Government in 1997, were widely implicated in raising the tension. Matters escalated rapidly after militias were formed to support the natives of Guadalcanal islands and the Malaitans respectively. The latter dominated the police and had access to arms. A state of emergency was declared in June 1999 but the situation continued to deteriorate. Pitched fighting broke out between the two militias and a small but vicious civil war ensued.

A cease-fire and peace accord were ineffective. In June 2000, Malaitan militants seized key-institutions and took the Prime Minister hostage, demanding his resignation. On 13 June the Prime Minister resigned. In this chaos, a new Prime Minister was elected in a process flawed by intimidation and pressure from militants. The new Prime Minister could not rule effectively amidst a sea of intimidation, coercion, extortion and threats of violence and law and order broke down.

However peace talks continued and the Townsville Peace Agreement was signed in October 2000. Armed gangs and remnants of the militia continued to

dominate the political and social arena; business and government remained under constant threats of violence. Armed gangs regularly raided the treasury, politicians were coerced at gunpoint and a series of dubious 'compensation claims' were paid.

General elections of December 2001 were considered to be free and fair and over 60% of the sitting members from 2000 were not re-elected. A new Government headed by Sir Allan Kemakeza attempted to restore law and order but failed. In 2002, extortion and intimidation by criminal gangs and ex-militia members severely compromised the Government's ability to bring reform and fiscal discipline.

Following a series of high profile murders, the Prime Minister pleaded with the Australian Government for assistance. In July 2003 the Regional Assistance Mission to Solomon Islands (RAMSI), was despatched to the Solomon Islands. RAMSI included troops, police and administrators from many Pacific nations, to assist the financial, justice and prison systems in particular. This stabilised the situation, at least outwardly, though RAMSI is not designed to resolve many of underlying problems.

Postscript

During 1999-2003, the economy contracted substantially. Many firms left and most will probably never return. Attracting new business will prove difficult given the recent history of the Solomons and its practical and geographical disadvantages.

Current exports remain below the level of 1999, logs and timber still account for a large proportion of exports. The Solomon Islands have no alternative to unsustainable

logging; not an enviable position. In the mid-1990s, the World Bank estimated that at the existing rate of exploitation, the country had eight years of harvesting left. The government is now forced to rely on this meagre remaining resource to climb out of its crisis.

The contribution of logging to the disaster that overtook the Solomons cannot be over-emphasised. It is a clear example of the pernicious effects of bad management and corruption related to of a key national resource. The failures are not of Governments or politicians alone. They are failures of the whole of civil society: the failure to insist on the responsible use of forest resources and the failure to adhere to common rules of good practice and law and order.

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