Globalization, Human Dimensions and Environmental Change in the South Pacific Island Nations

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Abstract

The process of globalization is having a far-reaching impact on small island states in the South Pacific Island Nations (SPINs). Trade liberalization and the structural changes to the economies are having a significant impact on the livelihoods of rural and poor people in these countries. It is also affecting the environment in a number of ways. The human dimension of global environmental change is a major issue at the global level. However, at the local level, the human-induced environmental degradation is a matter for concern. The SPINs should seriously consider the human-induced environmental degradation and include them in their environmental policies.

Keywords: globalization, human dimensions, South Pacific Island Nations

Introduction

Globalization presents many challenges and problems to the small island states of the South Pacific as it does to many other smaller developing countries around the world. Trade liberalization is the main cornerstone of the global economic integration strategy. For small island nations in the South Pacific, the challenge is to position themselves in the global economic environment and reap the benefits of free trade. However, together with trade liberalization and the issue of how countries could benefit from globalization, there is increasing concern about the impact of globalization on the environment and how the human dimensions of environmental change is ignored in the whole process. This article discusses some of the concerns regarding the process of globalization and its impact on the environment. It also discusses the human dimensions of the process of globalization and environmental change and how this may affect the environment at the national and local levels in the South Pacific Island nations (SPINs). At a regional level, there is too much concern about regional issues and international issues and some of the issues regarding environmental damage at the local level and through human activities are being neglected. Regional organizations such as the Forum Secretariat and the South Pacific Regional Environment Programme (SPREP) are too concerned with global and regional environmental changes such as climate change, international whaling issues and global warming, that some of the immediate issues are left behind. Particularly important are the anthropogenic causes of environmental degradation and how people perceive their contribution to the management and conservation of the environment at the local level. The human dimensions of environmental degradation needs to be taken into account and policies designed must take into account the activities of people at the local level.

SPINs are a diverse group of countries with diverse cultures, language and level of economic development. The way in which globalization and trade liberalization may

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affect each one of them may be different. However, what is evident is that all them seem to embrace the idea that free trade and globalization as a whole could be beneficial to them. This is evident from the recent policy directions adopted by most of them. The 14 members of the South Pacific Forum Island countries have adopted two agreements that allow them to achieve further trade integration amongst themselves. ² The first agreement is the Pacific Islands Countries Trade Agreement (PICTA) and the other one is the Pacific Agreement on Closer Economic Relations (PACER). The PICTA is a free trade agreement amongst the 14 Forum Island Countries and it provides a timetable for the reduction of tariff rates in 8 years for the bigger countries and 10 years for the smaller ones. The PACER provides a broad framework for trade and economic cooperation amongst all the forum member countries including Australia and New Zealand. Table 1 shows some of the basic indicators of the selected SPINs.

Table 1. Basic economic indicators of selected Pacific Island Nations.

	GDP (\$)	GDP (%)	Population growth (%)
Cook Islands	2,140	4.1	1.1
	(1993)		
Fiji	2,440	2.1	2.0
	(1995)		
Kiribati	920	0.2	2.3
	(1995)	(1981-1995)	
Marshall Islands	n.	5.9	4.0
Nauru	n.a.	n.a.	2.9
Papua New Guinea	1,160	3.7	2.3
•	(1995)		
Samoa	1,120	2.0	0.5
	(1995)	(1990-1996)	
Solomon Islands	910	4.2	3.4
	(1995)		
Tonga	1,630	2.6	0.5
-	(1995)	(1991-1996)	
Tuvalu	n.a.	3.6	1.7
		(1990-1996)	
Vanuatu	1,200	2.1	2.8
	(1995)		

Source. Asian Development Bank, 1998; pp.6.

There is a strong belief amongst the policy makers that these agreements would help achieve economic growth levels which would be necessary to reduce poverty,

² The 14 Forum Island Countries are Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Nauru, Niue, Palau, Papua New Guinea, and Republic of the Marshall Islands, Samoa, Solomons Islands, Tonga, Tuvalu and Vanuatu. The remaining two members are Australia and New Zealand, the two developed countries. Both Australia and New Zealand are major donors to South Pacific Island Nations

unemployment and other social ills confronting many of the islands. The SPINs have had low levels of economic growth in the last two decades.

Many of the SPINs have experienced rapid population growth compared to some of the more advanced developing countries. The level of economic growth has not kept pace with the per capita income growth in most of the countries and this has put further stress on government resources. Majority of the population still live in the rural areas, most of them lack basic sanitation, and access to drinking water is always a problem (see Table 2). However, in the last decade there has been an exodus of people to the urban areas. This has led to rapid levels of urbanization and brought to the forefront the emergence of many other urban-based social ills.

Table 2. Population growth and distribution in the SPINS.

SPINs	Annual population			Population (%)			
	growth rates(%)		1990		2001		
	1985-	1995-	2000-	Urban	Rural	Urban	Rural
	1990	2000	2001				
Cook Islands	-0.2	- 1.6	1.7	57.9	42.1	59.1	40.9
Fiji Islands	1.1	1.0	2.7	41.6	58.4	50.2	49.8
Kiribati	2.3	2.3	2.2	34.7	65.3	38.6	61.4
Marshall	2.6	2.1	3.6	64.4	35.6	66.0	34.0
Islands							
Micronesia,	2.8	0.2	2.0	26.3	73.7	28.6	71.4
Fed States of							
Nauru	2.0	2.4	2.1	100.0	0.0	100.0	0.0
Papua New	2.1	4.9	-	15.0	85.0	17.6	82.4
Guinea							
Samoa	0.1	0.8	2.0	21.3	78.8	22.3	77.7
Solomon	3.6	3.7	3.7	14.5	85.5	20.2	79.8
Islands							
Tonga	0.5	0.3	0.3	31.3	68.8	33.0	67.0
Tuvalu	1.9	1.9	2.0	44.4	55.6	53.2	46.8
Vanuatu	2.7	2.6	2.7	18.7	81.3	22.1	77.9

Source. Asian Development Bank, 2002.

Other features of some of the FICs include declining levels of development finance as overseas development assistance (ODS) has been reduced over the years. This has affected the capacity of many of the governments to improve their infrastructure to enhance economic development as well as better deliver public services to the people (PRASAD, 2002). Table 3 shows the Human Development Index. Most of the FICs also have very low levels of economic growth and this is not sustainable in the long run.

Table 3. Human development index for Pacific Island Countries, 1998.

Adult	Combined	Life	GDP	HDI	Global
literacy	gross	expectancy	per		HDI
(%)	enrolment	at birth	capita		Rank*
	(%)		(US\$)		
91.4	83.4	69.0	8,027	0.861	46
93.2	84.8	72.0	4,947	0.822	62
97.0	83.6	74.0	3,714	0.774	70
92.9	81.3	66.5	2,684	0.667	101
95.0	79.5	58.2	3,450	0.663	103
99.0	83.3	68.0	1,868	0.647	107
95.7	85.7	66.6	1,060	0.590	117
95.0	74.0	67.0	1,157	0.583	118
71.3	74.4	65.7	2,070	0.569	120
74.4	71.7	65.0	1,182	0.563	121
92.2	67.8	61.6	702	0.515	129
33.5	57.4	65.8	1,231	0.425	140
30.3	34.7	64.7	926	0.371	147
28.2	28.6	54.0	1,196	0.314	164
91.0	88.3	69.0	n.a.	n.a.	n.a.
	1iteracy (%) 91.4 93.2 97.0 92.9 95.0 99.0 71.3 74.4 92.2 33.5 30.3	literacy (%) gross enrolment (%) 91.4 83.4 93.2 84.8 97.0 83.6 92.9 81.3 95.0 79.5 99.0 83.3 95.7 85.7 95.0 74.0 71.3 74.4 74.4 71.7 92.2 67.8 33.5 57.4 30.3 34.7 28.2 28.6	literacy (%) gross enrolment (%) expectancy at birth 91.4 83.4 69.0 93.2 84.8 72.0 97.0 83.6 74.0 92.9 81.3 66.5 95.0 79.5 58.2 99.0 83.3 68.0 95.7 85.7 66.6 95.0 74.0 67.0 71.3 74.4 65.7 74.4 71.7 65.0 92.2 67.8 61.6 33.5 57.4 65.8 30.3 34.7 64.7 28.2 28.6 54.0	literacy (%) gross enrolment (%) expectancy at birth (US\$) per capita (US\$) 91.4 83.4 69.0 8,027 93.2 84.8 72.0 4,947 97.0 83.6 74.0 3,714 92.9 81.3 66.5 2,684 95.0 79.5 58.2 3,450 99.0 83.3 68.0 1,868 95.7 85.7 66.6 1,060 95.0 74.0 67.0 1,157 71.3 74.4 65.7 2,070 74.4 71.7 65.0 1,182 92.2 67.8 61.6 702 33.5 57.4 65.8 1,231 30.3 34.7 64.7 926 28.2 28.6 54.0 1,196	literacy (%) gross enrolment (%) expectancy at birth capita (US\$) per capita (US\$) 91.4 83.4 69.0 8,027 0.861 93.2 84.8 72.0 4,947 0.822 97.0 83.6 74.0 3,714 0.774 92.9 81.3 66.5 2,684 0.667 95.0 79.5 58.2 3,450 0.663 99.0 83.3 68.0 1,868 0.647 95.7 85.7 66.6 1,060 0.590 95.0 74.0 67.0 1,157 0.583 71.3 74.4 65.7 2,070 0.569 74.4 71.7 65.0 1,182 0.563 92.2 67.8 61.6 702 0.515 33.5 57.4 65.8 1,231 0.425 30.3 34.7 64.7 926 0.371 28.2 28.6 54.0 1,196 0.314

Source. Pacific human development report (1999. 13).

The environmental problems in the SPINs could be categorized into two broad areas of externally induced and internally induced (UNITED NATIOS: 2000). The externally induced environmental problems include the occurrences of cyclones, flooding, and rise in the sea level because of global warming, drought, landslides and volcanic eruptions. Cyclones are common occurrences in many of the SPINs and often the economic and environmental damage they cause is substantial. For example, after cyclone Uma in 1987, Vanuatu experienced a negative growth rate of about 9 percent for several years and in Samoa cyclones Ofa and Val caused negative economic growth rate of 8, 28, and 4 percent in 1990, 1991, 1992 respectively. Drought and flooding seriously affect the bigger SPINs. The 1987 drought in Fiji had a drastic impact on the economy. Active volcanoes are always a threat to Papua New Guinea and Vanuatu and they cause substantial damage to agricultural crops like coconut and cocoa.

Cyclones and droughts are extreme weather conditions which are occurring more frequently and are causing more damage to the economy and the environment. Extreme events probably generated by or caused by ENSO and El Nino effects causes a lot natural disasters for Fiji and other South Pacific countries. These natural disasters not only cause damage to the tourism industry but also cause the loss of human lives. In the case of Fiji for example, Table 4 shows the number of death from natural disasters and table 5 shows the cost of natural disasters in Fiji.

Table 4 No	of deaths	arising from	natural	disasters
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Year	No of Deaths
1991-1999	31
1981-1990	49
1971-1980	143
1961-1970	14

Source: DISMAC, Ministry of Regional Development and Multi-Ethnic Affairs, Government Buildings, Suva, Fiji.

Internally and human-induced environmental problems include land degradation and soil erosion, deforestation, pollution from extractive industries, air pollution especially in the bigger countries and in the urban centres such as Suva in Fiji. Water pollution is caused by lack of proper waste disposal facilities. This is a common problem in Fiji and other bigger island nations. Other human induced environmental problems include solid waste and hazardous waste disposal, loss of coastal resources and litter.

Table 5. Cost of recent natural disasters in Fiji (F\$m).

Natural Disaster	Loss of	Agriculture	Others	Total	% of	% of GDP
	Capital	\mathcal{E}			Gov't	
	Stock				Exp	
Flash Flood 1999	5.3	1.7	1.1	8.1	0.8	0.2
Drought 1997/98	0	125.0	19.8	144.8	11.7	5.3
Gale 'June' 1997	n.a.	n.a.	n.a.	1.0	0.09	0.03
Hurricane 'Kina' 1992/93	n.a.	64.0	n.a.	154.0	18.8	7.1
Cyclone 'Gavin' 1985	19.5	13.9	0.9	34.3	8.3	2.9
Hurricane 'Eric' 1985	n.a.	n.a.	n.a.	40.0	9.7	3.4
Hurricane 'Oscar' 1983	n.a.	n.a.	n.a.	80.0	21.8	7.8

Source: DISMAC, Ministry of Regional Development and Multi-Ethnic Affairs, Government Buildings, Suva, Fiji.

Globalization and Environment: Some broader issues

The term globalization has acquired new meanings and definitions in the last decade. However, there is no consensus on its impact on various political, social, economic and environmental institutions in many of the developing countries. Yet, there are proponents and opponents of this process in most of the countries. In the SPINs the same is evident, those that argue for globalization, see this process as a panacea for their economic, social and environmental ills while those who oppose it view it as damaging to the social and environmental fabric of the small island economies. It is therefore

necessary to provide a brief over-view of the debate about the process of globalization before discussing its specific implications to the SPINs.

MUNCK (2002: 51) says, "globalisation whether viewed as a panacea for the new century or demonized as the source of all our evils, has become the new common sense for our era". The process of globalization is defined as the worldwide spread of modern technologies of production and communication. This has aided the liberalization of trade, finance and investment. The agents of the spread of technologies have largely been the transnational corporations supported by the international organizations such as the IMF, the World Bank, WTO and other multi-lateral agencies and groupings such as the G7 and OECD and regional lending institutions such as the Asian Development Bank and the African Development Bank.

The process of structural adjustment was started after the debt crisis and the poor economic performance of the late 1970s and early 1980s. Developed countries led by Margaret Thatcher of Britain and Ronald Reagan of the US were major proponents of the market mechanism being the guiding principle of economic policy making. Since then many of the developing countries have been subjected to structural adjustment programmes of the IMF and the World Bank. These invariably included export-oriented growth, more market and less state social policy, free trade, deregulation, labour market flexibility, privatization, priority to keep inflation low and many other austerity measures to cut government expenditure (WENT, 2000). WENT (2000) provides an interesting account of the new issues in the process of globalization and some of the downsides of this. First, Went points out that global markets have increased; there are no longer the concepts of national markets. Oman (1997: 15) for example points that "In little more than a decade most of the non-OECD world, comprising four-fifths of the world's population, has moved to privatize, liberalize and deregulate, and is moving to compete actively on world markets". WENT (2000) further points out that the multinational companies continue to exert more and more influence in the production and distributions of goods worldwide. There is also an increase in the problems of governance as national states are increasingly becoming weaker and less effective. This has largely been due to the globalization of macro-economic policies. Economic policies and institutions must now be geared towards the international trading and investment regimes. Governments in the developing world increasingly find it difficult to isolate their macro-economic policies from the international financial markets.

Some of components of globalization include increased trade but as WENT (2000) points out very clearly most of this increase has been restricted to the developed countries and selected developing countries in the East Asian and Latin American region. Apart from trade, there has been an increasing rate of international mergers and takeovers by multinational firms and financial globalization through increased flow of capital. The technological and communication revolution has given further impetus to the whole process of globalization.

What has been the impact of these recent trends in the process of globalization? Again, Went (2000) along with others such as AKYUZ (2002), DIERCKXSENS (1998), GRAY (1998), GAFFIN and MORRISEY (1992), MICKLETHWAIT and WOOLDRIDGE (2000), PATOMAKI (2001), SHUTT (1998), KOVEL (2002) and MacEWAN (1999) has provided some of the down sides of globalization. These are important considerations that need to be understood by developing countries such as the

SPINs if they are to manage their economic development prospects in a sustainable manner.

The down sides of globalization include many issues. First, the financial markets dictate what happens and how it happens. According to WENT (2000), financial liberalization does not mean that it is easy to attract investment. In addition, international organizations such as the IMF actually dictate what developing countries should do in terms of their government budgets and foreign debt. Other important downsides of globalization in many of the developing countries are its deleterious impacts on the environment, employment and the state of poverty. While there may have been economic growth in some of the developing countries, the level of income inequality and social inequality has increased. Only a few countries in the South East Asian region have managed to reduce poverty through fast economic growth.

With respect to trade liberalization and environment, there are strong proponents of the view that free trade always lead to improvement in the quality of the environment. BHAGWATI (1993), one of the strongest proponents of the view that trade liberalization is beneficial to environment argues that the beneficiaries of higher income through trade will demand better quality environment. So in his view, globalization and through trade liberalization will be beneficial to the conservation and management of the environment. STAGL (2002:177) further provides three arguments why trade liberalization would be beneficial for the environment. First, he points out that 'higher income generated through international trade corresponds to higher preference for environmental quality. He believes that the rich will demand better environment and the poor generate little demand for environmental quality. The second argument provided by STAGL (2002: 179) is that 'higher income generated through international trade corresponds to lesspolluting production patterns' and the third argument is that 'international trade enhances the transfer of cleaner technology. Many of the SPINs have embraced structural adjustment policies and are fast restructuring their economies to conform to international requirements of trade and investment rules. The question however, that ought to be asked is, has these reforms led to sustained levels of economic growth in these countries. The answer is no. While there are various other factors such as political instability and lack of appropriate institutions, which may have hindered the growth prospects, the truth of the matter, is that many of the SPINs have not benefited from global trading rules. However, it is believed that SPINs are just beginning to open trade and in the long run improved export performance will lead to higher levels of economic growth.

Human Dimensions of Environmental Change in the SPINs

Research into the human dimensions of global environmental change is now being undertaken in many of the countries and is driven by the International Human Dimensions Programme (IHDP). According to the US Committee on Human Dimensions Research (1999:1) "the human causes of global change has shown that socio-economic uncertainties dominate biophysical uncertainties in climate impacts and possibly also in other impacts of global change. They further point out that "human activities such as deforestation and energy consumption are determined by population

growth, economic and technological development, cultural forces, values and beliefs, institutions and policies and the interaction amongst all these things".

In most of the SPINs, the interaction of the population with land, forestry and fisheries determine how they perceive these resources and how through their own activities they change them for better or worse. Nevertheless, before we discuss each of the resources, it is important to point out that the impact of global activities on these resources. Most the SPINs have been the victims of exploitation of resources by multinational companies (PRASAD, 2001). Multinational corporations are the greatest forces in the global trading systems and they are heavily involved in the exploitation of natural resources. In most cases, they are the cause of the destruction of large forest and fisheries areas (The Group of Green Economists, 1992). The multinational corporations have been attracted to SPINs because of their capital investment in the exploitation of these resources. Most of the SPINs do not have the capital to invest in the extraction of fisheries, forestry and mining resources. Initial investments in the extraction of these resources are very capital intensive and SPINs do not have adequate funds to undertake these investments on their own.

The mining sector has been important in Nauru, Kiribati, and Papua New Guinea and in the case of gold mining in Fiji. The phosphate mining in Nauru has virtually left the island nation destructed and it is currently undergoing a lot of financial and environmental pain. Transnational mining companies are very powerful and they have a profound impact on the environments and communities in which they operate. They drive down the environment, and cause social, political and economic changes in those countries. The experience of large-scale mining such as the Ok Tedi Mine on the Island of Bougainville is a good example of the kind of social, political, economic and environmental chaos that could be created if environmental safeguards are not put in place (HAVINI and JOHNS, 2002).

Forestry and fisheries resources have been exploited without adequate rents being paid to the owners of the resources. Multinational corporations are very active in these two sectors as well. Tuna processing in most of the SPINs are in the hands of the multinational or foreign owned companies. In the case of Fiji, the government has withdrawn from tuna processing and has allowed a fully privately owned venture to process tuna for exports.

Fisheries, subsistence and coastal resource management

Fisheries for subsistence at the local level are vital for all the SPINs. Majority of the population in the SPINs depend on coastal fisheries for income as well as food and their dietary requirements. The depletion of coastal fisheries resources are having a huge impact on the dietary and food availability for the coastal communities. This dimension is normally overlooked in many of the regional and international environmental negotiations and policies and programmes of governments. Table 6 shows the extent of subsistence fisheries harvest that takes place in some of the SPINs.

Table 6. Subsistence fisheries in selected SPINs, 1	1992.	
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Country	Volume	Value to consumer	Foreign exchange
	(1000 mt)	(US\$mill.)	savings
			(US\$ mill)
Fiji	16.4	6.3	8.2
Solomon	12.7	7.8	7.7
Islands			
Vanuatu	3.1	2.2	1.3
Samoa	3.1	0.5	2.6
Total	35.2	16.8	19.8

Source: World Bank (1996: 48)

The human dimensions of the environmental impact of the fisheries resources are reflected in the increasing levels of marine pollution in many of the SPINs. Coastal fisheries environments especially close to the urban areas have been degraded and in some cases totally destroyed. This is due to the increasing numbers of people who are moving to the urban areas. Most of the SPINs who are members of the SPREP have highlighted the problem of marine pollution and they also included coastal degradation, loss of biodiversity, mangrove destruction, beach mining, over fishing and destructive fishing. As more and more people fish for subsistence, the volume of the catch that is available is getting smaller and smaller. When this happens, methods that are more destructive are used to catch them and the vicious cycle continues in many of the islands. Despite legislations, destructive practices continue to be used in Fiji, Marshalls Islands, and America Samoa, Western Samoa and Federated States of Micronesia (ADAMS, 1996). There are two issues involved in the management of the fisheries resources at the local level. One, there is a belief that traditional practices are sustainable and therefore it is not a matter of concern about over fishing and environmental degradation. However, this is not true, in many of the SPINs; traditional fishing habits have given way to more modern and destructive methods. This is because there are no written down traditional methods of fishing and knowledge, instead it no longer exists in many of the countries. Commercial pressures and pressures to provide food defy all traditional forms of knowledge and methods even if it existed and even if people had the knowledge. In this respect, policies and programmes would have to be designed so that people's economic needs are also addressed first before they are asked to conserve resources. Regulations in these respects do not work in many of the cases; however, appropriate economic incentives may work.

Forestry Resources and Land Degradation

Forestry resources are also vital for the larger SPINs such as Fiji, Papua New Guinea, Solomon Islands, Vanuatu and Samoa. This sector also attracts significant foreign investment and export of logs is a significant source of government revenue in the Solomon Islands and Vanuatu. The multinational corporations are the key players in the exploitation of these resources. In most cases the windfall profits they make is too high and what the owners of these resources get is very insignificant. In the case of Fiji, it is estimated that the landowners receive only 16 percent of the windfall profits made by the logging companies (PRASAD, 1998).

Land degradation and soil erosion is another problem in many of the SPINs which is caused by human activities and which needs further discussion The land degradation and deforestation are linked closely. The indiscriminate cutting of trees in the bigger countries such as Fiji, Vanuatu, Solomons and Samoa has led to problems of land degradation and soil erosion. In the case of Fiji, McGregor (1998) estimates that the cost of land degradation in terms of lost production and use of fertilizer is about F\$16 million per annum. Deforestation through unsustainable logging has caused further land degradation and soil erosion. Deforestation is occurring at two levels. At the commercial level, some governments actively promote the logging as they depend on it for government revenue. In the Solomon Island for example, overexploitation and depletion of forests resulted from continued government approval for logging. At the local level and on a smaller yet significantly more important for subsistence production, deforestation is due to cutting down of forests for fuel wood and for local building materials.

Pollution is generally human induced. In the bigger countries such as the PNG, Fiji, Vanuatu and the Solomon Islands, pollution of rivers and water streams have taken place through uncontrolled mining and industrial wastes. In the case of Papua New Guinea, the extent of river pollution in the Ok Tedi region demonstrated by the action of one of the world largest mining company, BHP Billiton. "Since the mid-1980s, the Ok Tedi mine has dumped more than 80,000 tonnes of mine wastes into the river each day, leaving an environmental disaster that threatens the livelihoods and food security of local people for the next 100 years", (EVANS *et al.*, 2002). On a smaller scale, mine pollution and industrial pollution affects all the bigger Spins. Coastal destruction through urbanization, industrialization and tourism is also affecting many of the SPINs

Policy Responses and Human Dimensions Research Agenda for the SPINs

According to the UNITED NATIONS (2000) SPINs suffer more externally induced environmental disasters than that induced by human activities. However, this may still be valid but the international economic environment created through trade liberalization and globalization is going to change the human-environment interaction.

One of the key issues that need to be confronted is the relationship of people to land in many of the SPINs. This issue is particularly important in the bigger countries such as the Solomon Islands, Vanuatu, Fiji and Papua New Guinea. Land problems in Fiji is serious one and it involves conflicts which may be both environmentally and economically disastrous (PRASAD, 1998) In the Solomon Islands movement of people due to landownership conflicts has caused economic and political disaster. In Papua New Guinea and Vanuatu, the problems could become worse in future. The different types of local land use in many of the SPINs are an important area of research for both social and environmental scientists. In the SPINs land is a key factor in the various social relationships and from an economic point ob view, the way in which resources are used.

The land management institutions in many of the SPINs are complex and rigid. These institutions are not geared towards responding to the new challenges of the global market and the SPINs own move towards new economic policies based on trade

liberalization and globalization. SPINs would have to consider seriously these institutions in light of their own environmental policies. National institutions to develop environmentally friendly policies in the SPINs would not be compatible if some of the existing institutions governing land and the use of other natural resources are not reformed as well. For, example, is the nature of property rights in land and other natural resources compatible with the new trading and production environment that most of the SPINs have adopted?

The second issue is how the SPINs are responding to the economic transformations that are taking place. One of the human dimensions aspects of the environment in the SPINs has been the view that traditional resource management practices are very appropriate and there is still knowledge that exists in the community, which could be used for sustainable resource use. This may not be true, as the economic transformation has led to the increasing dependence of people on global markets for most of their necessities around the world. The US National Council of Research (1999:27) describes this as follows: "Economic transformation include the dependence of an increasing proportion of the worlds population on global markets for necessities such as food and fuel that were previously produced locally, much of them outside the money economy; increasing liberalization of international trade, the emergence of service economies in place of manufacturing-based ones in most high income countries; and the transformation of formerly socialist economies from a central command model to a more decentralized market –based one"

For the SPINs the PICTA and PACER agreements are being hailed as major achievements for trade and economic development. While this may be true, given the global imperatives of having these kinds of trading agreement, its impact on the environment remains to be seen. For example, in the case of the North American Free Trade Agreement (NAFTA) some believed that the environmental effects would be beneficial while other believed it would be damaging to Mexico's environment (JOHNSON and BEAULIEU, 1996).

Other issue that needs consideration and research involved the human population dynamics. These include the demography and the migration patterns of people within the region. The first is the internal migration and the other is the external migration. Both internal and external migration is taking place on a significant scale in many of the SPINs. The internal migration involves the movement of people generally from the rural to the urban areas. In the SPINs the proportion of people living in the urban areas is likely to increase and this is going to put added pressure on the urban infrastructure. In the case of Fiji, eviction of tenants from the native land is going to accentuate the movement of people away from the rural areas. External migration involves people living their countries to leave permanently in another country. Many qualified and highincome people are living their own countries. Tonga, Samoa, Fiji, and Cook Islands find them selves constantly depleted of skilled people. Why do people move and migrate? According to the United Nations High Commissioner for Refugees (UNHCR), there are four root causes of refugee/migrant flows and these include political instability, economic tensions, ethnic conflict and environmental degradation (UNHCR, 1993). While those migrating both internally and externally are strictly not refugees but could be termed as voluntary refugees who move because of one of these four reasons. In the smaller islands such as Niue, Tuvalu, Tokelau and Nauru, environmental and economic considerations are the major reasons why people leave. In other such as Fiji, its political instability, lack resources such a land and economic opportunities which force people to leave.

Concluding Comments

Economic globalization is a process which is likely to have a profound impact on the lives of millions of people in the developing world including those in the SPINs in the next decade. The SPINs are moving fast to adopt economic policies to bring them in tandem with the world-trading environment. The recent adoption of the PICTA and PACER agreement by the Forum member countries is a testimony to the new approach. The globalization process is not only about globalization of economies but also about globalization of cultures. This is causing a change in public attitudes and values and changing individual and household behaviour.

The impact of the globalisation of economies and cultures is also having an impact on the way in which people perceive about the environment and the natural resources. More and more people in various parts of the world are becoming vulnerable to environmental damage done often through economic production. This is why it is vital to consider seriously the human dimensions of environmental change and how people can respond or adapt to the changing environment.

In most cases, policy makers in the SPINs and regional organization have concentrated for too long on global and regional environmental problems far removed from people's behaviour and perception about the environment. The environmental policies and programmes do not take place in a vacuum. They require institutions and people to implement them.

At the local level, many of the people in the SPINs are in a vicious cycle of daily livelihood needs and balancing the need to conserve natural resources such as forests and fisheries. Coastal resources are for example, being depleted through daily activities of the people who depend on them for their livelihood. Deforestation is taking place slowly but significantly through cutting of trees for fuel wood and other local uses. These are just some of the examples of local human activities which are causing significant impact on the environment. Finally, the externally induced environmental problem such as cyclones, drought, landslides and volcanic eruptions are having a lot of impact on the environment as well as on the lives of the people. Therefore, environmental policies and programmes should take into account the human-environment interaction and how people could be involved in the whole process of environmentally sustainable development. The human dimensions aspects should not be neglected in any of the policies and programmes, whether it is at global, regional and local levels.

References

ADAMS, T. 1996. Fisheries and Acquaculture in the South Pacific: Situation and Outlook in 1996, FAO Fisheries Department, Rome. http/www.fao.org/docrep.

ASIAN DEVELOPMENT BANK (1998) Improving Growth Prospects in the Pacific, ADB; Manila

- AKYUZ, Y. 2002. Reforming the Global Financial Architecture, Issues and Proposals, Zed Books Ltd, New York.
- BHAGWATI, J. 1993. "The Case for Free Trade", Scientific American, November 1993. pp.42-49.
- DIERCKXSENS, W. 1998. The Limits of Capitalism: An Approach to Globalization without Neoliberalism, Zed Books Ltd: London.
- EVANS, G., GOODMAN, J. and LANSBURY, N. (ed) 2002. Moving Mountains: Communities Confront Mining and Globalisation, Zed Books: London.
- GRAY, J. 1998. False Dawn: The Delusions of Global Captialism, Granta Publications: London.
- GROUP of GREEN ECONOMISTS. 1992. Ecological Economics, Zed Books: London
- GAFFIKIN, F. and MORRISSEY, M. 1992. The New Unemployed: Joblessness and Poverty in the Market Economy, Zed Books: London.
- HAVINI, M. and JOHNS, V. 2002. "Mining, self-determination and Bouganville", in Evans, G., Goodman, J. and Lansbury, N. (ed) Moving Mountains: Communities Confront Mining and Globalisation, Zed Books: London.
- JOHNSON, P. and BEAULIEU, A. eds. 1996. The Environment and NAFTA: Understanding and Implementing the New Continental Law. Island Press: Washington, D.C.
- KOVEL, J. 2002. The Enemy of the Nature: The End of Capitalism or the End of the World? Zed Books Ltd: London.
- MacEWAN, A. 1999. Neo-Liberalism or Democracy? Economic Strategy, Markets, and Alternatives for the 21st Century. Zed Books Ltd: London.
- McGregor, A. 1998. "Synthesis Paper: Institutional Arrangements and Mechanisms-Pacific islands" paper presented at the ESCAP Regional Expert Group Meeting on Integrating Environmental Considerations into Economic Policy Making Processes, Bangkok, 20-24 July, 1998.
- MICKLETHWIT, J. and WOOLDRIDGE, A. 2000. A future perfect: The challenge and hidden promise of globalization, Crown Business, New York.
- MUNCK, R. 2002. Globalization and Labour: the new 'Great Transformation, Zed Books: London and New York.
- OMAN, C. 1997. "Technological Change, gloablisation of production and the role of multinationals", Innovations: Cahiers d'economie de l'innovation, vol.5, pp.15
- PATOMAKI, H. 2001. Democratizing Globalization: The Leverage of the Tobin Tax, Zed Books Ltd: London.
- PRASAD, B. C. 2002. "Trade Liberalization in the South Pacific Forum Island Countries: A Panacea for Economic and Social Ills? Working Paper, Department of Economics, The University of the South Pacific, Suva, Fiji.
- PRASAD, B. C. (2001) "Globalization, Markets, Transnational Corporations and Environmental Management: A Case of Small Island-Nations in the South Pacific" The Journal of Corporate Citizenship, Issue 2: pp75-89.
- PRASAD, B. C. 1998. Property Rights, Economic Performance and the Environment in Fiji: A Study Focusing on Sugar, Tourism and Forestry, Unpublished PhD Thesis: Brisbane: Department of Economics, The University of Queensland.
- SHUTT, H. 1998. The trouble with capitalism: An inquiry into the causes of global economic failure, Zed Books Ltd: London

- STAGL, S. 2002. "Free Trade and its Effects: Some Critical Comments", in Wohlmeyer, H. and Quendler, T. (eds) The WTO, Agriculture and Sustainable Development, Greenleaf Publishing Ltd: UK.
- UNITED NATIONS 2000. "Integrating Environmental Considerations into Economic Policy Making: Institutional Issues", Development Papers No.21, UN, New York.
- UNDP 1999. Pacific Human Development Report 1999: Creating Opportunities, UNDP: Suva.
- UNITED NATIONS COMMISSIONER for REFUGEES, 1993. The State of World's Refugees: The Challenge of Protection, UNHCR: Geneva.
- WENT, R. 2000. Globalisation: Neoliberal Challenge, Radical Responses, Pluto Press: London.
- WORLD BANK (1996) Pacific Island Economies: Building a Resilient Economic Base for the twenty-first Century, World Bank: Washington.