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Sustainable Development in the Pacific: Progress and Challenges

Pacific Regional Report for the

5-Year Review of the Mauritius Strategy for Further Implementation of the Barbados Programme of Action for Sustainable Development of SIDS (MSI+5)

ESCAP Subregional Office for the Pacific, Suva, Fiji
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Preamble

This report on progress in the Pacific was prepared by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), in accordance with United Nations General Assembly Resolution 63/213 (February 2009). A draft version was tabled for discussion at the Pacific High Level Dialogue held in Port Vila, Vanuatu on 8-9 February 2010. Comments received during the meeting and the consultation period that followed have been incorporated into this final version.

Assessment reports have also been prepared at the national level. Together the national and regional reports comprise the Pacific's submission to the High Level Meeting that will be convened in New York in September 2010 to mark the five year review point of the Mauritius Strategy (MSI+5). ESCAP will submit the regional report to the United Nations Commission for Sustainable Development (CSD) and the ESCAP Special Body on the Pacific to be convened in conjunction with the ESCAP Commission Session in Korea

The reports, as well as the outcome of the Pacific High Level Dialogue (the Port Vila Outcome Statement) should inform preparations for other reviews being held during 2010: the United Nations General Assembly high-level review of the Millennium Development Goals; the high-level session on biodiversity conservation; and, recognizing that this MSI+5 review is taking place in this International Year of Biodiversity, the 10th Conference of the Parties to the Convention on Biological Diversity.

Acknowledgements

This report was drafted on behalf of UNESCAP by Mr. Russell Howorth, Consultant. Feedback from member states and regional stakeholders during the High Level Dialogue held in Port Vila, Vanuatu on 8-9 February 2010, and the consultation period that followed, have been incorporated into this final version of the report.

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Executive Summary

The Mauritius Strategy for the Further Implementation of the Barbados Programme of Action for the Sustainable Development of Small Island Developing States (MSI) was adopted in 2005. To mark the passing of the first five years of the strategy, United Nations General Assembly has called for a review of progress towards implementing the MSI.

"…the review should provide the international community with an opportunity to conduct an assessment of the progress made, lessons learned and constraints encountered in the implementation of the Mauritius Strategy…"

United Nations General Assembly Resolution 63/213

This report on progress in the Pacific provides a consolidated view of actions taken to implement the Mauritius Strategy in the region. It covers the Pacific SIDS of the Cook Islands, the Federated States of Micronesia, Fiji, Kiribati, Nauru, Niue, Palau, Papua New Guinea, the Republic of the Marshall Islands, Samoa, the Solomon Islands, Timor Leste, Tonga, Tuvalu, and Vanuatu. The report highlights established frameworks for action, concrete actions taken, lessons learned, remaining challenges for the way forward and the effectiveness of implementation support and mechanisms.

Chapter 1 gives a brief overview of the Pacific for those readers who are less familiar with the region. Chapter 2 discusses progress in strengthening the environment and support mechanisms for implementation of the Mauritius Strategy. Chapters 3 reviews progress against key areas such as climate change, energy, culture, biodiversity, transport and ICT. Chapter 4 provides a brief overview on progress against the Millennium Development Goals (MDGs) and Chapter 5 reviews the impacts of the recent global economic crisis. Recommendations on the way forward for the region are provided in Chapter 6. Analysis of progress towards sustainable development in other areas is provided in the Annex.

Box 1: The Mauritius Strategy

An international meeting on small island developing states was held in Port Louis, Mauritius in January 2005. All Pacific SIDS were represented at the meeting, many by their Head of Government, and reaffirmed their commitment to sustainable development through the Mauritius Declaration.

The meeting adopted a new strategy for sustainable development. The Mauritius Strategy for Implementation (MSI) recognizes the unique vulnerabilities of SIDS and maps out the actions needed at national, regional and international levels to address sustainable development challenges. The strategy comprises twenty sections:

I. Climate change and sea-level rise
II. Natural and environmental disasters
III. Management of wastes
IV. Coastal and marine resources
V. Freshwater resources
VI. Land resources
VII. Energy resources
VIII. Tourism resources
IX. Biodiversity resources
X. Transport and communication
XI. Science and technology
XII. Graduation from least developed country status
XIII. Trade: globalization and trade liberalization
XIV. Sustainable capacity development and education for sustainable development
XV. Sustainable production and consumption
XVI. National and regional enabling environments
XVII. Health
XVIII. Knowledge management and information for decision-making
XIX. Culture
XX. Implementation

The final chapter on implementation highlights the most urgent priorities for sustainable development and is therefore the main focus of this report. The full text of the Mauritius Strategy is available at www.un.org/smallislands2005/pdf/sids_strategy.pdf.

The Pacific is a diverse region made up of countries and territories with varying land sizes, populations, natural resources, economies and cultures. The main economic sectors in the region are tourism, fisheries, forestry and agriculture. Remittances play an increasingly important role in the economies of Pacific SIDS, contributing towards economic growth and sustaining livelihoods, including meeting education and basic needs.

Geographic isolation and the small land area and population sizes of SIDS result in unique challenges for sustainable development. Pacific SIDS suffer from diseconomies of scale in production and exchange of goods and services, remoteness from export markets and a high vulnerability to natural disasters and climate change. Notwithstanding these challenges, the environment, culture and uniqueness produced by isolation has created a strong tourism industry with prospects for continued growth. Isolation has also produced resilient communities with strong traditions, cultures and coping capacity. Paradoxically, Pacific SIDS may be described as resilient social systems which can succumb to a "knock-out" event at any time.

The sustainable development agenda is a broad one, aiming to ensure inclusive economic growth for current and future generations. Economic, social and environmental dimensions comprise the pillars of a holistic and integrated approach. The focus of this report is on the key areas identified in the Mauritius Strategy where the most urgent sustainable development challenges exist. The report does not follow the structure of the Mauritius Strategy, but rather attempts to merge related information to give a clear picture of progress.

Pacific SIDS have made considerable progress towards implementing the Mauritius Strategy since its adoption in 2005. Acknowledging that sustainable development is primarily a national responsibility, this progress has been mainly due to national efforts. However, the ongoing support of regional and international organisations, civil society organizations and development partners has been crucial and is greatly acknowledged.

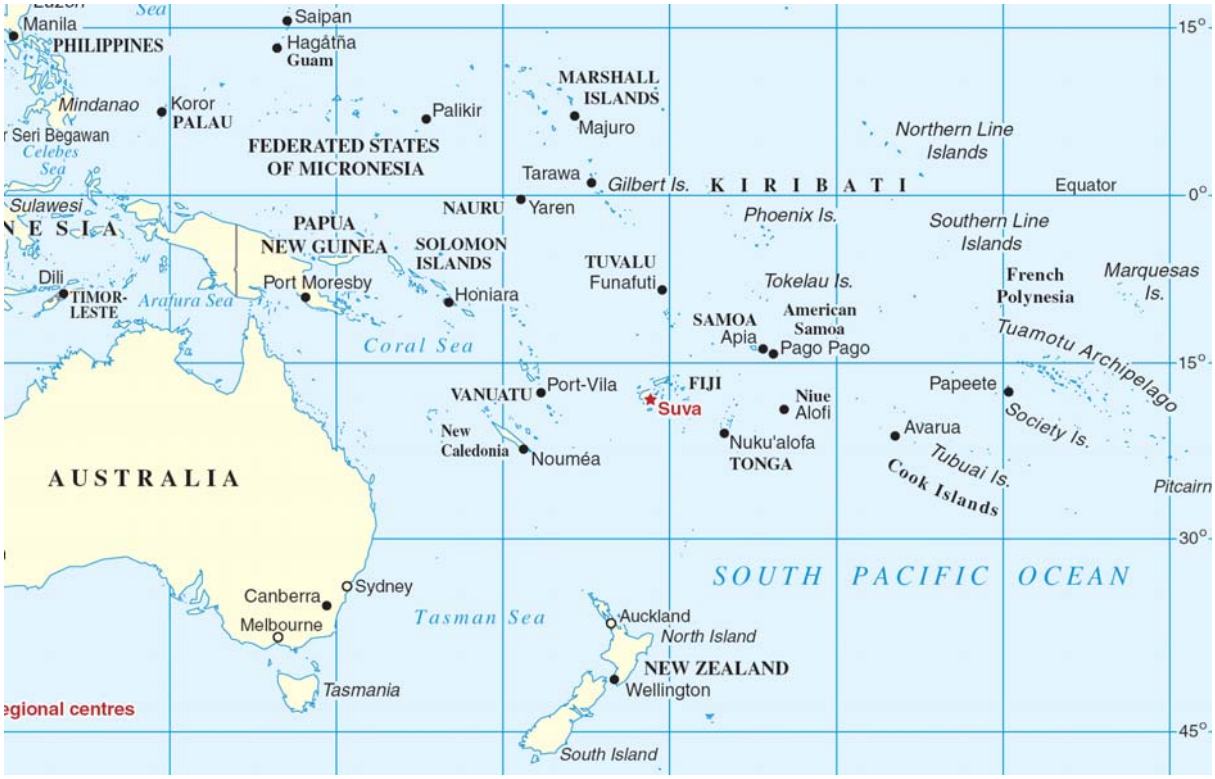
This report focuses on regional progress, providing a detailed overview of the regional frameworks and concrete actions that have been taken to support sustainable development at the national level. The outcomes of the Pacific High Level Dialogue on the Implementation of the Mauritius Strategy, held in Port Vila on 8-9 February 2010, provides the roadmap for the future of sustainable development in the region.

Chapter 1
The Pacific: a region of Small Island Developing States

The Pacific is a diverse region made up of countries and territories with varying land size, population, natural resource base, economy and cultures. The region contains 15 small island developing states (SIDS): the Cook Islands; the Federated States of Micronesia; Fiji; Kiribati; Nauru; Niue; Palau; Papua New Guinea; the Republic of the Marshall Islands; Samoa; Solomon Islands; Tonga; Tuvalu; and Vanuatu. This report also covers Timor Leste. All are members of the Alliance of Small Island Developing States (AOSIS) and, except for Timor Leste, the Pacific Islands Forum.

Some of the Pacific SIDS are amongst the poorest and weakest segment of the international community, with Kiribati, Samoa, Solomon Islands, Timor Leste, Tuvalu and Vanuatu, currently classified as Least Developed Countries (LDCs).

Figure 1 Map of the Pacific Region



Source: United Nations Cartographic Section

1.1 Economy

The combined value of the Pacific SIDS Gross Domestic Product (GDP) is around US$15 billion. Papua New Guinea has the largest with a GDP of US$8.2 billion in 2009. This is more than twice the size of the second largest economy: Fiji (US$3.5 billon GDP in 2009). Together Papua New Guinea and Fiji account for 80 percent of the region's GDP1. The remaining Pacific SIDS, particularly the Polynesian and Micronesian countries, have very

[1] AusAID, *Pacific Economic Survey 2009,* AusAID publications, Canberra, 2009.

small economies, with GDP's ranging from Samoa with US$ 523 million in 2009 to the smallest being Tuvalu with a GDP of US$15 million in 2009[2] .

The main economic sectors in the region are tourism, fisheries, forestry and agriculture. Remittances also play an increasingly important role in the economies of the Pacific SIDS, contributing towards economic growth and sustaining livelihoods, including meeting education and basic needs. An overview of these sectors is provided at Appendix 1.

Pacific SIDS suffer from diseconomies of scale in production and exchange of goods and services, high vulnerability to natural disasters and remoteness from export markets. Most have experienced low average growth in output during the past decade while their growth rates have shown large fluctuations. Trade deficits have been on the rise due to declining exports and increasing imports. The challenge of the global economy is particularly high for those countries with limited human resources and technology and poor management skills. Gender inequality also manifests itself in Pacific SIDS in the economic sector in the context of labour force participation (PIFS/European Community, 2008).

Table 1: Key economic indicators

	Current GDP USD mil	GDP per capita	Real GDP growth (percent)			Inflation[a] (percent)		
	2009e	2008 US$	2008	2009 e	2010 e	2008	2009 e	2010 e
Cook Islands	183	10 907	-1.2	-0.1	0.8	7.8	6.5	2.2
Fiji	3500	4 264	0.2	-2.5	1.2	7.8	5.0	7.0
Kiribati	114	804	3.4	1.5	1.1	11.0	9.1	2.8
Marshall Islands	161	2 737	-2.0	0.5	0.8	14.8	9.6	1.7
Micronesia (FS of)	238	2 154	-2.9	0.5	0.5	6.8	2.9	2.2
Nauru	22	2 396	1.0	1.0	0.0	4.5	1.8	1.8
Palau	164	8 812	-1.0	-3.0	-1.0	12.0	5.2	3.0
Papua New Guinea	8200	1 218	7.0	3.9	3.7	10.7	8.2	5.0
Samoa	523	2 988	4.8	-5.5	-1.0	10.9	5.7	3.2
Solomon Islands	668	1 284	6.9	0.4	2.4	17.2	8.0	7.0
Tonga	259	2 891	1.2	2.6	1.9	14.5	12.3	6.1
Tuvalu	15	3 213	1.5	1.0	1.0	5.3	3.8	2.3
Vanuatu	554	2 388	6.6	3.0	3.5	4.8	4.3	3.0

Sources: IMF, World Economic Outlook October 2009 for Fiji, Kiribati, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu; and Asian Development Outlook October 2009 for Subregional total, Cook Islands, Marshall Islands, Micronesia (Federated States of), Nauru, Palau and Tuvalu.
Notes: a = changes in CPI; e = estimate

1.2 People

The Pacific islands have a total population of 8.7 million people. Papua New Guinea has the largest population with 6.5 million people (74% of the region's population). Just over half the countries have populations of less than 100,000, and of them, several have less than 10,000 residents with Niue being the smallest with 1,625 inhabitants. The population of the Pacific islands is predominantly young with a median age of 21.3. Over half the population is aged below 24 years and 20 per cent are between 14-20 years.

[2] Tuisolia S.R., *The Impact of the Global Economic Crisis on the People of the Pacific*, commissioned by UNESCAP for the Pacific Conference on the Human Face of the Global Economic Crisis, Port Vila, Vanuatu, 10-12 February 2010.

Approximately 2.3 million people live in cities and towns in Pacific SIDS with many urban populations are growing at twice the rate of national populations. Urban growth is expected to persist because of high rural-to-urban migration and high levels of fertility.

Table 2: Key demographic indicators

	Population	Median age	Land area	EEZ* area	Population density	Urban population	
	2009 mid-year estimate	2009 years	km^2	thousands of km^2	2009 people/ km^2	% of total	Year
Cook Islands	15 636	26.1	237	1 800	66	72	2006
Fiji	843 888	26.5	18 272	1 260	46	51	2007
Kiribati	98 989	21.8	811	3 600	122	44	2005
Marshall Islands	54 065	18.6	181	2 131	299	65	1999
Micronesia (Federated States of)	110 899	20.5	701	2 978	158	22	2000
Nauru	9 771	21.5	21	320	465	100	2006
Niue	1 514	32.9	259	..	6	36	2006
Palau	20 397	34.1	444	629	46	77	2005
Papua New Guinea	6 609 745	20.5	462 840	3 120	14	13	2000
Samoa	182 578	20.2	2 935	120	62	21	2006
Solomon Islands	535 007	19.7	28 370	1 340	19	16	1999
Tonga	103 023	20.6	650	700	158	23	2006
Tuvalu	11 093	24.2	26	1 300	427	47	2002
Vanuatu	238 903	20.4	12 190	710	20	21	1999

Sources: Secretariat of the Pacific Community (SPC) Estimates and projections of demographic indicators for specific years (October 2009), SOPEC
* Exclusive Economic Zone (EEZ)
.. Data not available

Participation in primary education is relatively high, with net enrolment rates varying from 63 to 98%. There has been mixed progress, however, on increasing the number of children who complete school, with primary school completion rates declining most significantly in Papua New Guinea and Vanuatu, and to a lesser extent in Fiji, but improving in Samoa and Tonga. Gender parity in primary schools has improved in Tuvalu, Samoa, Niue, Kiribati and Solomon Islands, but slightly worsened in Papua New Guinea and Tonga during 1999 – 2004. An emerging gender trend is that girls stay at school longer and are more successful than their male counterparts in external examinations. This is also reflected in the higher education level at the University of the South Pacific (USP), where the enrolment and programme completion rates for girls and women outdo those of their male counterparts. Adult literacy in the Pacific remains a challenge in some of the very few countries in the region with available data, varying between 57% in Vanuatu and 99% in Tonga and Samoa.

Non-communicable diseases are the major cause of death in the Pacific (75% in 2002): mainly heart diseases, strokes and cancers. Twenty percent of deaths are by communicable diseases, mainly diarrhoeal diseases, tuberculosis, meningitis, malaria, and maternal and perinatal deaths; and 5% caused by accidents. Environmental health is an issue in many parts of the region as sustainable access to improved water supplies and sanitation is not universal.

High fertility rates in the region make reproductive health and family planning services regional priorities. While infant mortality has declined throughout the region and generally women have proper prenatal, intra-natal and post-natal care, some countries may not achieve their targeted MDGs by 2015.

HIV prevalence is generally low, but increasing in many Pacific SIDS. It is estimated that between 50 000 and 150 000 people have HIV/AIDS region-wide. Papua New Guinea has already reached generalised epidemic rates[3]. Prevention remains the first line of defence and is well established in countries such as Kiribati, with a large proportion of their young men working worldwide as seafarers on foreign vessels. There has been progress in scaling up service provision, including having many people on anti-retroviral treatment; care and support arrangements are being implemented for people living with HIV/AIDS and second generation surveillance (mapping of risk and infection) has been undertaken in some Pacific SIDS.

Despite gender equality in lower levels of education in most Pacific SIDS, women remain under-represented in technical and professional education and are over-represented in low-paid informal sectors. They are also under-represented in decision-making bodies and high-level positions, including in parliaments where the Pacific continues to have the lowest levels of women's representation in the world.

Recent studies have shown that in some Pacific SIDS, prevalence of physical and/or sexual violence against women is among the highest when compared with similar studies conducted elsewhere in the world. Additionally, there is unequal protection and numerous gaps in legislation region wide regarding sex discrimination, domestic violence, marital rape, legal and safe abortion, legal age of marriage, and property rights including land.

There is a strong need to revisit and strengthen frameworks and mechanisms to effectively translate regional gender commitments into implementation at national and local levels. Simultaneously, there is a real need to reconcile existing gender commitments with all other national, regional, and international development plans, such as the Mauritius Strategy.

1.3 Environment

The Pacific Ocean covers one-third of the earth's surface and is one of nature's greatest active carbon sinks, even more so than the Amazon forest. It has an immense biodiversity and it is estimated that as little as 20% of the Pacific Ocean's flora and fauna has been properly researched.

Pacific SIDS are characterised by extremes in physical geography and remoteness. The environmental profile of the region is one of high degrees of endemism and levels of biodiversity, but relatively small numbers of species. There is a high degree of economic and cultural dependence on the natural environment and a clear vulnerability to climate change and a wide range of natural disasters.

The Pacific region is blessed with its coral reefs, and their ecosystems and biodiversity. More than 80% of Pacific islanders live in or near coastal areas and draw from the coral reef for their livelihood. The coral reef supports approximately 25% of all marine life, including over 4,000 species of fish, providing valuable spawning, nursery, refuge and feeding areas for large varieties of organisms. Coral reefs also play vital roles as natural breakwaters, minimising wave impacts during storms and cyclones. Hence the motto for the Second Pacific Year of the Coral Reef 2008 was "Strong reefs, strong islands."

Given that most of the region's population is settled in coastal areas, changes in population density combined with new technology and changing development priorities have had a significant impact on coastal environments in the last decade. Uses of the coastal zone and activities taking place within it (for example coastal construction, port development,

[3] An epidemic is generalised when over 1 percent of the population is affected by the disease.

sewage and waste disposal, coastal protection, fishing, sewage/waste treatment, agriculture, logging, mining) pose the following threats, amongst others, to marine and coastal resources: eutrophication, soil erosion, sedimentation, degradation and bleaching of coral reefs and mangroves, coastal erosion, physical environmental alterations, and overexploitation of fisheries.

Climate change is already affecting the Pacific and its critical importance it is considered in several parts of this report. Climate variations and extremes have disrupted food production, water supply and the economies of Pacific countries. Climate projections for the future, although coarse for islands, are bleak and indicate reduced food security, especially at household level. The primary food sources (agriculture, fisheries and forests) and water will all be impacted by climate change and, in most cases, these impacts will be negative.

A scarcity of freshwater resources poses several problems in the region. Despite high levels of total rainfall, water is sometimes not available in the high islands due to rainfall seasonality and inadequate storage. Localised pollution, excessive sedimentation due to uncontrolled watershed development and water wastage are common problems reported in Fiji, Samoa and Solomon Islands. Water shortages force some atoll communities to use polluted or salty groundwater for drinking and cooking, thus giving rise to serious health problems. The protection, conservation, management of supply/quality of water is expected to become an increasingly important issue in the Pacific given the impact of climate change in increasing rainfall variability.

The main types of pollution within the region are shipping-related pollution, hazardous chemicals and hazardous wastes and solid waste management and disposal. The region's coastal and marine resources are threatened by introduced marine species, shipwrecks, marine accidents and spills, ships' waste and antifouling paints on vessels. Increasing quantities of solid waste, poor control of chemicals imported into the region and the lack of capacity to manage pollutants are primary problems.

All Pacific SIDS share the problems of waste disposal and pollution prevention. These problems have been exacerbated by the small size, remoteness and rapid urbanisation of many islands. Environmental contamination is a consequence of the increasing population pressures. The majority of household waste is recyclable material and organic waste. Unfortunately, only a very limited amount is recycled as there are very limited recycling operators and no market for recyclable material. Waste is generally burned or dumped into the sea or in mangroves. Consequently, non-organic waste management is expected to become an ever more critical environmental challenge in the region. Water disposal and pollution is also impacting adversely on the region's health and tourism potential for sustainable economic development. The atoll nations of Tuvalu, Kiribati and the Marshall islands are particularly constrained by limited land area for use as landfill sites.

Pacific SIDS rank among the most vulnerable in the world to natural disasters. Between 1950 and 2004, extreme natural disasters, such as cyclones, droughts and tsunamis, accounted for 65 percent of the total economic impact from disasters on the region's economies. Ten of the fifteen most extreme events reported over the past half century have occurred in the last fifteen years.

1.4 Isolation and vulnerability

The Pacific SIDS are dispersed over a large geographical area and vary in land size, population, resources, development constraints and prospects. However, a recent Asian

Development Bank (ADB) report[4] highlights that despite their differences, Pacific SIDS have one thing in common: their vulnerability[5]. Events during the last decade have demonstrated that vulnerabilities remain high and efforts to build resilience have been insufficient. Despite the hard work of Pacific SIDS to fulfil their commitments to internationally agreed development goals, such as the Mauritius Strategy and the MDGs, gains made in recent decades risk being lost through the adverse impacts of climate change, natural disasters and the recent food, fuel and financial global crises.

Isolation has significant economic, environmental and social impacts on Pacific SIDS:

(a) large distances, high fuel costs and low economies of scale makes the cost of developing and maintaining infrastructure, such as transport and communications, prohibitively high

(b) a small population base tends toward a narrow range of resources and skills, increasing the costs of public administration and limiting institutional capacity

(c) narrow markets for local products and dependence on international trade creates vulnerability to global developments as well as fewer employment and livelihood opportunities

(d) trade in remote locations is limited by high freight costs and marketing difficulties leading to increasing urbanization

(e) the resulting rise in population density is placing pressure on resources and infrastructure, leading to problems such as overfishing, freshwater depletion, and pollution

(f) islands often exhibit high levels of biodiversity, characterised by many plants or animals indigenous to only one island or area. The small size of these islands means that species have a relatively small population, leading to higher risks of extinction and a strong need for protection.

Notwithstanding these characteristics, the environment, culture and uniqueness produced by this isolation has created a strong tourism industry with prospects for continued growth. Isolation has also produced resilient island communities with strong traditions, cultures and coping capacity. This strength is founded on extended family values and communal mechanisms that link to national systems.

Tight kinship and a highly-localised economy often lead to subsistence livelihoods devoid of larger economic structures. Reliance on each other, community cooperation, an understanding of the environment and a tradition of coping with local resources, have together contributed to building an society that can deal with challenges through community cooperation. Sadly, these indigenous systems of ensuring social safety for all are gradually being eroded and are often at odds with more recent concepts of governance, decentralisation and social welfare.

[4] The Millennium Development Goals in Pacific Island Countries: Taking Stock, Emerging Issues and Way Forward. 2009: A report prepared by ADB in conjunction with the UNDP Pacific Centre.
[5] Vulnerability in referred to in its broadest context, whether from internal or external actions and whether it is economic, social, environmental or governance related.

Chapter 2
Implementing the Mauritius Strategy

Implementation of the Mauritius Strategy relies on a multitude of factors. Key among them are national commitment, regional and international partnerships, stakeholder participation and the provision of financial resources and technical assistance. This chapter focuses on achievements in establishing the components needed to support the implementation of the strategy and to monitor progress towards sustainable development in the Pacific.

2.1 National enabling environments

One of the most important factors for implementing the Mauritius Strategy is the creation of an enabling environment for sustainable development through governance structures, planning, leadership and regional and international cooperation.

Pacific Islands Forum Leaders committed to the development and implementation of National Sustainable Development Strategies (NSDS) within each country by 2008 (Pacific Plan Initiative 5.1, 2005). All Pacific SIDS have an overarching development plan (see Table 3), many with a long term vision, including goals, guiding principles and strategic areas. The NSDS is intended to complement rather than replace existing planning and strategy development, the aim being to ensure the principles of sustainable development are embedded into planning processes, rather than developing a separate strategy document. In some cases, national development plans have been renamed to highlight a focus on sustainable development where it was considered appropriate.

Table 3: Current National Plans and Strategies amongst Pacific Island Countries

Country/Territory	Plan title	Timeframe
Cook Islands	National Sustainable Development Plan (NSDP)	2006-2010
Fiji	Strategic Development Plan (SDP)	2006-2008
Kiribati	Kiribati Development Plan	2008-2011
Micronesia (Federated States of)	Strategic Development Plan	2000-2015
Nauru	National Sustainable Development Strategy (NSDS) Revised in 2009 "Revised 2009 NSDS"	2006-2008 2009-
Niue	Niue National Strategic Plan (NNSP)	2009-2013
Palau	Palau 2020 National Master Development Plan	2020
Papua New Guinea	Medium Term Development Strategy (MTDS)	2005-2010
Republic of Marshall Islands	Vision 2018	2018
Samoa	Samoa Development Strategy	2008-2012
Solomon Islands	Medium Term Development Strategy	2008-2010
Tonga	National Strategic Development Plan 8	2006/7 2008/9
Tuvalu	National Strategy for Sustainable Development	2006-2015
Vanuatu	Priorities and Action Agenda	2006-2015

As Table 3 illustrates, many of the Pacific SIDS national plans are near or past their use-by-date. Several have a timeframe that may be too long to reflect shifting priorities and emerging issues, such as recent global crises, affecting the region. Furthermore, the linkages at national level between the NSDS process and global initiatives that have similar intentions, such as the MDGs, should be re-examined.

Although it is clear that development plans are ultimately matters for national governments to determine, Pacific SIDS have called for the support of the international community to formulate and implement NSDS and incorporate guiding principles for sustainable development into all sectoral policies. Since 2005, a substantial amount of support has been given to Pacific SIDS. These efforts have been coordinated through the through the Pacific NSDS Regional Support Partnership, established to promote joint planning, support and implementation among relevant regional and international development organizations and partners to improve the formulation and implementation of NSDS. The partnership, involving regional organizations and the United Nations system, operates under the guidance of the Sustainable Development Working Group coordinated by the Pacific Islands Forum Secretariat (PIFS).

National commitment to sustainable development is clear, but significant challenges remain. Unfortunately, many governments and individuals, both in the Pacific and globally, have misunderstood the meaning of sustainable development. In particular, it is often confused with, and been taken to be primarily about, environmental management. Furthermore, some Pacific SIDS have found it demanding to incorporate sustainable development into the structure of their existing development plans.

The following recommendations are made to ensure enabling environments continue to be strengthened at the national level:

(a) Establish and communicate a long term national strategic vision that is linked to medium term goals/targets and short term actions

(b) Transparent and effective coordination across sectors ("horizontally")

(c) Clear and complementary links between local, national and international policy and governance initiatives

(d) Establish national and regional policies that address science and technology and the protection of natural resources to support sustainable development and build resilience to the impacts of climate change

(e) Streamlined, efficient and effective national effort to link NSDS, MDGs and other internationally agreed sustainable development goals and commitments

(f) Genuine partnerships between government, development partners, the private sector, NGOs, and the community at large.

(g) Sustainable financing including an increased allocation of domestic resources for NSDS that contributes to social and economic development and environmental protection and adaptation activities.

2.2 Role of regional and international organizations in promoting sustainable development

The Pacific region benefits from an active and functional interregional system comprising organizations at the political, technical and sectoral levels. Strong relationships with bilateral and multilateral donors provide funding to support many of the sustainable development initiatives outlined in this report. The region is also closely connected with international support networks through the United Nations regional commission, agencies and funds.

In the same year that the Mauritius Strategy was adopted, the Pacific Islands Forum Leaders adopted the Pacific Plan. The plan was established in response to the many challenges facing Pacific SIDS and to strengthen regional cooperation and integration. Sustainable development is one of the four pillars of the Pacific Plan and the

accompanying Leaders' vision statement highlights the vital role that it plays in the future of the region.

> *"We seek a Pacific region that is respected for the quality of its governance, the sustainable management of its resources, the full observance of democratic values and for its defence and promotion of human rights. We seek partnerships with our neighbours and beyond to develop our knowledge, to improve our communications and to ensure a sustainable economic existence for all."*
>
> The Pacific Plan: excerpt from the Leaders' Vision[6]

The implementation of the Pacific Plan creates the environment needed for achieving sustainable development goals. The plan includes initiatives for better access to markets and goods, trade in services including labour, trade facilitation, enhanced transportation and communication and private sector development. It promotes the development and implementation of national sustainable development strategies and commits to regional support for good governance, particularly in areas such as leadership, human rights, ombudsman functions, audit, transparent administration systems, and participatory decision-making mechanisms.

Reports on progress against the Pacific Plan are prepared every six months[7]. Recent achievements in promoting sustainable development include strengthening the effectiveness and viability of national tuna industries, improved shipping services, ports and associated administration standards, facilitating negotiations for the bulk procurement of petroleum, developing regional standards for literacy, numeracy and life skills, establishing the Pacific HIV Response Fund and facilitating trade negotiations and regional trade agreements. These and many other achievements are described in more detail in this report.

The Council of Regional Organisations in the Pacific (CROP), chaired by the Secretary-General of PIFS, brings together the Secretariats of eleven intergovernmental regional organisations (see Box 2). With the exception of PIFS, the organisations are generally technical or educational in nature, and with their own governance and legal arrangements. The member organisations of CROP are an extension of national capacity and are often key in delivering services at national level.

The international community, through aid and donor agencies and the United Nations Secretariat, agencies, programmes and funds, play an active role in creating an enabling environment for sustainable development in the Pacific (see Box 3). They work in close partnership with regional organizations and coordinate activities to ensure optimum utilization of resources. Their strong presence in the Pacific helps to ensure the international community understands and pays appropriate attention to the particular needs and priorities of Pacific SIDS.

The Cairns Compact on Strengthening Development Coordination in the Pacific (2009) brings a new determination and an invigorated commitment to lift the economic and development performance of the region. From 2010, regional and international development partners will provide an annual report on their efforts to the Cairns Compact, including efforts to reduce aid fragmentation, ease the burden of aid administration and improve aid effectiveness, through measures such as increased use of country partner systems, multi-year funding commitments, pooled funding, the delegation of aid delivery to lead donors, and collaborative analytical work.

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[6] http://www.forumsec.org

[7] Available online at www.forumsec.org/pages.cfm/newsroom/publications/pacific-plan-progress-reports.html

Box 2: Members of the Council of Regional Organisations of the Pacific (CROP)

Fiji School of Medicine (FSchM): To provide quality health professional education, training and research for the Pacific. It offers academic programmes in medicine, dentistry, environmental health, radiography, medical laboratory technology, nutrition and dietetics, pharmacy and public health.

Forum Fisheries Agency (FFA): To support and enable our members to achieve sustainable fisheries and the highest levels of social and economic benefits in harmony with the broader environment.

Pacific Community (SPC): To help people in its 22 member countries and territories position themselves to respond effectively to the challenges they face and make informed decisions about the future. Their activities support the sustainable development and management of natural resources; human and social development and broad-based economic development in particular through provision of appropriate policy, technical, scientific, research and training assistance and advice in the sectors under its jurisdictions including agriculture, aquaculture, fisheries, forestry, culture, demography and population, education, gender, health, human rights, media, youth, transport, energy, information and communication and infrastructure with the aim of improving the region's economic, social and environmental wellbeing.

Pacific Islands Applied Geoscience Commission (SOPAC): To contribute to sustainable development, reduce poverty and enhance resilience for the peoples of the Pacific by supporting the development of natural resources, in particular non-living resources, investigating natural systems and the management of vulnerability through applied environmental geosciences, appropriate technologies, knowledge management, technical and policy advice, human resource development and advocacy of Pacific issues.

Pacific Islands Development Programme (PIDP): To contribute to the processes of sustainable development through research, education and dialogue and advance cooperation and understanding between Pacific islands and Pacific rim nations.

Pacific Islands Forum Secretariat (PIFS): To service the annual Forum meeting of the heads of Government of the independent and self-governing countries of the Pacific, and to foster regional cooperation and integration, particularly on economic and trade matters, as directed by the Forum.

Pacific Power Association (PPA): To enhance the performance of power utilities in the region through a cooperative effort by maintaining a partnership among the Active Members.

Pacific Regional Environment Programme (SPREP): To promote cooperation in the South Pacific region and to provide assistance in order to protect and improve its environment and to ensure sustainable development for present and future generations.

South Pacific Board for Educational Assessment (SPBEA): To provide quality service to its members, promote self reliance in the area of educational assessment and to encourage member countries to keep abreast with current developments in the area of educational assessment.

south-pacific.travel: To provide service to its member countries and promote cooperation in the marketing and development of tourism in the South Pacific.

University of the South Pacific (USP): To provide for the needs of the Pacific region for cost effective and internationally recognised higher education and training at all levels; and to ensure that such education and training is sensitive and relevant to the diverse island cultures and environment; and to promote social and economic advancement and good governance among Pacific communities.

Box 3: The United Nations in the Pacific

The United Nations System has three Subregional offices in the Pacific located in Fiji, Samoa and Papua New Guinea, led by Resident Coordinators who are representatives of the United Nations Secretary General. The United Nations country team in Fiji covers ten Pacific SIDS, the Samoa Office covers four and Papua New Guinea has its own office. United Nations agencies, funds and programmes [8] work together with United Nations country teams (UNCTs) to coordinate the work across the region.

The **United Nations Development Assistance Framework (UNDAF)** for the Pacific Subregion 2008-2012, represents the first region-wide response to the United Nations operational reform process, and is a product of several partnerships in development. While the UNDAF is intended to guide the majority of the work of the United Nations, a minority of activities fall outside its objectives. The UNDAF aims to achieve:

- Equitable economic growth and poverty reduction
- Good governance and human rights
- Equitable social and protection services
- Sustainable environmental management.

Based on June 2009 estimates by the United Nations Development Group (UNDG) Regional Directors Team for Asia and the Pacific, there are 185 international staff deployed in the region by the UN system and a further 32 United Nations volunteers. The Pacific UNCTs contribute to the delivery of diverse regional and national programme portfolios with the resource volume for 2008/09 biennium estimated at US$241.5 million.

While the United Nations programme portfolio is dispersed across all Pacific SIDS, most of the staff work from Samoa, Papua New Guinea and Fiji, with a growing staff contingent also in Solomon Islands. Several other Pacific SIDS have been advocating for establishment of additional offices across the Pacific. In response to this initiative, three organisations of the United Nations system - UNDP, UNFPA and UNICEF - formed a partnership to establish Joint United Nations Presences in other Pacific SIDS. In September 2006 their proposal was endorsed by the United Nations Secretary-General. Offices have been established in Palau, Solomon Islands, and Tuvalu and ones yet to be formally launched in Nauru (UNDP lead agency); Kiribati and Vanuatu (UNICEF lead agency); and Federated States of Micronesia and the Republic of the Marshall Islands (UNFPA lead agency). There are 73 United Nations staff, both national and international, working in the new Joint United Nations Presences: 39 in Solomon Islands, 19 in Vanuatu, 11 in Kiribati, and 1 each in Marshall Islands, Federated States of Micronesia, Palau and Tuvalu.

The new Joint United Nations Presence offices are already playing a vital role in strengthened communications between United Nations and the host governments and for delivery of development and humanitarian assistance. Several of the presences are spearheading design of joint programmes in areas such as local governance and MDG monitoring. In addition, it is expected that Joint United Nations Presences will support respective Pacific SIDS governments in strengthening their aid management systems and overall aid effectiveness.

Kiribati One UN Fund: Kiribati is now the first country in the Pacific where the United Nations, with assistance from its regional development partners, has established a One UN Fund mechanism. This One UN Fund mechanism allows development partners to provide multi-year financing at the agencies, funds and programmes level, thus ensuring that the United Nations will upscale its efforts to achieve concrete development results as envisaged in the new Kiribati Development Plan (2008-2011). The Kiribati One UN Fund was formally established in July 2009 when ILO, UNDP, UNESCO, UNFPA. UNICEF, UNIFEM and WHO signed a memorandum of understanding. It received an amount of US$500,000 from the Expanded Delivering as One Funding Window in August 2009 and the above seven agencies submitted various proposals for funding which were later endorsed by the Government of Kiribati.

The UNDP Pacific Centre, currently with a staff of 16 advisers, became operational in early 2006 and specifically focuses on the fifteen Pacific SIDS. Two regional centres in Bangkok and Colombo focus on a range of thematic areas and cover all countries in Asia and the Pacific.

[8] FAO, ILO, UNAIDS, UNDP (including the Pacific Centre), UNDSS, UNEP, UNESCAP, UNESCO, UNFPA, UNICEF, UNIFEM, UNISDR, UNOCHA, UNOHCHR, UNOPS, WHO, and WMO.

The Pacific Centre services the two UNDP Multi-Country Offices based in Fiji and Samoa, the Papua New Guinea Country Office and the recently established sub-office in Solomon Islands. The Pacific Centre is designed to support UNDP Country Offices build capacity through technical and policy advisory support to the governments, civil society and regional organisations in the Pacific as well as the delivery of initiatives promoting regional cooperation and integration. The Pacific Centre adds value to the United Nations' presence in the Pacific by helping build the capacity of UNDP offices; by supporting the work of other United Nations agencies; and by promoting partnerships with regional inter-governmental organisations and regional NGO umbrella organisations that encourage south-south cooperation as well as the development of knowledge products and tool kits. The Centre also seeks to ensure that the development challenges of the Pacific are recognised globally and that the successes, best practices and lessons learned in the region are shared within and beyond the Pacific.

The Centre's programmes are structured around three core thematic areas: (i) MDG Achievement and Poverty Reduction; including support for HIV and AIDS response and environment and energy; (ii) Democratic Governance; and (iii) Crisis Prevention and Recovery. The Centre has also initiated two new supporting projects, in Financial Inclusion and Support for Civil Society Organisations. Human rights and gender equality have been mainstreamed through all the Centre's programmes

The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) is the regional development arm of the United Nations. It serves as the main economic and social development centre for the United Nations in Asia and the Pacific. ESCAP provides the strategic link between global and country level programmes and issues. The **ESCAP Subregional Office for the Pacific (EPOC)** was established in 1984. In 2005, it was relocated from Port Vila to Suva to enable more effective collaboration with regional partners and in early 2010, it was upgraded to a Subregional Office to strengthen its mandate and enhance effective delivery in the region.

EPOCs mission is to provide strong support to Pacific island countries and territories in their effort to attain economic and social development goals. Work focuses on:

- implementing the ESCAP Commission's agenda at the subregional level by serving as a link between the Pacific and Commission headquarters
- promoting and supporting specific Pacific priorities and programmes, concentrating on the priority sectors of member States
- spearheading the delivery of technical assistance activities in the Pacific
- establishing close working relations with UNCTs within the Pacific and promoting the coordination of United Nations system activities
- building strong partnerships to promote subregional cooperation within a regional framework.

Current work areas of focus include: sustainable development strategies; poverty alleviation and employment generation; the Pacific Urban Agenda; disability in the Pacific; developing statistics and Pacific connectivity.

International Strategy for Disaster Reduction (ISDR) Subregional Pacific Office: In 2008, the ISDR established a Subregional Pacific Office which is co-located with the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) in Fiji.

2.3 Civil society and sustainable development

Civil society, sometimes referred to as Non-State Actors (NSAs), has the potential to be very effective partners in delivery of services that are people-focused and aim for an immediate improvement in livelihoods and lifestyles. Civil society is active at both regional and national levels throughout the Pacific region. The organizations vary in size and capacity and there are differences in governance, financial accountability, institutional management and work programme management and delivery. This inhibits some to effectively deliver services through implementation of multi-country projects.

In 2007, PIFS established a policy on "A consultative status and accreditation between the Forum and Pacific Regional Non-State Actors". This policy is overseen by a Forum-led Consultative Status Committee to which aspiring organisations must apply. For the purposes of this policy, a non-state actor means a non-profit, voluntary group such as a Non Government Organisation (NGO); Civil Society Organisation (CSO); Community Based Organisation (CBO) and Faith Based Organisation (FBO), organised at a regional level. The guiding principle for the granting of consultative status is to enable the Forum to secure expert information or advice from organisations having special competence and enable regional organisations that represent important elements of public opinion to provide perspectives to the subjects for which consultative arrangements are made.

Currently organizations granted consultative status are: Council of Pacific Education (COPE), Pacific Disability Forum (PDF), Fiji Women's Crisis Centre (FWCC), Foundations of the People of the South Pacific (FSPI), Greenpeace, Pacific Foundation for the Advancement of Women (PACFAW), Pacific Concerns Resource Centre (PCRC), Pacific Islands Association of NGOs (PIANGO), Pacific Islands News Association (PINA), Pacific Conference of Churches (PCC), Pacific Network on Globalisation (PANG), South Pacific and Oceania Council of Trade Unions (SPOCTU), World Wildlife Fund South Pacific Programme (WWF-SP).

Other active civil society representatives that are not currently holding consultative status include: Birdlife International Pacific Regional Programme, the Commonwealth Local Government Forum Pacific Project, Conservation International (CI), International Union for Conservation and Nature (IUCN Oceania Regional Office), Live and Learn, and The Nature Conservancy (TNC).

With a view to increasing private sector participation in and contribution to development, the Pacific Islands Private Sector Organisation (PIPSO) was established in 2005 and its members comprise the national private sector organisations of all Pacific SIDS. PIPSO recognises that sustainable development in the region will only come about through functioning and effective partnerships involving governments, civil society, regional organisations and development partners. It has successfully hosted the inaugural Pacific Islands Business Forum attended by a broad range of stakeholders including PIFS, UNDP Pacific Centre, regional business leaders and Ministers responsible for trade and business development from Fiji, Kiribati, Nauru, Niue, Samoa, Solomon Islands and Vanuatu. Among topics discussed were ways of promoting greater regional economic integration, trade agreements and linking goods to markets.

2.4 Trade: globalisation and trade liberalisation

Increased trade and economic integration is vital for the sustainable development of Pacific SIDS, and as such is central to the Pacific Plan. Integration of the region's economies presents significant opportunities to raise living standards for all Pacific SIDS. The continuing focus on trade and economic integration has been evident with both economic and trade ministers respectively continuing to work on ways to achieve success in these areas. Current efforts are focused on trade in services and labour mobility.

Pacific Islands Countries Trade Agreement (PICTA)

PICTA entered into force in 2003 and six Pacific SIDS – the Cook Islands, Fiji, Niue, Samoa, Solomon Islands and Vanuatu – have commenced trading under the Agreement. Five Pacific SIDS – Kiribati, Nauru, Papua New Guinea, Tonga and Tuvalu – have completed their notification requirement under the Agreement and are expected to announce readiness to trade under PICTA once they have put legislative changes in place. The Federated States of Micronesia has signed the Agreement and is at the ratification process, while Palau and the Republic of the Marshall Islands are yet to accede to PICTA. PIFS continues to provide technical assistance to members to assist in the implementation of the Agreement.

In taking the step toward establishing a regional free trade agreement through PICTA, the Pacific SIDS recognize that regional economic integration is part of a strategy for integrating with the world economy. Regional economic integration can also provide a basis for Pacific SIDS partners to coordinate their international economic policies, thereby assisting Pacific SIDS to operate effectively in the international economy.

The trade-in-services agreement being negotiated is part of the region's vision of broadening PICTA beyond trade in goods only to also include trade in services. Trade in services among the Pacific SIDS is already taking place and formalizing the existing dynamics through an Agreement is a logical step, with the expectation that more investments will flow into the Pacific SIDS as a result. The key objectives of the Agreement are to improve transparency and certainty of the existing regulations and encourage the use of Pacific SIDS suppliers in selected service sectors.

PICTA is a powerful tool to channel reforms in critical areas where processes of deregulation are being undertaken. The binding of domestic reforms in a regional agreement ensures that they are not discretionarily reversed. This sends a positive signal to investors, encouraging them to see the Pacific Islands as a regional market rather than a series of individual markets, thus more attractive for undertaking investment decisions on a larger scale.

The Pacific SIDS are currently also negotiating the facilitation of temporary movement of natural persons within the Pacific SIDS. Individuals from Pacific SIDS who possess one of the qualifications listed in the Agreement would be given automatic right to unrestricted entry to the territory of other Parties to the Agreement for a defined period. Skilled and semi-skilled professions would be subject to freer movement within the Pacific SIDS once the agreement is concluded. This has seen the region's Education Ministers' turn their attention to addressing the portability of qualifications across the Pacific.

Pacific Agreement on Closer Economic Relations (PACER) Plus negotiations

PACER is a framework agreement, established in 2002, that sets out the future development of trade relations in the Pacific SIDS. It is separate to PICTA and is not a free trade agreement. Advocacy for PACER Plus began in 2008 and a series of informal meetings held over the last 12 months has seen progress. The outcome of the Forum Trade Ministers' Meeting in June 2009 suggests the commencement of negotiations over the coming months.

Ministers affirmed that PACER Plus provides the Pacific with a significant opportunity to develop a truly innovative trade and economic agreement that takes account of the different stages of development of each Forum member. Ministers stressed the importance of progressing PACER Plus as a means of underpinning the economic security of the region through capacity building, market liberalisation and building resilience to shocks such as the current global financial crisis.

Australia and New Zealand have demonstrated considerable recognition of the challenges remaining and announced a funding contribution for the establishment of the Office of Chief Trade Adviser to be initially housed and supported by PIFS prior to its long-term establishment in Vanuatu. Reflecting the strong engagement at ministerial and officials levels over 2008-2009, Trade Ministers recommended to Forum Leaders that PACER Plus negotiations commence after the conclusion of the Forum Leaders Meeting in August 2009. This decision responds to the direction given by Leaders at Niue in 2008.

Multilateral Trade Negotiations

Four Pacific SIDS are Members of the World Trade Organization (WTO): Fiji, Papua New Guinea, Solomon Islands and Tonga. Samoa and Vanuatu are currently observers and in the process of acceding to the WTO. At the same time, because of its central importance in the international trading system and the formulation of rules governing trade, events in the WTO remain of great interest to all Pacific SIDS.

Regional Trade Ministers have remained engaged in discussions relating to developments in the WTOs Doha Round of Multilateral Trade Negotiations. The Office of the Forum Representative in Geneva caters for the needs of the Pacific SIDS, especially those which are WTO Members and Observers. To date, the Forum Office has operated under the overall aegis of the Secretariat and largely funded by the European Union, although it is generally agreed that Pacific SIDS WTO Members and Observers should steadily take ownership of the Office through making increasing contributions to its operation.

European Union and Pacific SIDS Economic Partnership Agreements (EPAs)

African, Caribbean and Pacific (ACP) States and the European Community established the Cotonou Agreement to negotiate new WTO-compatible trading arrangements, removing progressively barriers to trade between them and enhancing cooperation in all areas relevant to trade. The EPA negotiations commenced in September 2002.

On 29 November 2007, the European Commission initialed an Interim Agreement with Papua New Guinea and Fiji. The agreement enables both countries to benefit from significantly improved market access to the EU as from 1 January 2008 stimulating investment and growth in Papua New Guinea and Fiji due to new trade opportunities in sectors of interest to these countries, in particular fishery products. This Interim Agreement is open to any other interested Pacific SIDS. Negotiations are ongoing on a comprehensive EPA, containing arrangements for trade in goods and services, development cooperation, fisheries, trade related rules and other aspects with the Pacific SIDS.

During 2009, the following additional activities took place in regard to economic integration and trade:

- Australia announced a Pacific Seasonal Worker Pilot Scheme. This scheme is expected to create more economic opportunities for those Pacific SIDS (Kiribati, Papua New Guinea, Tonga and Vanuatu) included in the pilot scheme.
- Strengthening of the private sector in the region through the Pacific Islands Private Sector Organisation (PIPSO) working closely with national private sector organisations.
- In one of the region's key economic drivers, tourism, south-pacific.travel continued its efforts to build the capacity of small and medium enterprises in the sector and working with stakeholders to address ways to overcome a number of current constraints in the aviation sector that will better facilitate access to the region.

Remaining challenges include the slow pace at which regional trade agreements are being implemented, the continued need to develop private sector participation in the formal economy and much needed regulatory reform. A continued focus on trade and economic integration is required to achieve the goal of strengthening the region's economic growth and improve the livelihoods of Pacific peoples.

During 2009, the implementation of regional trade agreements continued at a positive, but slow pace. The lack of capacity among Pacific SIDS to engage on a range of trade issues has been hampered by the ongoing challenge of developing national positions on various issues as well as the ability to translate regional commitment into supporting national legislation.

2.5 Access to and the provision of financial resources

The international community has pledged its commitment to support the sustainable development of SIDS, through the provision of financial resources. Between 2001 and 2007, total aid to the Pacific SIDS region in real terms has remained relatively stable at around US$1-1.3 billion per year. Aid to Pacific SIDS is indicated in the tables below. This list is not exhaustive as some donor countries, including China, Japan and Taiwan, are missing.

Table 4: Indicative Net Aid to the Pacific SIDS in 2007

	Net ODA (US$ millions)	ODA/capita (US$)	ODA (%GDP)
Cook Islands	9.3	461	4
Fiji	57.5	69	2
Kiribati	27.1	285	35
Marshall Islands (Republic of the)	52.1	894	35
Micronesia (Federated States of)	114.9	1 035	49
Nauru	25.6	2 912	113
Niue	14.8	5 514	88
Palau	22.3	1 108	14
Papua New Guinea	320.9	51	5
Samoa	37.5	207	7
Solomon Islands	246.1	497	63
Tonga	30.9	302	12
Tuvalu	11.7	1 197	44
Vanuatu	56.7	251	13
Regional Aid	**138.7**	**n.a.**	**n.a.**
Pacific Aid Total	**1 165.9**	**136**	**9**
Timor Leste	278.3	262	70

Source: AusAID 2009: Tracking Development and Governance in the Pacific
Notes: 'Regional aid' refers to disbursements for regional programs recorded by the OECD Development Assistance Committee as 'Oceania Regional'; n.a. = not applicable.

Table 5: Indicative Sources of Aid to Pacific SIDS (excluding Timor Leste) 2007

Development Partner	Total (US$ millions)	% of all sources of aid
Australia	649.3	55.7
Canada	8.2	0.7
France	16.7	1.4
Japan	70.3	6.0
New Zealand	120.9	10.4
United Kingdom	5.4	0.5
United States	171.7	14.7
Other bilateral	2.5	0.2
European Union *	71.2	6.1
Global Fund	10.8	0.9
International Financial Institutions	9.9	0.8
United Nations and other multilateral organizations	28.8	2.5
Total	**1 165.9**	**100.0**

Source: AusAID 2009: Tracking Development and Governance in the Pacific
** The EU Office in Suva advises that this figure quoted in the AusAID Report should be US$143/year.*

In 2005, the Paris Declaration on Aid Effectiveness was agreed and was followed with the Accra Agenda in 2008. For the Pacific SIDS region, the Pacific Aid Effectiveness Principles were developed in 2007 and closely mirror the Paris Declaration. These legally nonbinding principles have been considered widely across the region, and are designed to fit the Pacific context. The Principles, like the Paris Declaration, include actions and approaches for both Pacific SIDS (countries/recipients) and development partners (donors).

The Global Environment Facility - Pacific Alliance for Sustainability (GEF-PAS) Programme agreed in 2007, is a new partnership with Pacific SIDS, GEF agencies, regional organisations, NGOs and others. The World Bank has been chosen to take the lead role in the development of the GEF-PAS initiative, working together with the GEF Secretariat and supported by SPREP. The total GEF funding available for this programme for three years is US$98,837,920 million, including projects in the areas of biodiversity ($37,715,220), climate change adaptation ($30,392,000), climate change mitigation ($14,700,000), international waters ($10,722,950) and persistant organic pollutants ($5,307,750). Compared to the US$86 million that the region has received in the past 15 years from the GEF, this is a nearly six-fold increase on an annual basis.

By the end of 2009, approximately 95% of the indicative total amount for the GEF-PAS had been approved. The GEF-PAS Programme Framework also allowed for the establishment at SPREP of a Monitoring and Evaluation Coordination Unit for the overall programme.

There are concerns that some Pacific SIDS may not have the capacity to develop acceptable project proposals for GEF-PAS consideration and approval or, in the event such proposals are approved, lack the capacity to implement them. In addition, there remains a concern that the rules governing the GEF-PAS are overly complex and cumbersome as are the procedures for vetting project proposals. This could further delay project implementation.

2.6 Capacity development

Capacity development is a vital component in supporting sustainable development in the Pacific region. Boosting the technical and managerial capacities of Pacific SIDS is essential for them to be able to continue to develop in a sustainable way and to fully meet their

commitments to national goals and international agreements. Development of capacity and technical assistance is provided to Pacific SIDS through bilateral and multilateral arrangements and regional and international organizations. Covering a broad range of economic, social and environmental areas, achievements in developing capacity are highlighted throughout this report. Cross-cutting initiatives are detailed below.

The SIDS Universities Consortium was set up in 2005 and includes the University of the South Pacific (USP). The aim is to "enhance the capacity of graduate education institutions in SIDS to provide practical, high quality education, research and development, and outreach across SIDS, to assist SIDS with the required individual, institutional and systemic capacity needed to implement the Barbados Programme of Action". The Secretariat is based at the University of the West Indies.

The Consortium has received funding from the Spanish Government for capacity building development through an Education for Sustainable Development for Small Islands Developing States Project. The Consortium partners have agreed on their respective roles at strategic and implementation levels as well as partner modalities for developing virtual training. The project is to begin in the first quarter of 2010 and last for two years and will include the development of a virtual PostGraduate Diploma, Masters and short-term training programmes. The Consortium partners have also agreed that training of the workforce in strategic areas of sustainability is a vital component of this project.

Work on the **Pacific Regional Qualifications Register (PRQR)** has been substantially advanced by SPBEA over the past two years. Visits to National Qualifications Accreditation Authorities have commenced along with the establishment of regional and international networks. Since this register was first considered in 2001, many developments have occurred at the country and regional levels. These include the development of national qualifications frameworks and authorities in Fiji, Samoa, Tonga, and Vanuatu. Also established have been links with qualifications frameworks from outside the region, such New Zealand. Once fully implemented, the Register will enable greater portability of qualifications and better facilitate labour mobility giving the initiative's particular importance when viewed against regional trade initiatives such as PICTA.

The Pacific Association for Technical and Vocational Education and Training (PATVET) was established in 2007 to advocate, influence and promote, lead and set standard for technical and vocational education and training (TVET) in the Pacific. There is an urgent need to support the work of PATVET in the following three areas (i) regional inventory of TVET institutions in the Pacific (ii) a regional qualification register and (iii) a regional qualifications framework. Training for the informal sector has to become a key priority. The informal sector is the dominant segment of the labor market in most Pacific SIDS and it is where most school-leavers will have to find work.

Attention to TVET was given further prominence in the 2008 with Leader's calling for improved quality and access to TVET, focusing on both formal and non formal modes of training for better and resilience of Pacific people and societies and to improve their income earning and livelihoods. Similarly, the overarching Pacific Regional Human Resource Development (HRD) Plan or the Pacific Education Framework (PEDF) has TVET and Non Formal Education as two of the six national priorities for regional interventions endorsed by Forum Ministers of Education in March 2009.

The **Australia-Pacific Technical College** in 2007 opened its doors to the first students, fulfilling the Government's commitment to provide US$140 million for world-class vocational education and training in the Pacific. The first student intake offered training in tourism and hospitality to fill critical skill shortages and boost employment opportunities and economic growth in the region. The college is intended to provide essential skills in a range of vocations including automotive, construction, manufacturing and electrical

trades, tourism and hospitality, health and community services. The internationally recognised courses are offered at training centres in Fiji, Papua New Guinea, Samoa, and Vanuatu.

Multilateral Environment Agreements

A new capacity building initiative, funded by the European Union and the United Nations Environment Programme (UNEP) and implemented through the Pacific Regional Environment Programme (SPREP), has been established to assist member countries in implementing their national commitments under multilateral environment agreements (MEAs). The project involves providing technical assistance and training in cross-cutting areas such as negotiation skills, integrated environmental policy and planning and information and knowledge management. The project will also build capacity to implement the Clean Development Mechanism and improve land, chemical and pesticide management. Table 6 shows the commitment of Pacific SIDS to MEAs as at end of 2009.

2.7 Governance

Good governance is central to sustainable development and is one of the four pillars of the Pacific Plan. There have been a range of efforts to improve governance in the Pacific within a complex network of relationships, roles and responsibilities. Competing visions of sovereignty and statehood, sometimes codified in laws and constitutions, sometimes the product of strong cultural traditions, only add to this complexity. Recent activities in support of achieving stronger governance include:

(a) improving standards of accountability and integrity continue through the Pacific Association of Supreme Audit Institutions (PASAI) Secretariat. This Secretariat is responsible for supporting the sub-regional audit support programme being implemented in Kiribati, Nauru and Tuvalu.

(b) strengthening Ombudsman functions through the Pacific Ombudsman's Alliance, including the assessment of possible sub-regional models for complaints handling in the smaller Pacific SIDS.

(c) Raising the awareness of the importance of Freedom of Information and ongoing efforts to fully consider the development of draft legislation to support this, including supporting infrastructure such as records keeping and records management.

(d) The Pacific Leadership Programme has witnessed considerable effort in the forward planning and design of a work programme to strengthen leadership in the region, and has seen careful effort to consider 'fit-for-purpose' approaches and develop a flexible strategy for engaging current and future leaders at national and local levels, and thereby seeks to focus on building both the skills and values for ethical and effective leadership.

(e) Strengthening statistics capability in the region through national and regional statistical systems.

(f) Developing a regional human security framework for conflict prevention beginning with the analysis of case studies on human security in the Federated States of Micronesia, Kiribati, Samoa, and Vanuatu.

Benefits to date include the strengthening of the Pacific Transnational Crime Network and increasing collaboration through the implementation of joint activities between the Australian Anti-Money Laundering Assistance Team (AMLAT) and the United States Government funded Pacific Anti-Money Laundering Project (PALP).

Progress and challenges in establishing good governance are discussed further under the remaining sections of the report.

Table 6: Pacific SIDS commitments to MEAs as of end 2009

Pacific Developing Member Country	Global Agreements/Conventions																Regional Agreements/ Conventions				
	Ramsar	World Heritage	MARPOL	CITES	Migratory Species CMS	UNCLOS	Vienna Convention (Ozone)	Montreal Protocol	Basel Convention	Rotterdam	UNFCCC	Kyoto Protocol	CBD	Cartagena	UNCCD	POPs (Stockholm)	Waigani Convention	SPREP Convention	Whaling Convention IWC	Apia Convention	Pacific Tuna Fisheries Conv
Cook Islands		®	®		A	®	A	A	A	A	®	®	®	S	A	A	®	®		®	S
Federated States of Micronesia		®				®	A	A	A		®	®	®		®	S	®	®			S
Fiji Islands	A	®		A		®	A	A			®	®	®	®	A	®	®	®		®	S
Kiribati		A	®			A	A	A	A		®	A	A	®	A	®	®		A		S
Marshall Islands.	A	A	®			A	A	A	A	A	®	®	®	A	A	A		®	A		S
Nauru						®	A	A	A		®	®	®	A	A	®	S	®			S
Niue		A				®	A	A			A	®	A	A	A	®	®				S
Palau	A	A		A	A	A	A	A			A	A	A	®	A	S	S	S	A		S
Papua New Guinea	A	A	®	A		®	A	A	A		®	®	®	A	A	®	®	®		®	S
Samoa	A	A	®	A	A	®	A	A	A	A	®	®	®	®	A	®	®	®		®	S
Solomon Islands		A	®	A		®	A	A			®	®	®	A	A	A	®	®	A		S
Tonga		A	®			A	A	A			A	A	A	A	A	®	®				S
Tuvalu			®			®	A	A			®	®	®		A	A	A	S	A		S
Vanuatu		®	®	A		®	A	A			®	A	®		®	®	®				S

® = Ratified; S = Signed; A = Acceded.
CITES = Convention on International Trade in Endangered Species of Wild Fauna and Flora;
MARPOL = International Convention for the Prevention from Ships;
SPREP = Secretariat of the Pacific Regional Environment Programme;
UNCLOS = United Nations Convention on the Law of the Sea.

Source: Pacific Regional Environment Programme (SPREP)

2.8 Graduation from Least Developed Country (LDC) status

There are six countries in the region with Least Developed Country (LDC) statust. They include five Forum island members, Kiribati, Samoa, Solomon Islands, Tuvalu, and Vanuatu, together with Timor Leste. The vulnerability of Pacific SIDS particularly in relation to climate change tends to suggest that graduation from LDC status should be put on hold, given that one significant environmental event, such as a rise in sea level, has the potential to destroy the economy of an entire state.

Graduation from LDC status, and the need for a smooth transition in such circumstances, is a national issue and reference should be made to the respective national assessment reports for further consideration of graduation.

2.9 Monitoring and evaluation

The Pacific SIDS are required to report regularly through the Pacific Islands Forum and have demonstrated their commitment to monitoring progress towards implementing the Mauritius Strategy through their participation in this five-year review. This regional report will be supported by national assessment reports on progress and a strong Pacific SIDS presence during the review meetings being held throughout 2010.

Nonetheless, there are challenges for ongoing monitoring and evaluation of sustainable development, as there is with other reporting processes in the Pacific. The 2007 report on initial progress with implementation of the Pacific Plan expresses concern that the gathering of information in support of the initiatives of the plan remains difficult, particularly with respect to country-level reporting. The funding of desk officers in the smaller Pacific SIDS by PIFS and the continuing deployment of such resources in other Pacific SIDS, is one example that has significantly improved the flow of information. By doing so, a clearer picture should emerge of the strengths and weaknesses and ultimately where and how assistance should be channelled. However, the lack of reporting from a number of Pacific SIDS hampers broader efforts to assist in planning, coordination and the ability of the region to provide clear and consistent advice on needs and priorities, both current and emerging.

2.10 Knowledge management and information for decision-making

In Pacific SIDS, many existing and new information systems have been developed and/or strengthened in the past five years. Some have been linked to global information systems, such as national weather service data into the World Meteorological Organization (WMO) databases, and health statistics into World Health Organization (WHO) databases. Increasingly, Pacific SIDS have gained access at the national level to these global information systems and have benefited from the knowledge and information gained, for example in improved early warning for climate variability (El Nino forecasting) and early warning for natural hazards such as the Pacific Tsunami Warning Centre for tsunamis.

The Pacific Regional Information SysteM (PRISM): The SPC has been long involved in the search for a workable, cost effective, simple to use socio-economic database for the region. Past attempts to establish, and maintain, a regional database have not been successful. One of the main reasons was that National Statistical Offices (NSOs) felt, justifiably, that they were not getting anything in return for supplying the data. The concept of PRISM is, simply, to give NSOs the tools and the skills to develop, publish and maintain their own websites containing key statistical indicators, statistical summaries, reports, concepts definitions and other documentation for the statistical indicators. The information from the NSO websites is then compiled into the SPC PRISM website. PRISM

contains additional resources for users such as regional summaries, templates for developing indexes for international trade imports data, and comparison data such as exports from Australia, New Zealand and the United States to Pacific SIDS.

Environmental Vulnerability Index (EVI): Launched by Pacific SIDS at the Mauritius Meeting, the EVI developed by SOPAC in collaboration with UNEP and others, quanitified the vulnerability of the natural environment to economic, social and natural hazard effects. The EVI is a robust and highly relevant to policy at all levels and ready for use by countries to determine how well it describes their vulnerability. The index is based on 50 indicators that are combined by simple averaging and reported as a single index. Simple averages across indicators are used as they can be easily understood and more complex models did not offer any advantages to the expression or utility of the index. The EVI has been designed to reflect the extent to which the natural environment of a country is prone to damage and degradation. It does not address the vulnerability of the social, cultural or economic environment, nor the environment that has become dominated by those same human systems (such as cities and farms) because these are included in the economic and social vulnerability indices which are needed separately to identify trade-offs.

An EVI Diagnostic Report and Action Plan has been prepared for each of the Pacific SIDS except Timor Leste. They identify the key issues threatening the environmental support system of each country, as well as areas of resilience that could be preserved to prevent vulnerabilities from developing in the future. In these reports, the EVI is used to provide clear guidance for addressing issues of vulnerability, including policy directions, specific actions and/or amounts of change needed to effect changes in vulnerability, and projects that could be implemented in support of sustainable conditions. These reports identify the highest priority issues that need to be addressed to build the environmental resilience of countries and by the most efficient means. It is also expected that the application of the EVI will assist each country to meet internationally agreed reporting and goals including MDG7 on environmental sustainability.

The **Pacific Islands Network for Taxonomy** (PACINET) is designed to build taxonomic capacity in Pacific SIDS for sustainable development. It is a joint programme of SPC, SPREP and USP. Taxonomic capacity is having the human resources to identify, describe, name and classify the unique biodiversity found in all Pacific SIDS landscapes including rainforests, grassland, freshwater systems, atolls, coral reefs and the deep ocean.

Monitoring environmental change has in recent years moved forward a quantum leap with the ability to quantify rates of change at scales appropriate for small islands, digitise and merge spatial historical data, such as air photos and maps, with on-the-ground surveying. Digital satellite images of very remote islands are now accurate in large scale/small area format often with resolution down to a few centimetres. Large digital meta-databases now exist for spatial data including satellite and air photo imagery and remotely-sensed data collected from both onshore mapping (vegetation mapping), coastal surveys (erosion and accretion), and offshore bathymetric mapping (water circulation, and fish habitat mapping). These databases are increasingly accessible on-line via user-friendly portals utilizing GIS such as the SOPAC GeoNetwork (**http://geonetwork.sopac.org/**). Several CROP organisations, particularly those with strong technical work programmes such as SPC and SOPAC, are working with Pacific SIDS to establish geographic information systems (GIS) for a wide variety of sectoral and multisectoral applications. USP has well developed courses in GIS technology.

Vai Pasifika, (www.sopac.org/Vai+Pasifika) is the joint e-newsletter of the Pacific Islands Observing Systems. It aims to provide stakeholders working within the context of national sustainable development strategies with relevant up to date scientific and technical data. First published in December 2007, the newsletter is released quarterly and links the Pacific Islands Global Ocean Observing System (PI-GOOS), the Pacific Islands Global

Climate Observing System (PI-GCOS), and the Pacific Islands Hydrological Cycle Observing System (Pacific HYCOS). By bringing together information resources from these systems it is hoped to encourage a more unified approach to observing the Pacific ocean, climate and water ecosystem.

Pacific SIDS have called for the reestablishment of **SIDSNet** as a critical tool for managing and sharing information related to the sustainable development of SIDS. The **Global Islands Partnership (GLISPA) (http://www.cbd.int/island/glispa.shtml)**, launched in Mauritius, is also seen as an important network to facilitate communication and share lessons among SIDS.

The challenge for Pacific SIDS is to further develop statistical capacity and to take full advantage of information systems to ensure better policy and decision-making for effective national sustainable development. A recent study, entitled ***Strengthening of Statistical Services through Regional Approaches****: A benchmark study and way forward* (2009), was commissioned by SPC and PIFS. The study involved a review of issues in producing and using statistics at national and regional level. It proposes stronger regional coordination through promoting the concept of a Pacific Statistical System (PSS) and an expanded programme of capacity building and technical assistance from SPC and the Pacific Financial Technical Assistance Centre (PFTAC). A costing and planning exercise is now being conducted and will be discussed at the Pacific Islands Forum Leaders' Meeting in August 2010.

Chapter 3
Progress in key areas

Sustainable development requires coordinated action across a broad range of sectors and themes. The Mauritius Strategy identifies several key areas where action is needed to address the most urgent sustainable development challenges. These are:

(a) Climate change adaptation and sea-level rise

(b) Energy

(c) Intellectual property rights and development

(d) Biodiversity

(e) Culture and development

(f) Natural environment and disasters

(g) Marine resources

(h) Agriculture and rural development

(i) Health (HIV/AIDS, tuberculosis, malaria and other diseases)

(j) Transport and security

(k) Sustainable production and consumption

(l) Information and communication technologies (ICTs)

This chapter provides a detailed review of progress in these key areas. It outlines the concrete actions that have been taken, lessons learned and the remaining challenges. As this is a regional report, the focus is mainly on issues being addressed through regional and international cooperation. Other important sectors and issues, such as waste management, freshwater resources, land management, and tourism are reported on in the annex to this report.

3.1 Climate change adaptation and sea-level rise

Climate change is a growing threat to national development and security, affecting the social and economic interests of all Pacific SIDS. The region continues to intensify the implementation of adaptation and mitigation measures to better respond to the threats posed by climate change. With support from SPREP, SOPAC and SPC, work has continued to focus on both policy and implementation, with a strong emphasis on mainstreaming climate change into national development planning and areas such as disaster risk reduction and management, renewable energy, food security, and water conservation management.

A framework for action in the Pacific

The **Pacific Islands Framework for Action (PIFACC)** 2006-2015 has established a series of principles on climate change for the region. These principles include: implementing adaptation measures; governance and decision-making; improving our understanding of climate change; education, training and awareness; contributing to global greenhouse gas reduction; and partnerships and cooperation.

SPREP was directed to develop an Action Plan to implement PIFACC by establishing a set of national and regional activities. To facilitate monitoring, SPREP has reinvigorated the **Pacific Climate Change Roundtable (PCCR)** that will allow Pacific SIDS to gauge the

degree to which national and regional actions have met those key principles. Current priorities include:

(a) undertaking a mid-term review of PIFACC to ensure any gaps or issues are addressed, including ecosystem-based approaches, adaptation technology, links with mitigation and disaster risk management, and community-based approaches.

(b) strengthening the PCCR, including its governance structure and funding mechanisms.

(c) conducting a study of existing regional funding mechanisms and the feasibility of establishing a single Pacific adaptation facility.

In 2008, Pacific Leaders adopted the **Niue Declaration on Climate Change**[9] to highlight the serious impacts of and growing threat posed by climate change to the economic, social, cultural and environmental wellbeing and security of Pacific SIDS. Current and anticipated changes in the Pacific climate, coupled with the region's vulnerability, are expected to exacerbate existing challenges and lead to significant impacts on the environments of Pacific SIDS, their sustainable development and future survival of the people.

Concrete actions taken

National Adaptation Programmes of Action (NAPA) are being developed for Kiribati, Samoa, Tuvalu and Vanuatu through the Global Environment Facility (GEF) LDCs Fund, with the Solomon Islands NAPA nearing completion. There has been a request to extend this process to non-LDC Pacific SIDS.

The Global Environment Facility Pacific Alliance for Sustainability (GEF-PAS) programme, approved by the GEF Council in April 2008, includes climate change adaptation (US$30.39 million) and mitigation measures (US$14.7 million). One regional initiative approved under the GEF-PAS is the Pacific Adaptation to Climate Change (PACC) project. In addition, an adaptation fund was established by the UNFCCC COP in Bali in December 2007. A governing board for the fund has been elected and Tuvalu is the Pacific SIDS representative. A significant challenge is that implementation of the Adaptation Fund is delayed due to competing interests and mandates among and between relevant stakeholders. This could be further complicated by a lack of unity among Board members on appropriate approaches. The considerable time it is taking to develop relevant application procedures will continue to slow access down as will over-regulation or overly complex guidelines.

Through the **International Climate Change Adaptation Initiative**, Australia has invested US$137 million over three years (2008/09-2010/11) to meet high priority climate change adaptation needs primarily with a focus on Pacific SIDS and Timor Leste. Key activities are:

(a) The **Pacific Climate Change Science Programme** is helping Pacific island countries and Timor Leste better understand how climate change will impact on them.

(b) The **Asia-Pacific Community-based Adaptation Small Grants Programme** is providing funds to implement priority adaptation measures at the local level.

(c) The **Pacific Future Climate Leaders Programme** which is working to build a group of Pacific leaders with a greater understanding of climate change and tools to enhance resilience.

[9] The full text of the Niue Declaration for Climate Change is available at Annex B of the 2008 Pacific Island Forum Secretariat Forum Communiqué (www.spc.int/sppu/images/stories/2008%20communique%20forum.pdf)

A **climate change and food security initiative** is being coordinated through an expert group comprising SPREP/SPC/USP/FAO. Its objective is to identify practical approaches to build resilience of food production systems to climate change, particularly by diversifying the options for growing crops and harvesting fish. The group has also identified the need to step up investment in science and technology for food and agriculture, undertake vulnerability analyses for all food production sectors, provide incentives for economic growth to increase the options for achieving food security, and mainstream climate change adaptation into national policies, strategies and programmes related to agriculture, forestry and fisheries. They also highlighted the need to maintain biodiversity and apply an ecosystem approach.

SPC is leading scientific research to assess the **vulnerability of fisheries and aquaculture to climate change** in the Pacific, to determine the: (i) observed and projected changes to Pacific atmospheric climate and oceanography, (ii) effects of these changes on the ecosystems that support fisheries, and (iii) projected changes in fish stocks.SPC is also conducing research to develop a 'climate ready' collection of crops and varieties from the region and elsewhere that are resilient to marginal conditions and are salt and drought tolerant. This work has a particular focus on application in atoll environments.

Media training to improve the knowledge of climate change for journalists and the general public was carried out by SPREP in 2008 and 2009, in partnership with Canada, UNESCO and the Pacific Islands News Association (PINA). Many reporters received training at SPREP, and some were selected to attend UNFCCC events in Poznan in 2008 and Copenhagen in 2009. This initiative has helped to raise the profile of climate change with a noticeable increase in the amount of reporting on climate change which helps to build awareness on climate change issues.

USP have provided more formal training through its **postgraduate courses and research on climate change** impacts, vulnerability and adaptation, and mitigation, strengthening the number of Pacific islanders who are qualified in climate change issues.

Measuring climate change through accurate scientific information and targeted research on Pacific tailored solutions provides a baseline for climate change work in the region. Systematic observation of climate change is carried out by the **Pacific Climate Observing System**, the **Pacific Ocean Observing System** and the **Pacific Hydrological Cycle Observing System**. The aim is to achieve a sustainable level of capacity in Pacific SIDS to assess and monitor climate change related information needed to support national strategies and planning.

The **South Pacific Sea Level and Climate Monitoring Project** (SPSLCMP) was initiated in 1991 by Australia in response to concerns raised by Pacific SIDS over the potential impacts of global warming on climate and sea levels in the South Pacific. A total of 12 high precision sea level gauges are currently managed by the project, with the ultimate goal of generating an accurate record of variance in long-term sea level for the region. Other key services include routine tide predictions for major port areas, provision and management of a high quality sea level dataset, and regular reports on trends in sea level behaviour across the region and in individual Pacific SIDS. The project is currently in its fourth phase which will conclude at the end of 2010, a fifth phase is being planned. SOPAC is the coordinating regional organisation.

The **Pacific Islands Global Climate Observing System** (PI-GCOS) is a multi-partner regional programme hosted by SPREP with the objective of improving climate monitoring capacity in the Pacific SIDS region. The PI-GCOS Implementation Plan details several projects ranging from research and policy development, technical capacity building in

observation networks and enhancement of operational early warning systems (www.pi-gcos.org). Information sharing is linked to two other observing systems in operation in the region through the Vai-Pacifika Newsletter.

The regional meteorological service provides important information on climate change and the need for its strengthening has been recognised. SPREP has engaged an independent team of consultants to carry out the regional review on ways to do this.

There have been a wide range of other actions taken towards climate change mitigation and adaptation in the Pacific including:

- The **Kiribati Adaptation Project** continued to develop and demonstrate the systematic diagnosis of climate-related problems and the design of cost-effective adaptation measures and integrate climate risk awareness and responsiveness into economic and operational planning.
- SPC and WHO are working with Pacific SIDS to **improve the capability of national health laboratories** to undertake diagnostic work of diseases that may worsen with extreme climate events. This work involves developing policy and practical responses to address the social determinants of health that are affected by climatic events but are outside the remit of health departments or ministries such as the environment, food, housing, water and sanitation.
- Implementation of climate change adaptation and vulnerability assessment **research and training** among rural communities through the University of the South Pacific (USP).
- Discussions on linking disaster risk management with climate change commenced at the **Pacific Platform for Disaster Risk Management and Pacific Climate Change Roundtable**. The Roundtable agreed on developing a climate change portal that would incorporate a matrix of past, present and planned climate change activities in the region.
- Work continued to improve the capacity of Pacific SIDS to **engage in the ongoing United Nations Framework Convention on Climate Change (UNFCCC) negotiations** for a post-2012 global climate change agreement. This included a range of workshops and technical assistance provided to Pacific Government delegations during UNFCCC negotiations. SPREP continued to act as regional information coordinator between the AOSIS Chair and climate change focal points in Pacific SIDS.
- A **climate change declaration** was adopted during the Pacific Islands Forum-EU Ministerial troika meeting.
- The **Pacific Environment Community Initiative** agreed at the 5th Pacific Island Leaders Meeting with Japan (PALM 5).
- An SPC-German Technical Cooperation (GTZ) project - **Adaptation to Climate Change in the Pacific Islands Region** (ACCPIR) - commenced work in Fiji, Tonga and Vanuatu.

The way forward

Natural and agro-ecosystems, and the biodiversity that they support, are the frontline in adaptation to climate change in the Pacific. This is especially true given the reliance of the island community and national level economies on the natural and cultivated resources that they contain. There is a need to ensure that island ecosystems can continue to support the needs of human communities and are better able to withstand future changes. **Ecosystem-based adaptation approaches** recognise the role of natural infrastructure alongside built infrastructure. Healthy ecosystems not only provide protection from

extreme weather events, but also provide critical ecosystem services such as food, disease control, and fuels essential for reducing livelihood vulnerability and strengthening the adaptive capacity of communities.

At the UNFCCC COP14 in 2008, developing countries called for ecosystem-based adaptation to be a critical part of a post-2012 climate change agreement. In 2009 and with SPREP input, the Forum Leaders in the context of the Pacific Plan priority initiative on climate change called for enhancing the resilience of ecological systems and associated biodiversity and providing ecosystem services with a focus on the impacts of climate change in line with the Year of Biodiversity in 2010. In response to this call, SPREP is working on a proposed initiative built around the inter-related issues of ecosystem services and livelihoods and climate change for consideration under Australia's International Climate Change Adaptation Initiative.

To support the Niue Declaration and work emanating from PIFACC and the PCCR, significant **pledges of financial and technical assistance** have been received in the region in addition to those from Australia and the GEF referenced above. These include the EU Global Climate Change Alliance, Japan Cool Earth Initiative, as well as initiatives by a range of traditional and new development partners and multilateral financial institutions. There is a renewed interest in assisting the region on climate change issues, but the pledges now need to be realised and put into action, including through cost-effective solutions to protect the natural environment.

During the MSI review process, Pacific SIDS have reaffirmed their support for the position of the member states of AOSIS in their preparations for the COP15 of the UNFCCC, and thereby express their strong disappointment with the outcome from the Copenhagen Meeting in December 2009. Pacific SIDS emphasised the importance of urgent progress towards a fair and meaningful outcome in 2010 which should inter alia result in the following.

(a) Use the avoidance of adverse climate change impacts on SIDS as one of the key benchmarks for assessing its appropriateness, consistent with the precautionary principle and the principle of prevention;

(b) Adopt a package of mitigation activities, now, up to and beyond 2012 that provides for the following.

- Long-term stabilisation of atmospheric Greenhouse Gases (GHG) concentrations at well below 350ppm CO2-equivalent levels.
- Global average surface temperature increases to be limited to well below 1.5° C above pre-industrial levels.
- Global GHG emissions to peak by 2015 and decline thereafter.
- Reductions in global GHG by more than 85% below 1990 levels by 2050.
- Annex I parties to the UNFCCC to reduce their collective GHG emissions by more than 45% below 1990 levels by 2020, and more than 95% below 1990 levels by 2050, given their historical responsibility.

(c) A significant deviation from business as usual by developing countries through measurable, reportable and verifiable nationally appropriate mitigation actions in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner.

(d) Provide SIDS with new, additional, predictable, transparent and adequate sources of grant-based financing to fully meet the adaptation needs of these particularly vulnerable countries, and ensure for SIDS that access is timely, direct, prioritised and simplified.

(e) Call for an urgent and significant scaling up of the provision of financial resources and investment that is adequate, predictable and sustainable to support action on mitigation in developing country Parties for the enhanced implementation of national mitigation strategies; including positive incentives, the mobilisation of public- and private-sector funding and investment and facilitation of carbon-friendly investment choices.

(f) Ensure that renewable energy and energy efficiency form essential pillars of future mitigation actions by all countries, taking into account national circumstances.

(g) Establish a mechanism to address loss and damage from climate change comprised of a disaster risk component, insurance, and compensation funds, to help SIDS manage the financial and economic risks arising from climate impacts; to assist in the rapid recovery and rehabilitation from climate related extreme weather events and to address unavoidable damage and loss associated with the adverse effects of climate change.

(h) Provide support to SIDS to enhance their capacities to respond to the challenges brought on by climate change and to access the technologies that will be required to undertake needed mitigation actions and to adapt to the adverse impacts of climate change, noting the obligations of Annex 1 countries under the UNFCCC in this regard.

The Copenhagen outcome highlights that an enormous amount of work remains to be done. The challenge for 2010 is to ensure that the political and public profile of SIDS created in Copenhagen can be translated into a binding and ambitious international agreement on climate change that is supportive of the needs of these most vulnerable countries. In view of the substantial resources pledged by the developed countries, the Pacific SIDS need to remain engaged in the international process for the design and development of the various financing mechanisms and to ensure appropriate access and maximum utilisation of these resources in support of national actions to combat climate change.

3.2 Energy

Energy continues to be a key priority, given that almost all Pacific SIDS remain highly dependent on imported fossil fuels. Oil imports average between 14 and 20% of foreign exchange earnings with Fiji, for example, currently spending close to US$1 million per day on imported fuels. This reliance has seen Pacific SIDS suffer the full impact of the recent global fuel crisis.

There is a wide sectoral variation in the consumption of commercial energy throughout the Pacific SIDS. As development continues in the region, the demand for fossil fuels is increasing, especially for transportation and electricity production. Given the distance between markets and metropolitan centres, and the dispersed multi-island characteristic of many Pacific SIDS, transportation remains central to development. Transport is the fastest growing consumer of petroleum, with fuel costs for transport to remote islands especially high. These costs contribute to price inflation of domestic goods and services, including food.

There are still many communities in the Pacific SIDS that continue to rely heavily on traditional energy sources. People living in rural and remote areas still use wood fuel as their dominant supply of energy. Reduction in forest cover, including loss of mangroves, remains a threat to the extensive and fragile biodiversity of the region.

A framework for action in the Pacific

The Pacific SIDS energy sector is supported by three intergovernmental organisations with substantive programmes: SOPAC, SPREP and PPA. The Pacific Plan addresses energy issues and assesses progress in the context of the percentage of the population with access to electricity, and the percentage of the region's electricity that is generated form renewable energy. Targets are yet to be set for the region.

The 2009 Pacific Energy Ministers' Meeting developed a pathway for more effective coordination of the regional energy sector and encouraged action to facilitate investment in sustainable renewable energy technologies and in energy efficiency and energy conservation initiatives.

At the global level, nine Pacific SIDS are members of the **International Renewable Energy Agency** established in 2009 (Fiji, Kiribati, Nauru, Palau, Papua New Guinea, Samoa, Timor Leste, Tonga, and Vanuatu).

Concrete actions taken

Currently twelve of the Pacific SIDS have endorsed n**ational energy policies and strategic action plans**: Cook Islands, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. The Federated States of Micronesia is currently in the process of developing its policy and Palau has endorsed an energy conservation strategy. A **Regional Energy Policy** was first developed in 2002, in 2004 it was revised and an associated Action Plan developed. Together they identify the critical policy and implementation actions for the regional energy sector.

The International Union for Conservation of Nature (IUCN Oceania) is coordinating major energy-ecosystem-livelihood focused programme providing support to Pacific SIDS in implementing national energy policies and/or the development of strategic action plans (including for renewable sources) and incorporating conservation aspects into activities.

Petroleum consumption is still growing at a faster rate than that of renewable and efficient energy. There is much potential for the further development of renewable energy sources in the Pacific as has been demonstrated by the **Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project** (PIGGAREP). The project focuses on the productive uses of renewable energy thereby reducing the growth rate of greenhouse gas (GHG) emissions from fossil fuel use in the Pacific through the removal of the technical, market, institutional, financial, policy and awareness barriers to renewable technologies.

The Pacific SIDS have a high and relatively constant supply of **solar energy**. Direct solar energy is currently used for water heating, crop drying and processing. The use of small-scale solar photovoltaic power to provide electricity in rural areas and remote islands with low load densities also appears to have been successful, but more work on financing and institutional arrangements is required to effectively promote further commercialisation. The Kiribati Solar Energy Company and the Haápai Solar Electrification Programme in Tonga have been successfully operating as Renewable Energy Service Companies. Kiribati is managing more than 2000 installations while there are more than 500 in Tonga. While the use of solar photovoltaic has mostly been for stand alone solar home systems, grid-connected PV demonstration projects ranging from 20 – 50 kW have been installed in Federated States of Micronesia, Niue, Palau and Tuvalu.

The production of cleaner alternative energy sources, such as **biofuel** from sugarcane, coconuts or other biomass products is being researched and pursued. In addition to becoming a major income source, thereby cushioning the effect of rising fuel costs, their use will also assist in combating land degradation by planting these "energy crops" on

degraded or unused land. Emerging biofuels policies in Fiji and Vanuatu will promote planting on degraded lands and reducing net emissions of GHGs.

There are practical examples in some Pacific SIDS, for example in Vanuatu, of the use of **coconut oil for power generation**. The village of Port Orly in Santo is using a generator that is fuelled with 100% copra oil. Furthermore, the 4 megawatt Tagabe power station in Port Vila is using copra oil at a mix of 25% copra to 75% diesel. In the Republic of the Marshall Islands, there are currently twelve vehicles and a tugboat in Majuro using coconut oil as fuel. Work on developing mini-electricity systems continues including for mini copra driers, mills and presses to process the copra into oil on the outer islands.

Hydropower resources for electricity production are extensive but only in a few Pacific SIDS, for example, Fiji, Papua New Guinea, Solomon Islands, Samoa and Vanuatu, but many island countries have small hydropower capacity ranging from a few watts to kilowatts.

On a small scale and sporadically across the region, **biogas** for cooking has been produced from animal and human waste. There seem to be traditional/cultural barriers to using this technology (as with composting toilets). However, biogas can also be produced from agricultural products such as bananas and taro using simple methods developed in South Asia.

A number of proposals to develop **large scale waste-to-energy facilities** in Pacific SIDS have been developed and submitted to potential donors/investors for their consideration. The waste-to-energy technology is perhaps the solution to meeting some of the region's increasing energy requirements, reducing the need to import petroleum products and at the same time dealing with the increasing quantities of waste. Whilst it seems to have worked well at research and development project level, the interest of the private sector developers has been quite reserved, as there is a large initial investment required. In mid 2009 in Fiji, a local independent power production company signed a multi-million-dollar power-purchase agreement with the Fiji Electricity Authority to produce around 10 megawatts of electricity for the national grid from waste and rubbish, resulting in savings of around US$8million for Fiji Electricity Authority in diesel costs per year.

The nexus between energy and gender has been promoted through the **Pacific Energy and Gender Network (PEG)** established in 2003 by SOPAC and key stakeholders. As a result considerable progress has been made in understanding the importance of integrating a gender sensitive approach into energy policies and practices in the region. The PEGSAP was reviewed in 2009 and a revised PEGSAP 2009-2014 prepared and endorsed by energy officials and ministers in 2009. The PEGSAP sets out strategies and activities with the primary goal of “gender equity in all aspects of energy development”.

The University of the South Pacific has established a **renewable energy group** with the aim of guiding the region towards 'clean and green' energy and preserving the natural environment. The activities of this group include teaching at undergraduate and postgraduate levels, carrying out lab-based and field-based research in a number of areas relevant to the region and working with the energy departments of the governments to promote renewable energy in the region. The group members are also involved in assessing all forms of renewable energy resources available in the region.

The Bulk Procurement of Petroleum Initiative was accorded high priority by Pacific Energy Ministers in 2009. Recent reports indicate that following a number of years of slow progress, there has been significant advancement. The New Zealand funded meeting of national petroleum authorities, CROP agencies, sector experts and industry in October 2008, helped reach an agreement on a government-to-government memorandum of understanding (MOU). This has been signed by Cook Islands, Nauru, Tuvalu and Niue, with Tonga and Solomon Islands indicating that they intend to sign. PIFS has continued to

progress the initiative with the launching of the **Pacific Petroleum Project**. This will see the establishment of a Project Implementation Unit (PIU) that will be tasked to deliver a range of milestones including a risk assessment, procurement strategy and ultimately a commercial contract for tender.

The way forward

Regional Energy Ministers have stressed that the consequences of not securing an affordable and reliable energy supply are most dire. Heavy reliance on fossil fuels continues to stunt Pacific economies. Urgent efforts are needed to address both supply-side and demand-side efficiencies. As the price of fossil fuels remains high, so to does the pressure on many member governments to meet short-falls through subsidies. Should this pressure continue, it may affect the future viability of some of the Pacific SIDS.

Nearly all Pacific SIDS have adopted strategies and targets for promoting renewable energy such as solar, wind, ocean, wave, geothermal, biomass and hydro power. These include:

- Cook Islands 30% renewable energy by 2010
- Fiji 100% electrification (60% renewable and 40% non-renewable) by 2016
- Kiribati providing renewable energy electricity to the 70% of its rural population who do not yet have access to it
- Marshall Islands 20% renewable energy by 2020
- Nauru 30% renewable energy by 2015
- Niue 100% renewable energy
- Samoa 20% by 2030
- Tonga 50% renewable energy by 2011
- Tuvalu 100% renewable energy by 2020.

The challenge is to translate these targets into a road map with clear actions and milestones, as has been done in Tonga, for example. Limited progress to date towards using renewable and efficient energy is due to a lack of knowledge about the potential of these energy sources. There is also a lack of local technical expertise, weak institutional capacity, insufficient market development initiatives, policies that are ineffective and/or are biased towards fossil fuel and the absence of inadequate financing and investment opportunities, including the possible establishment of national sustainable capital funds for renewable energy and energy efficiency.

More efficient and wide-spread dissemination of information on renewable energy technologies and practices in Pacific SIDS is needed in order to promote knowledge of alternative energy development. Also required is technical advice and training to carry out financial and socio-economic analyses to ensure that the particular choice of renewable energy gives optimum return to the small economies. It would be of further benefit to share lessons learnt and best practices in other SIDS regions.

The revised **Pacific Islands Energy Policy** and associated **Action Plan** calls for an integrated approach that recognizes the cross-cutting nature of energy resource management. The following priorities have been identified:

(a) develop apprentice schemes for power utilities and alternative energy technologies

(b) establish regulatory frameworks for electricity production and supply

(c) facilitate investment in sustainable renewable energy technologies and in energy efficiency and energy conservation initiatives

(d) establish minimum energy performance standards and labeling

(e) strengthen energy data collation, management, dissemination and analysis to better inform national and regional energy planning and policy choices

(f) encourage private sector participation

(g) encourage greater involvement of CROP organisations to assist Pacific SIDS

(h) support the development of biofuels production and use where economically viable

(i) consider energy and agriculture impacts (particularly food security), as well as the assessment of impacts on the environment

(j) strengthen gender mainstreaming into national and regional energy initiatives in line with the Pacific Energy and Gender Network Strategic Action Plan (PEGSAP) 2009 - 2014

(k) demonstrate of how energy forms an essential component of priority services (e.g. energy and health; energy and education; energy and water supply).

In addition to the provision of technical advice and assistance, there remains an ongoing need to continue to provide training and capacity building across the national energy sectors. This is offered generally as part of the various energy programmes and projects implemented within the region.

Up-to-date and accurate energy data is required. During 2009, the petroleum advisory service previously located within PIFS was relocated to SOPAC and the data and information service has been re-established. It is proposed that this service will be strengthened over 2010 and the former Fuel Price Monitor Newsletter re-established.

3.3 Intellectual property rights and development

Pacific SIDS are undertaking initiatives to protect and promote traditional knowledge. For example, Tuvalu's National Sustainable Development Strategy 2005-2015 recognizes the need to: promote traditional knowledge and expressions of culture; revive and promote traditional skills and knowledge; and document traditional skills and knowledge. Tuvalu also calls for the improvement of science in the school curriculum as a means of providing support for science development at the national level.

The Pacific Regional Framework (2002) Traditional Knowledge and Expressions of Culture was developed to assist Pacific SIDS with legal protection in the face of increasing exploitation of their traditional knowledge and expressions of culture. The framework comprises a model law that can be used as necessary. It is reflective of developments in international standards by the World Intellectual Property Organisation (WIPO) and United Nations Educational, Scientific and Cultural Organisation (UNESCO). The model law establishes statutory rights for owners, providing a basis for Pacific SIDS wishing to enact legislation for the protection of traditional knowledge and expressions of culture.

An Action Plan to assist Pacific SIDS implement the framework for traditional knowledge protection was endorsed in 2008. It provides the basis for work in traditional knowledge over the next two years and will have a sub-regional focus for the time being to deliver assistance to selected Pacific SIDS: Cook Islands, Fiji, Kiribati, Palau, Papua New Guinea and Vanuatu. The programme is based on a partnership between PIFS, SPREP, SPC and WIPO.

3.4 Biodiversity

The impact of inappropriate land and resource use on biodiversity remains a significant concern for the region. Biodiversity capital of the Pacific continues to be eroded for a wide range of reasons, including the introduction of invasive alien species, habitat loss and degradation, overexploitation of natural resources, pollution, natural disasters and changes to climate and sea level. This remains a serious problem, as Pacific people depend heavily on biological resources to support their way of life.

The threatened status of animals and plants is one of the most useful signs for assessing the condition of an ecosystem and its biodiversity. The **IUCN Red List of Threatened Species** is widely recognised as the most comprehensive, apolitical approach for assessing and monitoring the status of biodiversity. The 2008 IUCN Red List includes assessments for close to 3,800 species of animals and plants found in 24 Pacific island countries and territories. Of the species assessed, more than one quarter (1,060) are threatened with extinction and 135 are already extinct. Just over 390 of the species are considered to be "near threatened" and for more than 500 species there is insufficient information to determine their threat status. Only a little more than two in every five species (1,605) are classified of least concern, meaning they have a low probability of extinction.

Mangroves are an important component of biodiversity and are a resource for a wide range of goods and services. They support sea life, protect coastlines from hazards, support good water quality, and provide natural materials used in traditional practices, such as dye from mangrove bark that is used to treat textiles, nets and fish traps. The Pacific SIDS, while containing only three percent of the global mangrove area, support unique mangrove communities and provide valuable site-specific services and products. Papua New Guinea has the highest global mangrove diversity and hosts over 70 percent of the region's mangrove area. Mangroves decline in diversity from west to east, reaching a limit in American Samoa. There is little information available on trends in the extent and health of mangroves in the region.

A framework for action in the Pacific

In 2006, Pacific Forum Leaders reaffirmed their commitment to the sustainable management of natural resources and the use of locally managed and protected areas as a mechanism to enhance and contribute to sustainable development.

The **Action Strategy for Nature Conservation and Protected Areas in the Pacific 2008-2012** charts a course for conservation practice in the Pacific at all levels. The underlying theme of the strategy is – '*Empowering people, communities and institutions*', and it has the following objectives:

(a) Ensure conservation has a development context that recognises, respects and supports sustainable livelihoods and community development aspirations

(b) Identify, conserve and sustainably manage priority sites, habitats and ecosystems

(c) Protect and recover threatened species and species of ecological, cultural and economic significance

(d) Manage threats to biodiversity, especially climate change impacts and invasive species.

SPREP advocates the critical role that biodiversity conservation plays in safeguarding the sustainability of the Pacific region. The **Roundtable for Nature Conservation**, a membership-based network of donors, NGOs and regional agencies, exists to promote, facilitate and monitor progress on the Action Strategy.

Concrete actions taken

Pacific Island Forum members have been encouraged to consider substantial and specific commitments to the conservation and sustainable management of marine and terrestrial resources. To help implement these commitments, Leaders called on the international community to support Pacific SIDS efforts to: determine the value of conservation to sustainable development and livelihoods; match financial commitments already made to conservation and sustainable livelihoods in Pacific SIDS; and assist in the development and resourcing of realistic financial plans in support of the conservation and sustainable use of their natural resources.

SPREP continues to support Pacific SIDS in meeting their obligation under the **Convention on Biological Diversity** (CBD). A project to help Pacific SIDS implement the CBD **Programme of Work on Protected Areas** (PoWPA) was approved by the GEF in March 2007. The goal is to assist countries to achieve effective national systems of protected areas in accordance with their commitments. The project operates as a grant programme and is expected to disburse up to US$9 million. Eight Pacific SIDS have received support from this project: Fiji, Kiribati, the Federated States of Micronesia, Papua New Guinea, Samoa, the Solomon Islands, Tonga and Vanuatu.

In order to prioritize the use of conservation resources, SPREP is **collating, cataloging, mapping and analyzing data**. These datasets include maps and locality records of target species (for example species that trigger the key biodiversity area (KBA) criteria) and contextual data layers that are available, such as bathymetry, habitat maps, political and traditional boundaries, and management units (including existing marine managed areas (MMAs) and marine protected areas (MPAs)).

A **Climate Change and Biodiversity in Melanesia (CCBM) Study** was undertaken by SPREP, in partnership with the Bishop Museum in Honolulu, the Pacific Science Association and the Indo-Pacific Conservation Alliance, with financial support from the MacArthur Foundation. The study focused on climate impacts on marine systems in the Solomon Islands and Vanuatu, but also included some terrestrial areas, and involved identifying existing management policies and programmes and impediments to/opportunities for successful biodiversity conservation in the face of climate change. Additionally, a detailed socio-economic assessment was conducted on the impacts of climate change on important economic sectors, such as tourism and subsistence coastal fisheries. An integrated vulnerability assessment report was produced in 2009, including a set of recommendations for policymakers and managers in developing and implementing conservation strategies that reflect a robust understanding of expected climate change. The final assessment will be used to support future revisions of the Action Strategy for Nature Conservation, the Pacific Islands Framework for Climate Change, and other conservation plans and strategies.

The **Coral Reef InitiativeS for the Pacific (CRISP)**, established in 2002, aims to develop a vision for the future of coral reefs and the communities that depend on them. The CRISP Programme comprises three components including the development of coral ecosystems. CRISP has contributed towards the creation of marine managed areas, conducted scientific studies on marine life, organized events for the sharing of knowledge and information at the international and regional levels and prepared the ReefBase Pacific DVD for disseminating data and information.

The **2008 Pacific Year of the Reef** campaign, coordinated by SPREP, aimed to build awareness and encourage Pacific SIDS to take action to reverse the degradation of coral reefs and build their resilience to adverse natural factors such as climate change. The most tangible and enduring results of the campaign were activities implemented by the ten participating teams of the regional youth 'challenge coral reef' competition. Funds were provided to teams of secondary school students in Cook Islands, Fiji, Kiribati, New Caledonia,

Samoa, Solomon Islands, Vanuatu, and Wallis and Futuna to implement activities that they had designed to help save a reef. Their chosen plans of action included community consultation and education visits, shore clean-ups, coral planting, placing signs at marine managed areas, developing an underwater trail for swimmers and divers, improving waste disposal practices in communities and at well-used beaches, and coral and mangrove planting.

The South Pacific has experienced a remarkable proliferation of **Marine Managed Areas (MMAs)** in the last decade. These protected areas, implemented by over 500 communities spanning 15 independent countries and territories, represent a unique global achievement. The approaches being developed at national level are built on a unique feature of the region, customary tenure and resource access, and make use of, in most cases, community strengths in traditional knowledge and governance, combined with a local awareness of the need for action, resulting in Locally Managed Marine Areas (LMMAs). The main driver in most cases is a community desire to maintain or improve livelihoods, often related to perceived threats to food security or local economic revenue. In Pacific SIDS, conservation and sustainable use are often seen as inseparable as part of the surviving concepts of traditional environmental stewardship. The extent of this shift towards community-based resource management in Melanesia and Polynesia is unprecedented on a global scale.

In February 2008, Kiribati created the world's largest protected marine reserve – more than double the area Kiribati originally pledged to protect at the CBD- COP in Brazil in 2006. The **Phoenix Islands Protected Area**, covering 410,500 km^2 (by comparison the Great Barrier Reef is around 345,000 km2), is one of the planet's last intact coral archipelagos and is threatened by over-fishing and climate change. Studies have found more than 120 species of coral and 520 species of fish, some new to science. The area also has some of the most important sea bird nesting sites in the Pacific, large fish populations and sea turtles, and includes extensive seamount and deep-sea habitats, tuna spawning grounds and as yet unsurveyed submerged reef systems.

In partnership with the Ramsar Convention Secretariat, SPREP has continued to provide support to the five Pacific SIDS that are parties to the **Ramsar Convention on Wetlands of International Importance**. Assistance has also been provided to other Pacific SIDS to progress their joining the Ramsar Convention. The conservation of wetland ecosystems has been promoted across the region through media awareness, and through the coordination of national **World Wetlands Day** 2008 celebrations.

The **Coral Triangle Initiative**, launched in 2007, covers the exclusive economic zones of Indonesia (Central and Eastern), Timor Leste, the Philippines, Malaysia (part of Borneo), Papua New Guinea and the Solomon Islands. Defined by areas containing 500 or more species of coral, the Coral Triangle, sometimes referred to as the "Amazon of the Seas", is the epicentre of marine life abundance and diversity on the planet. It has more than 600 coral species in some areas (more than 75% of all known coral species), 53% of the world's coral reefs, 3,000 fish species, and the greatest extent of mangrove forests of any region in the world. According to scientists, these marine biological resources are at risk, threatened by a range of factors, such as over-fishing, destructive fishing practices, pollution and climate change. This new initiative will address these threats and ensure long-term benefits from the marine biological resources of the region.

The way forward

Biological diversity can only be protected with the full involvement of the people living in the area. The engagement of key decision-makers and use of decision-making processes at higher levels are also needed to effectively address the consequences of proposed actions

on ecosystems. Financial and technical resources needed to support effective increased biodiversity conservation efforts at a village level are limited.

National Biodiversity Strategic Action Plans (NBSAPs) have been prepared for most Pacific SIDS. A review of them identifies a number of common challenges:

- Community – empowerment, awareness, involvement, ownership and benefits
- Protection of traditional culture and practices; indigenous property rights
- Improving knowledge, research, education, public awareness
- Developing and managing protected areas, habitats
- Species conservation – terrestrial, coastal and marine
- Management of invasive species
- Capacity building and training, governance
- Sustainable economic development, sustainable use of resources
- Mainstreaming conservation
- Lack of financial resources
- Waste management
- Climate change.

IUCN Oceania is to implement a new project titled **Mangrove Ecosystems for Climate Change and Livelihood (MESCAL)** in five Pacific SIDS (Fiji, Samoa, the Solomon Islands, Tonga and Vanuatu) over the period 2010-2013. The primary goal of MESCAL is to help reverse recent trends in the loss of mangroves, increase resilience of the people of the Pacific to climate change, and provide natural insurance against the effects of climate change and extreme events.

Kiribati has called for support to develop a trust fund, possibly as large as $US100 million, to pay for surveillance against illegal fishing and other running costs of its Phoenix Island Protected Area, as well as to compensate the government for lost income from commercial fishing licenses. Kiribati intends to allow subsistence fishing by local fishing communities, but it is crucial to protect the area from overfishing because healthy reefs and fishing grounds will help the area better withstand the impacts of climate change. The reefs are already facing the threat of warming seas, which has caused repeated coral bleaching around Kiribati. Parts of Kiribati, too, are already suffering from the effects of rising seas, including coastal erosion in the vast archipelago and salt water intrusion into freshwater supplies.

3.5 Culture and development

Culture is central to political, economic and social wellbeing in the Pacific region. People are engaged daily in a range of cultural activities and practices which provide meaning, generate resources and influence the flow of events locally, nationally and regionally. A challenge is to ensure that governments, regional institutions, donor agencies and partners recognize culture as an asset and integral part of development.

A framework for action in the Pacific

SPC supports the development of culture by Pacific SIDS. A large part of their work is geared towards making the socio-economic and political value of culture visible. Initiatives include:

- Commissioning a Valuing of Culture study which focuses on how to understand and articulate the contribution of culture to the four pillars of the Pacific Plan.
- Generating culture statistics by including questions in population censuses and household surveys.
- Developing cultural indicators for all Pacific SIDS and contributing to the development of international cultural indicators through UNESCO.

Concrete actions taken

The **Festival of Pacific Arts (FPA)**, initiated in 1972, held its 10th session in 2008 plays a strong role in providing a forum for cultural expression and exchange of skills and knowledge. It is a unique event in that all performances and events are open to the public and are free of charge. The festival is about sharing and exchange of Pacific cultures. A recent evaluation of the FPA suggested the need to better articulate the relationship between culture and sustainable development by identifying the contribution that arts make to the economy of Pacific SIDS and demonstrating the impact on poverty.

Three Pacific heritage sites were, for the first time, listed in 2008 on the **World Heritage list**:

(a) the Chief Roi Mata domain in Vanuatu

(b) Kuk, one of the world centres of agricultural innovation, in Papua New Guinea

(c) the lagoon of New Caledonia.

At a World Heritage meeting held November 2009 in Maupiti, Tahiti, Pacific members signed on to a **Declaration on the Ocean**, and made commitments to advancing heritage preservation and promotion. The declaration is significant in development terms because it signifies a process in re-uniting the Pacific through a common and shared bond, the Ocean, and understanding the ocean as provider in all its dimensions: cultural, spiritual, political, social and economic. It establishes the direct links between culture, society and the economy, as understood by indigenous people.

There remains a considerable work to be done in the area of heritage and arts education and the way culture is viewed in education, development and policy. USP and UNESCO have established a Chair in Teacher Education and Culture to promote **culturally inclusive curriculum development and teacher education**, encourage the development of curricula for multicultural literacy, encourage learning from indigenous education and promote capacity building of indigenous scholars and researchers through development and use of Pacific frameworks for teaching and research.

The way forward

Raising the profile of the cultural sector involves assisting Pacific SIDS to develop **appropriate policies and strategies**. So far, only Papua New Guinea has implemented a cultural policy, which is now under review. Other countries are in the process of drafting policies. SPC has secured European Union funding to carry out a mapping, planning and policy process in six countries. This will begin in 2010 and the engagement of all stakeholders is considered essential.

Marketing of the cultural industries is geared towards promoting the livelihoods of artists and artisans, and protecting their knowledge and skills. Artists receive little recognition at present; their work remains unprotected and poorly commercialized; and they have limited access to financing and opportunities for exchange and sharing. There is no coordinated approach to promoting and commercializing Pacific heritage and

contemporary art. One of the principal challenges has been the identification, pulling together, and organizing of the sector so that producers of cultural goods and services meet market demands. A focus will be developing a **marketing strategy for the cultural industries** to Europe and other regions of the world, including the Caribbean and Africa. At present, little has been done at the regional level in spite of successful individual initiatives by small cultural enterprises and through groups such as the **Pacific Arts Alliance**.

SPC and the Council of Pacific Arts are in the process of developing a **Regional Cultural Strategy** which seeks to bring closer the culture and education sectors. Although there has been much progress with integrating mother tongue/vernacular languages at the primary level particularly, there is still a need to increase cultural content and methods in schools, the ideal being for culture to underpin the education system. Culture is taught mainly through life skills and national studies but it is not at the heart of teaching (for example Samoa and Tonga). Furthermore, human resources are lacking in the area of cultural management.

Pacific SIDS are gradually beginning to sign on to the **UNESCO Convention on Intangible Heritage** with commitments from Vanuatu and Fiji, while Papua New Guinea has become a party. Heritage is not yet thought of as a resource by governments and often even by communities who do not pay much attention to this dimension of culture. The linkages between heritage and tourism have yet to be developed. The **Pacific Islands Museum Association and ICOMOS Pasifika** continue to coordinate heritage opportunities, training and events but the region continues to struggle to develop this sector

3.6 Natural and environmental disasters

The Pacific SIDS region is highly disaster prone with the threat of a variety of environmental and natural hazards including earthquakes, volcanic eruptions, tsunamis, cyclones, river and coastal flooding, landslides and droughts. There is deep concern over the current and future adverse impacts of climate change such as permanent coastal inundation due to sea level rise. Tropical cyclones are the most frequent cause of disasters in the region, but other hazards have the potential to cause greater losses as recent tsunamis have demonstrated.

The most recent major events were:

- April 2007 – a magnitude 8 earthquake and tsunami occurred in the western Solomon Islands costing the country an estimated US$90 million (equivalent to 90% of the year's operating budget)
- January 2009 – flooding in western Viti Levu, Fiji; families and small businesses in sample areas in Nadi and Ba alone lost an estimated US$160 million (7% GDP)
- September 2009 – the magnitude 8 earthquake and tsunami in American Samoa, Samoa and Tonga, a result of which the Samoa Government estimated the losses at US$104 million (more than 5% GDP)
- January 2010 – a magnitude 7.2 earthquake and tsunami occurred again in the western Solomon Islands for which costs are still to be assessed.

All except the latest event included the loss of lives.

A framework for action in the Pacific

A **Pacific Disaster Risk Reduction and Disaster Management Regional Framework for Action** 2005 – 2015 has been endorsed by Pacific Islands Forum Leaders. This framework emphasises the need for mainstreaming disaster risk management into national development planning for strengthening the capacity of Pacific SIDS to prepare

for, respond to and recover from disasters. It recognises disasters as including not only those resulting from natural hazards, but also social, environmental and technological hazards.

The **Pacific Disaster Risk Management (DRM) Partnership Network** was established in 2006 and is coordinated by SOPAC. It is primarily a collaborative and cooperative mechanism of support for Pacific SIDS in relation to DRM capacity building within the context of the Framework. It comprises an open-ended and voluntary membership of international and regional organisations, government representatives, and NGOs, with comparative advantages and interests in supporting Pacific SIDS towards mainstreaming DRM through addressing their disaster risk reduction and disaster management priorities.

Concrete actions taken

National Action Plans for mainstreaming Disaster Risk Management have been developed for Cook Islands, Marshall Islands and Vanuatu, and are being developed for the Federated States of Micronesia, Fiji, Palau, Samoa and Tonga with the support of SOPAC. In addition, initiatives under the **New Zealand's Regional Environment and Natural Disasters Programme** continue to assist preparedness for disaster response.

In 2008, the **United Nations International Strategy for Disaster Reduction (UNISDR)**, established a Subregional Pacific Office, based in Fiji. The office covers 17 United Nations Member States and Territories of the Pacific Subregion and operates under the UNISDR Regional Office for Asia and the Pacific in Bangkok. The overarching role of the Subregional Office is to support Governments in their efforts to implement the Hyogo Framework for Action in close collaboration with United Nations Resident Coordinators, United Nations Country Teams operating out of Apia, Fiji and Papua New Guinea, and regional organisations, such as SOPAC, SPC, and SPREP. UNISDR supports national and regional efforts to mainstream disaster risk reduction into development policy and programming; fosters an integrated approach towards disaster risk management and climate change adaptation; co-convenes the Pacific Platform for Disaster Risk Management jointly with SOPAC which met for the first time in 2009; and supports the documentation of progress and exchange of lessons learned and good practices in the Hyogo Framework implementation at the regional/national level.

Humanitarian organisations with a regional capacity to respond in Pacific SIDS are working together to improve preparedness and response under the banner of the **Pacific Humanitarian Team (PHT)**. The PHT, facilitated by the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), coordinates action through clusters that involve NGOs, donor partners, regional, international and United Nations organisations. In 2008, six clusters were established to strengthen coordination arrangements in the Pacific: Health and Nutrition; Water, Sanitation and Hygiene (WASH); Emergency Shelter and Camp Management; Protection; Information Management; and Logistics. The Samoa Tsunami response was also the first time in the Pacific that the clusters were officially activated at the global Inter-Agency Standing Committee level.

United Nations Disaster Assessment and Coordination teams were deployed in response to the tropical cyclones in the Cook Islands (2005), Tropical Cyclone Percy in Tokelau (2005), the Earthquake and Tsunami in Solomon Islands (2007), the High Sea Swell Floods in Papua New Guinea (2008) and the Samoa Tsunami (2009).

In support of disaster risk reduction and disaster management, the UNDP Pacific Centre and partners, have continued to work on developing and implementing **Pacific Disaster Net (http://www.pacificdisaster.net/pdn2008/)**. Launched online in 2008, it is a regional disaster risk management database providing information and baseline material on natural disasters to support better preparation and response. Complementary to this

work was the EU-funded Project on **Reducing Vulnerabilities of Pacific ACP States**. This activity acquired satellite imagery combined with bathymetry data and topography to provide essential baselines for hydrodynamic modelling for sea-level rise incursion, storm wave impacts and tsunami impacts and inundation. The imagery sets provide an effective tool for visualising the impacts of natural hazards on coastal areas and is useful for development planning for high-risk areas.

The way forward

Despite progress, significant challenges remain for effective DRM in Pacific SIDS. There has been a tendency to treat natural disasters as a humanitarian rather than a development issue. While the human cost of natural disasters cannot be overstated, it does mean that resources dedicated to actions tend to flow to post-disaster activities ('disaster management'), rather than towards heading off disasters in the first place ('disaster risk reduction'). Investment in disaster risk reduction is difficult to secure because the benefits exist only as disasters that ultimately never occurred. This tendency to focus on disaster management unnecessarily drains government departments of scarce resources. Combined with already stretched national resources, the effect is that it can be difficult to persuade national governments – or international donors with competing interests – to invest in DRM.

Ironically, evidence indicates that **investments in disaster risk reduction and disaster management** in Pacific SIDS can actually result in massive savings to governments, not to mention avoiding the physical and emotional hardship faced by families enduring disasters. In Fiji, for example, SOPAC estimated that more than US$150 million was lost in earnings by early 2009 flooding in western Viti Levu. This loss of earnings is a matter of national economic concern because it means considerably lower income tax from which to base national spending. Disaster risk reduction is therefore a national economic imperative.

Another challenge remaining is the need to increase **disaster mainstreaming**. First, there is a lack of recognition by government agencies that disaster risk reduction or mitigation can increase government income by avoiding losses. Second, sectoral plans must be 'disaster-proofed' to avoid disaster and or mitigate future losses. Given the pervasive nature of disasters, an 'all hazard approach' to disaster risk management is critical. Support by national planning agencies and treasuries is needed. At the same time, efforts to link national action to the activities being promoted through the regional frameworks for climate change and disaster risk reduction should be streamlined.

A recent global survey of **early warning systems** by UNISDR reports that considerable progress has been made in developing the knowledge and technical tools required to assess risks and to generate and communicate forecasts and warnings, particularly as a result of growing scientific understanding and the increased use of modern information and communication technologies. A major challenge is to integrate the knowledge and insight of relevant social and economic communities into the predominantly technically based existing systems. One of the key findings of the survey is that the weakest elements in early warning systems are the dissemination of warnings and the preparedness to respond. The Pacific DRR and DM Framework for Action calls for effective, integrated and people-focused early warning systems that are able to communicate information that is understood over vast ocean distances to generally isolated populations. One example is the Pipol Fastaem (People First, PFnet) – a wireless HF band rural community email service operating in the Solomon Islands which assists isolated communities in times of disaster. Efforts are being undertaken to integrate national and regional warning systems into a global network supporting improved safety and security, such as that operated by the Pacific Tsunami Warning Centre.

The role of **insurance as a financial tool for risk reduction** against the impacts of natural disasters in Pacific SIDS has been raised as an option and considered for over a decade at all levels, international, regional and national. The Caribbean Catastrophe Insurance Risk Facility, established in 2007, provides a good example. In the Pacific a catastrophe insurance pilot scheme was carried out in Port Vila in 2003, which highlighted the work that needs to be done in each country as a prerequisite to developing a regional insurance scheme. Further assessment of the viability of national and/or regional financial risk-sharing mechanisms is needed. A World Bank feasibility study on the development of catastrophe risk financing options for the Pacific commenced in 2008 and work continues in 2009 and further into 2010.

3.7 Coastal and marine resources

Coastal and marine resources underpin the subsistence economies that still characterise many of the Pacific SIDS. They have been, and will continue to be, one of the most important sources of economic development in the region. Marine protected areas, marine conservation, coral reefs and mangroves are dealt with in the section on biodiversity (Section 3.4).

The western and central Pacific Ocean tuna fisheries represent the world's most valuable tuna stocks. They have a total landed value of around US$2 billion per year and an estimated market value of US$6–8 billion per year. About half of this annual catch is taken from the Exclusive Economic Zones (EEZs) of Pacific SIDS. Annual licensing fees for the predominantly foreign fishing fleets provide revenues of about US$60–70 million to the region. As a consequence responsible and effective stewardship is a priority, recognising the scientific advice that over-fishing of two key species –bigeye and yellowfin tuna – now places stock levels in jeopardy.

Whilst marine and coastal resources offer enormous development benefits for the region, there are a number of constraints. Sustainable fisheries are a particular challenge, especially coastal fisheries, as there is open access to the resource, limited scientific and management data, poor awareness of the resources, limited funds for national based research and poor capacity to monitor the EEZ.

Changes to ocean and coastal ecosystems caused by human activities continue to impact on environmental quality and community wellbeing. Impacts include

- declining fishery productivity from over harvesting
- destructive fishing and loss of habitat
- reduced access of traditional users to fishing grounds and other areas
- increasing environmental damage due to shoreline development
- unregulated and unmonitored sand mining, pollution and invasive species
- serious decline in migratory transboundary species such as whales, turtles and dolphins
- damage to tropical marine ecosystems from global climate change.

These impacts are exacerbated by fragmented management, lack of coordination and poor institutional frameworks, lack of awareness on better coastal and ocean management practices and limited technical expertise and equipment.

A framework for action in the Pacific

Three regional organisations provide the support for Pacific SIDS in the fisheries sector: FFA, SPC, and the Western and Central Pacific Ocean Fisheries Commission (WCPFC). They are strongly supported by Australia, New Zealand and the European Union.

The 2007 **Vava'u Declaration on Pacific Fisheries Resources** "Our Fish Our Future" reaffirmed the importance of fisheries to the economies of Pacific SIDS, and committed the region to the following actions:

(a) Promoting domestic fisheries, in particular the development of national tuna industries; strengthening their support for the FFA, SPC and other regional fisheries bodies; and upholding and strengthening the existing regional and national arrangements, agreements and conservation measures that protect this essential resource.

(b) Conservation and sustainable management of highly migratory tuna resources by: fully implementing without delay the measures developed and endorsed by the WCPFC; seeking the urgent adoption of additional measures by the WCPFC to address over-fishing of bigeye and yellowfin; developing and implementing, with the assistance of the FFA, a comprehensive regional monitoring, control and surveillance strategy; and continuing support for the current tuna-tagging initiative of the SPC.

(c) Protection of high seas biodiversity and the conservation and management of non-highly migratory fish stocks in the Pacific Ocean.

(d) Effective participation in the negotiations to deliver a best-practice South Pacific Regional Fisheries Management Organisation.

(e) Development and management of coastal/inshore fisheries and aquaculture to support food security, sustainable livelihoods and economic growth.

Concrete actions taken

A notable achievement in 2008 was the agreement by the **Parties to the Nauru Agreement** (PNA), being Federated States of Micronesia, Kiribati, Marshall Islands, Palau, Papua New Guinea, Solomon Islands and Tuvalu, regarding tuna purse seine fishing licenses. The decision to enter into a Third Implementing Arrangement represents a bold step towards more effective management and conservation efforts and sends a strong message about their commitment to addressing over-fishing of tuna stocks in the Pacific. A PNA Secretariat is currently being established in Majuro, Republic of the Marshall Islands.

During 2009, concrete actions have continued to strengthen **national tuna industries** targeting improvements to their effectiveness and viability, focused on monitoring, control and surveillance of the high seas through the development of a regional strategy. There was strong expression of regional solidarity in the 2008 WCPFC meeting which saw FFA members strongly influencing its outcomes. While still too early to assess impact, the ability to maintain a whole-of-region position through this forum to reduce over-fishing of bigeye and yellowfin tuna saw the adoption of measures that included:

(a) a cut of 10% in long-line fishing in 2009

(b) closure of the high seas and EEZs to fishing using Fish Aggregating Devices (FADs) for 2 months in 2009 and 3 months in 2010 (July-September)

(c) prohibition of purse seine fishing vessels from throwing juvenile fish back to sea

(d) agreement to close two high seas pockets from January 2010 (details of which will be finalised, including consideration of closing all high seas pockets, by the WCPFC next year)

(e) future 100% coverage of purse seine fishing vessels with observers.

In 2006, Pacific SIDS reiterated their concerns regarding the destructive fishing practices on sensitive marine ecosystems such as seamounts, cold water corals and thermal vents in the **Western Tropical Pacific Island Area** (WTPIA). They adopted the **Declaration on Deep Sea Bottom Trawling to Protect Biodiversity in the High Seas** to manage this method of fishing and to protect biodiversity in the high seas until an appropriate environmental impact assessment has been carried out and effective conservation and management measures are implemented.

Negotiations continue to establish a **South Pacific Regional Fisheries Management Organisation (SPRFMO)**. The SPRFMO will be the key international forum used to determine the protection of deep sea biodiversity and future management of non-highly migratory fish stocks on the high seas in the Southern Pacific region. They will ensure adequate protection is afforded to the biodiversity and non-highly migratory fish stocks of the WTPIA.

Technical assistance to Pacific SIDS is provided by the FFA through the development of briefing documents for members attending these international negotiations. The main challenge is that the fisheries currently under consideration in this process, particularly trawling, are high latitude fisheries that do not occur in the high seas of the tropical Pacific SIDS region. Furthermore, the cost of participation is high – not so much in travel costs, but rather in the time senior officials spend developing regional and national briefings and attending meetings.

Ongoing assistance has been provided to Pacific SIDS in all areas of coastal fisheries and aquaculture including the following actions:

(a) Coastal fisheries science, assessment and statistics, including the completion of national reef fisheries status reports, and a major regional overview of reef fisheries.

(b) Ecosystem and community-based fisheries management, including the joint development by SPC and The Nature Conservancy of a regional framework for the application of the ecosystem approach to Pacific SIDS coastal fisheries management (based on the principles established by FAO and builds upon the framework used by FFA in applying the ecosystem-based approach to oceanic fisheries management) and the agreement of a set of Regional Coastal Fisheries Management Policies.

(c) Support for both freshwater and marine aquaculture, including the agreement of the regional Aquaculture Action Plan, and several national aquaculture plans.

(d) Fisheries development and training with a focus on inshore tuna fishing operations and the use of low-cost coastal fish aggregating devices to reduce fuel usage and increase food-fish landings by small-scale fishers.

(e) Forecasting and analysis have also commenced of the fish required by all Pacific SIDS for food security until 2030 together with consideration of steps required to meet any shortfalls in supply identified.

Eight island members successfully lodged their submissions under Article 76 of **United Nations Commission on the Limits of the Continental Shelf (UNCLOS)** for a total of about 1.8 million square kilometres of additional seabed territory (Cook Islands, Fiji,

Federated States of Micronesia, Papua New Guinea, Solomon Islands, Palau, Tonga, and Vanuatu). If successful, these claims give countries sovereign rights to explore, and possibly exploit, non-living resources from the seabed, subsoil (for example, oil, gas and minerals) and associated sedentary living organisms (for example, bio-prospecting or research for new active compounds for medical and industrial use).

A major action relating to maritime boundary definition has been the maintenance of the **Pacific Islands Regional Maritime Information System** hosted by SOPAC. Currently, it contains baseline information from maps, and satellite imagery, as well as the computed critical basepoints, and the extrapolated notional maritime boundaries for American Samoa, Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Tokelau, Tuvalu and Vanuatu.

Pacific Islands Global Ocean Observing System (PI-GOOS) is a regional programme which aims to assist Pacific SIDS via improved uptake and use of data and information from global and regional oceanic and coastal observing systems. Implementation of the programme is through capacity building at the local and regional level, and via the delivery of observation related products to the relevant national level government departments (www: pi-goos.org). The Argo float project is an important partnership with PI-GOOS. The project has deployed approximately 660 floats (out of a total of over 3000 world wide) in the waters of Pacific SIDS, each providing a profile to 2000m water depth of temperature and salinity every 10 days. Through these measurements, Argo observes the ocean's role in the storage and transport of heat and freshwater, which are fundamental elements of the climate system. Argo reveals seasonal to interannual variability in the oceans due to atmosphere/ocean climate phenomena such as El Niño. Information sharing is linked to two other observing systems in operation in the region through the Vai-Pacifika Newsletter.

In November, 2005, the **Micronesia Challenge** was launched to effectively conserve 30 percent of nearshore marine resources and 20 percent of forest resources by 2020. The Challenge countries are: the Federated States of Micronesia, Guam, the Republic of the Marshall Islands, Northern Marianas and Palau. They represent nearly 5 percent of the marine area of the Pacific Ocean and 7 percent of its coastlines. The Nature Conservancy is working closely with the governments of Micronesia and partners to support the Challenge's launch and implementation.

Extensive exploration for **seabed mineral resources** has been conducted within the Papua New Guinea EEZ (Bismark Sea area) and initial exploratory work is underway in the Tonga EEZ (Valu Fa Ridge area). Nautilus Minerals is the first company to commercially explore the ocean floor for high grade gold-copper-zinc-silver seafloor massive sulphide deposits and is positioned to become a world leader in underwater exploration and mining. The company's current focus is the Solwara 1 Project, in the Bismark Sea. Nautilus also has interest in major crustal structures in the EEZs of Tonga and Fiji that have been the subject of study by marine scientific researchers over the past 15 years with a number of high grade systems identified.

The way forward

Fisheries resources remain a key driver for sustainable economic growth in the region, especially for the smaller Pacific SIDS. Despite the considerable work undertaken to date, the challenge remains for urgent and continued efforts to support both tuna and coastal fisheries to secure current and future economic benefit and food security for Pacific island people.

The main challenge to the development and management of coastal fisheries and aquaculture lies in the limited institutional capacity of many Pacific SIDS, particularly in

monitoring coastal fisheries. Risks to coastal fisheries themselves lie not just in potential overfishing arising from population growth and commodity exports, but also coastal ecosystem degradation. An ecosystem-based approach to coastal fisheries management is needed, which takes account of other human impacts as well as fishery impacts on coastal fishery ecosystems. In the long term, climate change is expected to alter the nature of coastal fisheries.

A critical challenge remains as a result of the continuing proliferation of **illegal, unregulated and unreported (IUU) operations** across the Pacific. Of particular concern is the confirmation by SPC that conservation and management measures introduced by the WCPFC to date, are unlikely to adequately protect current tuna stocks from exploitation. Both bigeye and yellowfin tuna in particular, are being fished at levels that exceed standards agreed under the United Nations Fish Stocks Agreement.

While slowly changing, Pacific SIDS **domestic tuna industries** account for less than 30% of the value of tuna harvested in the region's EEZs and a much smaller portion of the high seas catches. Domestic tuna industries face increased costs, especially for transportation and associated fuel costs. This is worsened by depressed long-line tuna prices. Collaboration is needed to ensure **legislation and access frameworks** are harmonised. Furthermore there is a challenge to maximise the flow on benefits from both domestic fisheries and foreign fishing operations and increase returns to Pacific SIDS.

Compliance with **sanitary and phytosanitary (SPS) measures** remains a challenge in the fishery sector in the region. The recent findings of the European Commission Food and Veterinary Office's inspections carried out in Fiji, Papua New Guinea and the Solomon Islands confirm that more effort is needed to ensure the region's SPS systems comply with international standards. Deficiencies relate to the legislative framework and standards, enforcement mechanisms, laboratories and other infrastructure. These affect the successful integration, diversification and competitiveness of the fisheries sector, and could undermine the important contribution and role of fisheries towards development.

Despite having submitted claims to UNCLOS for additional territory, governments cannot afford to consider the matter closed. Partial submissions remain to be completed, and all claims must be successfully defended when reviewed by UNCLOS. This defence will rely on a detailed understanding of criteria and will need to be supported by a thorough understanding of the seafloor geology and geomorphology. These challenges are compounded by the lengthy timeframe involved. The United Nations agencies involved should make all efforts to speed up the process. Pacific SIDS must also be prepared that a successful claim will bring new obligations to ensure the responsible management and governance of these new seafloor territories and their potential resources.

Existing legislative instruments that govern the Territorial Sea, EEZ, and continental shelf of individual Pacific SIDS generally lack robust legal frameworks governing seabed mineral resources and are silent on the management of these resources. Furthermore, the active mineral and mining legislation is applicable only to onshore exploration and exploitation with little or no attention to offshore areas.

Stakeholders in Pacific SIDS, particularly at regional level, continue their efforts to implement the **Pacific Islands Regional Ocean Policy** and its accompanying Integrated Strategic Action Plan. The Policy and Plan, which is incorporated into the Pacific Plan, needs reviewing. Doing so would provide an opportunity to carry out a regional assessment of achievements and emerging needs.

In a geographic context that includes the Pacific Rim countries, the recently established IUCN Regional Office for Oceania based in Fiji initiated a project entitled **Pacific Ocean 2020 Challenge** in 2008. The project is intended to galvanise support to address the

emerging reality that the Pacific Ocean is nearing a crisis. It will seek to focus global attention, build new partnerships, and generate the necessary commitments to address threats to the world's largest natural resource – The Pacific Ocean - by 2020.

3.8 Agriculture and rural development

Agriculture is a dominant industry for all Pacific SIDS and many people rely on subsistence farming to meet basic needs. Efficient agriculture systems and diversification are essential for the food security and sustainable development of Pacific SIDS.

Diversity is an essential tool for farmers in meeting the challenge of revitalising local food production within an environment of climate change. There is a need to evaluate and utilise traditional diversity so that species and varieties with useful characteristics are made available quickly for farmers to use. This same process can also identify potential crops for domestic, regional and overseas markets. The region has a wealth of underutilised species yet to be evaluated.

Concrete actions taken

In July 2008, a new **Centre of Excellence for Atoll Agriculture Research and Development** in the Pacific was established in South Tarawa, Kiribati. The Centre provides a focal point for Pacific scientists working on the development of technologies to help atoll farmers increase their productivity. Limited land resources coupled with infertile coralline soils and long spells of dry weather make any form of agriculture very difficult. As a result, atoll communities face problems in maintaining food security and eating a balanced diet. The centre will emphasise the use of participatory methods to engage farmers and target groups to promote local produce and to revive production of traditional food. It will also emphasise gender equity and seek the involvement of women and youth in agricultural and fisheries production.

Initial challenges for the Centre will include documenting some of the proven technologies used in the region; for example, banana circles in Kiribati, coconut hydroponics in French Polynesia, and indigenous agro-forestry systems such as pulaka pits. The Centre will also source appropriate and transferable technologies developed on atolls in other regions, such as the Maldives and in the Caribbean. The Centre's research will include soil improvement, rainwater harvesting and irrigation, crops adapted to atoll conditions including saltwater incursions, pest and disease control, improved local livestock breeds, waste management and improved agro-forestry systems. Technologies developed or refined at the Centre will be tested by farmers in Tarawa and on the outer atoll islands of Kiribati and other Pacific atolls using established outreach approaches such as farmer field schools.

To ensure that farmers have sufficient genetic diversity to meet future challenges, the **Centre for Pacific Crops and Trees (CePaCT)**, which holds significant in vitro collections of the major root and tuber crops of the Pacific, established in 1998 in Suva continues its work. The CePaCT is known internationally for the largest in vitro collection of taro (over 850 accessions) collected from the Pacific and South-East Asia, for which it has recently received long-term funding support from the Global Crop Diversity Trust. Not only is traditional agrobiodiversity conserved in the CePaCT but also improved diversity sourced from international institutes, such as the International Potato Centre (CIP) in Peru. This access to diversity from overseas is vital to ensure that food and nutritional security requirements will be met in the coming years. The CePaCT actively distributes this planting material to Pacific SIDS, and in recent years, over 6,000 plants have been distributed. A "climate-ready" collection consisting of crops and varieties with climate-tolerant traits, such as drought and salt tolerance is currently a major focus of work in the CePaCT. Research is on-going and includes developing micropropagation systems for root,

tuber and tree crops to support the supply of planting material and developing technologies for evaluating and improving salt and drought tolerance.

Livestock is an important agricultural focus for Pacific SIDS, and is mainly to meet family and social obligations. Cattle, pigs and chickens are the three main types of livestock raised in the Pacific. Unlike cattle, free-ranging pigs and chickens are mostly unimproved but highly adaptive breeds. Knowledge of local domestic livestock for food and agriculture is not well documented. Many local breeds in the region have not yet been sufficiently identified or characterised, and this lack of information prevents the limited available funds from being applied to appropriate conservation, sustainable use and development projects. Ongoing support to Pacific SIDS from SPC and FAO will ensure the fair and equitable sharing of benefits deriving from improved knowledge of Pacific animal genetic resources for food and agriculture.

The **Facilitating Agricultural Commodity Trade (FACT)** project is an EU-funded programme that operates within the Land Resources Division of SPC. FACT aims to assist selected commercial ventures and producer groups to become export-oriented and market driven enterprises that consistently supply overseas markets with competitive products. The overall objective is to promote and increase trade in agricultural and forestry products from Pacific SIDS. FACT complements efforts aimed at enhancing regional cooperation and integration. This includes facilitating the integration of Pacific SIDS into the regional and global economies. It also promotes sustainable increase in quality and range of exports of agriculture and forestry products within and outside of the region.

The way forward

Protection of **agro-biodiversity**, which also includes soil and general biodiversity and pollinators, is fundamental to ensuring the sustainability of agriculture in a time of rapid environmental, biotic and socio-economic change. Knowledge of the role of agro-biodiversity in the various production systems in Pacific SIDS is lacking. Research is needed to determine which management practices result in higher levels of agro-biodiversity, thereby increasing agricultural sustainability.

Mechanisms must be put in place to ensure access to global diversity to strengthen the resilience of food production in the region. This interdependence will become stronger with Pacific SIDS having to manage climate change and increase food production at the same time. The region cannot rely on the genetic diversity within its borders to manage all these challenges. Access to diversity is often taken for granted by policy-makers and donors, to the extent that funds are not readily available for conservation of germplasm collections. It is assumed that the diversity will be available for use when required. This situation is improving, but there must be recognition of the increasing **importance of diversity to sustaining food production** now and in the future.

The Pacific SIDS suffer from a shortage of trained veterinarians which has resulted in a deterioration in the **health and welfare of animals**. A paraveterinary training programme, such as at SPC, is vital in building capacity in Pacific SIDS to address this skills shortage. Over time, the programme will extend its support by including more production-oriented topics.

More Pacific islanders are becoming involved in intensive livestock production systems, increasing their exposure to potential health risks from diseases transmitted from animals to humans (for example leptospirosis and avian influenza). Capacity needs to be strengthened at the national level to develop, test and implement emergency response plans to deal with potential disease outbreaks. Improving the health, welfare and general management of farm and other domestic animals is vital in minimising the risks.

Most Pacific SIDS assign low priority to the development of their domestic livestock sector. Developing this sector could reduce spending of foreign earnings on imports of animal products, consumption of which is steadily increasing, driven in some Pacific SIDS by increased tourism. Productivity improvements are possible by developing breeds adapted to conditions in Pacific SIDS and through training programmes for livestock farmers. Identification of locally grown raw materials for feed could also lead to productivity improvements.

Limited land and water resources in smaller Pacific SIDS means that livestock waste can have a severe impact on the environment if good husbandry practices are not followed. A set of comprehensive waste management practices developed by SPC are available to enable livestock waste to be used as organic manure.

The economic viability of **crop farming** in Pacific SIDS depends on the efficiency of production. Production efficiency is achieved and sustained when farmers adopt good husbandry practices and have access to a wide range of effective crop protection services, coupled with skills, information and knowledge. Climate change adds a new dimension to crop production, highlighting the need for diversification.

Opportunities for expanding agricultural production vary depending on the specific circumstances of individual Pacific SIDS. Some have rapidly growing populations and there are opportunities to expand production for the domestic market. For those Pacific SIDS with a strong tourism sector, opportunities exist for **supplying hotels and associated facilities with fresh produce** and substitutes for current imports, but the necessary linkages and systems must first be in place.

In some Pacific SIDS, increasing population limits **the availability of land** for cultivation and the temptation to mine the land is overwhelming. This practice, born out of necessity, has a negative impact on soil fertility. Farmer have little flexibility for diversifying or sustainable rotations as the whole farm must be used to produce basic foodstuffs and meet other needs. Crop systems are required that take this constraint into account.

Priority needs for crop protection in smaller Pacific SIDS are to prevent incursions of **exotic pests, diseases and weeds and other invasive species** that negatively impact on agro-ecosystems. Pacific SIDS must manage pests that threaten food security, using integrated pest management regimes with minimal pesticide use. With the predicted changes in climate, incursions of new pests and diseases are more likely and may be more extensive. The challenges in addressing pest, disease, weeds and other invasive species in Pacific SIDS is the ongoing lack of or low level of national capacity (trained and skilled personnel, financial and infrastructure) and the lack of public awareness to detect crop protection problems before impacts become severe.

Pacific SIDS are grappling with the issue of adopting **biological control** as a tool in fighting invasive pests in agriculture, forestry and environmentally important systems. In the Pacific 300–500 plant species could be regarded as invaders, with about 150 species classified as aggressive. For example, Mikania micrantha, often called “mile-a-minute weed” because it can grow as fast as one metre per month, is one of these aggressive weed species that is found in most Pacific SIDS. Biocontrol uses highly evolved and host-specific natural enemies to lower the population of pests affecting agriculture and the natural ecosystem. Pacific SIDS can share more information between agriculture, forestry and biodiversity conservation groups to better address biocontrol work, as well as looking at strategies implemented in other regions in the use of biocontrol agents to fight invasive plants and pests. A workshop in November 2009 developed a regional strategy for implementing biological control work in the Pacific.

For atoll Pacific SIDS, basic needs take precedence. They include **developing productive atoll farming systems**; improving the profile of agriculture and agro-forestry to attract youth and women; and identifying new varieties of food crops for local consumption. This need for a different approach to the requirements of atoll communities has been demonstrated by the launching of the Centre of Excellence for Atoll Agriculture Research and Development.

3.9 Health

Pacific SIDS have generally low HIV prevalence rates, with the exception of Papua New Guinea where prevalence is as high as 2.5%. Despite this, risks remain high and ongoing efforts in raising public awareness and encouraging preventative measures remain a priority. Malaria is endemic in the Solomon Islands and Vanuatu, although good progress has been recorded in Solomon Islands.

Noncommunicable Diseases (NCDs) are overwhelming the Pacific with some estimates attributing three out of every four deaths in the Pacific to lifestyle diseases. The economic cost of NCDs for most Pacific SIDS is huge, and leads to a reduced quality of life for the workforce. NCDs diseases have great influence in determining the wealth of a nation, and most Pacific SIDS do not have the capacity to deal with the challenges this problem presents. The increasing NCD burden will not only lead to premature death and disability for thousands of people, but could also threaten to overwhelm health resources and services already stretched thin.

The shortage of health workers is a chronic problem for Pacific SIDS mainly due to the inadequate numbers being trained. The shortage is compounded by the migration of health workers. The average health worker density for all Pacific SIDS is about 3 per 1000 population, compared to much higher densities of more than 10 per 1000 population in developed countries such as Australia and New Zealand.

Pacific SIDS are in a unique situation which presents opportunities for cross-border and regional approaches to common health system challenges, including early warning and notification systems for disease outbreaks, the management of medicine supplies, and the need to provide specialist medical services. Furthermore, common approaches should lead to greater efficiency and effectiveness, and make it easier to interest external partners and donors.

A framework for action in the Pacific

The vision of "Healthy Islands" agreed to by Ministers of Health for the Pacific SIDS at their inaugural meeting in 1995 underscores the ultimate goal of achieving better health for the people of the Pacific Islands. In 2007, Ministers of Health endorsed the **Vanuatu Commitment** to strengthen the health sector in Pacific SIDS, and in **Madang** in 2009, they highlighted the challenges associated with the bulk procurement of pharmaceuticals, and sustainable financing and human resources for the provision of health services. Recent reports indicate significant progress was made in various areas of the health sector which benefited from ongoing efforts to strengthen collaboration and harmonise inputs.

The **Pacific Regional Strategy on HIV and other sexually transmitted infections (STI)** 2009-2013, and its implementation plan, aims to reduce the spread of HIV and STI while embracing people living with and affected by HIV/AIDS in Pacific communities. The **Pacific HIV and STI Response Fund** has been formally established and made operational with the disbursement of funding to governments, regional partners and civil society to support activity implementation.

The Global Fund is currently supporting programmes fighting malaria, HIV/AIDS and tuberculosis in the Pacific Region worth a total commitment of more than US$32 million.

Concrete actions taken

Following the approval and subsequent fund negotiations with the board of the Global Fund to fight AIDS, Tuberculosis and Malaria, Round 7 of the Pacific Islands multi-country proposals have commenced implementation with good progress being made to date in a range of activities across the region. Such activities have included the procurement of specialist medical supplies and equipment as well as training a range of health professionals.

Technical assistance and support is being provided by SPC, WHO, UNFPA and UNAIDS. SPC, the principal recipient for all Pacific SIDS multi-country grants, has been responsible for implementing Global Fund supported programmes battling HIV, tuberculosis and malaria in eleven Pacific SIDS since 2003 (the Cook Islands, the Federated States of Micronesia, Fiji, Kiribati, Niue, Palau, Samoa, the Solomon Islands, Tonga, Tuvalu and Vanuatu). Recently signed grants to fight tuberculosis and HIV/AIDS now also see the inclusion of Nauru and the Marshall Islands as beneficiary countries.

Challenges include the development of targeted STI communication strategies and the establishment of a 'Universal Access Policy Framework' to ensure adequate supply and distribution of condoms and the availability of treatment for HIV and other STIs throughout the Pacific. A regional technical assessment of counselling and testing services in several Pacific SIDS has been completed to identify priority issues to be addressed in scaling up such services. In addition, the first phase of the validation of HIV testing algorithms in low HIV prevalence settings in the Pacific has begun with the newly established **Pacific HIV Testing Taskforce**.

The Pacific remains **polio** free, and nearly all countries have embarked on **measles** elimination. Coverage rates for the first rounds of measles immunisation have been approaching 95%. But there are still problems in the remote areas of Papua New Guinea and in some remote island groups elsewhere in the Pacific. Even with these obstacles, measles elimination is feasible by 2012. In Fiji, high measles immunisation coverage and the efficient dissemination of information by the Pacific Public Health Surveillance Network were credited with quickly containing a major epidemic in 2006 and preventing its spread to neighbouring countries.

Dengue was identified as a major communicable disease problem in the region resulting in significant morbidity and severe economic losses, particularly for tourism. But since the meeting of the Ministers of Health for the Pacific SIDS in 2005, the proposed regional dengue initiative has not materialised. The challenge to establish effective surveillance systems is recognised as a key issue related to dengue, as well as other new and emerging diseases. There has been some success in implementing vector control for dengue.

In addition, and in response to the H1N1 global pandemic, the **Pacific Regional Influenza Preparedness Project** continues to play a key role in preparing countries to deal with the possible spread of the H1N1 virus across the Pacific. This work has focused on countries' surveillance systems and their laboratory testing procedures to detect any suspected cases. Strongly supported by SPC, WHO, AusAID and NZAID, this work has also sought to position Pacific SIDS to better respond to a range of other possible pandemics such as Avian Flu.

In an effort to address the challenges associated with the impacts of non-communicable diseases (NCDs), a Joint Management Committee has been established by SPC and WHO to

oversee the **Pacific NCDs Framework**. With activities initiated in five countries, this Committee comprises SPC, WHO, country representatives and donor partners.

The WHO STEPwise approach to surveillance (STEPS) has been adopted in Pacific SIDS as a simple, standardised method for collecting, analysing and disseminating data on NCDs. STEPS has provided for the first time a comprehensive data set on NCD risk factors, which can be used to formulate policy and initiate activities. Plans should not remain on the shelf. Resources continue to be a problem, but capacity for implementation and the lack of innovative approaches are real constraints.

Pacific SIDS are making some progress in implementing **mental health** activities. Samoa has a national mental health policy and supporting legislation. Cook Islands has established a new mental health division, and the Marshall Islands has established a mental health programme targeting suicide prevention. Other countries have expressed the need to further develop their capacity for mental health.

The **Pacific Open Learning Health Net (POLHN)** established in 2003, is recognised as a valuable contributor to capacity-building in the region. A number of countries in recent years have set up POLHN centres and look forward to an expanded selection of courses.

The way forward

The Pacific is subject to conditions that have led to rapid HIV transmission elsewhere, such as a high proportion of young people and other vulnerable populations and the significant movement of people into, through, and out of the region. Continued efforts are required to prevent the spread of HIV in the region as outlined in the regional strategy and associated implementation plan.

Pacific SIDS have expressed the need to prioritise **environmental health issues**. These include safe water supply, sanitation, climate change, and clinical and solid waste disposal. A number of Pacific SIDS have implemented activities for medical waste disposal. Samoa has a safe water strengthening programme, and Tuvalu has started a programme of regular water testing.

There is clear need to communicate more effectively the **risk of unhealthy lifestyles**. Even though a large information base exists, it is not reaching those that need it. Social networking may be one way to improve communications. Part of the problem is food of little nutritional value is being marketed by multinational companies. Some Pacific SIDS, recognising the importance of improving health promotion, have established health promotion foundations funded by alcohol and tobacco taxes, direct government contributions or other sources.

Pacific SIDS are not free from the threat of pandemic influenza, and need to further strengthen their preparedness. Most Pacific SIDS have **national pandemic preparedness plans**, but some indicated the need to harmonise plans across different sectors. These include the animal and human health sectors but also other essential sectors such as food supply, energy and communications. Early detection and reporting are keys for a successful response. Non-pharmaceutical public health interventions, such as social distancing and institutional closures, are the most important part of any response to a pandemic. While antiviral drugs may be important, they are not the mainstay of an intervention.

The **Asia Pacific Strategy for Emerging Diseases (APSED)** can serve as a tool for implementing the newly revised **International Health Regulations (IHR 2005)** which are a global legal framework for preventing and responding to the international spread of diseases which entered into force in June 2007. All Pacific SIDS have designated their

National IHR Focal Point and have expressed a challenge to strengthen their capacity for detection and response to outbreaks. Currently, the response capacity in many Pacific SIDS is not sufficient. However, there are existing systems available such as the Global Outbreak and Alert Network (GOARN) and the Pacific Public Health Surveillance Network (PPHSN). Sharing information early is important, as is collaboration for laboratory confirmation. There are existing mechanisms, such as PacNet and LabNet hosted by SPC, which can be used to support these activities.

Vitamin and mineral deficiencies (VMD) are a public health problem in many Pacific SIDS. VMD can co-exist in populations that are overweight or under-nourished. Nutritional anaemia is the most prevalent VMD disorder found in most Pacific SIDS. Anaemia affects the cognitive development of children, reduces adult productivity, increases the risk of pregnancy complications and maternal mortality, and impairs immune response. Although specific information on the causes of anaemia in the Pacific are limited, the main causes are thought to be deficiencies of iron, folic acid and other B vitamins and, in some cases, vitamin A and other micronutrient deficiencies. In many Pacific SIDS, parasitic infections, such as hookworm and malaria, are another important cause. Support is needed for the establishment of a **regional food fortification programme** supported by a Pacific Fortification Partners Group. The first activity would be to establish regional fortification standards for selected foods, considering not only iron and folate, but also iodine, vitamin A and fluorine deficiencies.

The education system in some Pacific SIDS does not equip students with basic sciences, mathematics and English levels needed for entry into **health professional education and training courses**. Other common human resources for health (HRH) issues in Pacific SIDS include imbalances in the skill-mix and distribution of workers; lack of effective HRH planning and management compounded by unreliable and inadequate workforce information management systems; low salaries and wages; poor working environments; limited monetary and non-monetary incentives; and the lack of professional development, especially for workers in rural remote areas. In most Pacific SIDS, national health workforce strategies and plans are not sufficiently implemented or effectively coordinated among partners and stakeholders. There are certain aspects of HRH, including a regional code of practice for recruitment of health workers, in which a regional approach may be beneficial in view of the unique circumstances of Pacific SIDS.

There is an urgent challenge to address the skill mix imbalances within and between occupational groups in Pacific SIDS. Although the majority of the health workforce in the region are nurses (more than 50% in most Pacific SIDS), the numbers are not sufficient to meet the primary health care needs of the majority of people, who live in rural areas. Due to a small populations, limited health technology, scarcity of equipment and supplies, and the lack of support services for delivery of clinical specialised care in many areas, nurses and mid-level practitioners have been trained to provide basic diagnostic and curative services that would normally be handled by doctors. This reliance on nurses and mid-level practitioners as frontline workers appears to be suitable and appropriate for most Pacific SIDS.

Pacific SIDS governments should support the **Pacific Code of Practice for the Recruitment of Health Workers**, and its application and use in their countries. They also should provide support for the monitoring and evaluation at a regional level of the implementation of the Code. Pacific SIDS should also take necessary actions to implement the WHO Regional Strategy on Human Resources for Health 2006–2007.

3.10 Transport and security

Transport remains a key for Pacific SIDS, it is a priority area for Forum Leaders under the Pacific Plan, and two major shipping disasters in the region in 2009 have refocused attention on the transportation sector and the risks associated with it.

The importance of the transport sector as a facilitator of economic growth continues to be hampered by gaps in services and supporting infrastructure, particularly in the Cook Islands, Kiribati, Marshall Islands, Nauru, Niue, Palau and Tuvalu. Noting its significance, a continued focus through regional and subregional approaches to improve shipping and aviation services, aviation liberalisation, safety and security as well as the physical infrastructure that supports these sectors remains an essential need for all Pacific SIDS. Progress in this area will also assist with tourism, a key economic driver for the region.

A framework for action in the Pacific

In 2004, just prior to the Mauritius Meeting, Forum Leaders endorsed the **Forum Principles on Regional Transport Services (FPRTS)** in recognition that the provision and maintenance of regular, reliable and competitive air and shipping services is crucial to Pacific SIDS. It recognised changes in the transport sector, including an increasingly competitive market and new international safety and security requirements, had significant implications for aviation and shipping in the Pacific region. Furthermore, Pacific SIDS have limited technical support. The FPRTS contains six principles promoting good governance, transparency, and accountability, and aims to serve as a guideline to Pacific SIDS in their pursuit for greater service delivery to improve the efficiency, effectiveness and sustainability of both air and shipping services.

Concrete actions taken

Actions to implement the FPRTS have seen institutional and regulatory reforms take place throughout the region, albeit at varying stages across Pacific SIDS. The **Pacific Aviation Safety Office (PASO)** was established in 2005, as a result of the **Pacific Islands Civil Aviation Safety and Security Treaty**, and Pacific SIDS members include: Cook Islands, Kiribati, Niue, Nauru, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu. The hiring of inspectors and completion of required audit manuals and other related documents for safety oversight signify a major move towards full operation of the office which will assist members meet International Civil Aviation Organisation (ICAO) requirements and standards more easily. PASO has commenced work in support of a number Pacific SIDS and is fully operational. In addition to this work, the remaining ratification to bring the **Pacific Islands Air Services Agreement (PIASA)** into effect has been secured with Niue having signed and now ratified the agreement. Its coming into force will assist members access increased economic benefits through air transport liberalisation. Along with this work in the aviation sector, examination of the possibilities of a subregional air services arrangement continues.

Shipping transport has seen significant success in two areas: **strengthened ports and administration standards and improved shipping services** to the region's small island states. With preparations greatly assisted by SPC's **Regional Maritime Programme**, audits on member administrations and ports conducted across the Pacific have confirmed that maritime services, safety, security and international standards in shipping are currently being met around the region.

Small island states shipping services have greatly improved with **Kiribati Shipping Services Limited (KSSL)** commencing a regular feeder service from Suva to Nauru and Tuvalu. Facilitated by SPC and PIFS, these services commenced in June 2009 and are expected to complement existing services. Discussions are underway on the possibility of expanding this service to include Wallis and Futuna. The success of this initiative has not

gone unnoticed at higher political levels with Small Islands State Maritime Ministers at their third meeting in Tonga directing work to assess the possibilities of commencing a similar service on routes between Samoa, Tokelau, Cook Islands, Niue and American Samoa.

The growth in cruise shipping in the region prompted SPC's Regional Maritime Programme to complete a study on the security risks posed by cruise vessels operating in Pacific waters. The security of pleasure vessels was also analysed and recommendations were made in the completed report on border security risks posed by oceangoing pleasure craft:

(a) Enhance coordination of maritime statistics

(b) Develop legal frameworks for ocean-going pleasure craft

(c) Establish standard reporting formats for use throughout the Pacific for ocean-going pleasure craft.

Land transport has been growing steadily and most Pacific SIDS have reported an increase in the number of vehicles in use. While lead additives have been phased out in most countries/territories, air pollution from older vehicles remains an issue. Furthermore, the growth in vehicle use due to lifestyle changes has caused congestion on roadways intended to accommodate less traffic. A sub-regional project on **Environmentally Sustainable Transportation in the Pacific Islands** has been developed and submitted for funding to the GEF as a medium-sized project. The project is aimed at reducing greenhouse gas emissions from the transport sector in the three participating Pacific SIDS (Fiji, Samoa and Vanuatu).

Other activities with a **regional security** emphasis have seen, the opening of a transnational crime units at national level as well as groups ranging from judicial to border security personnel having benefited from training and targeted capacity building efforts. In the case of the former, the training has focused on anti-money laundering and combating the financing of terrorism the latter, on improving expertise in assessing and verifying travel documentation.

The way forward

Despite substantive efforts, the provision of reliable and effective air and maritime services remains a challenge. There has been considerable work to improve air transport standards, but more remains to be done to ensure compliance with ICAO standards. Funding concerns continue to create some anxiety for the longer-term. While this has in part been alleviated in the short-term by donor support, increased contributions by members is the only sustainable longer-term funding option to support the core functions and operations of PASO. Better understanding of the benefits of air service liberalisation by governments that have not having signed PIASA are needed.

Transport Ministers have directed work to continue in assessing the possibilities and practicalities of a purpose built donor supplied ship, and the establishment a **Central Pacific Shipping Commission** comprising Kiribati, Marshall Islands, Nauru, Tuvalu, and other interested states and territories such as Federated States of Micronesia, Palau and Wallis and Futuna. To be modelled on the Micronesian Shipping Commission, the Ministers directed SPC and PIFS to develop a draft framework for their consideration that would guide the establishment of such a Commission.

With two major shipping accidents in the region in 2009, one in Kiribati and the second in Tonga, there is an urgent challenge for accident investigation guidelines to be developed, long range identification tracking to be promulgated, and the regional agreement on search and rescue to be translated into tangible assistance with a database of contacts and

incidents. Improved legislation, infrastructure, navigation aids and hydrography are required to facilitate and sustain increases in shipping traffic but there is a lack of funding.

3.11 Sustainable production and consumption

Shortly after the Mauritius Meeting in 2005, Pacific SIDS together with other members of the ESCAP region, adopted **Green Growth**, or environmentally sustainable economic growth for the improved wellbeing of all, during the Fifth ESCAP Ministerial Conference on Environment and Development (MCED). This meeting was attended by officials from eleven Pacific SIDS including the Cook Islands, the Federated States of Micronesia, Fiji, Kiribati, the Republic of the Marshall Islands, Nauru, Niue, Palau, Samoa, Tonga and Vanuatu.

The Green Growth approach is considered a viable strategy for achieving sustainable development in the region. Due to the inherent conflict between fulfilling MDGs 1 (reduce poverty and hunger) and 7 (ensure environmental sustainability) in Asia-Pacific, there is a need for increased eco-efficiency of production and consumption in order to achieve sustainable development. As the situation in the region illustrates, it is now an urgent challenge to find ways to ensure that the old paradigm "grow first, clean up later" is replaced by an integrated approach that enables economic growth to support and reinforce sustainability, rather than undermine it.

In 2010, the ESCAP Subregional Office for the Pacific will extend the promotion of Green Growth and initiate activities in Pacific SIDS. The Green Growth approach is aimed at helping countries in the region to achieve real progress towards sustainable development and poverty reduction by:

- Improving environmental sustainability (the way environmental resources are used).
- Enhancing environmental performance (the way environmental resources are managed by reducing pollution and improving ecosystem protection).
- Promoting environment as an opportunity for economic growth and development.

3.12 Information and communications technologies (ICT)

Over the past years, actions to support ICT in the region have been given a significant boost. Key activities supporting the ongoing implementation of the **Regional Digital Strategy** (2005) have seen continuing and significant progress.

The number of **Rural Internet Connectivity Scheme** (RICS) sites continues to grow across the region with: 15 pilots sites delivered; 10 activated; and 8 carrying traffic in addition to the 24 commercial sites having already been delivered. This is in addition to the continuing roll out of the **One Laptop Per Child** (OLPC) which over the reporting period saw five sites commence operations and 1,400 laptops delivered (out of a total of 5,000) to Nauru, Niue, Papua New Guinea, Solomon Islands and Vanuatu. Papua New Guinea committed to a national rollout of OPLC units with 10,000 to be disbursed over 2009 and a further commitment that every primary school child will have access to this technology by 2015. At the time of writing, eight additional sites were ready for commissioning across the region in Cook Islands, Federated States of Micronesia, Marshall Islands, Samoa, Tokelau, Tonga, Tuvalu and Vanuatu.

Tenders were called in 2009 to support the implementation of South Pacific Information Network (SPIN) which six countries and territories have now signed up to. This follows a World Bank commissioned study which confirmed submarine cable technology was a viable option for most of the Pacific and the SPIN initiative represented a reasonable

commercial proposal. To better facilitate access to this initiative, conditions for signing and access to various options under contract have been made more flexible.

The way forward

At their February 2009 meeting, Ministers agreed to address the challenges associated with ensuring affordable domestic and international connectivity in the Pacific, continuing reforms to policy, regulatory and financial frameworks, addressing cyber-security and ICT applications, making use of ICT to better respond to disasters and prioritising human resource development. There has been agreement to establish a Regional Regulatory Resources Centre with assistance from the World Bank.

The Mauritius Strategy refers to the role of the United Nations Department of Economic and Social Affairs (DESA) SIDS Unit in establishing and maintaining a roster of experts and to the critical support mechanism that SIDSNet provided. The Pacific SIDS are deeply concerned that neither of these functions has been effective over the past five years, and strongly recommends that DESA reactivate these services. In this regard, Pacific SIDS note paragraphs 15 and 16 of United Nations General Assembly Resolution 63/213, which calls for support for strengthening the SIDS Unit and revitalizing SIDSNet, and acknowledges the recent announcement of funding from the Spanish Government to support SIDSNet.

Chapter 4
Progress towards the Millennium Development Goals (MDGs)

The world is past the half-way mark for achieving the Millennium Development Goals. Recent reports on the progress towards MDGs in the Pacific indicate that achieving all the goals across the Pacific region by the deadline is unlikely[10]. While some progress has been made on some of the goals, no country is on track to achieve all the MDGs, and no MDG is on track to be achieved by all Pacific SIDS (Table 7).

In summary, the situation in the Pacific is one where poverty is rising, growth is insufficient and inequitable, not enough children complete schooling and the basic health challenges are significant. There is also some positive news on the MDGs. The region is undertaking world-leading work on malaria education. There is good progress in some countries in primary education completion rates. Most countries are investing more of their own resources in health and education. The need to invest in women and children is also widely recognized[11].

Table 7: Status of progress towards MDGs in the Pacific

PACIFIC: MDG STATUS AT A GLANCE

	1	2	3	4	5	6	7	8
PNG	×	×	?	×	×	×	×	?
Fiji		?	√	?	?	×	?	?
Solomon Islands	√	√	×	?	√		?	?
Vanuatu	√	?	?	?	?		√	?
FSM	√	?	?	?	?		√	?
Kiribati	√	√	√	?	?	×	×	?
Marshall Islands	√	√	√	√	√	?	?	?
Nauru		?	?	?	?		×	×
Palau	√	√	√	√	√	√	√	√
Cook Islands	√	√	√	√	√	√	√	?
Niue	√	√	√	√	√	√	√	?
Samoa	√	√	√	√	√	√	√	?
Tokelau		√		√	√			?
Tonga	√	√	√	√	√	?	√	?
Tuvalu	√	√	√	?	√	×	?	?

KEY: √ Mostly on track; ? Slightly off-track / some data gaps; ×: Off-track; Weak / No data SOURCE: National MDG Reports (2004-2008); UNDP estimates

Source: Ajay Chhibber, Global economic crisis and the Pacific Island countries: the human and social dimensions, UNDP Paper presented at the Lowly Institute Conference for International Policy, Brisbane, August 2009

[10] Two reports on MDG have been done, namely: AusAID, *Tracking development and governance in the Pacific* 2009 and a regional report by ESCAP/ADB/UNDP, *The millennium development goals (MDGs) in the Pacific Island countries: taking stock, emerging issues and way forward*, 2009.

[11] Lowy Institute for International Policy, *The Pacific Island and the world: the global economic crisis*, August 2009

Samoa and Tonga have made the most progress and are on track to achieve four MDGs. Fiji, Niue, Palau and Vanuatu are on track to achieve three MDGs. For many of these countries, substantial progress was made during the 1990's in the health and education MDGs. However, in recent years, progress has been slow (or in some cases reversed, as in the case of child and maternal health). Clearing the final hurdles to achieve universal primary education and mother and child care will often require more expensive interventions in remote areas and vulnerable groups. Kiribati, Marshall Islands, Nauru, Solomon Islands and Tuvalu are positioned to meet very few MDGs. Papua New Guinea is off-track on majority of the MDGs[12].

Looking at the region overall, progress against the common development indicators reveal the scale and challenges faced by Pacific SIDS in meeting their MDGs. As discussed in the next chapter, the global economic crisis has further weakened the ability of many countries to achieve the targets without substantial further assistance. Equally important for the region is the need to develop and implement an effective system for tracking development indicators.

Box 4: MDG 7 - Ensure environmental sustainability

The priorities for sustainable development are implicit in all of the eight Millennium Development Goals. MDG 7 is focused specifically on ensuring environmental sustainability, a priority of the Mauritius Stategy. Global progress towards this goal is being measured through the following indicators:

(a) Proportion of land area covered by forest
(b) CO2 emissions
(c) Consumption of ozone-depleting substances
(d) Proportion of fish stocks within safe biological limits
(e) Proportion of total water resources used
(f) Proportion of terrestrial and marine areas protected
(g) Proportion of species threatened with extinction
(h) Proportion of population using an improved drinking water source
(i) Proportion of population using an improved sanitation facility
(j) Proportion of urban population living in slums.

The 2009/10 report on progress towards the MDGs from ESCAP/ADB/UNDP [13] indicates that the Pacific SIDS have achieved the targets related to proportion of protected marine and terrestrial areas and the consumption of ozone depleting substances. However, they are making no progress or regressing against the targets relating to forest cover, CO2 emissions, water and sanitation. A recent collection of national estimates of MDG indicators in the region, conducted by UNDP and SPC, suggests a similar picture. Unfortunately, there are no data on the indicators relating to biodiversity ((d), (e), (f) and (g)) and limited data on the proportion of the urban population living in slums.

Progress in environmental sustainability is essential for the attainment of all other MDGs in the Pacific, in particular managing the effects of climate change. The global recession has exacerbated pressures on the environment in several ways, including increased number of urban poor and squatter settlements and slums, which is already a concern for the Pacific; reverting to unsustainable subsistence farming and livelihood practices, increased exploitation of fisheries resources, and an inability to make domestic and ODA resources available for climate change adaptation and mitigation[14].

[12] AusAID, *Tracking development and governance in the Pacific*, AusAID publication, Canberra, August 2009

[13] ESCAP/ADB/UNDP, *Achieving the Millennium Development Goals in an Era of Global Uncertainty*: Asia-Pacific Regional Report 2009-10 (www.mdgasiapacific.org/files/shared_folder/documents/Regional_MDG_Report_2009-10.pdf)

[14] Ajay Chhibber, *The Global Economic Crisis and the Pacific Island Countries: The Human and Social Dimensions*, UNDP paper presented at the Lowly Institute Conference for International Policy, Brisbane, August 2009

Urgent action is required to ensure resources from both Pacific SIDS and their development partners are applied more effectively to make faster progress towards the MDGs in the region. Reports indicate that the best progress towards the MDGs is achieved by countries that met the following criteria:

- Have sound economic growth supported by equitable development policies
- Have a strong political commitment towards the MDGs
- Committed higher levels of resources including substantial supplementary aid funds
- Have strong capacity to implement programmes
- Have a conducive internal environment.

The Cairns Compact15 on Strengthening Development Coordination in the Pacific, adopted by Pacific Islands Forum Leaders at their 2009 meeting, demonstrates a renewed commitment to the MDGs. The key objective of this compact is to coordinate development resources with the aim of making real progress towards the goals. The Compact calls for annual reports of progress against the eight MDGs. The latest report on progress and lessons learned is currently being prepared through the Pacific Islands Forum Secretariat for tabling at the August 2010 Leaders' meeting.

[15] See www.pif2009.org.au/docs/cairns_compact_final.pdf for the full text of the compact.

Chapter 5
Impact and responses to the recent global crises[16]

Pacific SIDS are being hurt by the global economic crisis as demand, output and employment falls internationally. The World Bank estimated that the world economy contracted by 2.2 per cent in 2009, the first decline in world output since the 1930s. As the global economy contracts, Australia, China, Europe Union, Japan, New Zealand and the United States – the major markets for the Pacific region – have all experienced slower or negative growth in 2009.

The global economic meltdown has a direct flow-on effect on the Pacific islands region, primarily through the trade channel and financial flows. Most PIDS have experienced lower economic growth in 2009 and 2010 as the global crisis started to bite. Its impacts are being are being felt through the following transmission mechanisms:

(a) Lower commodity prices and reduced demand for exports.

(b) Decline in tourism numbers and per capita spend.

(c) Fall in remittance flows and off-shore demand for labour.

(d) Decline in value of offshore national trust funds.

(e) Decline in FDIs (private investment and capital flows).

(f) Decline in aid.

(g) Decline in terms of trade.

As a result, all Pacific SIDS are experiencing a worsening macroeconomic and fiscal outlook. The falling export receipts and net financial inflows are contributing to the deterioration in the balance of payments, weakening foreign reserves, low domestic economic activity and falling government revenues.

The extent and nature of the impact on individual countries depends on the structure of their economies and the extent of their integration with the global economy. Countries and areas that maintained positive but slow economic growth in 2009 are Federated States of Micronesia, Kiribati, the Republic of the Marshall Islands, Nauru, Papua New Guinea, Solomon Islands, Tonga, Tuvalu and Vanuatu while others faced economic contraction (Cook Islands, Fiji, Palau and Samoa).

Impact on people of the Pacific

Pacific Islanders are exposed to the adverse impact of the global economic crisis, especially through declining incomes, increasing unemployment, high cost of living and increasing poverty. The degree of impact, however, is relative to people's income level and resource endowment.

Lower cash incomes for families' means less money for food, education, health care, transportation and other basic needs, hence contributing to worsening social outcomes. Pacific peoples are also faced with high food prices and cost of living. Although the high food and fuel prices in 2008 have fallen internationally, this has not filtered down to the ground level in most Pacific SIDS. The real purchasing power of household incomes has fallen, reducing household consumption and corresponding domestic aggregate demand.

[16] This chapter is based on a paper by consultant, Tuisolia S.R., *The Impact of the Global Economic Crisis on the People of the Pacific*, commissioned by UNESCAP for the Pacific Conference on the Human Face of the Global Economic Crisis, Port Vila, Vanuatu, 10-12 February 2010.

Household savings, which are already generally low across the region, have been significantly constrained, especially for the poor.

The most vulnerable and severely affected are the poor who make up nearly a third of the Pacific island region's population (2.7 million people). These are people who live below and near national poverty lines and do not have the income to satisfy their basic needs. As the global economic crisis forced thousands of people into poverty, the poverty level in the Pacific is expected to rise. Children, women, rural people, urban poor and groups with special needs, such as the elderly and people with disabilities, have become worse-off.

Governments are faced with fiscal challenges due to falling revenues, high debt levels and a corresponding shrinking in the fiscal space available for public investments. Reduced government financial capacity to fund crisis responses in infrastructure, economic services, health, education and pro-poor social programmes will constrain economic growth, employment and make the poor worse-off.

Surviving the global economic crisis: a platform for action

The Cairns Pacific Islands Forum meeting in August 2009 provided the platform for decisive action by governments in responding to the global economic crisis and laid the foundation for promoting future broad based private sector-led growth consistent with the *Pacific Plan*.

First and foremost, it is important for Pacific SIDS governments to fully understand the impacts of the global economic crisis on their economies and peoples. The lack of quality statistical data is a serious issue that needs to be addressed to ensure the proper tracking of development outcomes, the design of evidence based policy responses to the global crisis and aid effectiveness.

With the knowledge of the impacts of the global economic crisis, governments could consider appropriate country, regional and international policy responses to the crisis. However, the challenge is to balance the urgent need to achieve accelerated economic recovery with measures that ensures the long-term sustainability of small island states and their resilience to future economic shocks – particularly ensuring protection for the poor. To achieve this, the following policy responses are considered appropriate:

(a) Maintain macroeconomic stability

(b) Stronger governance and better fiscal management

(c) Implement economic and public sector reforms for broad based private sector-led growth

(d) Prioritise education and health investments

(e) Invest in social protection programmes to insulate poor people from future economic shocks

(f) Promote regional and national food security

(g) Protect progress made towards the MDGs

(h) Strengthen statistics and development tracking

(i) Support regional cooperation and integration

(j) Improve development partnership and coordination.

Chapter 6
Sustainable development: a way forward for the region

The outcomes of the United Nations ESCAP / Department of Economic and Social Affairs (DESA) Pacific High Level Dialogue on the five year review of the Mauritius Strategy capture the current position on the way forward for the Pacific region. The meeting endorsed the **Port Vila Outcomes Statement** as the summary of the views and positions of the Pacific SIDS on the MSI+5 review. An extract from the statement is provided below as the roadmap for the way forward for sustainable development in the Pacific.

Extract of recommendations from the Port Vila Outcome Statement
9 February 2010

10. In their discussions, the Ministers and officials highlighted a number of critical vulnerabilities in the Pacific which include:

(a) **Climate change** remains the greatest challenge as current and predicted impacts serve to undermine progress towards development and, for some of the Pacific SIDS, threaten their very existence. Recognizing that the United Nations Framework Convention on Climate Change (UNFCCC) remains the mechanism for negotiating action on this issue, the meeting noted the need for:

- Urgently reaching agreement on and implementation of meaningful and legally binding commitments following the less than desirable outcomes of the UN Climate Change Conference in Copenhagen;
- Supporting the provisions in the Alliance of Small Island States (AOSIS) Climate Change Declaration of September 2009, including immediate adoption of a package of mitigation activities up to and beyond 2012[17];
- Providing SIDS with new, additional, predictable, transparent and adequate sources of grant-based financing to fully meet the adaptation needs of these particularly vulnerable countries, and ensure for SIDS that access is timely, direct, prioritized and simplified; and
- Developing adaptation funding modalities, including cost-effective solutions to protect the natural environment, designed specifically for Pacific SIDS.

(b) **Energy** - fossil fuel dependency has a crippling effect on national budgets and revenues and impacts on key productive sectors in the region such as fisheries, agriculture and tourism. Support is needed from the international community for:

- Immediate diversification in energy options, with a focus on renewable energy;
- A move to appropriate technology in key productive sectors; and
- Coordinated support from donors with respect to appropriate technology transfer.

[17] This provides for: i. long-term stabilization of atmospheric greenhouse gas concentrations at well below 350ppm CO2-equivalent levels; ii. global average surface temperature increases to be limited to well below 1.5° C above pre-industrial levels; iii. global greenhouse gas emissions to peak by 2015 and decline thereafter; iv. reductions in global greenhouse gas emissions by more than 85% below 1990 levels by 2050 v. Annex I parties to the UNFCCC to reduce their collective GHG emissions by more than 45% below 1990 levels by 2020, and more than 95% below 1990 levels by 2050, given their historical responsibility; vi. a significant deviation from business as usual by developing countries through measurable, reportable and verifiable nationally appropriate mitigation actions in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner.

(c) **Natural and environmental disasters -** the 'knock out' effect of natural disasters on economies and the limited ability to recover has been experienced by a number of Pacific SIDS over the last five years. Support from the international community is needed for:

- The establishment of vastly improved early warning systems at regional and national levels;
- Improved affordable insurance mechanisms; and
- Improved post disaster support with financing and reconstruction.

(d) **Development assistance** – Pacific SIDS remain subjected to fragmented, unpredictable and difficult-to-access development assistance. It is critical that Pacific SIDS, donor partners and regional and international organizations work together to enable:

- Better coordination and harmonization of resources from donors;
- Improved coordination amongst regional and international organizations for effective delivery of services and support;
- Pooling of resources where appropriate;
- Improved capacity of Pacific SIDS to access and effectively utilize resources; and
- Longer term commitment of Official Development Assistance (ODA) channeled through direct budgetary support, particularly at the national level.

(e) **National plans and budgets** – despite efforts towards development of effective national sustainable development strategies (NSDS), significant challenges remain in linking them to adequate budgets for effective implementation. This matter requires support from all stakeholders to:

- Improve processes related to the NSDS and link this to improved national fiscal management systems;
- Mainstream Green Growth approaches into national plans, policies and budgets;
- Channel ODA towards national frameworks and areas with a predictable, long-term focus;
- Increase the allocation of domestic resources for environmental protection and adaptation activities and build capacity in sustainable financing by incorporating national sustainable finance plans in NSDS, for example.

(f) **Infrastructure, transport and ICT** – the isolation of Pacific SIDS remains a major impediment to the growth of Pacific economies. The latest World Economic Report noted that Pacific SIDS are twice as isolated as their Caribbean counterparts. Thus, there is a clear need to improve maritime and aviation infrastructure as well as transport facilities in the region. Furthermore, ICT provides a key to unlocking development potential and reducing the distance to markets, education, health care, etc. Support is required from the international community to assist Pacific SIDS in their efforts to:

- Improve connectivity within and between countries of the Pacific and the rest of the world. This involves a combination of appropriate cables, satellite technology and national ICT infrastructure;
- Develop shipping and aviation infrastructure and facilities that meet international standards and ensure the capacity to maintain this; and
- Improve subregional transportation options in both aviation and maritime sectors.

(g) **Least Developed Countries (LDC) graduation** - LDC criteria does not give adequate emphasis to the vulnerabilities of SIDS and their effects on development. Support is needed from the international community to:

- Create more accurate measures of vulnerability; and
- Include an environmental vulnerability indicator in the graduation criteria.

(h) **Fisheries** – whilst significant efforts have been made to increase the revenue from fishing resources in the region, there remains a need for support by the international community to:
- Improve regional capacity to monitor illegal, underreported and unregulated (IUU) fishing; and
- Improve and strengthen nationally owned fishing industries.

Cross cutting issues

11. As identified in the MSI, a number of cross cutting issues underpinning any efforts to address the challenges would include**:**
a) Strengthen enabling environments at the national, regional and international levels. This would include partnerships to support national planning and Green Growth;
b) Simplify access to substantially increased resources;
c) Transfer skills in science, development and technology including through South-South cooperation in the Asia-Pacific region;
d) Develop capacity; and
e) Improve trade, finance development and debt financing through regional cooperation in the Pacific and with Asia.

A. National, regional and international enabling environment

National enabling environment

12. The development and strengthening of NSDS or the like remain critical for integrating decision making systems and processes that foster sustainable development. The main features of an effective NSDS were acknowledged as including:
- Visible long term national strategic vision linked to medium term goals/targets and short term actions;
- Improved links with national budget and fiscal management systems;
- Visible and functional coordination both within and across sectors (i.e. horizontally and vertically);
- Visible and functional national and regional policies for science and technology, the protection of natural resources to support sustainable development and building resilience to the impacts of climate change;
- Streamlined, efficient and effective integration of MDGs and related regional and global commitments;
- Genuine partnerships operating between government, development partners, the private sector, NGOs, and the community at large;
- Recognition of tradition and culture as an asset; and
- Measurable targets and indicators where possible.

13. Linking national priorities with predictable resources remains a challenge for governments and donors at the national level. Pacific Leaders have committed to improve the impact of development assistance and resource use at the national level by seeking better planning, budgeting and donor coordination through the Cairns Compact. There is also a need to adhere national planning systems to the key principles of sustainable development, namely: (i) integration of economic, social and environmental priorities; (ii) wide participation of stakeholders in the development process; (iii) country ownership and commitment; (iv) comprehensive and coordinated policy processes; and (v) targeted resourcing and monitoring.

14. The Pacific SIDS reaffirmed the special role played by women, youth and people with disability in sustainable development. It is important to ensure, through targeted interventions, resources and monitoring and evaluation frameworks, that decision-making processes for sustainable development work towards gender equality and are inclusive of disadvantaged groups. There is a real need to build on Pacific traditions and to strengthen the use of culture and history in the development of strategic planning processes for sustainable development. For

a region with diverse and rich cultures, the challenge is to demonstrate to policymakers in governments, regional institutions, donor agencies and partners that culture is an asset and an integral part of development.

15. Directing aid to those most in need is an important responsibility of governments, given that the vast majority of assistance flows through them. For instance, Samoa is providing free education to primary school children as a response to the economic crises with funding support from Australia and New Zealand.

16. Formal social protection that cushions the effects of crises on the poor is limited in the Pacific with such measures covering less than 20% of the population. Thus, there is a need to consider social protection measures in government planning and budgets along with efforts to strengthen traditional safety nets and social capital.

17. The meeting recognized the urgent need to implement key regional decisions of the Forum at the national level, namely to: (a) safeguard macroeconomic stability; (b) strengthen budgetary management, protecting core services, and assisting the vulnerable; (c) improve competitiveness and broad-based growth and resilience; and (d) strengthen development coordination and effectiveness. However, it was also agreed that such reforms would need to be implemented in the context of inclusive and sustainable development in order to minimize the negative impact on the poor and the marginalized while ensuring the sustainability or growth.

18. It was agreed that implementing Green Growth strategies at the national level would not only attract both donors and private sector investors, it would also ensure sustainable growth. These strategies would include investing in sustainable infrastructure, shifting to renewable energies and investing in efficient technologies to reduce energy costs. Green taxes and budget reforms could promote the demand for eco-efficient products and services. Implementing such reforms not only promotes the creation of green jobs, but they would also help address the root causes of food, fuel and water insecurities as well as climate change.

Regional enabling environment:

19. Regional architecture in the Pacific has evolved as a direct result of capacity constraints in Pacific SIDS. The need to build economies of scale and work collectively to address common priorities and challenges has resulted in the establishment of 11 regional intergovernmental organizations under the Council of Regional Organizations in the Pacific (CROP), all with significant work programs supporting the development of Pacific SIDS in various sectors.

20. The Pacific Plan is now in place providing the overarching framework for achieving the Pacific Leaders Vision of a region of “peace, harmony, security and economic prosperity”. The Cairns Compact was adopted in 2009 to strengthen development outcomes in the region through closer donor coordination and improved national planning and policy environment. Regional partnerships are being developed and implemented in specific areas such as energy, water, agriculture, ICT, transport, human resource development and in policy and planning, including in the support of national sustainable development. These initiatives have been well documented, including in the Draft Pacific Regional Report.

21. The meeting agreed that the Pacific Plan has improved collaboration amongst regional intergovernmental organizations. However, challenges remain and further efforts are needed, not only by subregional organizations, but also by the United Nations regional agencies, NGOs and other regional stakeholders. The challenge at the regional level is to realize the full potential of development assistance through enhanced regional cooperation and integration and international cooperation. At the same time, the meeting highlighted the importance of the contribution of subregional activities, such as the Micronesian Challenge to conserve and preserve the environment and the culture of the people.

22. The meeting also called for improved quality of data in order to establish a basis for clear performance indicators for sustainable development progress in the region. The international and regional organizations were called upon to support the efforts of the Pacific in the area of data collection and management.

23. The meeting agreed to promote regional and international partnerships that support the region's responses to the global economic crises and climate change and noted that some of these would be discussed in the Forum meetings and in the Pacific Conference on the Human Face of the Global Economic Crisis that is being convened on 10-13 February 2010.

24. Links between the Pacific and Asia should be strengthened through ESCAP membership in those areas that are identified here as priorities for the Pacific.

International enabling environment

25. Significant improvements are needed at the international level in order to overcome budgetary limitations in implementing the Barbados Platform for Action and the MSI. Tailored forms of assistance are needed for SIDS in accordance with their special case and limited capacity. Unfortunately, multilateral funding mechanisms have been slow to develop special windows of access for SIDS. The meeting considered this to be a central impediment to the effective implementation of the MSI.

26. Improved coordination and partnerships between international and regional organizations are also needed to avoid duplication and disjointed approaches to assisting SIDS.

B. Access to and the provision of financial resources

27. The meeting noted, with appreciation, the longstanding acknowledgement by the international community of the special case of SIDS and the need to make better use of opportunities offered through financing, trade, and technology transfer including through South-South Cooperation. It was agreed that ODA played an important role in helping Pacific SIDS towards recovery from the current crises and to progress the implementation of the MSI. As such, ODA needs to be made more predictable and better aligned with national priorities and MDGs. It was further noted that funding modalities need to accommodate the special constraints of SIDS and simplify their access and disbursement procedures.

28. The Monterrey Consensus's promise of providing financing for development remains largely unfulfilled. Financial resource flows to the Pacific were relatively high on a per capita basis, however, this is due in part to the high overhead costs in a region populated by small and widely dispersed islands. Financial resource flows to the Pacific are insufficient compared to their level of vulnerabilities and needs[18].

29. There is a need to explore new sources of development assistance. At its London Summit in 2009, the G20 endorsed a six-point plan and made significant financial pledges that target low income countries. Furthermore, the Copenhagen Accord included a pledge of US $30 billion for addressing the impacts of climate change. The meeting therefore added its voice to that of the Asia-Pacific LDCs[19] which have called on the international community to ensure that these pledges for addressing the effects of economic crisis and climate change were additional and above what had already been committed by the Monterrey Consensus.

[18] When expressed as a per capita ratio, aid to the Pacific SIDS appears high by comparison. However, a per capita measure is misleading for a region with a small, widely dispersed population, high overheads, thin routes and small economies.

[19] High-level Asia-Pacific Policy Dialogue on the Brussels Programme of Action for the Least Developed Countries held on 18-20 January 2010, Dhaka, Bangladesh.

30. The meeting participants also agreed there is a need to ensure that these new funds are quickly and fairly disbursed to countries with the greatest needs; that the voices of the SIDS are represented in the governance arrangements; that Pacific SIDS capacity is enhanced to utilize the additional resources; and that the focus on SIDS at the Copenhagen conference on climate change is enhanced as negotiations continue. At the regional level, there is a need to explore facilitation of access to financial resources in Asian countries and financial institutions.

31. The meeting agreed that these outcomes should inform preparations for the United Nations General Assembly (UNGA) high-level review of the Millennium Development Goals, the UNGA high-level session on biodiversity conservation and the Tenth Conference of the Parties to the Convention on Biological Diversity. Further recognizing that this MSI+5 review is taking place during the International Year of Biodiversity, the meeting noted the importance of biodiversity conservation as a cornerstone for further implementation of the Barbados Programme of Action.

Trade and finance

32. Trade plays a significant role in the development of Pacific SIDS. Unfortunately, the Pacific SIDS have remained amongst the most marginalized in international trade and the full use of benefits offered by the Doha Development Agenda has not been possible due to limited supply capabilities and poor infrastructure as well as the restrictive rules contained in existing trade arrangements. There is a need to ensure that much of funds allocated to aid for trade can be accessed by Pacific SIDS. While aid received is high and much appreciated, the meeting noted that the trade deficits of Pacific SIDS vis-à-vis some of the major partners were just as high if not higher. The benefits of foreign investment are also weak in the Pacific and lack sustainability.

D. Science and development and transfer of technology

33. In addition to ongoing efforts in the region to improve science and technology transfer, the meeting agreed to further explore the potential of South-South and triangular Cooperation with Asia on appropriate and affordable technologies and connectivity to facilitate the implementation of the priorities identified in this document. In line with this, the meeting called for the immediate revival and strengthening of SIDSNet to facilitate the transfer of information and knowledge between the Pacific SIDS and the rest of the world.

34. The meeting further emphasized the need for specialized vocational training and education to create knowledge and skills in environmentally sound technologies, to create opportunities for technology transfer and to support local ingenuity.

E. Capacity development

35. Capacity is a cross-cutting issue and continues to be a major challenge in the region, including in the implementation of the Mauritius Strategy. Capacity constraints impact the ability of some Pacific SIDS to successfully access multilateral funding and to implement projects on the ground. Hence, human resource development through capacity building and capacity supplementation is an area that can facilitate the further implementation of the MSI and other development priorities in the Pacific.

36. The meeting underlined the need for specific and targeted capacity development activities for decision and policymakers to understand existing donor programs and to be able to access available funding to support practical field projects as per the national development programs. The meeting also agreed it is necessary to continue the development of technical and vocational training for countries that are keen to access the New Zealand and Australia labour markets.

F. Monitoring and evaluation

37. The timely production and ongoing use of statistics is crucial in ensuring effective responses to the Pacific's vulnerabilities. The draft report makes reference to the importance of databases and other methods of data dissemination for sharing information and knowledge. While the SPC is seen as the main regional agency for statistics, UNESCAP and other international agencies also provide technical assistance to build statistical capacity by providing a forum for the development of statistical methods and standards.

G. Role for the United Nations in the further implementation of the Barbados Programme of Action

38. The meeting recognized the important role played the United Nations in facilitating the participation of Pacific SIDS in global reviews and dialogue and requested that links be strengthened for this purpose between the Pacific, Asia and the international community. The need for the United Nations system to function as a cohesive platform to advocate the needs of vulnerable members of the global community is greater now than ever before. United Nations agencies, funds and programmes need to converge at the intergovernmental level and be a vehicle to advocate, identify and attract resources to help implement the MSI goals and objectives. United Nations intergovernmental processes could be better utilized by agencies and funds for this purpose. The meeting expressed concern that the United Nations was not reporting to members on what they were doing to implement the MSI and other internationally agreed goals.

Annex
Further review of progress

This annex provides a detailed review progress in the region according to the remaining areas identified in the Mauritius Strategy:

(a) Management of wastes
(b) Freshwater resources
(c) Land management, forestry and mining
(d) Tourism
(e) Sustainable capacity development and education for sustainable development

A.1 Management of wastes

Pollution from solid, hazardous/toxic or nuclear wastes, coupled together with a lack of land area, is widely recognised as one of the major threats to sustainable development in Pacific SIDS. To date, little has been achieved. Efforts to maintain healthy societies and to stimulate development may be permanently undermined without measures to combat increasing pollution through adequate mechanisms and appropriate technologies for the safe disposal of these wastes.

Increasing quantities of solid waste, the lack of controls on chemicals imported into the region and the lack of capacity to manage the range of pollutants, are of immediate concern for Pacific SIDS. In addition to land-based activities, the region's coastal and marine resources are threatened by shipwrecks, marine accidents and spills, ships' waste and antifouling paints on vessels. The transboundary nature of much marine pollution requires a coordinated and comprehensive approach to both assessment and control.

Concrete actions taken

A broad range of activities have been implemented to support Pacific SIDS in addressing these problems, with a particular focus on solid, hazardous and maritime waste management, including the development of waste and chemical management strategies, guidelines and legislation and GEF funding proposals to support management of hazardous wastes.

SPREP, with support from Australia, has convened the second **Scientific and Technical Advisory Committee** meeting and the first Steering Committee Meeting for the Pacific Regional Centre for the joint implementation for the **Waigani Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region** (1995) and the related global Basel Convention.

Shipping is a significant source of marine pollution. **Pacific Ocean Pollution Prevention Programme (PACPOL)** is implemented by SPREP with resources from the International Maritime Organisation (IMO). At the global level, recent marine spill incidents and the new threat of invasive marine species continue to highlight the need to address the environmental impacts of shipping. It remains a challenge for Pacific SIDS to meet their obligations under recent IMO legal instruments such as the Convention on Antifouling Systems; the Protocol on Hazardous and Noxious Substances; the Bunkers Convention and most recently the Ballast Water Convention and the Ship Wreck Removal Convention. The activities of PACPOL are also relevant to improving transportation in the region (refer Chapter 3.10).

Model legislation on pollution from shipping has been implemented, providing the enabling legislation for all IMO and other shipping/fishing related international legal instruments. Pacific SIDS have a limited capability for legal drafting, which was a primary factor in their not becoming a party to the international legal instruments or a reason why they have been unable to implement measures to meet their convention obligations. This model legislation has been adapted to suit domestic arrangements and passed in the Cook Islands, Tonga and Tuvalu. Samoa is the latest to have enacted marine pollution legislation in 2008. Fiji and Vanuatu are advanced in their legal drafting process.

Other activities seek to assist Pacific SIDS in meeting their obligations for dealing with marine spills under various international conventions and protocols including the SPREP Pollution Emergencies Protocol, the **Pacific Islands Regional Marine Spill Contingency Plan (PACPLAN)** and **National Marine Spill Contingency Plans (NATPLANs)**. With the exception of Fiji, Niue and Papua New Guinea there are no significant stockpiles of marine spill equipment in Pacific SIDS. SPREP has formulated a Regional Marine Spill Equipment Strategy that recommends what is needed for each country and the associated financing, maintenance, replacement and training requirements. SPREP recently delivered equipment with funding from IMO to Tonga, Samoa and the Cook Islands. Federated States of Micronesia, Marshall Islands and Palau have recently placed orders to purchase oil spill equipment.

A particular concern in the region is that the fishing fleets operating in the region are distant water fleets. These fleets spend extended periods at sea or anchored within lagoons and there remain questions in regard to the disposal of the onboard waste. Pacific SIDS rely on the respective flag states commitment to their obligations to manage this waste. Invasive marine species from shipping in particular ballast water but also hull fouling is a major threat. Bigger, faster ships have increased the potential for the introduction of invasive marine species carried in ballast water. Activities to date within the region have been limited to raising awareness. PACPOL has formulated a Regional Strategy on Shipping Related Invasive Marine Pests in the Pacific that was approved at the 2006 SPREP Meeting.

There are two main types of ports in the region the large commercial ports that are run either by the private sector or port authorities and the smaller social service ports that are not run along commercial lines by the government. PACPOL and the Pacific Countries Ports Association (PCPA) are working together to implement Port Marine Spill Contingency Plans.

The way forward

Major challenges remain, due to a lack of commitment by governments of Pacific SIDS and stakeholders such as the private sector, to prioritise the management of waste or develop and implement plans of action in response to poor waste management. Organisations like SPREP, SOPAC, SPC and donors have been working together with Pacific SIDS to improve "on island" waste management. Future initiatives need to focus on:

(a) Institutional activities, including policy development, capacity building, information exchange, public education and awareness
(b) Development and/or enhancement of waste minimisation activities such as recycling, so as to reduce the quantities of wastes produced at the national level
(c) Improvement and upgrading of existing waste management and disposal systems.

In 2009, leaders of Pacific SIDS recognised the special circumstances pertaining to the continued presence of **radioactive contaminants in the Marshall Islands** and called on the United States to fufill its obligations to provide adequate compensation and safe resettlement of displaced populations, including the full and final restoration to economic productivity of all affected areas. In 2006, Pacific Islands Forum Leaders reiterated their

concerns about the risks of economic loss in an incident involving the shipment of radioactive materials through the Pacific, and restated their view that in the event of losses directly attributable to such an incident, there is an imperative on the shipping states to support the countries suffering those losses. To date, little has been done.

This special case of the **World War II wrecks** warrants revisiting. In September and December 2001 there was a significant marine spill incident at Ulithi Atoll, Yap, Federated States of Micronesia. The spill was from the USS Mississinewa a sunken WWII US Navy tanker. Subsequently SPREP and SOPAC drew up a Regional Strategy to address WWII wrecks in the region. In 2003 SPREP was directed to cease work on this matter and leave it to Pacific SIDS to handle on a bilateral basis with the country owning the wreck. Pacific SIDS raised this issue repeatedly during negotiation of the Mauritius Strategy in 2005 but met with strong opposition from Japan and the US.

A.2 Freshwater resources

The conservation and management of watersheds, groundwater and the collection and storage of rainwater are critical to sustaining human settlement for Pacific SIDS, especially on the smaller islands. The problem of poor supply and quality of freshwater resources, a lack of adequate sanitation, and a limited capacity to deal with these issues has remained a constant theme throughout recent history. At the national level, there are often a multitude of agencies that deal with water. The fragmented management of this resource is compounded with a lack of overarching policy, outdated laws and poor administration capacity.

A framework for action in the Pacific

The period 2006-2009 saw increased support for and intervention in the region's water and sanitation sector. This unprecedented action was guided by a number of strategic policy instruments developed over the last eight years through a series of comprehensive consultations. They include the **Pacific Wastewater Policy and Wastewater Framework for Action** (2001); the **Pacific Regional Action Plan on Sustainable Water Management** (2002) and the **Pacific Framework for Action on Drinking Water Quality and Health** (2005). In 2006, water, sanitation and hygiene challenges facing the region were incorporated into the Pacific Plan.

SOPAC is the lead regional organisation for the management of freshwater resources., but the establishment of the **Pacific Water Partnership on Sustainable Water Management** has ensured a coordinated and strategic approach to water and sanitation activities in the region. The Partnership enables Pacific SIDS and development partners to: identify successful previous activities and therefore improve the sustainability of subsequent interventions; reduce and prevent duplication of activities; link country requirements to development programmes (and vice versa); and augment existing and proposed activities nationally and regionally. A new interactive information portal has been established which will assist Pacific SIDS, the Pacific Water Partnership and SOPAC to share information and news on sustainable water management (www.pacificwater.org). The partnership is a unique model for regional project implementation and members play active roles either through participation in national activities or regional support programmes. Tangible outputs such as newsletters and action matrix have proven useful. Less tangible, but arguably more important function of the Partnership, has been increased project coordination and donor harmonisation.

Concrete actions taken

The predominantly **surface water countries** are Cook Islands, Federated States of Micronesia, Fiji, Palau, Papua New Guinea, Samoa, Solomon Islands and Vanuatu. They have progressed relatively well with installation of rain gauges and stream flow measuring

stations for assessments of major rivers, such as the Rewa flood forecasting and warning system installed in Fiji in late 2008. Due to national capacity constraints, most of these countries have yet to fully implement installation and undertake field activities on a regular basis to enable the measurement of stream flows, drought sequences and floods. Rescue of historic data has ensured good coverage of national hydrological data in a well supported regional database. However, the review of these historic datasets indicates poor data quality.

Support for the **groundwater dependent countries** of Kiribati, Marshall Islands, Nauru, Niue, Tonga and Tuvalu has focused on consolidation of monitoring procedures and developing consistent and reliable datasets. Additional technical support to Niue has allowed a groundwater tracer investigation to be undertaken to benefit both the understanding of groundwater and assist in determining the risk to water supply surface contamination. In Kiribati and the Marshall Islands, the focus has been on developing sustainable monitoring schedules and practices and providing country personnel with tools to collect reliable data and analyse and report on the information gathered.

For **rainwater harvesting dependent countries** - Tuvalu and Nauru - GIS databases have been developed to optimise rainwater capture and storage. A pilot project has been established in two communities in Vava'u, Tonga and based on lessons learned, guidelines have been developed on rainwater harvesting. Outcomes of the demonstration project, including a Manual on Participatory Approaches in Rainwater Harvesting; Guidelines for Rainwater Harvesting Projects and a demonstration video, have been translated into Tongan and Tuvaluan and are being used in different countries. Surveys of domestic infrastructure for rainwater harvesting have been supported in Nauru and Tuvalu. SOPAC became a founding member of a rainwater harvesting partnership, which is led by UNEP, and is liaising with International Rainwater Catchment Systems Association (IRCSA) and UNEP to further promote rainwater harvesting as an option for domestic water supply.

Pacific Hydrological Cycle Observing System (Pacific HYCOS) commenced in 2007 with funds provided through the European Union's Water Facility. The Pacific HYCOS Project is jointly implemented by SOPAC and the World Meteorological Organisation (WMO), together with UNESCO and the Fiji Meteorological Office as associate partners. Pacific HYCOS will assist Pacific SIDS to address a lack of capacity and related infrastructure at the national level for hydro-meteorological data collection and storage. To date, the project has focused on in-country implementation through installation of new technologies and hydrological equipment, training and capacity development; provision of a national hydrological database, GIS system and ongoing technical support. A Pacific HYCOS website (www.pacific-hycos.org) has been established, and information sharing is linked to two other observing systems in operation in the region through the Vai-Pacifika Newsletter.

Water quality monitoring continues to be an important component in most groundwater and rainwater dependent countries, with a real challenge being the need for simple, reliable and robust sampling and analysis. The **Water Quality Monitoring (WQM)** capacity building programme is funded by NZAID and is jointly implemented by SOPAC, WHO and the USP Institute of Applied Sciences. The main objective of the programme is to build sustainable national capacity for monitoring the quality of drinking water, surface water, ground water and coastal waters.

Four pilot countries (Cook Islands, Marshall Islands, Niue, and Vanuatu) have been provided with basic water testing equipment and training on laboratory practice. With the support of the WQM programme, the laboratory of the Marshall Islands Environmental Protection Agency (EPA) was recently certified by laboratory assessors of the United States EPA, under their support programme for EPAs in the North Pacific. Both the Vanuatu Department of Water Resources laboratory and the Niue Department of Health

water laboratory are now well equipped with basic water testing equipment while the Department of Water Works in Cook Islands is in the process of establishing an appropriate laboratory infrastructure through WQM efforts. In addition, an electronic water quality database has been developed to assist countries with better management and analysis of water quality data.

Whilst many Pacific SIDS have made progress towards realising national objectives for sustainable development and achieving the MDG targets, such endeavours have generally been made through sectoral approaches. In doing so, competitive demands of different sectors have become difficult to manage, with increasing stress placed upon water resources as pollution increases and populations continue to grow. The **Integrated Water Resources Management (IWRM)** Programme is a cross-sectoral, multi level approach to water resources management, also providing an entry point to addressing inter-related issues such as health and land management. Two projects comprise the Pacific IWRM Programme: the European Union (EU) Water Facility Funded "IWRM National Planning Programme"; and the GEF-funded "Sustainable Integrated Water Resources and Wastewater Management Project in Pacific Island Countries".

The **IWRM National Planning Programme** will provide policy improvement and institutional support to help Pacific SIDS in the development and delivery of national IWRM plans in line with MDG targets. It will enable all Pacific SIDS to develop policy, strategy and actions for water reform for IWRM with National Water Committees. Countries are at varying stages of consultation and development of policy, strategy and legislation.

SOPAC and the **Pacific Water and Wastes Association (PWWA)** are implementing the NZAID funded **Pacific Water Demand Management (WDM) Programme** in six pilot countries (Cook Islands, Federated States of Micronesia, Marshall Islands, Niue, Solomon Islands, and Vanuatu). The programme aims to improve the capacity for water demand management in Pacific urban water utilities. Support is being provided to establish System Loss Management Plans in each of the pilot countries. The programme assists pilot countries to acquire both "hardware" such as water meters, leak detection equipment or bulk water-saving devices through incentive or rebate schemes, as well as "software" which include training, community education materials and technical expertise.

The **Pacific Drinking Water Safety Planning (DWSP) Programme** is a joint initiative of the World Health Organisation (WHO) and SOPAC. The programme, funded by AusAID and now in its second phase, promotes a risk management approach for the provision of safe water supply through pilots in four member countries (Cook Islands, Palau, Tonga and Vanuatu). The first phase of the programme (2005-2007) developed Drinking Water Safety Plans for individual urban and rural water supplies in all pilot countries. Under the second phase of the programme (2008-2010), associated improvement schedules are being implemented for various water supply systems including: Nuku'alofa as well as rural supplies on Tongatapu, in Tonga; at Luganville and Mele in Vanuatu; at Koror-Airai in Palau; and on Rarotonga, Cook Islands.

The New Zealand Ministry of Health, through its Pacific SIDS assistance programme, is providing additional in-kind support through the mobilisation of drinking water safety planning experts from New Zealand. Furthermore, public awareness programmes on drinking water safety are being conducted by in-country NGOs such as the Tonga Community Development Trust, the Palau Conservation Society, Live and Learn Environmental Education in Vanuatu and the National Environment Services in Cook Islands.

Replication of **Water Safety Planning** is being supported in Fiji, Marshall Islands, Niue, Samoa and the Solomon islands. Guidelines have been developed based on the lessons

learned from the first phase of the DWSP which are guiding further application of the concept throughout the region.

A training course for **wastewater management** has been jointly developed by UNEP's Global Programme for Action for the Protection of the Marine Environment from Land-based Sources of Pollution (GPA/UNEP) and the UNESCO-IHE Institute for Water Education. The wastewater training course addresses one of the Guiding Principles of the Pacific Wastewater Policy and Framework for Action and is being implemented by a consortium of SOPAC, USP-Institute of Applied Sciences, International Oceans Institute, UNESCO-IHE, GPA/UNEP and UN Department of Ocean Affairs and Law of the Sea (UN/DOALOS).

The first series of training courses held in Suva, Guam and Port Moresby have been followed up through additional courses in Kiribati and Tonga. Through course evaluations the training materials have been modified and delivered in Fiji with the Water and Sewerage Department and the Ministry of Health, and in the Cook Islands with the National Environment Service and the Ministry of Health.

The **Pacific Island Climate Update (ICU)** project is implemented by SOPAC, in collaboration with SPREP and the New Zealand National Institute of Water and Atmospheric Research (NIWA) with the support of NZAID. The main output is the publication of a monthly seasonal climate bulletin for the Pacific region with a primary goal of assisting Pacific SIDS to make informed planning and management decisions across of range of sectors. The ICU bulletin is available online. At the 13th Regional Meteorological Services Directors' meeting in Nadi in May 2009, Directors noted the crucial contribution by the ICU in developing and building climate forecasting capacity in the region.

Following the outcomes of the **Pacific Dialogue on Water and Climate**, the Asian Development Bank (ADB) supported the Pacific Resource Centre on Water and Climate to continue improving capacity in water resources management to cope with the impacts of increasing climate variability, by establishing a platform through which policymakers and water resource managers have better access to and make better use of information generated by climatologists and meteorologists. Through the Pacific Resource Centre on Water and Climate, SOPAC and the Caribbean Environmental Health Institute provided a paper on adaptation to climate change in water resources and services in the Caribbean and Pacific SIDS for a session at the 5th World Water Forum.

Under a joint initiative between SOPAC, SPREP and NIWA, and funded by the New Zealand Ministry of Environment (NZMoE), support is being provided to rescue, preserve and **digitise historic climate observations from Pacific SIDS**. Progress to date has been to assess data availability and to provide a listing of daily climatological and rainfall records that are archived in NIWA's climate database, as well as sites for which daily data are still to be archived. The NIWA climate database has 716 Pacific island sites of which there are 524 locations where daily observations of weather and climate are made.

World Water Day activities are coordinated annually by SOPAC and Live and Learn Environmental Education (LLEE), and include the production of organised relevant educational materials for raising awareness on how water connects people and how water management is everybody's responsibility.

As a member of the global Water Supply and Sanitation Collaborative Council (WSSCC), SOPAC has mobilised partners in the region to coordinate activities in the Pacific region on water supply, sanitation and hygiene (WASH) and established the **Pacific WASH Coalition**. Partners include the Foundation of the Peoples of the South Pacific International (FSPI), the Fiji School of Medicine (FSMed), Live and Learn Environmental

Education (LLEE), the World Health Organisation (WHO), the United Nations Children's Fund (UNICEF) and the International Federation of Red Cross (IFRC). Increasing interest in water and sanitation support provided to the region by donors and other organisations resulted in a large number of overlapping interventions. The Coalition meets regularly to ensure that work carried out is well coordinated to optimise outputs and avoid duplication.

An emerging challenge for freshwater resource management by Pacific SIDS will be continuing to secure adequate financial resources into the future.

A.3 Land management, forestry and mining

Traditionally the indigenous people of Pacific SIDS have had, and retain, a strong affinity with their land. Within Pacific SIDS, land ownership is predominantly vested with the customary owners (83%-100%) and is often held communally. The ongoing conflict over land tenure systems is both an impediment to, and provides unique opportunities for, poverty alleviation and sustainable development of land.

Sustainable land use requires the establishment of land tenure and management systems, strategies to combat degradation, protect biodiversity, promote agricultural diversity and manage forests and mining. For most Pacific SIDS communities, even on the smaller atolls, a large proportion of their real income (cash plus non-cash incomes) comes from the land and terrestrial biodiversity, agriculture and forestry. Progress specific to agriculture and rural development is detailed in section 3.8 above.

Mining for aggregates is a major activity for supporting construction of buildings, roads and other infrastructure. The source is often from quarries or from river beds, but for lowlying coastal areas and atolls mining of the beaches and nearshore reef areas is practiced. Mining for metals (gold, copper, nickel), which contribute to exports, is currently confined to Papua New Guinea and Fiji, and Nauru for phosphate.

Land tenure and management systems

Integrated land resource management is being promoted to address land degradation in the Pacific. The approach considers technical, physical, sociological, economic and political issues in making land use decisions to achieve the most efficient and sustainable long-term use of resources. Essentially, it is a package of technologies that, individually or in aggregate, contributes to sustainable land management.

Efforts to raise the capacity of Pacific SIDS to deal with sustainable land management issues within the context of the United Nations Convention to Combat Desertification (UNCCD) continue through the implementation of a **GEF/UNDP Sustainable Land Management Programme**. This programme, coordinated by SPREP, has involved the development of a resource mobilisation strategy to assist with the implementation of sustainable land management programmes and initiatives. Training on the application of the environmental economics toolkit developed by the UNCCD Global Support Unit has assisted countries with decision-making for land use planning. The programme has also provided a mechanism for sharing lessons and best practices on approaches to mainstreaming sustainable land management into national sustainable development strategies and plans.

Land degradation is a problem for many Pacific SIDS, where land resources are the basis for subsistence and commercial economic activities. Regional support is coordinated principally by SPC, SPREP, USP and the FAO Subregional Office for the Pacific Islands in agriculture and forestry, and through SOPAC for mining. These agencies are the core group that forms the **CROP Land Resources Working Group**.

The objectives of the CROP Land Resources Working Group are to work towards an integrated approach to land resource management; share information and seek opportunities for collaboration, and raise the profile of land resources management and community level activities. The working group assists regional organisations and partners to coordinate efforts and combine skills and resources to support Pacific SIDS develop and implement strategies, action plans and programmes pertaining to land resources management.

Land policy reform is increasingly on the agenda in the Pacific region. Papua New Guinea, Vanuatu, Solomon Islands, Samoa, Tonga, Timor Leste and others are all undertaking or considering ways of strengthening their land systems. And the growing push for reform is not coming from governments alone. Customary landowners in many countries recognise that their present and future livelihoods depend on sensible and sustainable management of traditional lands. Land is crucial for food security, shelter, cultural identity, community development, social cohesion and economic wealth. It is central to the growing regional challenges of urbanisation, migration, population growth, resource-related conflicts and - in some cases - political instability and state fragility.

National and local land policy reform efforts in the Pacific have the potential to be supported and complemented by three ongoing regional activities: (i) the Land Management and Conflict Minimisation (LMCM) agenda; (ii) the Pacific Urban Agenda (refer Chapter 2.3); and (iii) the Pacific Land Programme. Regional activities are able to take advantage of economies of scale in service delivery mechanisms and facilitate information-sharing and coordination in relation to land issues that are of common concern to countries and communities in the region. A regional programme has the potential to support a wide range of people who have a strong interest in land issues, including local landholders (including land owners and land users) as well as land practitioners, broadly defined to include professional, technical and administrative personnel as well as civil society and customary groups.

Starting in 2006, PIFS undertook research into the linkages between **land management and conflict minimisation** in Pacific SIDS. The results of the research are contained in a synthesis report published in 2008 called "Improving Access to Customary Land and Maintaining Social Harmony in the Pacific." The Forum also developed twelve Guiding Principles and an Implementation Framework, which were endorsed at the Forum Leaders meeting in 2008. The Secretariat of the Pacific Community (SPC) has the mandate to develop and implement a regional initiative to support national land reform efforts.

In 2008, Australia announced a $54 million budget initiative for a second phase of its **Pacific Land Programme**, which was established in 2006 to support Pacific SIDS strengthen land systems. The first phase of the program involved the development of an analytical report "Making Land Work." This report explores different policy options to reconcile customary land and development and identifies broad principles for how the Australian Government can assist countries in the region. The second phase of the programme will run for an initial four years and, in addition to the existing bilateral programmes in Papua New Guinea, Solomon Islands and Vanuatu, includes plans for a regional initiative.

To ensure productive access to and use of land, national land reform remains a challenge for Pacific SIDS. The approach is both based on and sensitive to continuing customary ownership, and involves facilitating a better interface between indigenous and western science and information to ensure sustainable land use.

Forestry

Forests and trees help protect areas of human settlement and agricultural land by controlling soil and coastal erosion and providing a steady supply of clean water. They protect maritime resources, including coral reefs and mangroves from sedimentation. Forests and trees also contribute to global biodiversity resources due to an extremely high incidence of endemic species, the occurrence of which may be limited to a single island.

With globalisation of the world economy and its markets resulting in increased competition among countries, the **Pacific Agricultural and Forestry Policy Network (PAFPNet)**, launched in 2006, is helping broaden stakeholders' participation in regional and national policy development. The network encourages the participation of community groups, such as women's and youth groups, churches and NGOs. It will accelerate regional harmonisation and rationalisation of standards and grades for trade, and will naturally forge closer alliances and cooperation between the Pacific SIDS and other regions of the world.

Centre for Pacific Crops and Trees (CePaCT) is currently establishing a tree seed facility for the efficient and safe exchange of important tree germplasm in the Pacific. A new action plan for the conservation, management and utilisation of forest genetic resources in the Pacific was endorsed by the 2008 Heads of Agriculture and Forestry Services meeting, which identified poor access to tree germplasm as one of the main constraints to the effective conservation and sustainable use of Pacific SIDS forest resources. Movement and deployment of appropriate tree germplasm will become an increasingly important component of strategies for adapting to climate change, especially for coastal and watershed protection and food security. The establishment of the tree seed facility comes at a time when some wild and improved germplasm for several important tree species are becoming available from various sources in some Pacific SIDS, including recently established plantations, and there is a desire to exchange these between interested countries.

Climate change and land resources

Pacific SIDS need a thorough understanding of the implications of climate change, specifically **Clean Development Mechanism (CDM)** forestry. They also need to learn skills so they can better handle international, regional and national negotiations on CDM forestry. Closer collaboration among Pacific SIDS and relevant agencies and programmes will help enhance understanding of climate change issues and can prepare for the bundling of individual projects necessary to ensure that benefits accrue to small and large countries alike. As a first step, a regional awareness workshop was convened in early 2008.

The SPC/GTZ Regional Programme on **Adaptation to Climate Change in the Pacific Island Region (ACCPIR)** is assisting a number of Pacific SIDS strengthen their capacities to cope with the adverse impacts of climate change and to avoid deforestation as a fundamental element for sustainable management of land based natural resources

A brief on **Climate Change and Food Security in the Pacific**[20] was prepared for Pacific SIDS delegations to the Climate Change meeting in Copenhagen, December 2009, to raise awareness of the imminent impacts of climate change on food security in Pacific SIDS and to urge participants to respond to the challenge associated with the importance of mainstreaming food security in climate-related policies, strategies and programmes. SPC is undertaking to collect, conserve, and make available crop varieties with traits such as drought and salt tolerance in an effort to ensure communities are not put at risk through a

[20] FAO, SPC, USP, and SPREP 2009: Climate Change and Food Security in the Pacific

lack of crops adapted to climate extremes and boost food security in Pacific SIDS in the face of climate change, .

The **Pacific Organic Standard 2008** promotes a holistic approach to addressing key areas of concern for Pacific SIDS including: economic development; environmental protection; improved health; and opportunities for Pacific SIDS smallholder farmers to link into global export markets. The Standard encompasses such pressing issues as climate change and recognition of culture, traditional practice and social justice. It is traditional in the sense that the majority of producers to this day use tried and tested practices handed down from generation to generation that are generally in harmony with the environment and with modern organic principles. It is new in that Pacific SIDS are starting to understand the benefits of certification for obtaining access to external markets, and the need for research and training to develop the sector and generate much needed livelihoods for their people.

Mining

Sand and gravel are an important resource supporting development in Pacific SIDS. These aggregates are required for many activities including construction of private houses, government and commercial buildings, infrastructure (airports, harbours, roads, landfill and reclamation). In some Pacific SIDS sand is traditionally used to cover gravesites. Aggregate mining provides jobs, as well as indirectly supporting others, such as construction workers and sub-contractors. A wide variety of aggregates occur in the Pacific SIDS ranging from hard, compact igneous rocks in volcanic islands (good quality) to highly porous and easily abraded coral detritus and marine organism fragments found in atoll islands (poor quality).

On the higher islands, aggregates are sourced from quarries or from river channels. On atolls, and coastal lowlands of the high islands, beach sand mining and reef flat mining/dredging is common. These activities have been a major cause of coastal erosion in many Pacific SIDS and the detrimental environmental impacts can be significantly reduced by the identification of alternative onshore and/or offshore aggregate sources.

A major challenge is to ensure **sustainability of aggregate mining** and minimising adverse impacts whilst at the same time ensuring affordability. Pacific SIDS need to ensure accurate and timely records are kept of volumes of aggregate mined, sources and costs. Recent work by SOPAC on South Tarawa atoll, Kiribati, has shown no accurate records exist and yet it is well known aggregate mining has been detrimental for at least two decades for the major source has been the beaches and nearby reef flats. Estimates of current prices range from US$50 -100/cubic metre depending on whether aggregate (sand or gravel) is removed from the beaches, dredged from the lagoon or imported from Fiji. With current consumption estimated at 50,000 cubic metres per year and increasing, a dredging operation costing US$2.5 million/year will be feasible and affordable. A suitable site with sufficient resources has been identified on the lagoon floor and careful environmental monitoring should ensure a sustainable operation. Nauru is also examining the feasibility of exporting crushed coral limestone from the mined out phosphate areas for use as aggregate in nearby countries dominated by atoll islands.

Mining of **phosphate** commenced in Nauru and Ocean Island (Banaba, Kiribati) 100 years ago, and still continues in Nauru. Papua New Guinea boasts some world-class gold and copper mines and other metalliferous deposits. New Caledonia has significant nickel deposits and mines. Fiji has a large potential copper deposit at Namosi, as well as one operating gold mine at Vatukoula. The Solomon Islands has been operating its first gold mine, Gold Ridge, and there are promises of further lucrative deposits. The economic significance of mineral exploitation in some Pacific SIDS is reflected in the related export earnings. For example, in Papua New Guinea, the minerals sector (without oil and gas) accounted for 48.5% (1999) and 63.5% (2008) export earnings, the Solomon Islands

about 25% (1999) and 1.4% (2008), and Fiji with estimated 7.4% (1999) and 2.1% (2008).

The significant drop in the **mining sector export** earning in the Solomon Islands is largely due to the closure of Gold Ridge Mine in June 2000. This will certainly change once production resumes in late 2010/early 2011. Similarly for Fiji, the new Vatukoula Gold Mine is struggling to boost production and the gold ounces won in 2008 is less than a third of the 1999 gold production. However, the gold price has a major part to play in offsetting the low production, with an average US$1000/oz in 2009 compared to about US$300/oz in 1999.

Emerging challenges for the sustainable development of land resources

Despite much progress, many challenges still remain and are identified in the SPC Land Resources Division Strategic Plan 2008-2012.

Challenges for land use and planning: Pacific SIDS have identified sound land-use policies and practices, and improvements in soil management, as pivotal requirements in promoting sustainable and integrated management of land resources and ensuring that land is allocated to maximise sustainable benefits. Smaller Pacific SIDS, especially atoll islands, face special difficulties in improving their soils, managing water resources for agriculture and improving food security.

Effective management can help to maintain the productivity of land resources, strengthen food security, safeguard the environment, and increase tourism and revenue. Improved land information, evaluation and geographical information systems (GIS) are required to support informed decision making by policy makers, land users and owners. Improved awareness and education regarding the environmental, social and economic implications of different land-use practices can also facilitate improved management.

Land administration and management in Pacific SIDS are often based on narrow sectoral interests, which can lead to conflict and mismanagement. There is increasing recognition that integrated land-use planning and management are key factors in minimising land-use conflicts.

There is a need to create mechanisms to facilitate the active involvement and participation of communities and people at local level in land management. The formation of land-care groups, where both tenants and landowners can discuss issues that affect their livelihoods, can help to create partnerships and trust among stakeholders and minimise conflict over land.

Challenges for forestry: Despite their crucial role in these ecosystems, the importance of forests is often not well understood or acknowledged by stakeholders, including decision-makers. Pacific SIDS face serious challenges including the conversion of natural forest land for agriculture and other purposes; over exploitation and degradation of forest areas by unregulated commercial logging; land tenure conflicts that hamper long-term oriented management; and lack of effective enforcement of environmental standards, especially in logging operations.

Loss or degradation of forests and trees due to unsustainable harvesting of timber and non-timber products are serious concerns for all Pacific SIDS. Such practices cause significant loss of forest biodiversity with many tree species of economic and traditional value already lost or bordering on extinction. Current international negotiations on climate change have highlighted the role of forests and trees in mitigating the impacts of climate change, both in preventing emissions of carbon dioxide into the atmosphere and sequestering carbon from the atmosphere. There is an urgent need to build the capacities

of Pacific SIDS to take advantage of opportunities for potentially new sources of funding for forestry arising out of climate change mitigation efforts.

Carbon storage in the forests of Pacific SIDS represents a commodity that the international community is willing to pay for as part of international efforts to reduce global emissions. The Clean Development Mechanism (CDM) is an instrument that enables developed countries with emission reduction targets under the Kyoto Protocol to purchase credits from developing countries for projects that generate emissions reductions or carbon storage. Eligible activities in the forestry sector include reforestation but currently avoided deforestation (protection of currently standing forests that might otherwise be logged) is not eligible.

Biofuel projects are also eligible for CDM project funding and represent an opportunity for Pacific SIDS to reduce their carbon emissions and their dependence on imported fossil fuels. However, increasing interest in using food crops for biofuels production needs to be carefully assessed for its potential impact on food security. SPREP continues to provide technical support, capacity building and advice to Pacific SIDS on these issues including REDD, biofuel and CDM opportunities.

Strengthened support is needed for Pacific SIDS' efforts to address these challenges by strengthening their capacity to implement sustainable forest management and develop appropriate forestry and agroforestry policies, strategies and legislation. Support is also needed for capacity building in Pacific SIDS to research and develop new income generating opportunities from the sustainable use of forest and forest-related products.

Challenges for biosecurity and trade facilitation: Rules to gain market access pose considerable challenges for Pacific SIDS. The most immediate challenge facing the region is the ability of Pacific SIDS to facilitate trade within the region, as envisioned in PICTA.

A major barrier to trade facilitation is that the legislative framework under which most biosecurity (i.e. quarantine) services operate is often archaic and requires modification to cover functions required by various international treaties and conventions. Operating procedures of most biosecurity services either need to be developed or revised. Effective coordination mechanisms need to be developed between agencies responsible for the various areas of biosecurity (animal, plant, aquatic and environment) at national, regional and international levels.

Increased movement of people, goods and services in the region poses important challenges for biosecurity services in the Pacific SIDS. This in turn increases the potential introduction of invasive species, pests and diseases to the islands and thus threatens their agriculture, environment and livelihoods. Pacific SIDS must ensure protection of their borders to minimise and/or mitigate potential risks and facilitate the movement of people, goods and services with the limited resources available. It is also critical that Pacific SIDS are prepared to deal with incursions by invasive species, pests or diseases. The main concern for agriculture trade and trade facilitation is the lack of capacity of Pacific SIDS to operate within an international trading regime based on global rules. Building the capacity and ability to influence trade (facilitation) or participate in the rulemaking process, together with capacity to implement is needed.

Challenges for mining: Political will and national capacity to implement legislation and policy for the sustainable exploration of mineral resources is lacking. Often this can result in missed opportunities and under-utilisation of resources. It can also allow the private sector to set its own standards, which may result in long-term environmental impacts. For example, poor extraction management often results in watershed contamination, environmental degradation and loss of biodiversity. These problems are particularly acute in the coastal zones of small islands.

Confusion and uncertainty confound mining companies in the absence of enforceable legislative policy and mineral protocol. Policies are needed for occupational health and safety and environmental management, government authorisations, fiscal and compensation requirements. Uncertainty is a cost to the private sector and the resultant 'risk' is a disincentive to investment in country.

Recommendations for addressing challenges in the mining and minerals sector include:

(a) Improve national capacity for policy and legislation formulation, negotiations with transnational corporations and evaluation of mineral sector projects.

(b) Ensure full cost-benefit analysis and environmental impact assessment (EIA) are undertaken, taking into account social and environmental costs and risks, before the grant of any mining licence.

(c) Establish fair and transparent monetary and non-monetary compensation systems that fully compensate all natural resource loss (including water, forest, and land resources), environmental damage, disamenity costs, recreational loss, and socio-cultural effects.

(d) Progress, legislate, and manage national mineral policy frameworks and environmental management plans. Fiscal policy should include a taxation and incentive scheme that provides a competitive environment for investors, whilst ensuring fair return to the country for the exploitation of a non-renewable resource.

(e) Develop institutional capacity in Pacific SIDS to deal with mining tenement issues, mine company selection, closure, institutional weaknesses, environmental issues related to mining and raising of land 'owner' awareness.

(f) Develop national and regional mineral databases, assess and evaluate mineral and aggregate resources.

(g) Build sustainable development capacity in the mineral sector through training, promotion and raising of community awareness.

(h) Increase stakeholder participation in all forms of discussions/negotiations regarding access to and exploitation of mineral sector projects.

A.4 Tourism

The effective management of tourism resources provides many opportunities for sustainable development. The positive effects of tourism growth in the Pacific can be used to help diversify the economic base and contribute directly to poverty alleviation, reducing disparities among groups. Tourism also provides much-needed opportunities in areas away from main commercial centres through the revitalization of community based arts and traditions, new business opportunities for small and medium-sized enterprises and the development of infrastructure.

Sustainable tourism development is a special challenge for island destinations. The narrow economic base of most islands usually means that there is a high level of dependence on outside sources for goods, services, inputs and infrastructure related to the tourism industry. Some stakeholders may see tourism as the universal economic development solution. However, all stakeholders must see to it that local island culture and ways of life are safeguarded and the environment protected. The active participation of local communities in tourism policymaking, planning, management and monitoring can help to ensure support at the local level and appropriate distribution of the socio-economic benefits, as well as ensuring that negative impacts are minimized and monitored.

By 2007, there were just over 1.3 million visitors to the region, and while more than 40% went to Fiji, the industry was also growing in other countries in the region. These figures seem impressive, but they need to be placed in a wider context. First, between 2000 and 2008, the annual increase in tourism arrivals in Oceania was only 1.8%, less than most other regions. Secondly, from 1985 to 2008, the growth of tourism in Pacific SIDS (141%) was lower than the global average (177.1%) or for Oceania as a whole, which includes Guam, and Palau. Thirdly, across Pacific SIDS there have been considerable differences in tourism fortunes. While Fiji and French Polynesia remain the most popular destinations, the latter's growth rate has been poor and Fiji's tourism development has been stunted by a series of coups and frequent political unrest. By contrast, the Cook Islands, Samoa, and Vanuatu are becoming increasingly popular destinations. Indeed, even during 2009, when global tourism was hit by the global financial crisis, along with Solomon Islands and Tonga, they have bucked regional and international trends by increasing their tourism arrivals.

In support of tourism, organisations such as ***south-pacific.travel*** in collaboration with the private sector and member governments continue to support the creation of a tourism infrastructure. Work has focused on continuing to develop the region's 'brand name' and to assist members break into new markets.

A **Regional Cruise Strategy** was completed in 2008 and is now being promoted. A noticeable benefit has been the increase in cruise liner visits to Pacific SIDS which has seen for example, visits to Suva increasing from 40 to 80 cruise liners over 2007 and 2008 and visits to Port Vila increasing from 80 to 120 cruise liners for the same period.

Tourists are becoming increasingly aware of the environmental costs of long distance travel and the links to climate change. Impacts on the tourism industry are significant with the potential to reduce the number of visitors, but also opening up new possibilities as the demand for ecotourism options increases. In response to these changing demands, the region has developed the South Pacific Action Strategy for Green Tourism (October 2007) which outlines key strategies for communication and engagement, mitigation and adaptation.

The way forward

In practice, the main challenge for the government, private sector, and policy makers in Pacific SIDS is to plan and **manage tourism development in order to ensure sustainability**. Stakeholders with divergent interests must be brought together to reach a common understanding of the balance between present and future benefits, the negative impacts and how to minimize them, and the interrelationship between human activities and the natural environment.

There is a need to **develop a knowledge base** on the contribution of the different kinds of tourism, (for example cruise ship, ecotourism, five-star resorts, backpacking, dive tourism). This should not only be a subject for market research, but much more generally of research to increase overall understanding how they contribute to the sustainable development of Pacific SIDS. At present, this kind of information is seriously lacking.

There is a need to **make careers in tourism attractive**, so that island nationals get involved at all levels. At present the tourism industry in the region appears largely disinterested in providing valid career paths for local graduates. USP is attempting to create such a career path with its new Bachelor of Commerce in Hotel Management, but the test will come when the industry is asked to deliver on its year's placement for all students in this programme.

Other challenges include:

(a) Increasing the value of and understanding of the economic contribution, retention and equal distribution of the tourist dollar

(b) Increasing resource owners' participation in the tourism industry, including in education and training programmes

(c) Promoting sustainable ecotourism development and public awareness at all levels of the society

A.5 Sustainable capacity development and education for sustainable development

Pacific SIDS continue to require support to address challenges faced in building capacity in policy and strategy formulation and implementation. Attempts to address these challenges are being made through an integrated approach involving NGOs, the private sector and government. These are highlighted throughout this report under each sector / theme.

Education is a key enabler of sustainable development in the Pacific region. In 2009, a comprehensive review of the **Forum Basic Education Action Plan** was completed. The review revealed that its main delivery vehicle, The PRIDE Project (Pacific Regional Initiatives for the Delivery of Basic Education), has had a positive impact at the national level. The findings of the Review were endorsed by Forum Education Ministers together with the newly developed **Pacific Education Development Framework** and work to harmonise regional standards. The new framework will replace the Forum Basic Education Action Plan and target two areas: education for all; and training for employment to better assist economic growth. Work to harmonise regional standards will target teachers and eventually principals. This will be supported by ongoing efforts to develop regional standards for literacy, numeracy and life-skills utilising the expertise of organisations such as SPBEA, UNESCO, UNICEF and USP.

Several achievements over recent years have been reported:

(a) The South Pacific Board for Educational Assessment (SPBEA) progressed work on strengthening standards and a **regional qualifications register**.

(b) PIFS completed a mapping exercise as a first step in efforts to standardise regional training programmes in nursing.

(c) The **Pacific Regional Initiatives for the Delivery of basic Education (PRIDE)** Project implemented by the University of the South Pacific (USP) continued to support Pacific SIDS especially with strategic planning in education.

(d) Australia progressed the implementation of the **Australia-Pacific Technical College** while PIFS completed a regional study on technical and vocational education and training.

Enhancing youth involvement and increased participation in sport has seen modest but solid progress across the respective initiatives. The work of USP in the area of sport has seen the awarding of a number of all-rounder sports scholarships in the reporting period and growing private sector involvement through sponsorship of sporting initiatives.
SPC continues to lead in support for youth under the Pacific Plan having completed a region-wide mapping exercise on youth activities. This is complemented by the work of a number of other stakeholders including the Honiara-based Commonwealth Youth Programme and the ongoing work of UNICEF around the region.

Education initiatives related to particular sectors and sustainable development priorities are highlighted throughout this report.