

- support scientific projects for the protection and development of the environment;
- promote technologies that respect the environment and renewable energies;
- favour applied scientific research;
- initiate partnerships of research, society and industry;
- achieve a transfer of appropriate scientific technologies;
- support modern methods of training and communication for sustainable development;
- preserve biodiversity;
- manage an exceptional environmental heritage of world interest;
- develop resources for long-term exploitation;
- upgrade the knowledge and the comprehension of natural phenomena; and
- integrate the management of sustainable development in the decision-making process.

Case Study 4

Fisheries bylaws in Samoa

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Customary laws and conservation practices

Pre-western contact

In pre-contact times, Samoa was divided into divisions and ruled by paramount chiefs. Samoans had strong and intimate beliefs in deities. Tongans ruled Samoa for about 600 years (400–1000 AD), after which Samoans resumed control of their country; but divisional or factional infighting persisted. This led to the shaping and strengthening of social interactions that were followed by subsequent generations.

Today, Samoa is a hierarchical society where the chiefs (*matai*) govern village affairs. Two kinds of chiefs — the oratory chief (*tulafale*) and the high chief (*ali'i*) — have very different functions. All village land is controlled by the chiefs. There are three types of customary land: 1) settlement land (residential); 2) plantation land; 3) village land (from mountain top to fringing reefs; a concept equivalent to *vanua* in Fiji). The residential and plantation lands are controlled by family chiefs, whereas village land is controlled by village chiefs.

Papalagi (European) influence

Initial contact between Samoans and Europeans resulted in conflicts and subsequent alienation of the country to outside explorers. This was relatively short-lived, and whalers and traders re-opened communication with Samoa. The missionaries' arrival in the 1830s began a revolution in which many customs and traditional practices perished. Codified laws to govern trade with outsiders were first passed in 1838. Factional infighting between various paramount chiefs continued, and saw

America and Great Britain supporting one side and Germany the other. The Steinberger Constitution, drawn up by US Colonel A.B. Steinberger, governed Samoa from 1873 until 1876 (when he was deported). The Berlin Treaty, drawn up in 1889, gave token recognition to the nation's independence, but all decisions had to be approved by Germany, Great Britain and America. In 1900, Samoa was divided, with Tutuila and the Manu'a Group becoming an American protectorate, whereas Upolu and Savai'i formed German Samoa before New Zealand took over in 1914. In 1946 the United Nations assumed responsibility until independence on 1 January 1962, as Western Samoa.

Interface between traditional and governmental laws: issues and challenges

The supreme law, the Constitution of the Independent State of Western Samoa 1960, provides the foundation for national administrations. Laws prior to independence (mostly of New Zealand/British origin) continued to be enforced until they were repealed or amended.

The coastal and marine ecosystems of Samoa have been a mainstay for the people for many generations. Over the last 50 years, rapid development has led to a large increase in population, and significant changes to traditional lifestyles. The market economy has become a dominant force that is having negative impact on the traditional social settings and obligations.

The Fisheries Act (1988) and the Fisheries Regulations (1995) were enacted to manage fisheries resources. In the mid-1990s and with the assistance

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of the Australian Government, Samoa developed a programme for the establishment of village fisheries management plans. Through this programme, the government encouraged participation by the *fono* (council of chiefs) and other users (i.e. untitled men and women's groups) in decision making. Separate meetings allowed for a free flow of discussions, and a representative from each group was selected to form the Fisheries Management and Advisory Committee (FMAC). The overall objective was to develop a Fisheries Management Plan to enable villages to manage their resources.

The process of developing a Fisheries Management Plan can take from three months to over a year, from the plan's initial introduction to its formal adoption. Decisions regarding both critical issues and solutions are made by villagers. The establishment of fish reserves (which are declared taboo for a period of time) is one management option; with the villagers being responsible for enforcement. As was done traditionally, villagers impose penalties for law-breakers, including fines of pigs, chickens or money. This system worked well for villagers initially, but proved difficult to enforce when offenders were outsiders (non-village people). Clause 104 of the constitution stipulates that all lands lying below the high water mark are public, meaning that outsiders can fish within the village coastal zone, including in taboo fish reserves. Villagers thus found it difficult to impose their fines

on members of another village. To overcome this problem, the government introduced village-level fisheries bylaws. The bylaws are village specific and often include activities that cannot be carried out within the village coast. To date, 83 villages are participating, with 62 villages agreeing to set up fish reserves as part of their Management Plan. This network of 62 reserves provides a good conservation strategy for Samoa's marine resources.

The fisheries bylaws are subsidiary to national legislation; hence they must not contravene any provisions of national laws. The bylaws continue to rely on government support especially when there is a dispute between parties (e.g. between the *fono* and an offender from another village). In this case the village will take their complaint to the Fisheries Division, which then takes the matter to the formal court system.

Lessons learned

Engaging the traditional decision makers (chiefs) ensures that decisions and undertakings are effectively implemented at the village level; the rich knowledge and experience of these two groups ensure that informed decisions are made. The bylaws strengthen villages' ability to manage their resources, and some customs that may have been lost (e.g. fishing harvesting methods) become revitalised.

Case Study 5

Traditional law and the environment in the Solomon Islands

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Traditional laws and conservation practices

Pre-western contact

Despite the diverse and heterogeneous nature of the Solomon Islands, the basic principles behind the different tenure systems and resource management regimes were generally similar. Land and adjacent coastal areas such as coral reefs and lagoons were owned under a kinship group (tribe, clan or line) ownership system⁶.

Traditional management of resources was usually done through the customary tenure system. The main customary conservation practices were:

1. Sacred sites: movement into and within these sites was usually restricted to certain people or customary priests only. These sites then automatically served as unofficial protected sites;
2. Social prohibitions: prohibitions or restrictions on the consumption of certain species by some social groups (these could be continuous or limited to certain times of the year); and
3. Serial or sequential prohibitions, which rotated areas and limited access to some groups for harvesting resources.

The most commonly practiced were the system of temporary closures, or sequential prohibitions or limited access on harvesting of resources.

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6. Coral reefs, lagoons and adjacent coastal areas are usually seen as an extension of the land.