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GLOBALIZATION CHALLENGES FOR SMALL ISLAND DEVELOPING STATES

The Atoll of Nui with its nine islands (Tuvalu/Pacific Islands)
Source: http://www.oceandots.com/pacific/tuvalu/nui.htm

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This thesis is dedicated to Paolo Benassi, who spent one inspiring year with me on the islands of Fiji. He always helped me to view the world from a variety of perspectives and enlarged my spirit of adventure.

Furthermore, I want to thank my mother Brigitte Augustin and my sister Christina who always supported and helped me to find my own way.

ACKNOWLEDGEMENTS

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LIST OF ABBREVIATIONS

ACP	Asian, Caribbean & Pacific Group of nations that are former colonies of any European power, which receive privileged access to European markets, aid funds and other resources under the Lomé (and from the 2001, the Cotonou) Conventions.
ACS	Association of Caribbean States
AOSIS	Alliance of Small Island Developing States
AIDS	Acquired immune deficiency syndrome
AISIDS	African and Indian Small Island Developing States
ASIDS	African Small Island Developing States
AusAID	Australian's foreign development Assistance
BRA	Bougainville Revolutionary Army
CARICOM	Caribbean Community
CVI	Commonwealth Vulnerability Index
CSIDS	Caribbean Small Island Developing States
DraFCo	The Drawa Landowners Forest Management Cooperative Ltd
EEZ	Exclusive Economic Zone (200 miles zone)
e.g.	Exempli gratia (for example)
et al.	Et alteri
etc.	Et cetera
EU	European Union
EVI	Environmental Vulnerability Index
FSM	Federal States of Micronesia
GDP	Gross Domestic Product
GIN	Global Island Network
GSEII	The Global Sustainable Energy Island Initiative
GTZ	German Technical Cooperation
G8	Group of Eight
HDI	Human Development Index
HIV	Human immunodeficiency virus
i.e.	Id est (that is)
IORNET	Indian Ocean Rim Network
IPCC	Intergovernmental Panel on Climate Change
ISIDS	Indian Small Island Developing States
Km	Kilometre
LDC	Less developed country
LLDC	Landlocked Developing Country
MIRAB	Migration, Remittances, Aid and Bureaucracy
NGO	Non-government organization
NLTB	Native Land Trust Board
NZAID	New Zealand's foreign development assistance
OPEC	Organization of the Petroleum Exporting Countries
PIC	Pacific Island Country
PGRFP	Pacific German Regional Forestry Project
PRA	Participatory Rapid/ Rural/ Relaxed Appraisal
PSIDS	Pacific Small Island Developing States
PNG	Papua New Guinea
SIDS	Small Island Developing States
SIDSnet	SIDS Network
SMF	Sustainable Management Forestry
SOPAC	South Pacific Applied Geoscience Commission

SPREP	Secretariat of the Pacific Regional Environment Programme
TNC	Transnational Cooperation
UN	United Nation
UNCTAD	United Nations Conference on Trade and Development
UNDESA	United Nations Department on Economic and Social Affairs
UNDP	UN Development Programme
UNEP	UN Environment Programme
UNOHRLLS	UN Office of the High Reprehensive for the Least Developing Countries, Landlocked Developing Countries and Small Island Developing States
US	United States of America
USP	University of the South Pacific
VFR	Visiting Friends and Relatives
WTO	World Trade Organization

ABSTRACT

This thesis is about the challenges and impacts of globalization for the Small Island Developing States (in the following SIDS) of the Caribbean, Atlantic-, Indian- and Pacific Ocean Islands. The author raises the question of how the SIDS respond to the altering processes of globalization. The SIDS are viewed in the light of their vulnerabilities such as insularity, fragility to natural hazards, small economy, limited natural resources, climate change etc. Special attention is drawn to their political as well as economical dependencies and hindrances. Furthermore, tourism is highlighted as one choice that island societies have to destine and create for their future. Hereby sustainable tourism is playing a key role. This work has an ethnological and social focus, which concentrates among other things on the issue of the commodification of traditions and customs in the Pacific, and on migration and its resulting diasporic communities in the Caribbean. The process of globalization creates the demand of new identities for the islanders, and shows the growing Pentecostal movements in the Pacific. At the end, the author represents the results of the her fieldwork in Fiji (Vanua Levu) 2005. The study demonstrates on a small-scale perspective the impacts of globalization. The challenges and impacts of an externally supported development project within a Fijian forest community are going to be emphasized.

1 INTRODUCTION

Just recently, in June 2007, Germany was holding the annually proceeded G8 summit in Heiligendamm at the Baltic Sea. The meeting was highly influenced by the publication of the UN Intergovernmental Panel on Climate Change (IPCC) reports (McCarthy 2001). Therefore, one of the main discussed issues was the debate around climate change and the question how to deal with it. However, it is doubtable that the commitments on the reduction of greenhouse emissions will be realized. The only outcome was the agreement that further actions are necessary to be taken (G8 Nations 2007). The key issue in this thesis are the SIDS, which could vanish from the maps without any realistic climate change solutions. Their islands will drown, and with them, their unique culture and their places of belonging will be vanished as well. Even if these small island nations and microstates produce fairly small amounts of greenhouse gases, they are the first, which suffer under the global climate change and their resulting sea level rise. Right here, globalization patterns becomes very visible. The main decisions are made by a selection of eight world ruling countries, but the entire globe, which currently consists out of 192 nations (according to the UN list of members 2007, www.un.org), will be affected. The fifty SIDS have no say, although the SIDS are going to be most pretentious by these decisions. In this context Robert Kiste, the director of the Centre for Pacific Island Studies at the University of Hawai'i-Manoa noticed the following: "The new rules of globalization are being set by people who don't care about small places." (Cited in Finin, 2001:1).

This is only one feature of how globalization looks like for the SIDS. Within this thesis the author has the aspiration to draw a more diversified picture of the impacts and challenges of globalization for the SIDS. Nowadays, globalization is a global phenomenon, as such recognized, and studied all around the world. However, "... the international community recognizes the exceptional disadvantages island societies face, but it has failed to translate this recognition into island-specific support." (Ouane 1995:vi).

The SIDS are particularly vulnerable to the globalization. As it will be envisaged in Chapter 2, the concept of vulnerability is essential to understand that special treatment is needed for the SIDS. They have certain fragilities like the small size; small domestic markets and a dependence of export markets; prone to natural hazards and sea level rise; as well as the exposure to island tourism. The vulnerabilities make them weak and dependent on others. In this sense, these island states have to fight a battle within an unfair competition. Together with the Least Developed Countries (LDCs) and the Landlocked Developing Countries (LLDCs), they therefore receive special attention from the United Nations and other institutions.

However, until today the SIDS are more than ever before exposed to intrinsic disadvantages and vulnerabilities. Not enough actions were accomplished to make the SIDS more resilient for the challenges of the globalization (Pelling et al. 2001). As we will see in Section 3.1, the establishment of the Alliance of the Small Island Developing States (AOSIS) illustrates the unsuccessful struggle of the SIDS to form a world lobby to gain attention for a special treatment, which is extremely needed.

Map 1: Upside down and Pacific centred world map including the SIDS (circles visualize the SIDS regions) [1]

Besides being, a group of vulnerable islands with common characteristics the SIDS are located in various parts of the world. They take into account enormous space as visualized on the Map 1. According to the upside down- and Pacific centred world map, it can be said that the SIDS lie in the middle of the globe. Unfortunately, the islands are almost unknown and often left out on world maps and in decision making processed. Furthermore, their voices are seldom heard and their problems do not care the "international community". In this way, the author attends to provide a small overview into the features of the SIDS. They are economically, politically and socially highly influenced by their neighbouring countries and geographical location, like e.g. the Caribbean by the USA. In Section 3.2 there is considered nuanced insights into the small islands regions of the Caribbean, the African and Atlantic Ocean Island region and into Oceania. It becomes clear, that these island regions are both different and similar. However, they deserve concerning their uniqueness and fragility more international attention.

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[1] Source slightly modified by the author, http://flourish.org/upsidedownmap/hobodyer-large.jpg (Accessed, 14.06.2007).

Some islands have been uninhabited before the European invasion while on others already existing complex cultures developed like in the Pacific Islands region. However, since Vespucci, Columbus and the European expansion, up to the emergence of global and the consumer society, these islands systems were culturally, economically and ecologically highly influenced and involved in an altering globalization process (Firth 2000). This view of Firths (2000) can be enlarged to the other SIDS saying that the process of globalization already started with the integration of islands into the world economy by the time as traders, beachcombers, missioners settlers, slaves and discovers landed on the islands shores. The profound impacts were apace visible.

In fact the globalization wave holds on until today, but it has changed in volume and patterns. The island nations have had no choice as to accept the globalization and its system (Firth 2000). Nevertheless, the pressure does not come from colonial powers or from white traders anymore but it has its origin from aid donor countries, Transnational Cooperations (TNCs), international decisions (such as the G8 declaration) and from foreign financial institutions, banks and investors (Firth 2000). The challenges and opportunities with such limited base of action protect the SIDS somehow, but on the other hand restrict them to set their own course. To show these contradictions the author first profiles, in Section 4.1, the impacts and challenges of economical and political interactions to the SIDS such as historical partnerships, the influence of development assistance and the impact of tourism.

Especially the issue of tourism is a multifaceted section because it is a topic of paramount importance. Tourism mostly is the only economical livelihood base for many of the SIDS and as such a dependency for them. At the same time, tourism is a change agent in economic, social and environmental development. In this way, Mcleod (2004:3) noticed, "Tourism is genuinely powerful and unique force for change in the community." Ongoing in depth Lockwood (2004) observes that the impact of globalization has among other things changed the way in which people interact, commodities and information flows. Accordingly, to the importance of tourism, tourism is represented as an enlarged field, because it is the most relevant globalization force for the SIDS. The cross-section topic tourism will be again an important topic within this environmental Section 4.2, but also in the Section 4.3 were socio-cultural consequences are a subject of discussion. In this context, Conway (2002:127) demonstrates how diverse the effects of tourism can be.

> "Small-island ecosystems, both in the Caribbean and in the Pacific, appear to be highly susceptible to overuse and can rapidly become overwhelmed by the rapid and uncontrolled growth of tourism, tourism-related activities, and the modernization activities that accompany "development" – residential development, commercial growth, infrastructure expansions, and the like."

Following this thoughts this work tries to catch the phenomenon of island tourism in a wider scope and will represent three types of island tourism as case studies in Section 4.1.3. Within the first case study, the author examine the influence of mass cruise ship tourism in the Caribbean, as a system that does not support islanders to gain profits, but benefits foreign tourist- and international investment demands. In the second case study, which refers to sustainable ecotourism through community-based fale tourism[2], Samoa's tourism patterns are envisaged. This form of tourism could indeed obtain the status of a good and future wise long-term support to sustain an economic livelihood base without threatening the environment and contributing to community development. In addition, the third case study sounds, at the first view, environmental friendly and seems to contribute to economic development on the Maldives. This model of sustainable island resort tourism is, however, at the second view, not an exemplary model for the other SIDS, since its economical profits only serve a small elite and contribute to environmental and social problems.

Ongoing in Section 4.1.4, the main emphasis will be placed on to the issue of renewable energy. In this context the author frames the current situation of energy use including the current difficulties, which goes along with it. Now shortages to efficient energy or energy in general, are high debated topics in the island regions. However, by overcoming the current deficient situation enormous challenges for the SIDS are existent, to build up resiliencies and to counteract the consequences of globalization. Most of the islands are either blessed by sun, wind, biomass, geothermal springs or tidal energy and have as such multiple energy resources available.

However, one of the most important challenges for the SIDS is their treatment towards their extremely limited environments. The Section 4.2 deals extensively with the islanders' ecological management and its resilience building against the impacts of climate change. A number of the environmental considerations are man-made and as this quite often an expression of late discernment and short-term thinking. Especially concerning the natural resource exploitation, the SIDS are highly abused by old imperial dependencies, like TNCs and their own governments. Through the globalization, the extraction of natural resources, particularly timber, marine resources and minerals in the Pacific and Caribbean region, has been thriving and degraded the environment in a massive way (Lockwood 2004 and Skelton 2004). As one case, the Panguna Copper Mine in Papua New Guinea (Bougainville) is illustrated in Section 4.2.1. It shows that, islanders without a harmonized environment are

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[2] Community-based fale tourism refers to a special Samoan way of practicing sustainable tourism. Whereby fale stands for an accommodation which is made out of traditional material and which does not have sidewalls.

forced to change lifestyles and will not be able to practice their customs and traditions anymore.

OUR PEOPLE ON THE REEF
Jane Resture[3]

"The swaying palms, the gentle surf lapping upon the sand
A gentle breeze so keen to please slowly gusts across our land
Our island home is all we have known as centuries rolled by
Our island people stood alone on reefs so barren and dry.

But as years go by we wonder why the shoreline is not the same
The things we knew as always true somehow do not remain
The breakers break on higher ground - the outer palms are falling down
The taro pits begin to die and the village elders wonder why.

For what is happening to the beautiful isles we know
Tuvalu, Kiribati and Tokelau - the Marshall isles, that place of smiles
The rising sea will reclaim our ground - nothing but water will abound
Our people forced to leave for higher ground.

While far away they pour their fumes into the clear blue sky
Not knowing and never caring why the world is beginning to die
So land of our forebears despite how much we cared for you
The time will soon be when we must bid you adieu."

As the poem "Our People on the Reef" shows, climate change is not only a topic for politics nor the economy. Some islanders have started to realize the effects of climate change given that they are experiencing them already everyday. In the Section 4.2.3, the author represents the two key issues where islanders will be confronted with in future, such as the sea-level rise and the loss of biodiversity. Climate change as well as globalization are the buzzwords of the twentyfirst century and are highly connected to each other. However, due to the limitation of this thesis, the author can only refers selectively to this wide-ranging topic. Within the SIDS climate change, already produces real threats, but also creates challenges to protect, preserve and reforestrate islanders environment. If islanders want to survive, strategies for adaptation are in need to develop and use for real actions.

Within the last section of Chapter 4, the author refers to socio-cultural consequences and changes, which are composed by globalization. In Section 4.3.1, the impacts of globalization are in the centre of attention and are illustrated by the sale of islanders' customs and traditions to tourism. Especially, the flow from the "western world" to the islands attack islanders' lifestyles and attitudes in an irreversible way. Island societies have to deal with the challenges of finding their own identity and new forms of society formations. A massive impact to islanders' cultures, especially to the older island societies of the Pacific are changed through

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[3] Source: http://www.janeresture.com/oceania_warming/ (Accessed, 25.05.2007).

the sale of their culture, by e.g. purchasing cultural dances or traditional products. In this sense, traditional values and customs become redefined through tourism interactions. Somehow they lose their originally purpose, but at the same time it aids island societies to sustain customs and traditions.

> "In essence, globalisation involves the exchange and flow of economic and intellectual items in terms of goods, knowledge, values and images, as well as people, on a global scale." Mcleods (2004:4)

Following McLeod's statement, globalization leads to the exchange of people, which is another major socio-cultural challenge for the SIDS societies. Islanders are forced due to economical-, ethnical-, political shortages and/or problems to leave their islands. In this way, cultural compounds become a paramount essential. Migration flows from the Caribbean to economic higher developed and prospering nations are today on the everyday schedule of many islanders and are content of Section 4.3.2. With the back and forth migration movements, islands carry their customs and traditions to the new places of residence, and at the same time introduce "western" patterns into their former home country. However, islands societies also profit out of the migration for example through remittances that forms new challenges such as the investments into new regional development. Nevertheless, the price they pay is high, and quite often leads to scattered families, brain drains, and to diasporic societies all around the globe.

Taking the process of migration, which is definitely a result of globalization, it creates a need and demand for stability. For many Pacific Islanders the stability answer lies in the participation and affiliation to Pentecostal Churches, which offer a language of restricted behaviours and an organized living-structure. This gives them hold and security on the one side, but on the other side it sometimes creates contradiction with their traditions and communities, as it is to see in Section 4.3.3. Together with the reshaping of traditional values and customs, islanders' identities are in the process towards new hybridized pluralistic societies. Coevally others try to bethink to the old traditions. One side effect is the blooming of nationalists movements. However, the formation of new identities is a long-lasting process and will always be hybrid to new influences.

The following thesis attempts to provide some insights in the problems and challenges of the SIDS. However, since it is quite difficult to express micro changes on a meta-level, at the end the author will, in Chapter 5, expose the impact of an externally supported development project to a small forest community on the island of Vanua Levu in Fiji. This small-scaled perspective gives the possibility to understand how, even small changes in the living environment of Fijian Islanders, can have multiple effects. The Fijian case study was carried out by the author in the year 2005, under the supervision of the Human Geography

Department of the University of the South Pacific and the project operator German Technical Cooperation (GTZ). The study is based on the Pacific German Regional Forestry Project (PGRFP), which aims the development of a sustainable forestry resource management in various Pacific nations.

1.1   Aims of the Thesis and Research Questions

This thesis seeks to go some way towards addressing the deficits of literature of the impact of globalization on SIDS. By asking key questions, the author wants to outline how globalization can look from the vantage point of people in different peripheral world regions such as the Caribbean, Oceania, and the African/Indian SIDS. The notion behind shall underline the SIDS' adjustments for coping with the consequences of globalization and emphasize islanders response and achievements. This is embarked on discussions and reflections of the specific SIDS vulnerabilities at selected island nations. Depending on the construction of the SIDS, globalization can have both positive and negative effects. The aim of this work is to focus more on environmental and cultural alter-globalization rather than on economical global processes. Within the inter-connection of global patterns, the imperial or neo-liberal economy cannot be left out. Therefore, one whole chapter is dedicated to the SIDS' economy. Corresponding with Lockwood (2004) and Tomlinson (1997),[4] it has to be noticed that the upcoming of the western imperialistic system has created the first patterns of globalization. The development of globalization can be traced back to economical roots and as a result of this, it is highly necessary to include the economical development in the analysis of the SIDS. Either the published literature of the SIDS hitherto deals with a specific problem of small island states such as vulnerability and natural disasters, or it focuses on an overview of e.g. the economic vulnerability of several or of all the SIDS. Moreover, "… the literature about SIDS and natural disaster vulnerability [has] an under-developed critical voice." (Pelling et al. 2002:49) In general, none of the comments in literature on the impact of globalization are based on all the three columns of sustainability of the SIDS: economy, environment and society. The SIDS problems and challenges are inter- and intra-related. That is why a wide-ranging and interdisciplinary overview is needed to facilitate comparisons and create edge points of actions.

The goal of this thesis is to identify the pathway of islanders of the SIDS from the interaction between the global pressures to their regional answers of globalization. This means the author wants to identify, along central themes, where the "global meets local junction" is detected. Moreover, the author wants to prove if globalization indeed is counteracting against the

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[4] Tomlinson, John (1997). Internationalism, Globalization and Cultural Imperialism. In: Media and Culture Representation. Thomson, Kenneth (ed.). London. Sage.143-144. In Lockwood 2004:3.

cultures and traditions of the SIDS societies as Dr.Teaua Taitai from the secretary to the cabinet of Kiribati doubts by saying: "… globalization in the actual situation goes against our cultures and traditions. Globalization seems to be a one-way street, benefiting only the economically strong" (Finin 2001:1) Hence, we ask:

- Why are the SIDS specifically vulnerable to the global pressure of the altering culture and environment?
- How do they try to respond to these altering processes?
- What kinds of changes are identifiable?
- Where can the author determine rather sustainable than unsustainable trails?

1.2 The Methodology

Most of the primary data was collected during the authors fieldwork in Fiji, which was carried out between the 02.09.2005-15.09.2005 and the 03.11.2005 – 7.11.2005. The second largest island of Fiji, Vanua Levu and its villages Keka, Drawa, Lutukina and Baitiri were examined and observed. The detailed methodology of this research study will be represented in Chapter 5.

As second source for data, a large extent literature was used for this work. This data was provided by the library of the University of Trier and interlendings, the library of the University of the South Pacific, the library of the Forum Secretary and some selective books from the GTZ in Suva, as well as personal books from Suva office of the GTZ, Dr. Eberhard Weber[5], Manfred Ernst[6] and Prof. Dr. Dr. Christoph Antweiler[7].

1.3 Limits of the Thesis

The content of this thesis is quite limited due to the relative small number of the existent and available literature. Especially, the Indian Ocean Islands[8] as well as the Atlantic Ocean Islands[9] as the two smaller island groups are, within the existing literature, not summarized nor understood as one region. Therefore, general statements on common features could be made seldom and incompletely. Conspicuously, the Atlantic Ocean SIDS are barely mentioned due to the old or mainly nonexistent data. However, the claim was raised, to implement at least some Indian Ocean Islands examples. In this sense, the thesis is more or less Caribbean and Pacific Island focussed.

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[5] Is a lecture in Human Geography at USP in Suva/ Fiji.
[6] Is the director of research and projects at the Pacific Theological College in Suva/ Fiji.
[7] Is a professor of Cultural Anthropology at the University of Trier/ Germany.
[8] The Indian Ocean Islands consists out of the Comoros, Seychelles, Mauritius and the Maldives.
[9] The Atlantic Ocean Islands content Cape Verde, São Tomé and the Principe, and Guinea-Bissau.

Furthermore, the aim of this thesis is to centre only the SIDS and not the small islands in general. However, the UN category of the SIDS contains also non-island states such as Belize, Suriname or Guinea-Bissau, which the author does not explicitly focus on. In addition, the author sets the emphasis on developing states, for this reason Malta, Singapore and Bahrain, which are a part of some SIDS – definitions, were completely elided. Hence, the author only picked out some selective island issues, which mark the themes that are particularly influencing the SIDS.

2   THE CONCEPT OF VULNERABILITY

The word vulnerability refers to various synonyms such as: unprotected, sensitive, defenceless, exposed, open to attack, endangered, unsafe, or prone to something, while the objects of vulnerability can be both humans and environment (Brauch 2005). Vulnerability and its concepts are extensively discussed in the literature about global changes and climate change impacts (Brauch 2005). According to Barnett (2001) (Cited in Brauch 2005:31) vulnerability develops within the interaction between economical, social and environmental processes and is a consequence of 'poverty, exclusion, marginalisation and inequalities in material consumption'. From a different perspective Pelling et al. (2001:50) are arguing that the concept of vulnerability "… is a synthesis of political-economy and human-economy approaches to nature-society relationships." On the other side Blaikie et al. (1994:15) are picturing vulnerability "... as a product of such characteristics as ethnicity, religion, caste, membership, gender and age which influence access to power and resources." Oliver-Smith (2004) (Cited in Brauch 2005:31) formulates it shortly by saying 'vulnerability is conceptually located at the interaction of nature and culture'. However, different concepts of vulnerability emerged and are referring to e.g. economical vulnerability (Sutton and Nagle 2006)[10], environmental vulnerability (SOPAC 2005)[11], or social vulnerability (Warner 2007).

For the specific point of view on the SIDS, the author follows Hein (2004), who is framing the concept of vulnerability on the special focus of the SIDS. He suggests that the concept of vulnerability results from two key issues. First, the relation of the SIDS ecological fragility and its proneness to natural disasters, and second the limited access of SIDS economies to external products and markets.

During the last 30 years, the SIDS were supported on behalf of the UN, because of their intrinsic disadvantages. But in the current past, following Hein (2004), the concept of vulnerability was questioned from the time the characteristics of SIDS vulnerability started to fade. The per capita incomes of SIDS have had a much better performance than other developing countries. Furthermore, the arguments like the disadvantages of transportation and telecommunication in the remoteness were somehow overcome through the changing patterns of globalization (Hein 2004).

Vulnerability assessment is the tool to examine 'multiple causes of critical outcomes rather than only multiple outcomes of a single event.' (Steffen et al. 2004 Cited in Brauch 2005:35).

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[10] Suttons and Nagles paper on "Emerging Economic Models for Vulnerability Research" gives further information on economic vulnerability under the following link: http://weis2006.econinfosec.org/docs/17.pdf (Accessed, 05.05.2007).

[11] For further information on environmental vulnerability see http://www.vulnerabilityindex.net (Accessed, 25.04.2007)

To operationalize the vulnerability concept, several vulnerability indexes were developed. Also the Barbados Programme of Action had the aim to invent a vulnerability index for the SIDS.

> "The Barbados Programme of Action (BPoA), Section C5 Vulnerability Index (paragraphs 113 and 114) called for the development of vulnerability indices and other indicators that reflect the status of small island developing states and integrate ecological fragility and economic vulnerability. An emphasis was placed on how such an index and other measures might be used as quantitative indicators of fragility. (SOPAC/UNEP 2005:2)

SOPAC, the United Nations Environment Programme (UNEP) and their partners developed, on behalf of the implementation of the 1994 Barbados Programme of Action, a vulnerability index for the SIDS (SOPAC/UNEP 2005). The Environmental Vulnerability Index (EVI) was presented on the Mauritius International Meeting 2005. The index was developed to look at the processes that could influence SIDS' sustainable development, in a negative way (http://www.unescap.org/about/index.asp 2007). However, it was the first Environmental Vulnerability Index. Today there are global assessments of the EVI in each country. As shown in the map above (Map 2), SIDS are scoring fairly high in the EVI, which is even visualizing the SIDS' situation in relation to other countries and regions.

Map 2: The Environmental Vulnerability Index for each Country[12]
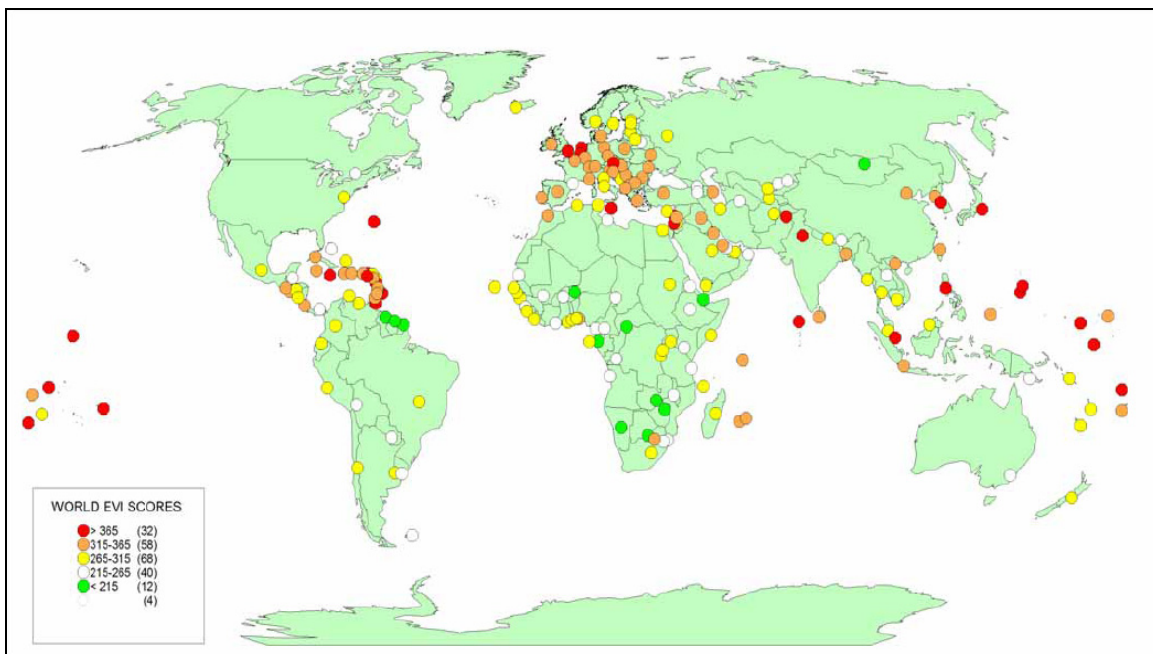
Another research of Pelling and Uitto (2001) gives rise to the concerns on the global threats to vulnerable SIDS. They are pointing out, that there are two trends of the impacts of natural

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[12] Source: http://islands.unep.ch/EVI%20Summary%20of%20Global%20Scores.pdf (Accessed, 25.03.2007).

hazards. First, small islands e.g. Cook Island and Antigua are highly affected in terms of relative losses in a single event and second, larger and least globally connected islands e.g. Haiti or PNG with proneness to weak economic, political and institutional development are highly shocked by repeated natural disasters. The global pressures alter ambiguously the vulnerability of SIDS in a negative and positive way. The global scale institutions, as a trait of global pressures, can merge in effective cooperation at national and regional levels. Notwithstanding, Pellings and Uittos (2001:60) consideration, that

> "... urbanisation, foreign direct investment, cultural modernisation and identity politics can be tools for enhancing resilience given supportive regulatory mechanisms and transparent and accountable governance."

In recent papers, scientists set in motion a discussion on reciprocation, capability and resilience of the people of SIDS (Pelling et al. 2001). Hence, it seems that resilience is a feature that facilitates organisation, ecosystems, households or nations to convalesce rapidly from disaster shocks. "Resiliency puts emphasis on coping with disaster rather than promising to control or avoid their underlying physical energies." (Pelling et al. 2001:52) This notion emphasizes the patterns of human organisations and the human capital of Pacific Islanders rather then the search explanations for specific disasters. In the future the Pacific Islanders will rely on such informal organisation systems, in order to cope with the challenges of climate change and global warming. In addition, their voices need to be heard on the international congresses of e.g. WTO or UN and raise awareness to turn rhetoric into action.

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[13] "This index is designed to be used with economic and social vulnerability indices to provide insights into the processes that can negatively influence the sustainable development of countries." (Source: http://www.unescap.org/LDCCU/LDCs/LDC.asp Accessed, 25.03.2007).For further information on the data of the EVI of SIDS please visit following website: http://www.vulnerabilityindex.net/. The South Pacific Applied Geoscience Commission (SOPAC) has established the website where the full results and various reports on its development can be obtained.

3 WHAT ARE SMALL ISLAND DEVELOPING STATES

Map 3: The SIDS (without the land states) (a) The Caribbean SIDS, (b) The African and Indian Ocean SIDS and (c) The Pacific Ocean SIDS[14]
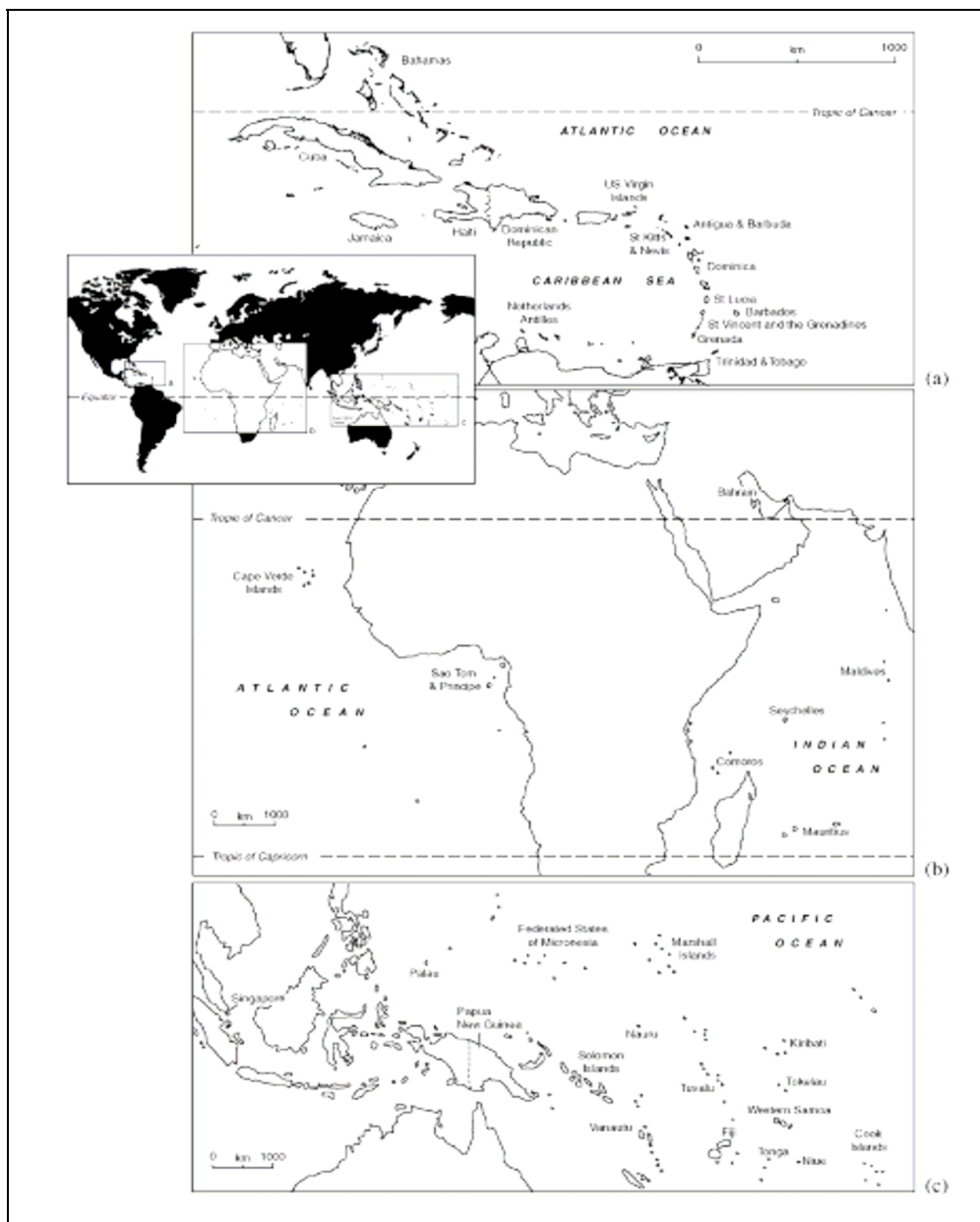
The SIDS (Map 3) are a group of island and non-island developing countries, which share common key characteristics such as remoteness and insularity. Even, if many people relate paradise and calmness with these features, small island nations seriously face intrinsic disadvantages (UNDP 2004b). Although they have common natural traits, their coalition and cooperation as an interest group is the outcome of their vulnerability due to various impacts and has been altered in the current past through the changing patterns of globalization.

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[14] Source: Pelling et al. 2001:52.

The SIDS are complicated to define, since not all islands are small[15], i.e. some are not even islands[16] and cannot be categorized as developing countries[17] (Fry 2005). Hein (2004) argues that the inconsistence of the SIDS is more a result of the "flexibility" of AOSIS - The Alliance of SIDS. However, there are irregularities in the members of SIDS even within the UN. The UN Department of Economic and Social Affairs (UNDESA) (2005) lists 51 SIDS by including Bahrain and excluding Singapore, whereas the UN Office of the High Reprehensive for the Least Developing Countries, Landlocked Developing Countries and Small Island Developing States (UNOHRLLS) lists 51 SIDS as well, but includes Singapore and excludes Bahrain.[18] For the purpose of this thesis, the focus is mostly directed on developing countries, so the author follows the list of the UNOHRLLS and excludes Singapore. In addition, the emphasis is mainly on the UN-members states rather than on Non-UN-Members states because of the high economical and political dependence of these island states to other mainly former colonial powers. Overall, henceforth 36 SIDS are in the centre of attention, but other 14 are not entirely left out since they also face similar or even the same challenges. Following Briguglio (1995:pp. 1616) five key traits of SIDS can be identified and are summarized in the list below.

I. Small Size

➢ **Limited natural resource endowment and high import contents**
Due to the limitation of size, SIDS are extremely dependent on foreign exchange earnings to satisfy their resource demands.[20]

➢ **Limitations on import-substitutions possibilities**
The economy of SIDS are limited to import substitution-products, therefore SIDS may suffer under high prices, suspicious quality and non-domestic competitors.

➢ **Small domestic market and dependence on export markets**
SIDS experiencing the burden of energy imports in view of the fact that high amounts of the export earnings of SIDS have to cover large oil bills.[21]

➢ **Dependence on a narrow range of products**
The diversification of product ranges is highly limited in small economies as a result of this is their dependence on foreign traders even higher.

➢ **Limited ability to influence domestic prices**
SIDS tend to be "price-takers" at a higher level than other LCD because of the small market size in comparison to the world market.

➢ **Limited ability to exploit economies of scale**

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[15] For instance, PNG has a land mass of 462,840 km², which is bigger than Sweden (449,964 kkm²) and smaller than France (543,965 km²). (Falk 2004: 140, 158, 198).

[16] For example, Suriname and Guyana are mainland of Latin-American, Belize is mainland of Central America and Guinea Bissau is situated on the African continent.

[17] For instance, American Samoa, Northern Marianas, Guam, Nuie, Puerto Rico and the US Virgin Islands belong to the USA and do not have full statehood. French Polynesia and New Caledonia are a part of France and as such do not operate in political or economical independence.

[18] The SIDS lists are available at http//:www.un.org/esa/sustdev/sids/sidslist.htm (UNDESA) and http//:www.un.org/special-rep/ohrlls/sid/list.htm (UNOHRLLS).

[20] With the exception of the depleted natural resources of Fiji (gold), Nauru (phosphate), Trinidad and Tobago (oil), Vanuatu (manganese) and Haiti (bauxite) (Briguglio, 1995:1618).

[21] For further information on the relation of energy imports and economy impacts see Persauds (1995) case study on "Alternative Energy Sources for Small Island Developing States".

The possibility of the exploitation of economies of scales is undermined by the indivisibilities and narrow scopes for specialisation through e.g. the lack of specialized workers, high production units and transportation costs and the lack of own technologies.

➢ **Limitation to domestic competition**

Due to the small economies, domestic competition is highly rare, therefore SIDS tend to oligopoly and monopoly organisations.

➢ **Problems of public administration**

In general, SIDS face difficulties because of their lack of specialist for administrator jobs. They have to be trained overseas usually in ex-colonization country. Specialists tend to be expensive per capita in relation to the population size. Also, many of them have kin relationship and this creates problems with effectivity and impartiality.

II. Insularity and Remoteness

➢ **High per-unit transport**

The coast of transportation per unit of export is relatively high compared to other countries, because of the SIDS limitation to air and sea transports. Moreover, only small amounts of cargoes are needed again, resulting in high per-unit coasts. Besides that their remoteness curtails them from the international trade and traffic centres.

➢ **Uncertainties of supply**

Due to the remoteness and the reliance on specific transportation needs, the SIDS face disadvantages through time delays and unreliability of transport services.

➢ **Large stocks**

As the result of the uncertainties of supply, large stock supplies are needed and force the SIDS to race additional coast on products.

III. Proneness to natural disasters

The devastating impact of natural hazards such as earthquakes, hurricanes, tsunamis, landslides as well as volcanic eruptions, may have long term effects on the island economies. Any single event causes loss of lives and great destruction that can reverse SIDS for years and centuries in their development.[22]

IV. Environmental factors

➢ **Pressure arising from the economical development**

SIDS are dangerously threatened by the altering environment due to the growth of the economic development and the increased use of the coastal zone for tourism and marine related activities. In addition, the proper waste disposal is becoming a serious problem and the depletion of natural resources is set in motion towards an irreversible peak.

➢ **Environmental characteristics of SIDS**

The global diversity is under high pressure because of the uniqueness and fragility of islands ecosystems. Remoteness helped unique and endemic species to develop and survive in niches of their ecosystems. However through the environmental degradation their living space is threaten and the world diversity is curtailing.[23]

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[22] To make an example, in 1979 Hurricane David seriously hit Dominica in the Caribbean. It destroyed 50% of the homes and left 80,000 homeless. The reconstruction coasts were estimated at US$ 23,78 million. Even 1983 the agriculture and fishing market was still not recovered. For further information see Obasi 1995:74-75.

[23] A specialist in the biodiversity of islands, including ethnobiological concerns, is Professor Randy Thaman. He is a professor of Pacific Island Biogeography at the University of the South Pacific. His research includes biogeography, environmental studies, pacific ethnobiology, agroforestry, environmental sustainable development and community-based biodiversity conversation. In addition, he has been a delegate at the International Meeting of Mauritius to represent the biological vulnerability of SIDS. For further information on his research see http://www.geo.fio.usp.ac.fj/index.php?id=2485 (Accessed, 22.January 2007).

Especially in the last decade the problem of global warming and environmental change has started to concern not only the SIDS, when particularly the low-lying atoll islands of Kiribati, Seychelles and Mauritius began to shrink.
Another concern of SIDS is the enlargement of erosion due to the island exposure to sea-waves and winds.

V. Other characteristics of SIDS

➢ **Dependence on foreign sources of finance**
Most of the SIDS in the Pacific depend on foreign financial sources such as remittances and international development assistance. The South Pacific region is worldwide the region where people receive the highest amount of aid per capita, therefore the standard of living is relatively high in comparison to other LDC.
➢ **Demographic factors**
The population of the island states is rising as everywhere in the LDC. The smallness plays a particular role, since the population densities of some islands are higher than in some urbanized centres. Besides, SIDS are getting multiethnic, because of the (e)migration of neighbour islanders work /brain drains or political and economical changes.

In the past, the former so-called island developing states were grouped together with land-locked developing countries a part of the internationally identified states of geographical disadvantage. In 1977, the concerning issues of the Island Developing Countries, the Least Developed Countries and the Land-locked Developing Countries were for the first time united in the programme of the UNCTAD. The UNCTAD and the UN collected data of all Island Developing States, which includes e.g. Madagascar, Indonesia and Sri Lanka. However, 1992, quite soon after the recognition of the special needs of the SIDS, the formal phasing out began (Hein 2004). Followed by, the introduction of a more focused denomination for the SIDS-Category at the UN Conference on Environment and Development, which was held in Rio de Janeiro. Afterwards, in 1994, the first Global Conference on Sustainable Development of SIDS was carried out in Barbados, whereby the Barbados Programme of Action[25] was initiated (Hein 2004).

3.1 The Alliance of the Small Island Developing States (AOSIS) and its achieved goals

The AOSIS is a coalition and the paramount tool of the SIDS. AOSIS works as an 'action group' and has no charter, budget or secretariat. It works as an ad hoc lobby within the UN. They first represented themselves as a group at the Second World Climate Conference in Geneva 1990, but emerged before at the Small States Conference on Sea-Level Rising in

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[25] The Barbados Programme of Action identifies priority areas and specifies essential actions to address the challenges of small islands. In Barbados, 1994, the action plan was subscribed by 111 governments at the "Global Conference on the Sustainable Development of Small Island Developing States". Later in 1999, a special session of the UN General Assembly assessed the Programme and requested the international community to provide effective means and financial resources to help small islands to realize a sustainable development (Source: http://www.un.org/smallislands2005/backgroundeng.pdf, Accessed, 25.04.2007).

Mauritius 1989. The small island countries have been brought together through the same difficulties through climate change and its various impacts. For the first time, the AOSIS gained recognition for their unique situation, at the Earth Summit 1992 and at the Global Conference on Sustainable Development the AOSIS was extremely active (Hein 2004 and Fry 2005). Since the emergence of the AOSIS, there have been progresses through the participation at numerous processes, which resulted in the development of soft environmental laws.[26] Both, Fry (2005) and Hein (2004) refer to the constant will of actions of AOSIS-members. On the other side however, the inability to scope and influence the international decision-making processes, made them fail to reach their goals. The last International Meeting was held in Mauritius 2005, hereby Fry (2005) pointed out some positive results such as achieving progresses in the shipment of radioactive material and the development of reinsurance/insurances to recover from natural disasters. However, unfortunately most of the resolutions at the meeting were more negative, disappointing and meant a step backwards. For example, the issue of climate change was hotly debated but Canada, China, USA and the OPEC countries did not conform with the already 'dangerous' levels of global warming. The same happened with the topic of renewable energy, energy efficiency and fossil fuels, where the OPEC countries and the EU inserted the term 'cleaner fossil fuel technologies' to pass the passage through the Mauritius strategy. Even more unsatisfactory was the discussion related on trade. The provision to address trade issues was, in order to the USA and others, passed to the responsibility of the WTO. Fry (2005:97) commented the situation in the following matter:

Figure 1: We are all in the same boat[27]

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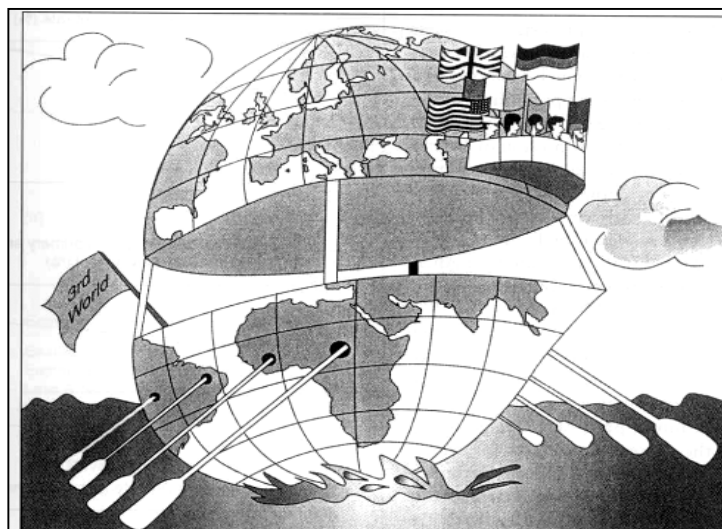
[26] In the research paper of Ian Fry (2005) is a detailed summarize of the trials and errors SIDS, and how the AOSIS was trying to implement further action. Unfortunately, considering the amplitude of this thesis this topic is to pervasive.

[27] Source: Weber not published. Power Point GE303 2005.

"It was evident that globalization was here to stay and countries, weather vulnerable or resilient, would have to play the same rules". He further argued that the impacts of climate change and the loss of trade could not be denied, even more, they will result in critical social, economical and environmental consequences for SIDS. In this sense, the SIDS have to deal with the situation "Meanwhile the rest of the world will sail on, abroad the good ship 'Globalization' " (See Figure 1) (Fry 2005:99).

3.2 Selected Issues of the Small Island Developing States

At this point, the author wants to introduce the specific characters of the four island groups: the Caribbean Islands, the Indian Ocean Islands, the African Islands and the Pacific Ocean Islands. However, it is not the aim to give a brief overview of a region profile, rather than to outline special issues, which distinguish a region from another. Just because several island countries share common fragilities, their way to achieve solutions can and sometimes must differ according to their unique position.

3.2.1 The Caribbean Region

Map 4: The Caribbean Islands SIDS region[28]

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[28] Source: http://worldatlas.com/webimage/countrys/carib.htm (Accessed, 28.05.2007).

'The overwhelming cultural characteristic of the Caribbean, taken as the sum of its parts, is diversity. In race, in culture, in language and religion, it is one of the most heterogenous areas in the world'" (Sunshine, Catherine in Scott 1988:19. In: Scott 2004:36)"

As noted above, there is scarcely any region in the world that offers such a cultural, social, political, ethnical and natural heterogeneity and diversity at once, as the Caribbean region. It may lie behind that the Caribbean was involved for about 500 years in the different phases of the European colonialism and imperialism. Historically the region was shaped through slavery, genocide, environmental degradation as well as planned economy. Especially the experience of slavery and later, of the slave resistance movements unifies the Caribbean region (Scott 2004).

Honychurch (2004:pp.154) pointed out that in the prehistory the Caribbean region was inhabited by the Amerindian, also appellated as the Island Caribs. Their ancestors came once from the Orinoco Delta, following the South Equatorial Current, and populated the island chains up to the Bahamas, from about 3,000 BC to 1,500 AD. They colonized the islands in two migration waves. First, a group of archaic hunter-gathers, called the Otoiroid, settled on the islands 2000 BC. The second group, called the Saladoid, reached the island shores in 250 AD. These people were the first who brought ceramics and introduced horticulture (mainly cassava). Finally, Columbus met their descendants named Arawak and Tainos. Different theories exist to examine the relations between the Caribbean ethnics. However, it is evident that the Caribs created a 'complex mosaic' (Honychurch 2004:157) with considerable interactions with each others. Under the colonisation, most of them were killed, vanished through diseases or creolized with new invaders from West Africa[29], Europe, China[30] and India[31]. Today, the Caribbean 'patchwork society' speaks besides the colonial languages only three Caribbean languages (Creole, Patois and Papiamento). Some of the traditions and religious practices have survived, e.g. Voodoo, while others were new inventions, e.g. Rastafarianism. Today all these cultural practises are incorporated in the Caribbean society, and shaped the Caribbean identity (Scott 2004). Ratter et al. (1997:ix) even forecast that:

"The cultural richness of the Caribbean is an asset for future sustainable development, as it valorises the human capacity in problem identification and solution."

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[29] According to Honychurch (2004:161) the African slaves came from over 50 main cultural groups and subgroups. They were captured all the way from Senegal down to the Gulf of Angola.
[30] About 1835, the first Chinese indentured labours came to Cuba. In Trinidad, Jamaica and British Guiana the cultural impact is the most significant. (Honychurch 2004:p.165).
[31] East Indians came as indentured labours to push the sugar production from 1838 on. (Honychurch, 2004:166).

Table 1: Statistical Facts of the SIDS of the Caribbean[32]

	SIDS	Population 2002 *	Population Density per km² 2002*	Urban Population (%) 2002*	HDI 2003**
1.	**Antigua and Barbuda**	65,000	152	37	60
2.	**Aruba**	108,000	489	3.8	Not ranked
3.	**Bahamas**	312,000	22	89	50
4.	**Barbados**	269,000	622	50	30
5.	**Belize°**	236,000	10	54	91
6.	**Cuba**	11,273,000	101	75	52
7.	**Dominica**	70,000	751	71	70
8.	**Dominica Republic**	8,639,000	172	65	95
9.	**Grenada**	94,000	270	38	66
10.	**Guyana°**	765,000	4	38	107
11.	**Haiti**	8,400,000	293	36	153
12.	**Jamaica**	2,621,000	234	56	98
13.	**Netherlands Antilles**	219,000	269	7o	Not ranked
14.	**St. Kitts and Nevis**	38,000	149	34	49
15.	**St. Lucia**	151,000	238	38	76
16.	**St. Vincent and the Grenadines**	115,000	289	55	87
17.	**Suriname°**	441,000	2,7	74	86
18.	**Trinidad and Tobago**	1,306,000	252	74	57
19.	**US Virgin Islands**	124,000	271	46	Not ranked

The Caribbean is not the poorest region in the world, although it has along with Latin America one of the greatest levels on inequality (Skelton 2004b). According to the Human Development Index (HDI) Barbados is ranked at the index of number 31 and Haiti at 146, which clearly illustrates the altering development situation in and within the region (Skelton 2004b:47).[33] The Caribbean basin, may be so poor due to it is dependence to other nations all around the globe.

Whereas all the other SIDS follow the economy of neo-liberalism, Cuba represents the exception. Cuba has a socialist state-run economy. Moreover, Cuba is blocked by an US embargo. Nevertheless, Cuba was able to make a dramatic shift towards the social development of health and education. Tulchin sums it up precisely:

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[32] Source: * UNDESASD 2003; **UNDP 2005:219-222) °= belong to mainland Latin America.
[33] To compare the HDI of the Caribbean SIDS see Table 1.

"Cuba is far better prepared to attract and utilize foreign investment than any of its island neighbours. Its economy in one of the largest and most diverse of the Caribbean basin, and its infrastructure, the education and skill level of people, and its medical and high technology industries are among the most developed in the Latin America (1997:xii-xiii)." (Cited in Skelton 2004b:58)

In addition to the special problems the SIDS face, the CSIDS are seriously vulnerable due to the increasing population density and growth rates. Even worse, in the view of the challenge of climate change and sea level rise, is the fact that the majority of the people live in urbanized coastal areas. Despite these circumstances, the population is increasing every year due to mass-tourism, which occupies the island on the coastal areas all around the year (UNEP et al. 2004).[34] As a cause of this, added to lacking macro and sectoral development economic policies, poverty has risen in the last 30 years and (Skelton 2004).

Moreover, environmental problems have in almost all island and microstates a major problem of consideration (Ratter et al. 1997). It can be said that most of the effects has been developed through failed and short-term economical and political actions (Ratter et al. 1997).

Concerning the FAO (2000) the CSIDS are involved in the international illegal drug market because of their geographical gateway position between North America and Europe. The CSIDS lay between the mayor producing and consuming countries. Additionally the islands are a top tourism destination and have their own market area (FAO 2000).

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[34] 2001, the ratio of general tourist arrivals to the island inhabitants was 1.7:1, which means that the total population is clearly overrun by the tourist population (UNEP et al. 2004:21).

3.2.2 Indian Ocean Region

Map 5: The Indian Ocean SIDS region[35]

The Indian Ocean islands are historically connected through their major commercial role in the East-West trade of commodities such as spices and slaves (Arnberger et al. 1988). The islands mainly provided refuelling opportunities and a communication network for the colonial powers of France and Great Britain. As in all the SIDIS, the impact of European imperialism was imprinted in the indigenous cultures. Culturally the Indian Ocean SIDS are multiethnic societies, shaped by Arabian, European, Creole Indians, Black African and Malayo-Indonesian influences. While the Maldives are shaped by the Indian-Asian cultural group, the Seychelles, Mauritius and the Comoros islands are particularly influenced by the Arabian-African culture (Arnberger et al. 1988). As visualized in Table 2 the Indian Ocean SIDS are compared to the other SIDS less urbanized, but have in contrast high population densities.

All the four SIDS in the Indian Ocean Islands have in common their year of independence in 1965. Today these islands play an important role as a top tourist destination, with exception of the Comoros. Geopolitically they are particularly important since the booming oil-shipping route is situated there, especially, when there are political tensions in the Arabian region (Metz 1995).

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[35] Source: http://maps.nationmaster.com/country/xo/1 (Accessed, 24.07.2007).

"The island states of the Seychelles and Mauritius are known as the Creole islands[36] and ... have nothing in common with the countries bordering the Indian Ocean and indeed with the neighbouring but non-Creole islands." (Houbert 1999:315).

The Creole society and the Creole language were created between European settlers and slaves and is a unique form of interaction. Before the arrival of the Europeans, the Seychelles and Mauritius were uninhabited (Houbert 1999). The Indian islands Creole societies as well as their present environments are a direct result of the colonial invasion during the past centuries. At present, the atoll Diego Garcia belongs to the Seychelles and is in use of the USA as a strategic military base. In the same way, also Guantanamo on Cuba is utilized as a prison for terrorists. Furthermore, it played an important role for military attacks in the Cold War, the Gulf War (1990/1), during Iraq war 1998 and Afghanistan 2001 (Houbert 1999 and No Lager 2005).

Table 2: Statistical facts of the SIDS of the Indian Ocean[37]

	SIDS	Population*	Population Density per km²*	Urban Population (%) 2002*	HDI 2003**
1.	**Comoros**	749,000	316	33	132
2.	**Maldives**	309,000	976	27.4	96
3.	**Mauritius**	1,210,000	615	43	65
4.	**Seychelles**	83,000	177	64	51

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[36] Also Réunion is a part of the Creole island societies, but it is not a part of the SIDS since it is an official département of France. As a geopolitical decolonization-strategy of France, Réunion was incorporated because France wanted to gain acceptance in the Indian Ocean as the littoral state (Houbert 1999).
[37] Source: * UNDESASD 2003; **UNDP 2005:219-222.

3.2.3   The African Atlantic Ocean Region

Map 6: The African SIDS region[38]
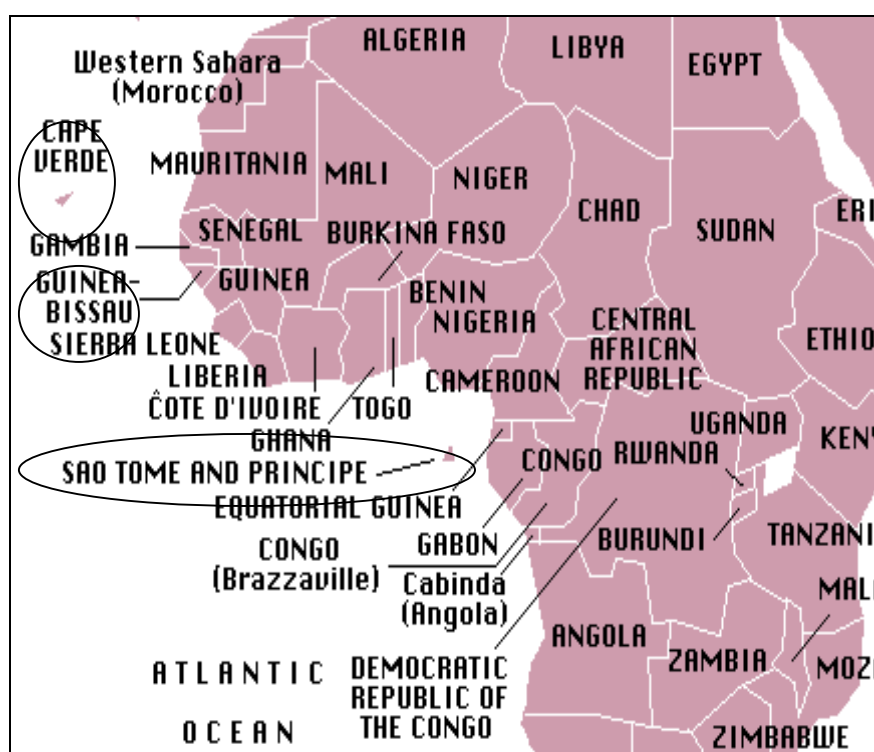
Due to the lack of information on the African Atlantic Ocean SIDS as a united region, only a few updated comprehensive and islands comparative information can be provided. The African Atlantic Ocean SIDS have compared to the other SIDS an older colonial occupation history, e.g. was Cape Verde, São Tomé and Principe were already colonized in the 15th century.

Table 3. Statistical facts of the SIDS of the African Region[39]

	SIDS	Population*	Population Density per km²*	Urban Population (%) 2002*	HDI 2003**
1.	Cape Verde	446,000	106	62	105
2.	Guinea-Bissau	36.125,000	33	24	172
3.	São Tomé and Principe	143,000	149	47	126

The two African islands states Cape Verde, São Tomé and Principe were uninhabited before their discovery by the Portuguese (CIA 2007). Today, mainly African rooted ethnics, Creole (mulatto) and very few Europeans, settle these islands.

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[38] Source slightly modified by the author: http://www.zurqui.com/crinfocus/map/af.html (Accessed, 24.7.2007).
[39] Source: * UNDESASD 2003; **UNDP 2005:219-222.

In comparison to the other SIDS, the ASIDS performance is very poor according to their HDI (all are ranked over 100), but they are still much better than all Sub-Saharan Africa states (São Tomé and Príncipe Government Page; UNEP 2005 and CIA 2007).

Besides this, it is known to be an illegal drug trade position as a transhipment point from Latin America and Asia, Cape Verde is, due to its geographical position, already facing serious climate change effects such as a reduction in freshwater ability and floods (CIA 2007).

Guiana Bissau is one of the 10 poorest countries in the world. It is the only SIDS land state in Africa and is facing several migration flows and, as a result of conflicts in neighbouring countries, it has to deal with e.g. approximately 7,320 refugees from Senegal (CIA 2007 and UNEP 2005).

3.2.4   The Pacific Region

Map 7: The Pacific SIDS region[40]
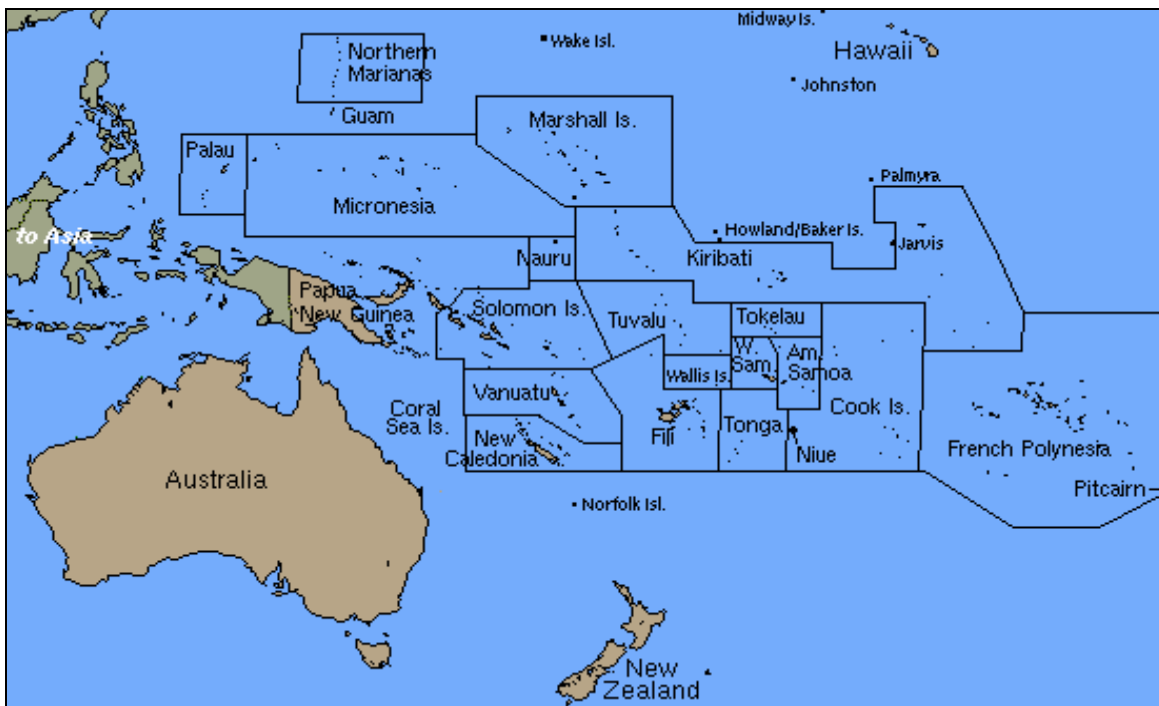
First of all, the Pacific region, or also called Oceania, is the largest region on the earth surface, but in terms of actual land mass it is one of the smallest on our planet[41] (Kreisel 2004). The area is only little known or recognized by the rest of the world, which becomes obvious by looking at world atlases were it is seldom visible. Compared to other regions it is quite

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[40] Source: http://www.kcbbs.gen.nz/lori/ar/Lepage-oceania.gif (Accessed, 24.7.2007).
[41] The Pacific land mass is estimated at 1, 3 Mio km², whereby already 1, 15 Mio km² belong to New Zealand, PNG and West Papua (Kreisel 2004:3).

difficult to mark and determine the geographical Pacific region (Kreisel 2004)[42]. Culturally the Pacific island region can be divided into Melanesia, Micronesia and Polynesia[43] (Murray 2006, Crocombe 2001 and Kreisel 2004).

Table 4: Statistical facts of the SIDS of the Pacific Ocean[44]

	SIDS	Population 2002*	Population Density per km² 2002*	Urban Population (%) 2002*	HDI 2003**
1.	**Cook Islands**	20,000	236	59	Not ranked
2.	**Fiji**	832,000	45	49	92
3.	**Kiribati**	85,000	113	39	Not ranked
4.	**Marshall Islands**	53,000	343	72	Not ranked
5.	Federated States of **Micronesia**	129,000	165	28	Not ranked
6.	**Nauru**	13,000	524	100	Not ranked
7.	**Palau**	20,000	40	72	Not ranked
8.	**Papua New Guinea**	5,032,000	10	13	137
9.	**Samoa**	159,000	56	22	74
10.	**Solomon Islands**	279,000	15	20	128
11.	**Tonga**	100,000	151	38	54
12.	**Tuvalu**	10,000	423	52	
13.	**Vanuatu**	207,000	16	20	118

For a long time it was unclear wether their ancestors came from South America or Southeast Asia. Evidences of both regional cultures could be found all around Oceania. Due to genetic and linguistic research most scientists trace the "Oceanian population" back to Austronesian roots who came in several migration waves from Taiwan. The Austronesian language is interestingly distributed all the way from Madagascar to the Easter Islands (Kreisel 2004).[45]

In contrast to the Caribbean- and the African/Indian- SIDS, the Pacific SIDS were colonized very late, at the beginning of the 19th century. This is probably a consequence of the geographical position of the small islands. They are isolated from the mainland, even in

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[42] Some scientists add New Zealand and PNG/West Papua, because of there culture origin, flora and fauna are historically connected to the Pacific island states (Kreisel 2004:1).

[43] The cultural classifications of the Pacific Islands were introduced by the European "discovers". Melanesia comes from the Greek word *melas*, which means black and can be traced back to the black skin of the island inhabitants. Micronesia comes from the Greeks word micro and means small. This name was given due to the clustering of small islands. Polynesia follows similar thoughts. Poly is Greek and means many, and was used to describe a large group of islands (Kreisel 2004:47).

[44] Source: * UNDESASD 2003; **UNDP 2005:219-222.

[45] Kreisel (2004:72-96) is following the scientific discussion of the ancestral roots of the people of Melanesia, Polynesia and Micronesia. He describes the scientific research of anthropology, linguistic, culture anthropology (in addition legends and myths) and ethnobiology, the possibility of marine voyages and the occurrence of currents.

comparison to other SIDS, therefore they are more marginalized in terms of economy and politics. (Kreisel 2004)

Unique for the PSIDS were the testing of highly destructive weapons. France, the USA and GB were testing atomic and nuclear weapons during the last 40 years in French Polynesia and Micronesia. As Kreisel (2004) describes, most of the testing areas are still poisonous due to the toxic nuclear waste. The health impacts on human and non-humans are still obvious. The atoll islands are uninhabitable and the entire former inhabitants live as "nuclear nomads" scattered in the Pacific region. The testing of nuclear weapons and its consequences started the wave of the nuclear free movement (Crocombe 2001 and Kreisel 2004).

4 THE IMPACTS AND CHALLENGES OF GLOBALIZATION IN SMALL ISLAND DEVELOPING STATES

Nowadays, each state or country, as well as every single individual is involved into the changing patterns of our globalized world, wanting it or not. The consequences of globalization have enlarged their influence and on deciding about lives in all global villages. Decisions made far-off can have instant impacts on the lives of local communities or individuals such as islanders. The altering process of globalization has, for instance changed, the way how people interact, their commodities and information flows (Lockwood 2004). A transformation of original lifestyles was only possible thanks to the interconnection and the opening of boundaries. To understand these complex social processes, the focus will localize the melting point of global and local. Only at this junction, the complex global social activities can be understood and contribute to the impacts of globalization in a local context (Murray 2006). The globalization echoes resoundly in the small and developing island contexts (Lockwood 2004). The core aim of this chapter is to visualize these "global meet local – junctions" and show a way how the SIDS can react and interact as a country or within an island community to the globalization challenges.

SIDS are very differently affected by the impacts of globalization. That effect is depending on their opportunities to cope with the altering situation and external influences. As shown in Chapter 3, the SIDS are, in contrast to other states, more fragile in their economical development, social stability and population issues as well as environmental concerns. According to Lockwood (2004) three key factors influence the opportunities of the island nations. First, the political status of an island society influences the decision making process. Some of the SIDS are independent, while others are still under dependencies from their former colonial power. Within that, the relationship between the islanders and foreign nations are also different. Second, globalization impacts are, among other things, affected by the existence of natural or other exploitable resources for the regional or global market. Island nation can gain independency in important sources of income through the self-marketing of their natural resources, e.g. Nauru[47]. Another equivalent impact factor on the possibilities of islanders to shape their participation on the globe, is to characterize their own cultural identities and political direction. Indigenous communities in Bougainville (PNG) have fought against the pervasive susceptibility to become a victim of environmental degradation, economic

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47 From 1907 on Nauru exported its phosphate rocks under the Pacific Phosphate Company with the permission of Germany, which annexed Nauru in 1888. 1970 Nauru established the locally owned Nauru Phosphate Cooperation. The Naurans living standard reached up to one of the highest in the Pacific (Crocombe 2001).

utilization and social inequality. In the following chapter the author wants to show how islanders are using their weapons to cope with the process of globalization.

4.1 Problems caused by the Economical and Political Situation

Various theories on small states determine an insecure future of their fragile economies since their existence is threatened by their smallness. However, the present shows that small island nations are indeed able to maintain themselves through a special adjustment and survival strategy. One example for this survival strategy is described by Kreisel (2004) for some microstates of Oceania. He points out that some Pacific Islands nations did not developed themselves, but survived in a system of "negotiated dependence", the so called MIRAB-Economies[48] (Migration, Remittances, Aid and Bureaucracy). In most of the cases, the MIRAB system can be enlarged for the Caribbean and Indian Ocean SIDS, but here the tourism plays a more significant role than in the remote Oceania (Murray 2006). The Pacific microstates established a working system to sustain their basic needs and maintain their high subsistence level. Therefore states like Kiribati, Marshall-Islands, Tonga and Cook Islands are not found under the LLDC (with the exception of West-Samoa) (Kreisel 2004 and Lockwood 2004). Notwithstanding that the stability of the MIRAB-System can be questioned. What is going to happen for instance when the overseas migrants break up their connection to their country of origin?

4.1.1 Historical Dependencies

All small island developing nations experienced more or less the imperial occupation of the European invaders, including e.g. slavery, war, loss of land, extermination of indigenous people, the loss of political self-determination, environmental and workforce exploitation, social structure change, emergence of new religious beliefs, plantation economy and the introduction of the capitalistic market system (Arnberger et al. 2001and Scott 2004). Some island societies even experienced various colonialism waves, such as Samoa. Samoa was first German, then one part was claimed by the USA and the other part gained independence, but was administered by New Zealand (Crocombe 2001). Not all colonies were decolonised, e.g. Hawai´i, Tokelau, the British Virgin Islands, Cayman Islands, Reunion, French Polynesia, New Caledonia, Easter Island or the Chagos Archipelago are still, and for a range of reasons,

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[48] The highly discussed MIRAB-concept was articulated by Bertram and Watters 1885 in the book "The MIRAB Economy in the South Pacific Microstates". They refer to high rates of out-migration, which are dominating especially in the Pacific Islands. The resulting remittances from overseas migrants form a notable income for many PSIDS. Furthermore foreign aid and well developed government bureaucracies are contributing to the present economy to an enormous amount (Kreisel 2004).

overseas territories of their former colonial power (Crocombe 2001; Houbert 1999; Lockwood 2004 and Scott 2004).

> "When most of them [SIDS] became independent nations in the later half of the 20th century they inherited economies based principally on providing commodities to their former ruling nations – and on small populations, secure markets for products, assistance with natural disasters and international political protection. Independence did not bring any significant change in the nature of their economies or trading relationships." (Binger 2004:1)

After becoming an independent state, most of the countries remained, due to several reasons in economical or political dependencies. The majority of the island nations are, even today, still characterized by their colonial heritage (Binger 2004). Arnberger et al. (2001:123) refer to various serious problems that were usually left behind in the colony such as: the lack of integration capability; isolation from other supplementary economic areas, and artificial borders; ethnic dispersion; monoculture; insufficient industrialization; lack of infrastructure necessary for economic independence; one-sided and/or insufficient training of the workforce and the absence of self-funded budgetary possibilities. Binger (2004:1) furthermore refers to "... devastating present consequences – like the World Trade Organization (WTO) ..." that started in addition to rule on the SIDS, but that is not an outcome of their own. Looking at these circumstances it becomes undoubtedly obvious that the scope of development is limited, and that today most of the SIDS still carry on their shoulder the burden of the colonial past.

4.1.2   International Development Assistance

It is far beyond the scope of this thesis to analyse such a wide and complex topic as the positive impacts and failures of foreign aid on the SIDS. However, it is possible to highlight the main considerations about foreign aid in the Pacific and Caribbean SIDS. Here, it should be noticed that it is highly discussed if the distribution of foreign aid can contribute to economic success as a development tool or not. In addition, we want to keep in mind that there is an existing evidence, that the majority of aid recipients fail to generate raising economic growth, according to Croes and Schmidt (2007). Moreover, they argue, that the effectiveness of foreign aid can be possibly achieved by direct problem solving contributions. However, the ability for positive influenced growth depends, how foreign aid is provided and utilized (Gounder et al. 2001).[49]

In many cases island nations are attached to a foreign nation as visualized for the Pacific area (see Map 10). Through globalization, these island states are even more banded to their former

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[49] One positive example is Fiji. It received total aid and bilateral aid, grant aid as well as technical cooperation, a mix of aid compensations, and the growth is positive(Gounder et al. 2001).

colonial power, which are usually their main trade partners. Islands can gain new dependencies with other foreign powers as well (Kreisel 2004).

Map 8: The Political Status of the Pacific Island States[50]
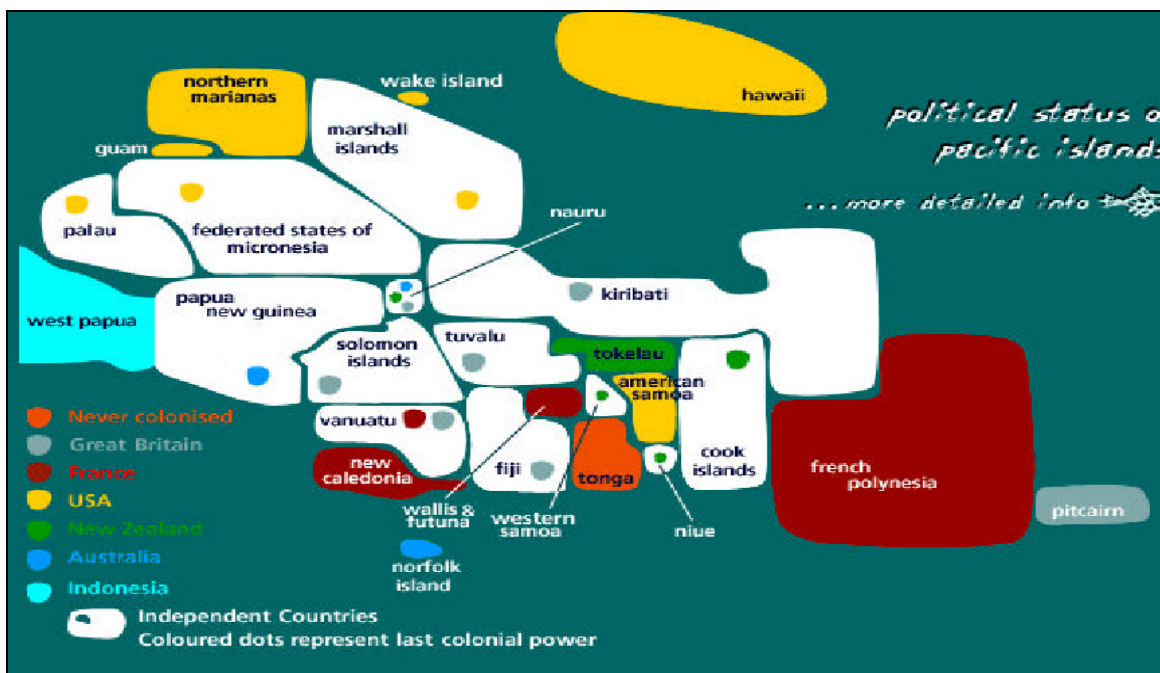
The political structures of the SIDS vary from formal colonial dependencies through to associated states and into states with full political independence. These nation-interconnections directed the Pacific Islanders to "rent" their islands to France and USA, while these nations used their new territories for military and geo-strategically purposes (Lockwood 2004).[51] Islanders take enormous profit out of these cooperations. In exchange, these islands nations have given high amounts of financial aid, food aid supplies[52] and privileges for subsidies. In fact, Pacific Islanders receive one of the highest amounts of aid per capita[53], equal to 16% of their GDP on average (Gounder et al. 2001). Independent islands states in the Pacific, but also in the Caribbean and the Indian Ocean region, get, in contrast, considerably less foreign assistance; typically, they have lower level of living as well as social welfare.

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[50] Source: http://www.abc.net.au/ra/carvingout/maps/colonies.htm (Accessed, 24.02.07).
[51] To make an example for the consequences of those deals: from 1952 to 1962, 78 atomic tests were accomplished by the USA at the Bikini- and Eniwetok atoll in the Marshall Islands. Until today the atolls are impossible to inhabit because of the continuous nuclear radiation (Kreisel 2004).
[52] SIDS have only limited access to food sources. Additionally, they suffer under high rates of population densities. Some islands score high population densities which are over 50-100 inhabitants/km², which are already worrying. This is only possible due to "food aid from aboard, and by accepting the jobs offered by foreign institutions (military bases, aviation facilities, etc.). This considerably increases the natives' independence on foreign powers and their susceptibility to crises." (Arnberger et al. 2001:241).
[53] The South Pacific state of Nuie, for instance, aid accounts for 50 % of GDP and in Samoa sometimes reach remittances 40% of their GDP (Murray 2006).

Those independent islands states usually seek help from other financial sources like the UN, Japan, China, India, USA or the EU. (Lockwood 2004, Kreisel 2004 and Skelton 2004)

Aid donor nations like Great Britain, France, USA, Japan, New Zealand, China, and Australia have their particular interest in most of the SIDS (Lockwood 2004). It is interesting to note, that China is enlarging its presence in the Pacific and in the Caribbean to gain partnerships (Lockwood 2004 and Mosher 2006). According to Steven Mosher[54], Grenada –followed 2006 other eastern Caribbean states- by breaking up its longstanding connection to Taiwan. Aid has been promised to Grenada. One of the key reasons may be to accomplish together with pro-Chinese nations the unification with Taiwan. Mosher (2006) even fears the loss of political control by the USA in the Caribbean region. In addition it is worth to keep a partnership to independent islands nations, because they have an underestimated power, i.e. one vote in international organizations such as the WTO or the UN (Mosher 2006). China and other nations already use their donor activities with the SIDS to strengthen their influence in the global politics. Another foreign aid donor is Japan. This developed nation is pumping aid in region not only for geo-strategically reasons, but also for their special interest in the natural resources of the Pacific basin: the fishing grounds. The island ocean territories are compared to the other oceans still a secure source for commercial fishing activities (Lockwood 2004 and Kreisel 2004).

Table 5: Official Development Assistance for SIDS (U$ billion)[55]
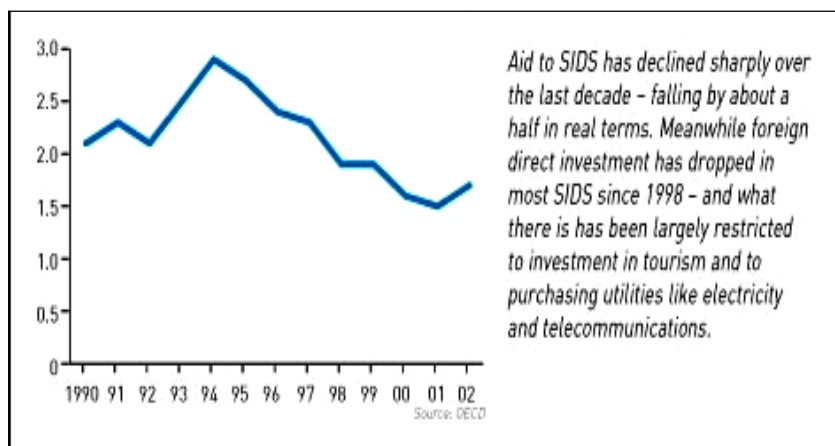
In the past decades, the Caribbean islands received high amounts of foreign development aid, mainly from the USA (Beltran et al. 2004). Within the last 10 years they decreased their aid supplies (see Table 5), but in the last three years they increased it to support HIV/AIDS assistance and natural hazard management.[56] In the Caribbean history, tourism was used as a kind of American development tool. Nowadays, as it is examined in Chapter 4.1.4, tourism is

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[54] Steven Mosher is the president of the Population Research Institute and author of "Hegemon: China's Plan to Dominate Asia and the World".
[55] Source: http://www.unep.org/OurPlanet/imgversn/151/images/glance/glance2.jpg (Accessed, 23.07.2007).
[56] Jamaica and the Bahamas, which are highly depending on tourism, felt the decline of the economic downturn more than anyone else (Beltran et al. 2004).

one of the backbones of the Caribbean economy. The island nations are highly dependent on tourism, even if, according to some critics, it is unstable and driven by external factor, e.g. fashion and weather. Moreover, tourism in the Caribbean is criticised, because mainly low-income jobs are provided and most of the revenues go back to foreign countries, since foreign investors own most of the hotels and purchased goods of tourism (Croes et al. 2006 and Mullings 2004).

Besides the two-sided relationships (taking and giving) of the SIDS to their aid givers, the acceptance of aid is indeed influencing and improving the lifestyles of modern islanders through the growth of the GDP (Arnberger et al. 2001). Nevertheless, it is also weakening their economy. Arnberger et al. (2001) point out, that the financial aid sources lead to distinctive "passive mentality" of Pacific Islanders instead of encouraging the young nations to gain self-confidence. In addition, islanders have easily adapted to the international development assistance, by acting short-termed and in restriction to their own political actions. Moreover they are also forgetting their own ethnic heritage and lifestyle. The dependence on development aid has risen, in some of the SIDS, together with the remittances, created a high percentage of their national GDP, which navigated the small nations into very dependent relationships.[57] Once the international development assistance will stop,[58] the island nations will decisively suffer under the changing patterns. In sum, the Pacific Island states are "de jure" independent, but in reality, they live in a "de facto" dependency (Arnberger et al. 2001).

> "I do not believe that the world should sit idly by while entire countries are slowly but surely annihilated .... And do you really want five million angry Pacific Islanders to come knocking on your door?" (Adams 2007:4).

On the other side, in the near future, those island nations will be better off, that have close relations with a developed country partner like New Zealand or Australia (Adams 2007). As referred later in Chapter 4.2.5 on climate change and global warming, the islanders' governments have to strengthen their connection to the developing countries. In case that sea level rising will destroy the habitats of some Pacific islander, especially of those who lives just a bit above the sea level. Albeit it is to consider, that most of islanders around the world live in low-lying coastal areas, which become threatened as well. It is just a matter of time (Singh 2007). Adams (2007) as well as other authors (e.g. Singh 2007) and nations (New Zealand, USA, and Australia) are worrying about the upcoming wave of environmental refugees. New Zealand is already taking in a quota of residents of Tuvalu. Nevertheless, it will become reality that New Zealand will have to absorb the entire Tuvaluan population of 11,800

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[57] The Micronesian islands, which are controlled by American, are fully dominated by USAAID and without the regular payment their whole economies would collapse (Kreisel 2004).
[58] At the end of the Cold War aid from traditional sources such as the USA declined, since the geo-political advantage was no longer important. Rapidly the international representation and with them the aid were radically downsized (Arnberger et al. 2001).

islanders, if it comes to the worst situation (Adams 2007). Tuvalu compared to Kiribati, Vanuatu, Fiji and the Solomon Islands has at least the opportunity to escape, while the others will start to hunt after such a chance or move (if they can) to higher habitable land. But than:

> "They may move further inland, but the more they do that, they will end up on somebody else's land or reach the ocean on the other side, as the islands are too narrow." Namakin resident of Tuvalu (Adams 2007:3)

4.1.3   Tourism

"Tourism is very much part of the globalisation process." (Mcleod 2004:4)

Figure 2: Typical Tourist Advertisement to encourage the Paradise Image[59]

Within the SIDS, tourism was identified as one of the key options for small and resource-poor economies to survive in the global economy competition (Vossenaar 2004 and Twining-Ward et al. 2002). The beautiful images and/or the "Robinson-Crusoe factor" (Twining-Ward et al. 2002:363) of paradise helped island nations to generate a great potential for regional tourism development around the world. However, various authors warn that tourism is quite often jeopardising vulnerable small island economies by putting high pressures on limited resources as well as having unpredictable impacts on the socio-cultural environment of island societies (Twining-Ward et al. 2002). For instance, it is argued that tourism can indeed result in the erosion of authenticity; loss of autonomy, creativity and power of locals (Silverman 2004). Apostolopoulos and Gayle (2002:6) sum it up brilliantly:

> "Added to a host of other economic distortions (e.g., inflation, dualistic development, foreign exchange leakages), tourism has allegedly caused widespread cultural losses and disruptive occupation shifts and population substitutions that threaten the traditional cultural genius of several locations in these regions [Caribbean, Pacific, Mediterranean]. "

Besides the socio-cultural and economic shifts, the environmental capacity runs in danger to cross its own limits and with it the livelihood base of islanders. The scope of tourism as a development tool can range from having anthropogenic impacts to the other extreme of having radical and devasting changes in the environment of the island nations (Apostolopoulos et al. 2002).

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[59] Source: http://www.polynesiandesigns.com/sw.jpg (Accessed, 23.05.2007).

The tourism sector developed quite differently in various SIDS regions. Since the late 19th century, tourism was already established in Cuba, Jamaica and Bermuda in the Caribbean, and had its take-off to mass tourism in the 1950s/1960s (McElroy 2004). In contrast, tourism in the remote Pacific and Indian Ocean region started not before the 1980s, except in Hawaii and French Polynesia (Arnberger et al. 2001). To date São Tomé and Principe, Cape Verde[60] and Guinea are on the way to put more emphasis on tourism as a developmental tool to increase economic growth and fight against poverty (http://www.afrol.com).

Compared to other sectors the author wants to put high emphasis on the tourism issue, since as one of the most influential components of globalization in the SIDS, it will be continuing in the future. In order to achieve a sustainable livelihood for the coming islander generations, tourism is in the need to develop upon the demands of islanders and not upon tourists or tourism companies' demands. Along the three case studies, the author will highlight the impacts of tourism and of current tourism patterns in different tourist destinations. And we ask: is this concept of sustainable tourism development suitable for the SIDS? As well as: which patterns can lead the SIDS through tourism to a prosperous future development?

For this chapter, the focus lays mainly on the contrasting tourism scopes of the Caribbean SIDS as a mass tourism destination in Case Study I. The challenges for community-based fale tourism in the Pacific Samoa are reflected in Case Study II. In the third Case Study, another form to conventionalize sustainability: the island resort tourism, which is promoted by the Maldives, will be represented.

4.1.3.1 Case Study I – All-inclusive mass cruise ship tourism in the Caribbean

"The Caribbean, in the collective European and North American imagination, has always been a paradise, a place for exotic and laid-back encounters, yet the reality is that 40 years of tourism has threatened the social and environmental foundations upon these fantasies have been built." (Mullings 2004:97)

"At the threshold of the new millennium, the economic significance of tourism has intensified in a region buffeted by the damaging contours of globalisation" (McElroy 2004:2)

Tourism is ambivalent in any way, and always understood by the specific point of view. The Caribbean region has being recognized as the most tourism-dependent in the world (Apostolopoulos et al. 2002). This form of income generating has highly altered the Caribbean in an alarming way. On the one side, tourism is the most important industry and contributes to a third of the GDP of many Caribbean countries (Environment Department of the World Bank

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[60] Cape Verde is currently quite active in enlarging its tourist sector. Currently the tourism industry contributes 10% to its GDP (2004). Recently the government agreed to the construction of the Santiago Golf Resort including "five hotels, 3000 holiday apartments for sale, a shopping centre, a hospital, a golf resort, swimming pools, a casino, discotheques, tennis fields and restaurants." (Afro News 2004: articles 15022)

2000). However, on the other side, critics argue that tourism produces high levels of inequality, since most of the benefits are going to multinational corporations and to the rich people within the local economies (Mullings 2004). Culturally people are attracted by the Caribbean mosaic of cultures and lifestyles e.g. the Rastafarianism and remote island images, which are served by the global island images publications. According to Murray (2006) tourists search and demand the "otherness", this may have increased through the homogenisation of cultural landscapes. Tewarie (2000) refers to the demand of global tourists for diversity, authenticity, cultural integrity and innovations. But looking from a different perspective, global tourists demand "standards of excellence and high quality performance" (Tewarie 2002:46). The same ambivalent patterns can be found within the environmental imagination and relation, tourists have. Researches have recognized that tourists demand heavy water resources amounts but do not see that locals suffer under short-water pressures[61] (Mullings 2004).

The conditions for the Caribbean tourism infrastructure such as airports, roads and docks were mainly financed by foreign aid donor activities, World Bank credits or establishments of international hotel chains such as Holiday Inn, Hilton and Sheraton (Mullings 2004 and McElroy 2004). Once the infrastructure was build and the airlines had started to land on the Caribbean islands, the mass tourism development began to satisfy the holiday consumption needs of dominantly higher income people.

> "As a result of a generation mass tourist development, the Caribbean has become the most tourist-penetrated region in the world." (McElroy 2004:3)

One speciality in the Caribbean is the mass tourism of ship cruises lines which was about 46% of all international cruise industry, at the end of the 1990s (Mullings 2004). This industry gives rise to much criticism. Suchanek (2001) illustrates very impressively that the local people earn only pittance and waste from the dream cruise liners. Concerning the profit for the economical sector it becomes understandable that, compared to other tourism branches, the cruise ship tourism cannot contribute to the livelihood of the Caribbean Islanders. The contribution to employment is less, and there are only a few multiplicate effects on local economies.[62] As Mullings (2004:105) underlines:

> "Overall, of the expenditures by the cruise lines on fuel, chemicals, port services and food, and by passenger on taxes and duty free items, very few are on items produced in the region."

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[61] The water consumption of tourist can reach to ten times higher than the local community, especially in hot climates and where tourist frequently and often uses swimming pools, baths and golf courses (World Travel and Tourism Council, 2001. In Mullings, 2004).
[62] Figures published 1993 by the Florida-Caribbean Cruise Association estimated that one passenger is on average spending only 6 US$ on food and drinks, and that people spent 154 US$ at each port stop in the Caribbean. Out of the 154 US$, about 45 % were spent on duty-free shopping, which are seldom locally produced in the Caribbean. (Mullings 2004:pp.105).

Suchanek (2001) continues Mullings remarks and points out that the only businesses which are left to generate income from cruise tourists are short-trips and prostitution. He argues that even souvenirs can be bought on the ship today. Thus, the cruise ship crew is advising the guest not to use local taxis or local cruise operators. In this way, the cruise ship industry is using the island infrastructure, but there is nothing in return to the island nations. Indeed the TNCs suck the financial community resources empty. Plus, if the developing island states try to raise admission or per head taxes, the cruise operators' change their destination at the latest in the next season. In fact, some cruise ship operators are already using privately owned or rented "dream islands".[63] Under these circumstances cruise ship operators can maximize their profits. Unfortunately the crew is also affected by the profit greediness. Estimations from the Arizona State University showed that a normal crew (of 1000 people) usually comes from 40 different nations. In general, the crew members are from the developing countries of the South and East (Suchanek 2001). However, it is common that the crew works very hard, and that most of them do not see the sunlight during a whole cruise ship tour (Suchanek 2001).

Including even the environmental considerations the picture of the impact of the all-inclusive cruise ship tourism is even more dramatically. Cruise ships produce large amounts of waste[64] and they have limited storage possibilities. It is a highly expensive issue and is therefore quite often illegal dumped into the Caribbean Sea. This waste includes synthetic organic chemicals, oil and pathogens, which are creating dangerous impacts on the health- and the natural environment of Caribbean Islanders[65]. The Caribbean beaches are now full of waste. According to Suchanek (2001) sooner or later Pacific island beaches will follow the same patterns.

There are existing international regulations, which try to minimize the impact whit high punishments, but the problem remains: Where to dump the waste? By now island states have difficulties to manage their own waste. Additionally, the indirect costs of infrastructure development result in the loss of land and habitat. Also, the coastal sedimentation caused from clearance of the dunes and beaches to build sea view hotels and the interfering in the fragile island ecosystems have to be taken into account (Mullings 2004, McElroy 2004, Beltran et al. 2004 and the Environment Department of the World Bank 2000).

Despite the economical and environmental impacts, the Caribbean SIDS have additionally realized socio-cultural changes. Mullings (2004) points out that in general, through the increased reliance on the "tourism dollar" social and cultural relationships have been

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[63] One example is an island in the Bahamas, which is called Salt Cay. It is used by three cruise ship line operators, which call at the island on different week days, whereby each operator promote the island in another way (Suchanek 2001).

[64] By analyzing the production of waste, the Florida-Caribbean Cruise Association estimated that an average cruise ship with 2000 passengers and crew produce about five tons waste a day (Mullings 2004:106).

[65] Jamaica for example is dealing with the disposal of waste and untreated water and sewage, and therefore they are experiencing a decline in diving tourists (Environment Department of the World Bank 2000).

transformed. Here, of course, it must be considered, that social changes are caused not necessary by cruise ship tourists. However, Caribbean Islanders are nowadays looking for all ways to generate tourism dollars. All-inclusive hotels started to "protect" their guest, therefore many switched to informal working occupations. Whereas within the informal tourism sector the most negative social cost can be found.[66]

As shown, mass tourism in general and cruise ship tourism in particular, have devasting impacts on the overall environment of Caribbean Islanders and have been unquestionably unsustainable since this industry only benefits a handful of people. Furthermore the livelihoods socio-culturally as well as environmentally are highly jeopardised by external and internal inequality patterns. Careful and controlled planing, which includes e.g. pollution prevention, waste minimization, controlled visitor numbers as well as the classification of protected areas can conduct to implement sustainable development principles (Vossenaar 2004). Both together, the altering tourism patterns and the establishment of ecotourism[67] to form an economic base as well as certifications for tourist providers, can lead to preserve the livelihood of locals and the natural environment. One certification that is internationally recognized is the Green Globe 21[68]. Some of the SIDS have started to obtain this certification such as: Barbados, Bahamas, Jamaica, Fiji. All-inclusive cruise ship mass tourism is undeniably a negative example in every way for all SIDS. In this sense Fritsch (1997) makes an interesting suggestion and highlights the idea of supporting a combination concept of cruise ship tourism and ecotourism. However with changing tourism strategies, which are not compound on environmental degradation, a concept with more local participation, limits to visitors and more equal share of the economical profits will be the opportunity for Caribbean Islanders. For the next part, the focus will be set on the Pacific region its sustainable tourism experiences.

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[66] One example is the sex tourism industry, which is particularly designed for North American and European tourists (Mullings 2004). According to the UNICEF-study "La Neo-Prostitution Infantil an Republica Dominicana" child prostitution is widely spread. In one of the Dominican Republic harbour called: Puerto Plata, 65 % of the child prostitution clients are from cruise ships, which are either tourists or members of the crew (Suchanek 2001).

[67] Ecotourism defined by the International Eco-tourism Society is "responsible travel to natural areas that conserves the environment and improves the well-being of local people". For further information visit their website: http://www.ecotourism.org (Accessed, 06.03.2007).

[68] From the Green Globe website: GREEN GLOBE 21 is the global Benchmarking, Certification and improvement system for sustainable Travel & Tourism. It is based on Agenda 21 and principles for Sustainable Development endorsed by 182 Heads of State at the United Nations Rio de Janeiro Earth Summit. It provides companies, communities and consumers with a path to sustainable travel and tourism. 2003 over 500 travel and tourism companies worldwide (mainly Asia-Pacific, Americas/Caribbean) were registered as affiliates members of GREEN GLOBE. For further information visit: http://www.greenglobe21.com (Accessed, 06.03.2007).

4.1.3.2 Case Study II – Sustainable Ecotourism through community-based fale tourism in Samoa

The Pacific island region is since the "European discovery", portrayed in the "stereotypical and highly gendered" (Treloar et al. 2005:165) perspective of the image of paradise. This image was transported and reinvented as a paradisaical notion for more than 200 years (Treloar et al. 2005).

Map 9: Samoa and its hotel capacities[69]
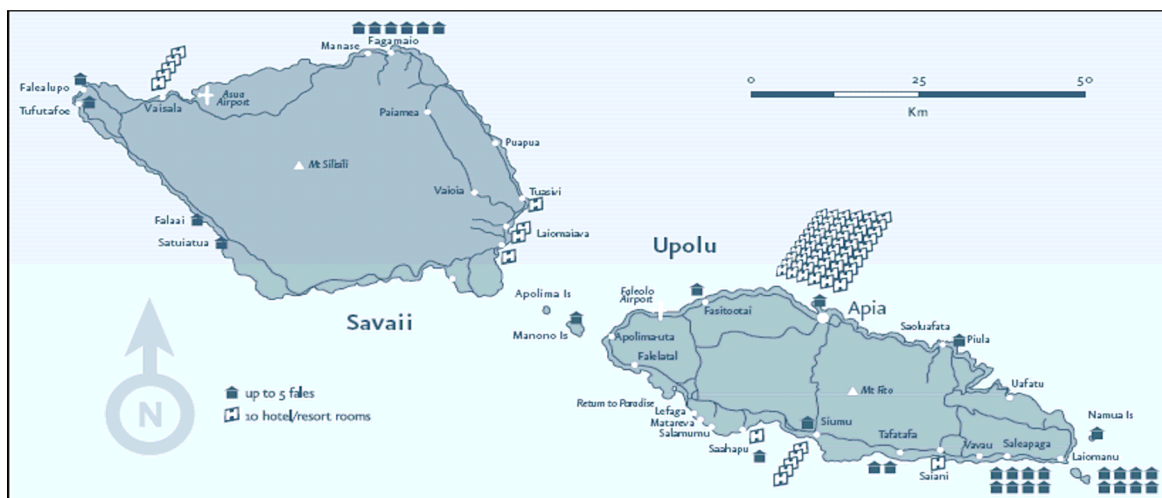
Currently the Pacific island region accounts for only 0.15% of international tourist arrivals (Sasidharan et al. 2002). According to Apostolopoulos and Gayle (2002:5) "the Asia-Pacific region will soon be the fastest-growing region in the world's international travel trade".

The main tourism destinations in Oceania are: New Zealand, Guam Saipan, Fiji and Tahiti (Lockwood 2004). As well as in the Caribbean, cruise ship tourism has started the tourism business in the Pacific. But, after the Asian economic crisis, the whole tourism branch has been exposed to considerable fluctuations (Treloar et al. 2005). Today, the Pacific Islands are primarily dominated by the resort-style tourism market managed by Hyatt, Robinson, Club Med and others (Scheyvens 2004 and Lockwood 2004). This is one of the reasons why the exclusive small island economies of Pacific Islands run into the danger of ruination of their own livelihood base and the degradation of landscapes as well as the eradication of their cultural foundation (Kreisel 2004). Therefore, the concept of sustainable tourism development in general and the community-based ecotourism in particular are promoted objectives all around in the Pacific. The Pacific Island nations have the negative impacts of mass tourism on

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[69] Source: Samoa Tourism Development Plan 2002-2006, in: The Global Education Centre et al. 2004.

Hawaii[70] in mind. Especially smaller islands such as the Cook Islands and Samoa primarily provide small hotels, local accommodation businesses and locally owned tour operators (Lockwood 2004).

> "... tourism activities involving eco-tourism, marine tourism or cultural tourism are becoming increasingly significant attractors for the islands." (Treloar et al. 2005:170)

Many of the SIDS like: Vanuatu, Palau and Solomon Islands centre on niche tourism concepts (e.g. eco-dive-tourism in Palau or cultural tourism in PNG). The sustainable tourism development approach is highly supported by the South Pacific Regional Environmental Programme (SPREP), the South Pacific Forum and the Alliance of Small Island States (AOSIS) (Twining-Ward et al. 2002). Here, we will have a closer look on the sustainable community-based fale ecotourism provided in Samoa.

> "The tourism attractions of Samoa are centred around tourists enjoying the natural and scenic endowment .... In addition, tourists can observe and participate in the interesting cultural life within Samoa, including traditional rituals, craftworks and festivals." (Treloar et al. 2005:250)

Figure 3: A typical Samoan fale budget accommodation[71]

Samoa has, compared to other South Pacific tourist (e.g. Kiribati) destinations, experienced high growth rates in small-scale, basic beach fale accommodation businesses (Scheyvens 2002). Fales[72] are budget tourists accommodations owned and ran by local Samoan people and are usually situated along the beachfront. According to Scheyvens (2004:8) it is "an indigenous, home-grown initiative". There are high quality resorts on the main island, but local communities refuse to give up their control over the land (even for renting), no matter of financial profits (Scheyvens 2004). In this sense, locals are empowered to decide about the kind of tourism development in their own country.

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[70] More than 6 Million tourists visit Hawai'i each year. Hawaiians have for the most part adapted to the American way of life. Culturally it is often a negative example for other Pacific cultures in terms of the eradication of cultural traditions, lifestyles and common identity (Crocombe 2001).

[71] Source: www.pranalight.de/reisen_7.htm (Accessed, 23.06.2007).

[72] Fale (pronounced fah-lay) is a traditional Samoan thatched roof hut, usually with woven blinds instead of walls.

The development of tourism started slowly in Samoa, and was first really pushed by the government after the emergence of two cyclones, which destroyed most of the crop of taro leafs (the main income source in the 1990s) (Scheyvens 2002). The government implemented a Tourism Development Plan, which emphasized that 'tourism in Samoa needs to be developed in an environmentally responsible and culturally sensitive manner, follow a policy of "low volume, high yield", and attract discerning and environmentally aware visitors'[73]. In this sense the fale tourism is institutional sustainable. Samoa attitude to respect the well-being of Samoans is best described by Pearce (1999):

> 'What is distinctive about the Samoan case is the way in which the country's strong social and cultural traditions - the faaSamoa [refers to the traditional way of life of Samoans] – have been incorporated in government tourism policies and the ways in which these policies are being implemented through the NTO [National Tourism Office] in their attempts to foster participation in the development process.' (Cited in: Scheyvens 2002).

In Samoa both concepts: ecotourism (for the preservation of the natural environment) and community-based tourism are offered together. Various actions are taken to preserve the environmental surrounding. At the same time the community-based ecotourism benefits the locals as well as hold on to cultural traditions. The tourism stakeholders are hold on the respect to the faaSamoa[74]. One of the community-based ecotourism operator, "The Samoan beach resort", points out its responsibility in the following way:

> "One of our main goals is to preserve the culture by showing our guests (free daily tours) traditional practises like basket weaving, how to open a coconut, making of coconut oil, use of plants for herbal medicine, fishing, paddling an outrigger canoe, village walks with visits to the local school, traditional cooking (UMU) and much more." (http://www.responsibletravel.com) [76]

Grants from AusAID and NZAID helped to finance infrastructure such as toilets and showers. Today, fale tourism is quite popular with over 190 beach fale accommodations, and is the main income source of Samoa (The Global Education Centre et al. 2004). Fales are mainly used by international backpackers and domestic tourists (including churches, family groups, and staff of the public and private businesses). Moreover, the VFR (visiting friends and relatives) market who live abroad and return to visits and ceremonies (Scheyvens 2002). For a small amount of money travellers "get their own open beachside fale, bedding, light and mosquito net, access to shared bathroom facilities, and two meals" (Scheyvens 2004:8).

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[73] Government of Samoa and Tourism Council of the South Pacific 1992, (Twining-Ward and Twining-Ward) cited in: Scheyvens 2002.

[74] "The fa'a Samoa, the Samoan way of life which is dominated by the extended family (aiga potopoto), chiefly structure (fa'amatai) ceremonial gift giving (fa'alavelave) and customary land ownership, still pervades every aspect of life from birth to death, and commerce to politics, providing a unique and authentic experience for visitors." (Wining-Ward et al. 2002:pp.367).

[75] http://www.responsibletravel.com/Accommodation/Accommodation900197.htm (Accessed, 23.04.2007).

[76] http://www.responsibletravel.com/Accommodation/Accommodation900197.htm (Accessed, 23.04.2007).

'Our idea is to help the community. We buy food products from villagers – if you need fish, arrange it with the fisherman. The same goes for building materials – buy locally. (Beach fale owner, Upolu, June 2003)' Scheyvens 2004:9).[77]

The businesses benefit not only local owners but also help to purchase local made products such as food and handicraft, as Upolu pointed out. In this way, compared to other tourism forms e.g. all-inclusive tourism, various multiplier effects follow, which are the reason for the great acceptance in the public.

'Beach fale tourism has helped to boost the morale of communities and helped people to cater for their own day to day needs… It's also helped them to improve their surroundings, their gardens etc. (Sione, Pastor, June 2003)' (Scheyvens 2004:9).

Positive side effects are that fale owners contribute to churches and community development through donations. They may encourage a youth groups to entertain tourists at fiafia nights[78] with traditional dances. In this way fale tourism improves local pride and economic development.

"The most important part is that we make our employees and the village proud of their culture which they regard as something important and not something that should be replaced by the western society. They understand that the culture is the reason why people travel to Samoa and it is their greatest sales tool." (Samoan Beach Resort) (www.responsibletravel.com)[79]

Young people even started to move back into their villages and this villages are more vibrant and revitalised, as Scheyvens (2004) noticed during her studies. Now villagers have an alternative to an urban livelihood. In addition, the ecotourism community, which is based on activities, can increase the awareness and knowledge of the natural environment and give villagers, in this sense, the opportunity to decide carefully on the future and common actions. Other advantages are that there is no need for a start-up capital, since the backpackers or low-budget tourists do not demand high services and goods. Moreover, high-level skilled trainings are not necessarily required. Furthermore, budget travellers stay longer and spread their money on a mixture of activities, which distributes money over a wider area and remote regions (Scheyvens 2002 and The Global Education Centre et al. 2004).

"What makes beach fale tourism stand out from dominant forms of tourism around the Pacific is that this is a form of development which entrenches indigenous ownership

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[77] The Samoan beach resort promotes under the banner "How this holiday makes a difference" their eco-concept: "We are the only employer in the village with 38 employees. We support the village by buying all building material for our Fales, handmade mats, pigs, chickens, fish, fruits and vegetables from the local families. The village is also earning a small entrance fee for every car coming to our resort (plus our own). A nature (mangrove) walk way has been created by the village and many times a week guided tours are made from our resort. Each guest can make a donation helping to maintain the walk-way." For further information please visit the following website:
http://www.responsibletravel.com/Accommodation/Accommodation900197.htm (Accessed, 23.04.2007).
[78] "Fiafia nights" is a popular traditional Samoan dance night, which is often used as amusement part during weekly diners in hotels and fales.
[79] http://www.responsibletravel.com/Accommodation/Accommodation900197.htm (Accessed, 23.04.2007).

and control, while building upon local skills, knowledge and resources." (Scheyvens 2004:9)

The community-based fale ecotourism concept is a success business and contributes at the same time to economic and social sustainable development.

However, there are also negative side effects that create a range of problems. In addition, Wining-Ward and Burtler (2002) call up for further work to guarantee a successful implementation of sustainable tourism development in Samoa, especially the collection of data to analyze the scope of the impacts. External events decreased visitor arrivals, such as the Asian Bird Flu, the September 11 in 2001 or the Bali bombs in 2002. Thus internal events, like cyclones and floods, result in a reduced tourism demand. Today, there is even an oversupply of beach fale and the maintenance is questioned in the quality.

Scheyvens (2002) also refers to the lack of sewage disposal, safe drinking water access and beach protection, which is not at all composed in an environmentally and friendly sustainable context. Additionally, contradictions have been raised where the global tourism influences local values and results in socio-cultural impacts. The concept of fale tourism gains critics concerning the traditional Samoan value of faaSamoa, which dictates sharing instead of accumulating the profits (Scheyvens 2002 and The Global Education Centre et al. 2004). According to the authors' opinion it can be said, that fiafia is similar to the ceremonial Fijian fire-dance nights. In the way, that it represents traditional culture elements as a commodity product for tourists. This certainly highlights the following sentence made by a Samoan tourist (Scheyvens 2003:9): "If they want to escape from their lifestyle, why not give them ours?"

Nevertheless, the community-based fale ecotourism is on the way to a fitting sustainable tourism development concept for Samoa and may function for other SIDS as well. According to the authors' opinion, community-based fale ecotourism is economically sustainable, because locals can participate, establish an own accommodation or receive synergy effects. Although tourists bring with them the globalization wave of modern lifestyles, it is conditionally and socio-culturally sustainable. At the same time, indigenous community members recognize and understand the emphasis that must be generated to renew and preserve traditional customs and values. However, it will still take some time until the environmental aspects will also be recognized. Community-based fale ecotourism will indeed become a success model concept for sustainable tourism in the SIDS.

4.1.3.3 Case Study III – Sustainable Tourism through Island Resort Tourism on the Maldives

Map 10: The Maldives and its resorts islands[80]
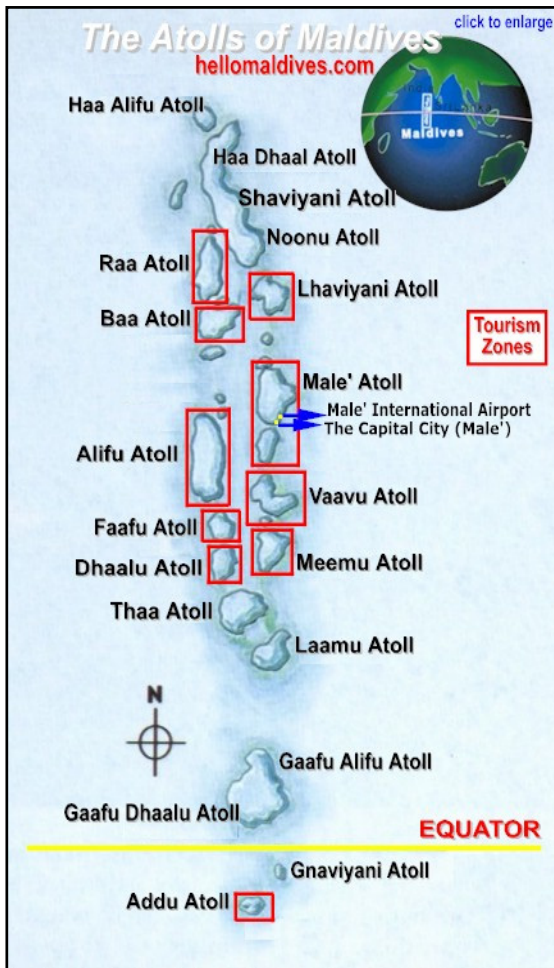
The Indian and Atlantic Ocean SIDS states are rather complicated to cluster in tourism patterns than other SIDS. In this region, each small island nation follows different tourism development strategies, or is just on the way to tourism development like Cape Verde and São Tomé and Principe. For this reason, general statements are almost impossible. In place of a small regional overview of the Indian and Atlantic Ocean SIDS tourism strategies, there will be a small look on the devasting tsunami of 2004 in interaction with tourism.

More than ever, the Indian Ocean Island destinations are endeavoured to polish their tourism industry. The tsunami catastrophe on the 26th of December 2004 where about 300.000 people were killed, set an alarming signal for the international tourism industry and was shocking for all Indian Ocean tourism destinations (Waibel et al. 2005). In fact, various research papers point out that tourism aggravated the impacts of the tsunami. Suchanek (2005) and the tourism expert Anita Pleumarom therefore recommended an introduction to responsible behaviour patterns in order to achieve unexploitable working- and livelihood conditions for the local communities, instead of rebuilding the old mass tourism industry. By continuing with the unsustainable and vulnerable methods, island shores will be soon flushed away. Together with the sand, the future of the islanders will be gone. In this sense, sustainability has to be implemented instead of the deforestation of mangrove forests and the establishment of aquaculture farms (Suchanek 2005). The tsunami was unfortunately a good example about how devasting the impact of a shifting culture, an environmental degradation and an economic inequality can result. Compared to others, the indigenous people of the Andaman's and Nicobar Islands, which lived very close to the epicentre of the earthquakes, were able to interpret the oceans signs and

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[80] Source: http://www.hellomaldives.com/resorts/maps/tourism_zone/index.htm (Accessed, 23.05.2007).

could bring themselves in secure places. Most of the indigenous people of the island chains of the Nicobarese[81] survived because they were living in an environment where mangrove forests and coral reefs were less threatened since tourism on these islands was officially limited (Delius 2005). In addition, their traditional knowledge is still in active use and enabled them to recognize the upcoming danger. This means that their abilities to cope with the natural disaster event made them less vulnerable than other people in the Indian Ocean.

Tourism is the Maldives' largest industry and accounts for 28% of the GDP and for more than 60% of the Maldives' foreign exchange receipts (CIA 2005). This makes the country very depending from international tourism. Throughout the search for new travel destinations in Asia the first dive and adventure tourist landed on the Maldives in the 1970s. Afterwards, mainly sun- and swim-tourists followed, and the island tourism developed uncontrolled. In 1981, the opening of the first international airport as well as the implementation of the first Tourism Master Plan in 1983, introduced the beginning of a controlled tourism development. The atoll state government developed the concept of the island resort tourism, based on nature and culture-compatible handling of resources to gain economical profits, primary named: the "one island one resort policy" (Caduff 2006).

Figure 4: A typical resort island[82]

Figure 5:The One&Only Kanuhura Resort and Spa for Luxury Tourists only[83]

Since the implementation of the first Master Plan 1983-1992 and later from 1996-2005 and 2006-2011, the government put high emphasis on sustainable tourism development. From the beginning on, the Ministry of Tourism realized that the protection of the natural environment, especially the marine ecosystems, was the key issue for a successful tourism development.

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[81] Which includes the Shompen peoples, the Great Andamanese, the Jarawa, the Jangil (or Rutland Jarawa), the Onge, and the Sentinelese (most isolated of all the groups).

[82] Source: http://www.maldives-resorts-hotel.com/nika-island-resort/nika3.jpg (Accessed, 24.07.2007).

[83] Source: http://www.expressionsholidays.co.uk/detail.aspx?t=indian-ocean-hotel-general&1=ww&2=maldives&3=ww40 (Accessed, 24.07.2007).

Notwithstanding that the unique marine ecosystem is, besides the climate, the main motivation for tourists to choose this island destination for their holiday trips[84] (Caduff 2006). In the Environment Report 2002 (State of the Environment: Maldives – 2002:60) the government therefore highlighted the importance of the environment.

> 'the preservation of the ecosystem and the natural resources will require to look into the environmental dimensions of socio-economic dimensions of environmental degradation. The Government [of Maldives] will have to regulate the unsustainable exploitation of the country's resources to ensure the sustainability of development' (Cited in Domrös 2005:57).

Through high environmental restrictions the strict segregation of the Maldivian people and the protection of the fragile marine and terrestrial ecosystems of the government wanted to limit the impact of tourism in the "one island one resort" approach. The government forced a strict segregation between tourists and local islanders, to avoid an intercultural contact between the western lifestyle and Islamic traditions. Locals are not allowed to visit a resort island unless they have a special permission (Domrös 2005). Also only native Maldives are allowed to rent an island, and only foreigners can visit the resort-island (Domrös 2005). Other forms of accommodations are, due to the ban[87], only present in the capital Male', which includes hotels, vessels and guesthouses (Ministry of Home Affairs, Housing and Environment 2001 and Domrös 2005).

According to the State of Environment Report 2001 about 86 resort-islands were constructed.[88.] The resorts are all build inside the tourism zone, which stretches over 10 atolls (Map 10). Upon each of the selected and uninhabited islands, a resort infrastructure was constructed including all modern amenities based on the resort's rating. That means that on each island one hotel complex was established including at the minimum: accommodation for the guest and the staff; all infrastructures for holiday activities; a repair workshop; and a mosque. Everything has to be transported to the islands, except water, which is usually produced by desalination plants. Within the vast north, south extension of the Maldives, there

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[85] The government forced a strict segregation between tourists and local islanders, to avoid an intercultural contact between the western lifestyle and Islamic traditions. Locals are not allowed to visit a resort island unless they have a special permission (Domrös 2005).

[86] Sixty of the resort-islands are owned locally; 8 are (due to the loosening of policies) hold by foreigners (Hilton and Taj); and another 8 are jointly owned by foreigners and locals. The remaining 10 resort-islands belong to the government (Ministry of Home Affairs, Housing and Environment 2001 and Domrös 2005).

[87] The government introduced a ban to all islands, except Male', that all accommodation facilities, which do not follow the resort-island-type are not allowed to be build on other islands. It is also strictly forbidden for tourists to visit other islands, except the resort-islands or Male' within a guided tour. Furthermore native Maldivian are only by permission allowed to step on a resort-island. Those restrictions are supposed to protect the native Maldivian from westernized impacts from the beginning on (Domrös 2005).

[88] Sixty of the resort-islands are owned locally; eight are (due to the loosening of policies) hold by foreigners (Hilton and Taj); and another eight are jointly owned by foreigners and locals. The remaining 10 resort-islands belong to the government (Ministry of Home Affairs, Housing and Environment 2001 and Domrös 2005).

is no existing traffic network (Caduff 2006). As a result of this, every resort-island owns or rents a water-airplane, modern motorboats and traditional Dhoni boats for transportation purposes. This is one reason why the tourists usually stay only on one island. Including the sewage disposal, it is the resort owners' responsibility to manage the sustainability of the resort (Domrös 2005).

Caduff (2006) was carrying out scientific researches on the actual sustainability of the "one island one resort" tourism. His PhD thesis examined the economical, socio-cultural and environmental impacts of tourism in general, as well as dive tourism, as a special tourism form of sport tourism on the Maldives. In this study he concluded, that all four sustainability dimensions are not or only limitedly rated as sustainable. To sum up his main critic points, it can be noticed that the "one island one resort" approach is in all four dimensions rated as unsustainable.

First, on the Institutional Dimension, Caduff argued that the government set up many restrictions and laws such as the "Resort Development Standards", but the government is unable to monitor and control it. The legislations are only present on the paper designed by the leading elite around the president Maumoon Abdul Gayoom[89]. Moreover, the participation of locals is not demanded hence they only have a small imagination of the tourism industry. In this sense, Caduff (2006) suggested an unsustainable rating for this sector. He proposed to change the general conditions of the tourism, to more achieve local participation and equal opportunities to learn a tourist job for Maldives citizen.

Second, the Ecological Dimension was heavily criticized by Caduff because of three major threads to the environment: the construction and maintenance of the tourist infrastructure[90]; the waste and sewage disposal on the island[91]; and the traffic[92], which is occurring from the resort tourism. Also the limitation of the number of tourists on one island, though the size of

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[89] Gayoom is (together with relatives and friends) ruling the one-party state since 25 years. Various democratic legislations are missing in the country like the freedom to statement, freedom to assembly and the freedom of the press. Opposers to the Gayooms politics get easily arrested and tortured on isolated atolls according to Amnesty International. The opposition party lives in the exile in Sri Lanka and called 2004 as well as 2007 out for boycotts of the tourism by saying "While you enjoy the beaches of the Maldives, don't forget that Gayoom is torturing his people" (Hautmann 2004 and Buerk 2007).

[90] The building materials are often coral rocks, even if this is prohibited. In the past this was leading to a change of the costal streams, which occurred in more erosion and the clearance of the beach line. In addition the consume level of energy and fresh water was very high. In 1998 the capital Male was consuming 3.96 Gallons of diesel were the rest of 65 Mio tonnes were mainly used by the tourism industry (Caduff 2006:229).

[91] Domrös (2005) argues that the ocean is polluted, because the waste and sewage treatments are not satisfying. Sometimes waste is even dumped behind the reef walls, threading the fishing industry. The waste production of tourists is very high: 7, 2 kg per day per tourist, whereas inhabitants of Male in average produce about 2, 48 kg per day and in island communities are only 0, 66 kg per day per inhabitant (Caduff 2006:230).

[92] The traffic of water airplanes and speedboats increased in the recent past due to the new tourism zone, which are more fare out and demand longer transportation time. Already 57% (in the year 2000) of the tourist reached their island by water airplane. Traditional Dhoni boats, with more seats and less oil consumptions are today less-used (Caduff 2006).

an island, leads the resort owner to use all capacities up to the maximum, regardless of the environmental limits. Here, besides the environmental degradation, it can be noticed that the Maldives are seriously vulnerable to the climate change and sea level rise. Caduff (2006) also scales this dimension as unsustainable and appeals to oblige information events and more responsibility to the host, the guest and the personal of the resort island.

Third, the Economical Dimension is disapproved by Caduff (2006) and Domrös (2005) for the reason that only the small elite around the president profits out of the tourism. "Unless a transparent system is put in place with a more democratic system of government, the tourism industry in the Maldives will only help the authoritarian regime to stay in power." (Abdulsamed 2004:12). Not even synergy or multiplier effects can be counted for the local economy. There are employment opportunities for qualified and unqualified workers, but most of the jobs are carried out by foreigners and locals who earn less salary. In general, there is an unequal distribution of tourism profits visible.[93] Caduff (2006) doubted that in the near future these general conditions will change. Hence, this sector is unsustainable too. One change option, favoured by Caduff (2006), is the establishment of guesthouse tourism in a local surrounding.

Fourth, the socio-cultural dimension is under the first view positively sustainable due to the establishment of an enclave nature with the strict segregation between tourists and locals. Even if the Maldives practice mass tourism, acculturation effects can be excluded. Other problems remain, such as the unequal distribution of the prosperity; human rights violations; family visit restrictions[94] and the practise of traditional living habits[95]. According to Caduff (2006), this unsustainable situation can only be changed if intra- and intergenerativ chances will become equal.

In the recent "6[Th] National Development Plan" the government is willing to diversify its tourism sectors with the promotion of yacht-tourism and sport-tourism. In the same breath, the government wants to implement even more bed capacities through opening even more islands for tourism (Caduff 2006). However, these are not the features, which will make the Maldivian resort tourism sustainable and is therefore not recommendable for other SIDS.

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[93] The inequality of prosperity is even so high, that according to an UN report (2004) 42 % only have 1, 17 US $ per day and that 20 % live under the international poverty line. Another shocking fact is that in the Maldives 30 % of children "face a nutritional situation more acute than sub-Saharan Africa." (Hautmann 2004).

[94] Most of the local workers don't have the possibility to visit their friends and family often due to high transportation coasts and the isolation of some resorts. Workers have only once a month one day off therefore one visit once a year is common (Caduff 2006 and Hautmann 2004).

[95] It is prohibited to live with the family on the resort. Also most of the workers are men, their wives and children at home have to deal alone with the struggles of everyday life (Caduff 2006).

Sasidharan and Thapa (2002:105) refer to Burtler[96] who suggested following sustainable tourism development strategies for the Caribbean, Pacific and Mediterranean:

> "reducing tourist numbers for alleviating environmental stress, hanging the tourist type from mass tourists to environmentally sensitive green tourists, changing the resource type to a form that can resist the pressures of tourism and educating all the parties involved in tourism".

According to the auditors' opinion, the lessons that other SIDS can learn from these diverse tourism concepts that are a combination of Burtlers advices and other recommendations: First, tourism has to go hand in hand with local participating and fair economic contributions; second, environmental conservation and protection are necessary; and third, the preservation of traditional values and practices are of a paramount importance. In this way, tourism will be a real livelihood base and decrease the islanders' vulnerability to various issues. Notwithstanding that also tourism providers as well as each single tourist have to take more actions to responsibility and understanding. Additional research e.g. on tourism behaviour, or the monitoring of a long-term sustainable development project is requested. Some of the SIDS are already on the way to offer sustainable tourism while others still continue their destructive tourism patterns in all dimensions (socio-cultural, economical, environmental). Only if tourism alters in the way that sustainability is not only seen as a tool and excuse to diversify tourism markets the future development of the SIDS will be less vulnerable.

4.1.4   Renewable Energy

Figure 6: Aggregate greenhouse gas emissions for SIDS, by sectors[97]
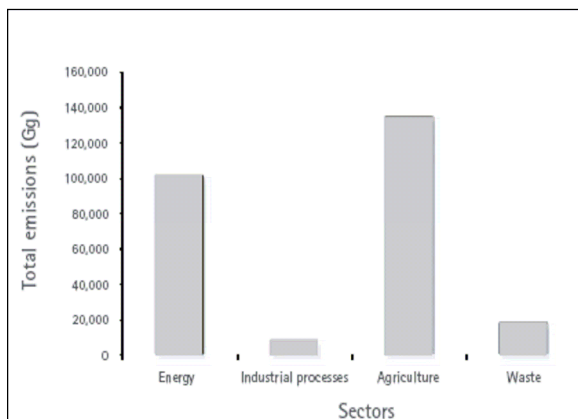
"Carbon dioxide emissions in the USA or China have a direct impact on small island states as sea level rises and cyclone events become more common in localities such as Grenada in the Caribbean or Nuie in the Pacific." (Murray 2006:6)

Small islands will likely be some of the first, that will suffer under climate change, even if the SIDS are only small contributors of the global greenhouse gas emissions (UNFCCC 2005 and Roper 2005). It was estimated that the Pacific island[98] region accounts for about 0.003% of world's carbon dioxide, although they contribute 0.12% to the world's population (Singh 2007 and Nurse et al. 2005). In

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[96] Burtler, R.W. (1991). Tourism, environment and sustainable development. Environmental Conservation 18:201-209.
[97] Source: UNFCCC 2005:11.
[98] There are no publications to the produced emissions of other SIDS, but Nurse et al. (2005) assume that other SIDS would score similarly.

comparison, Germany produces 3.3% of the worldwide greenhouse gas emissions, but in contrast to the Pacific Islands, it holds a population of 1.3% (Environmental Science Published for Everybody Round the Earth).[99]

By looking at Figure 6 it becomes apparent that most of the greenhouse gas emissions are produced to primarily generate energy[100]. The majority of the SIDS are oil-importing countries, and as such they carry high-cost burdens (Persaud 1995).

> "At the present, 70% of Pacific residents do not have access to electricity and depend on a mix of fuel wood, kerosene and batteries for energy supply." (Roper 2005:111)

Due to their small size, the SIDS face high freight charges (Persaud 1995), notwithstanding their own possibilities to reach outer islands. In addition, the SIDS have numerous hindrances, where small size blockade a healthy energy supply. These barriers are e.g. that the SIDS are not able to gather significant scale of economies. The chance of introducing electricity competitors is fairly small. They have high cost of energy supply, but low-cost urban consumers; and the electricity production is inefficient because it is seldom upgraded (Persaud 1995).

> "Since climate change has a special connection with energy policy, it gives small island developing states a special interest in this [the promotion of sustainable development] policy internationally and domestically." (Persaud 1995:5)

To follow Persaud (1995), islanders should become more effective and efficient within their energy supply through to the implementation of renewable energy. Moreover, Persaud (1995) and Gössling (2000) call for more renewable energy in the context of sustainable tourism development. However, Gössling (2000) shows also the deficits of ecotourism because travelling to the destination is mainly done by the unsustainable use of airplanes. In this sense, he outlines that the promoted ecotourism can only meet the requirement of sustainability by controlling sustainable energy consumption within the destination (hotel, transport etc.). Gössling (2000) and Roper (2005) argue that renewable energy is one of the solutions to manage development and at the same time contribute to the fight against climate change. The introduction and implementation of renewable energy compromises indeed realistic benefits for the SIDS, this includes:

1. a clean, green, dynamic image and marketing tool for the country,
2. the preservation of natural and touristic resources,
3. economical benefits, including reducing imports and by saving foreign exchanges,
4. creating employment and generating new income,
5. and providing cheaper and more reliable energy for businesses and individuals (Roper 2006:1).

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[99] For detailed information on the greenhouse gas emissions of single SIDS, please have a look at the annex.
[100] Compared to industrial countries, SIDS have a rather unusual distribution of greenhouse gases, since 90% of the gases are produced for energy and agriculture needs (UNFCCC 2005).

T. N. Slade, Ambassador of Samoa to the UN and Chairman of AOSIS mentions, in this context, the following notion.

> 'The Small Island States can by promoting a clean energy environment set an example for the rest of the world. Too much of our national budgets are spent on fossil fuels for diesel electricity. This is a drain on our national budgets and does not work towards a solution to the problems of climate change. When the tanker comes in, the foreign reserves go out . . . Far too little attention has been given – amongst the Small Island States leadership and by the donor countries – to the development of alternative means of energy.' (Cited in Roper 2005:110)

Good and best practice examples can be found worldwide in several of the SIDS (Roper 2005). The supply of renewable energy is marked as a positive development challenge that some authors call a "win-win" strategy (IPCC 2001). Here are three brief examples of islands: in Barbados 33% of all households use solar water heaters; Fiji and the Dominica account for more than 30% of their hydropower electricity production; and 45% of Tuvalu's electricity is supplied by photovoltaics (IPCC 2001). However, to achieve this, together with the further goal to implement renewable energy in all of the SIDS, external technical, financial and other assistance will be required (IPCC 2001). In addition, regional cooperations such as the Caribbean Planning for Adaptation to Climate Change (CPACC) and the Pacific Islands Climate Change Assistance Program (PICCAP), carried out by SOPAC, are seen as outstanding models for capacity building (IPCC 2001) for: 'training, technical know-how and strengthening national institutions in the area of energy management' (Roper 2005:110).

In the last years an alliance of seven organizations (including the UN Industrial Development Organization) called: The Global Sustainable Energy Island Initiative (GSEII) was established "... to support SIDS and public or private investors by incorporating renewable energy and energy-efficiency projects into national sustainable energy plans." (Roper 2005:115). ST. Lucia, Grenada, Dominica, Fiji and Marshall Islands started to request GSEII and are now on the way to environmentally cleaner energy (Roper 2005).

4.2 Impacts on the Islands Environment and their Consequences

Map 11: Environmental Concerns in the Pacific Island Region[101]

The SIDS are especially vulnerable to the vicissitudes of the economical globalization (Pelling et al. 2001). As referred in the tourism chapter 4.1.3, the majority of the SIDS are depending on tourism, because it is the main source of income for most of the islands' economies. Indeed, economical profit can only be produced on a stable environmental foundation as most of the SIDS are predominantly focused on natural marine and terrestrial island environment tourism (Nurse et al. 2005). But island environments are under constant threats of natural meteorological[102] (e.g. cyclones, droughts and floods) and geological[103] (e.g. earthquakes, tsunamis and volcanic eruptions) disasters (Obsai 1995). Furthermore, the tourism industry "... is likely to be affected directly through the damage to coastal and other infrastructure, and indirectly from a projected 'loss' of ecological attractions such as coral reefs ..." (Nurse et al. 2005:100). This is even reinforced by the global climate change. Therefore natural disasters are a serious challenge for the SIDS.

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[101] Source: http://www.abc.net.au/ra/carvingout/maps/environment.htm (Accessed, 23.7.2007).

[102] Meteorological disasters = violent, sudden and destructive changes to the environment related to, produced by, or affecting the earth's atmosphere, especially the weather-forming processes. Definition cited on the European Environment Information and Observation Network on following website: (Accessed, 02.05.2007) http://www.eionet.europa.eu/gemet/concept?cp=5193&langcode=en.

[103] Geological disasters = disasters caused by movements and deformation of the earth's crust. Definition cited on the European Environment Information and Observation Network on following website: (Accessed, 02.05.2007) http://www.eionet.europa.eu/gemet/concept?cp=3647&langcode=en.

Humans themselves produce various impacts on island ecosystems the so called man-made disasters, which even enhance the already higher vulnerabilities of the SIDS (Nurse et al. 2005). These man-made disasters can occur from e.g. pollution, over-fishing, costal urbanisation and inappropriate waste disposal. Here it has to take into account that the islanders' responsibility to global man-made disasters such as the climate change is fairly small compared to the main contributors of greenhouse gases: the developed industrial nations of e.g. China, USA, or the EU-countries (Nurse et al. 2005). However, island nations create in the meantime regional or local man-made disasters such as the over exploitation of natural resources.

These whole ranges of emerging natural and human disasters as well as global and local issues are challenging the health and wealth of islanders as well as the flora and fauna. Despite this, the SIDS have only a limited ability to cope with the occurring and their own produced stress (Nurse et al. 2005). Tompkins et al. (2005:13) pointed it out precisely and simple: "Climate change is expected to worsen existing vulnerabilities and create new vulnerabilities."

In fact the overwhelming variety of impacts even highlights that if no further actions will be taken small islands will have to fear the collapse of their islands. Especially the atoll island states, which are the lowest-lying islands such as the Maldives, Kiribati, Vanuatu, the Marshall Islands, parts of PNG and Tuvalu, will be between the first to face the consequences of global warming and the sea level rise (Marks 2006).

4.2.1 Natural Resource Exploitation

The development of the diversity of the human culture started with the adaptation to the environment. Physical and behavioural characteristics were developed, to survive and reproduce within the environment (Peoples et al. 2003). In this sense, humans were always utilizing and exploiting their environment and as far as it remained in a small scale, "mother nature" could usually recover. Today environmentalists denounce the process of globalization as the explanation for environmental degradation (Murray 2006). For the Pacific, Lockwood (2004:21) points out that "With globalization has come an intensified extraction of natural resources, particularly minerals and timber, by international cooperations (often consortiums) ...." And that "Islanders desire for roads, electricity and education contributes to their tolerance of forestry and mining projects." (Lockwood 2004:21) Also Binger (2004:1) noticed that

> "Economic activities in the Caribbean, for example, primarily involve direct exploitation of such fragile natural resources as coastal environments, marine ecosystems, forests, agricultural land and mineral resources."

What Binger points out for the Caribbean is normal in all of the SIDS. That is that natural resources such as land, forest and trees, fresh water, coastal and marine resources, and energy resources are jeopardised (FAO 1999). Through the globalization wave, enormous pressures have been raised by intensive and dense populations, uneven development and a higher living standard. Furthermore, a higher resource demand (especially from industrialized countries), tourism, pollution, agriculture and urbanization[104] resulted (FAO 1999). In addition, the SIDS have poor management strategies (Binger 2004). Also unemployment or underemployment (in some cases Binger (2004) counts 30% for the working population) can lead in various cases to ecological and environmental degradation. To sum it up, development in the SIDS has been established "on unsustainable use of non-renewable and potentially renewable resources to provide raw material" (Binger 2004:1). No wonder, that SIDS have now to live with degraded and stressed coral reef-, mangrove- and wetland ecosystems.

Figure 7: The Panugua mine in Bougainville[105]
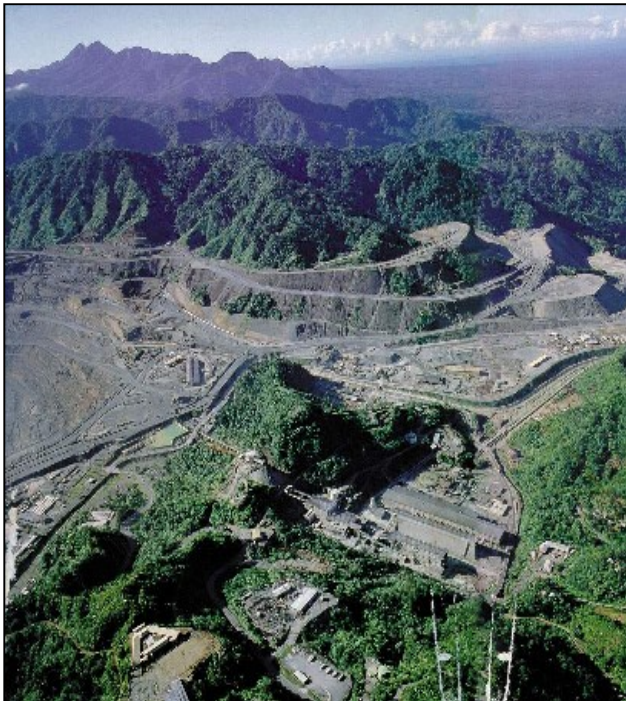
At this point, the author wants to leave the general frame and devote to the "ecological revolution" of Bougainville in PNG. Such kind of events might occur, in the near future, more often when natural resources become rare and people start to understand the value of nature.

Bougainville is an island, which lies west of the mainland of Papua New Guinea and belongs culturally rather to the Solomon Islands than to PNG (Lockwood 2004). The island appeared on the international showplace because of its rich copper and gold resources. Since 1964, when copper mining began in the Panguna Mine in Bougainville, by an Australian company called Bougainville Copper Ltd., tensions started to be present on the island. The conflict between the PNG government and the indigenous people of Bougainville become visible, because the new constitution changed the traditional land ownership and mineral rights were transferred to the state (O'Callaghan 2002).

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[104] Urbanization is on some islands so high that there is a100 % urbanization rate, e.g. in Guam, Hawai'i, Nauru or in the Northern Marianas (Crocombe 2001).
[105] Source: http://www.answers.com/topic/history-of-bougainville (Accessed, 12.06.2007).

> "Land is our life, land is our physical life - food and sustenance. Land is our social life, it is marriage; it is status; it is security; it is politics; in fact, it is our only world. When you take our land, you cut out the very heart of our existence." (Miriori 1996:60)

The mine brought 45% of PNG total export earnings (OPM SG 2001) and therefore an important development tool for the rise of PNG as a nation. At the beginning of the 1970s Bougainville gained more autonomy and than in 1975 they wanted to secede from PNG, but failed (O'Callaghan 2002). The mine brought little benefits for them. In contrast many people of the mainland of PNG moved as copper mine workers to Bougainville and changed the cultural foundations. It came to a cultural breakdown (Miriori 1996) and increased poverty and inequality followed (Havini et al. 1995). Women were raped and murdered in front of their own families and afterwards dumped from helicopters at sea. Unfortunately summary executions as well as torture have become a norm (Mirioris 1996). Furthermore Bougainvilleans claimed "... that Bougainville Copper had set up a system of apartheid on the island, with one set of facilities for white workers, and one set for the locals."[106]

After 20 years of exploitation the Panguna Mine had grown to a huge crater (500m deep and about 7 kilometres in circumference), creating over a billion of tonnes of waste (Miriori 1996). Environmentally speaking the Panguna Mine resulted in a disaster. The nearby situated Jaba River was highly polluted from the mine waste. This again caused birth defects and the extinction of the flying fox on the island of Bougainville. For more than two decades Bougainvilleans claimed compensation, wrote petitions, protested and were ignored by the government (OPM SG 2001).

In 1988 the outbreak of a violent escalation began generated by some islanders who formed the Bougainville Revolutionary Army (BRA) and brought material damage to the mine. 1990 the mine was closed (Lockwood 2004). The PNG government received military assistance from Australia and about ten years of guerrilla war followed (OPM SG 2001).

> "We now understand and have seen with our own eyes the destructive effects of the copper mine operations on our land, our environment, our society and our culture. The mine will remain closed for the rest of our lives." Pangunan landowners, 1992 (Cited in OPM SG 2001:6)

> "The blockade has amounted to genocide of a people merely fighting to protect what is their own."(Havini et al. 1995)

About 10.000 people died from war and from the lack of medicines, since the island is under a blockade (Havini et al. 1995). From 2000 on, the reconciliation process has begun and as a part of this, Bougainville as has to go through an independence referendum planned in

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[106] http://en.wikipedia.org/wiki/History_of_Bougainville, Accessed 01.06.2007.

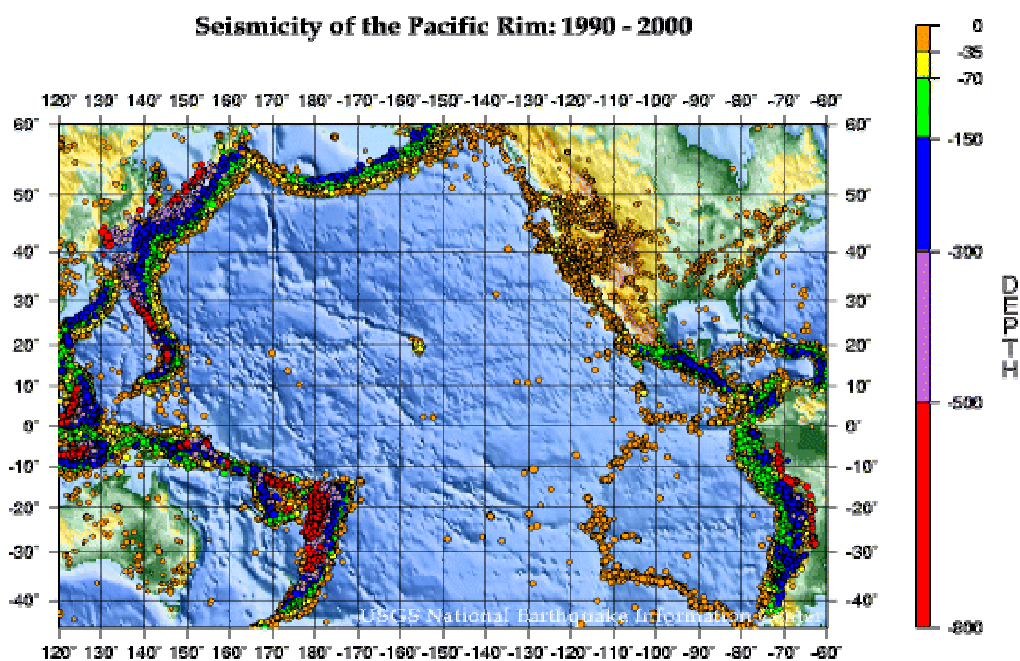2010.[107] Most of the people have got back to the everyday live of subsistence agriculture (OPM SG 2001).

However the event has been an inspiration for Pacific Islanders and other groups who live under enormous resource exploitation. The story has shown that, with community cooperation and the will to fight for land rights, independency, and natural resources, people can win the battle against TNCs, and modern armies (OPM SG 2001). Due to the worldwide decrease of mineral resources and the coincident increase of environmental problems such events are not and will be not the exceptional case. In the common future all humans will have to find differing solutions to sustain our resource obsession.

4.2.2   Natural Hazards

'The older generation tells us that certain parts of the reefs were above water when they were young. Every year the storms are getting worse, both more intense and destructive. Sea water contaminates many of our precious fresh water lenses.' Statement by H. T. D. Kijiner (Marshall Islands) (UNFCCC 2005:17)

"Antigua and Barbuda is currently losing its mangrove ecosystems at an annual average rate of about 1.5–2%, with a sea-level rise of 3–4 millimetres a year. Based on this, it is estimated that there will be few, if any, mangroves left in this nation by 2075, because the coastal slopes of most areas will not allow for landward retreat of these trees. If the sea level rises 10 millimetres a year, mangroves could disappear from Antigua and Barbuda by as early as 2030 or 2035." (UNFCCC 2005:19)

Map 12: Earthquakes, tsunamis and volcanic eruptions in the Pacific region[108]

Due to their intrinsic vulnerability, which is referred to in chapter 2.1, the SIDS are experiencing a wide range of natural hazards such as tsunamis and floods (Méheux et al., 2007). Many of the SIDS are situated in regions, which are highly crisis-prone to natural hazards. Therefore, the SIDS are classified as high-risk areas (Obasi 1995). For example, the Pacific Rim is seismically the most active region in the world. It has been accounted for 80% of all tsunamis (Obasi 1995). As shown on the Map 12 the whole Pacific region is highly exposed to occurring earthquakes, tsunamis and volcanic eruptions etc. Just recently, on the 3rd of April 2007, a measured earthquake of 8.2 hit the Solomon Islands and the following smaller magnitude earthquakes created a tsunami. At least 52 people were killed and more than 6,000 people were suddenly homeless (Mercer 2007).

However, the fragility of the SIDS around the world draws over and over attention. At the followed table exemplarily events are listed, just to give an impression on the effected SIDS and varieties of natural hazards.

Table 6: Natural hazards events in SIDS[109]

Year	Country	Natural Hazard
1979/2005	Saint Vincent and the Grenadines/ Comoros & PNG	Volcano eruption
1985/ 1995/ 1998/ 1999	São Tomé and Principe/ Cape Verde/ Guyana/ Kiribati	Drought
1998/2004/2007	PNG/ Mauritius, Seychelles & Maldives/ Vanuatu	Tsunami
1998/2002	PNG/Vanuatu	Earthquake
2002/2004/	Solomon Islands/Samoa/ Trinidad and Tobago	Tropical cyclone
2004	Haiti & Dominican Republic	Heavy flooding & mass movements
Ongoing	Maldives & Kiribati	Sea-level rise

Thirteen of the UN's SIDS belong to the world's twenty-five most natural hazard endangered countries in the world (Méheux et al. 2007). In fact natural phenomena become hazards only when they wrap humans and their welfare. That means the risks become critical, when their costs (in the meantime economical coasts) are associated with the risk (Tompkins et al. 2005). If an uninhabited island is devastated by a hurricane, it will not be declared as a disaster.

> "A disaster is said to occur when a specific event causes 'widespread human, material or environmental losses that exceed the ability of the affected society to cope using only its own resources'" (Obasi 1995:65)

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[109] Made by the author; full information can be cited in Méheux et al. 2007. A recent study was accomplished by Méheux, Dominey-Howes and Lloyed (2007) from the Macquarie University of Sydney in Australia, estimating the current knowledge of natural hazard impacts on SIDS.

In this case hazards alter to disasters (Obasi 1995). Hereby the scope of escalation is for the most part determined by the level of vulnerability that is exposed by the affected biophysical and human systems (Méheux et al. 2007). However, such events result not only in negative effects; they also can have positive effects to the human and biophysical environment as visualized in the table.

Table 7: Positive and negative examples of the impact of
natural hazards on biophysical and human systems[110]

Examples	Biophysical	Human
Positive	1. Climate Development & regulation 2. Generation of new land 3. Fire regeneration of vegetarian 4. River floods fertilising soils	1. Provision of renewable energy sources 2. Generation of building construction materials 3. Generation of mineral resources 4. Tourism income 5. Inspiration, well-being etc 6. Increased investment 7. Enhance sense of community
Negative	1. Climate amelioration 2. Destruction o landscapes (e.g. volcanic eruption) 3. coastal erosion 4. Destruction of/disruption to ecosystems 5. Salinisation of soils	1. Mortality and morbidity 2. Changes to social structure (e.g. disturb the sense of community) 3. Impacts on agriculture 4. Damage in the build environment (buildings, lifelines & transport)

In the literature, natural disasters are classified as direct and indirect impacts. Whereby the impacts are seldom investigated in depth, meaning indirect or long-term impacts often fail to be included in the complexity of interactions of impacts (Méheux et al. 2007). This even enlarges the lack of understanding to reduce SIDS vulnerability.

> "Disasters are unique events, composed of direct and indirect impacts in biophysical and human systems, which are products of their unique physical, social, cultural, political and economic environment." (Méheux et al.: 443)

The destruction of the islanders' natural environment and the effects for the society as well as for the economy, result in the sudden halt of everyday life. Furthermore small economies are triggered down, since the reconstruction costs are often behind the capabilities of the SIDS (Obasi 1995).

> 'we pointed out that our region already suffers heavily from a high incidence of tropical cyclones, and that rising sea levels, coupled with the anticipated increases in the frequency, and intensity of these cyclones, as a result of global warming, would effectively devastate most, if not all, of our vital infrastructure, and threaten the lives

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[110] Source slightly modified, cited in Méheux et al. 2007: 443.

of a majority of our population.' Statement by V. Lasse Trinidad and Tobago 12 November 1998, Buenos Aires, Argentina (UNFCCC 2005:22).

How can the impact of globalization alter this situation? Pelling and Uitto (2001) analyse in their research "... the critical pathways of interaction between global pressures and local dynamics". They conclude that global pressure such as coastal urbanisation, social change, local environmental degradation, local and international politics (which can lead to ethnical and political conflicts), have negative impacts on the vulnerability of SIDS. Notwithstanding, that globalization has two sides of a coin i.e. also positive effects such as: a wider international trade and investment (strengthening the economical diversity), regional island networking (experience exchange and support) and urbanisation (concentration of emergency relief organisations or medical services), which enlarge the resilience of the SIDS to cope better with natural hazards (Pelling et al. 2007).

How can the SIDS react to or prevent disasters? Unfortunately, the event can not be avoided. However, long-term planning, which includes disaster management to avoid uncontrolled development, non-existent safety regulation codes and ill-prepared populations, can certainly at least reduce the damage to the islanders societies and economy (Obasi 1995). According to the UN report (2004) the development of institutional and human capacities is the key action that has to be taken. The exchange of successful examples and international experience can connect and actually help island communities in a productive way. Méheux, Dominey-Howes and Lloyed (2007) postulated that more in-depth analyses are necessary to develop the best practices for multi-phase assessments as well as more analysis of impact data and a careful collation.

Another import issue is the empowerment of traditional coping methods, since many outer islands are too isolated to be reached immediately after the event. Pelling et al. (2007) emphasize the resilience as an important recover tool. They describe resilience as

> "... a quality that enables an organisation, ecological system, household or nation to recover quickly from disaster shock. Resiliency puts emphasis on coping with disaster rather than promising control or avoid their underlying physical energies." (Pelling et al.:52)

They refer to various authors (Burton, Scott, Swift, O'Keefe, Wisner, Benson and Paulinson) who point out that the influence of the modernisation[111] wave, which induces social change, will have further consequences in the loss of local knowledge of coping and adapting methods. For instance, the shifting system of indigenous reciprocity and social support of a 'moral economy' to mixed economies can erode the chance for island communities to cope with natural disasters (Pelling et al. 2007). However, the author wants to feature, that these actions has to be taken instead of waiting for better solutions. The author truly agrees with

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[111] In this sense they refer to modernization equal to Americanisation, consumerism and individualism.

Pelling and Uitto (2001:61), who formulate the following invocation "... much remains to be done to turn rhetoric into action."

4.2.3   Climate Change

"It is projected that small islands will suffer disproportionately from the adverse effects of global warming." (Nurse et al. 2005:102)

Following Nurse and Moore's (2005) statement, climate change has a paramount importance for the SIDS, because of the intrinsic vulnerability of the island states. Not only small islands, but the whole world has to fear various threats of climate change according to the new ICCP report of 2007 (http://www.ipcc.ch/). It is far beyond the scope of this thesis to illustrate the mechanisms that creates climate change; therefore the focus is on the main challenges and impacts, that the SIDS have to fear.

The menaces of the climate change are likely to be: rising sea level, warmer days during the rainy season, or the summer months, a more acidic ocean, changes in rainfall (more in the rainy season, less in the dry season) and changing of the intensity of tropical cyclones (Tompkins et al. 2005 and IPCC 2001). The effects will widely differ in the regional and global context. Furthermore, scientists proclaim a slow process rather than a significant short-term change (Tompkins et al. 2005).

Worldwide notable changes can be measured significantly. In the South Pacific the changes of weather patterns have been already analyzed since the mid-1970s (IPCC 2001). To briefly sum up some results, scientist detected that some islands have become drier (Fiji, New Caledonia and Tonga), whereas others have experienced a wetter climate (western Kiribati, northern Cook Islands and Tokelau) (IPCC 2001). In the box below, there are some examples of island having an altering situation due to the climate change.

Box: Examples of climate changes already being experienced in the Caribbean and the Pacific (Source: Tompkins et al. 2005:20)

In the Caribbean (published by Clarke, 2004)**:**
• The Caribbean Sea was warming up by 1.5°C in the last 100 years.
• Observations have shown a decrease in rainfall in the Caribbean area. Over the last few decades there have been prolonged dry spells.
In the Pacific (published by World Bank, 2000)**:**
• The increase in surface air temperature has been greater in the Pacific than in the rest of the globe. For example, since 1920, the temperature has risen by 0.6-0.7°C in Noumea (New Caledonia) and Rarotonga (Cook Islands), which is greater than the mean global increase.
• Across the Pacific region, atoll dwellers speak of having to move their houses away from the ocean because of coastal erosion; of having to change cropping patterns because of saltwater intrusion; of changes in wind, rainfall, and ocean currents.
• Fiji has experienced two droughts and severe floodings in the past decade.

4.2.3.1 Water-Level Changes

> "... small islands are likely to experience a rise in sea surface and air temperatures (between 1.4°C and 5.8°C), rise in sea level (as much as 9mm per year), changes in rainfall patterns, increase in the frequency of extreme events and a possible increase in the intensity of tropical cyclones and changes in their tracks." (Tompkins et al. 2005:20)

Scientists are expecting excessively impacts on the economic and social development of small island states due to sea-level rise (IPCC 2001). The main centres of activities (housing, business, tourism etc.) are located at the coastline of islands. Therefore they are in this sense highly prone to changes in sea-level rise. Especially atolls (e.g. in the Pacific or Indian Ocean) as well as low limestone islands (e.g. in the Caribbean) are likely to be threatened in their whole living system (IPCC 2001 and Pelling et al. 2001).[112] The contributors to the IPCC report 2001 further argue, that this intrinsic atoll and low-lying islands will, in addition, face higher storm surge and flood risks. In addition to the water-level changes, anthropogenic mismanagement (e.g. sand mining) of coastal land can cause increasing beach erosion (IPCC 2001).[113] Craig-Smith (2005) is also on the same line referring to the issues affecting the coastal marine environment. He argues that coral bleaching will be highly jeopardized. Within this context the tourism, as the main income base for many microstates, will additionally suffer disproportional (Craig-Smith 2005). Yet, the costs that will be generated to protect tourism accommodations have to be accounted in addition (Craig-Smith 2005).

The ICCP report authors notes that small island states are by history, already used to overcome high variations in interannual climatic and oceanic weather (ICCP 2001). That means that many adaptation and coping methods already exist, which could be used to handle with the stress. But, despite knowing of the additional stress, the future of these island states will rely on their adaptation scope and their international lineages to become potential "off-island migration" positive sounded countries (IPCC 2001). According to the IPPC report (2001) adaptation possibilities are retreat, accommodate and protect. But attention has to be put on that the adaptation pathway does not lead to maladaptation, where the adaptation practices will result in rather more vulnerability than the expected abated vulnerability (IPPC 2001).

> 'The Maldives is one of the small states. We are not in a position to change the course of events in the world. But what you do or do not do here will greatly influence the fate of my people. It can also change the course of world history.' Statement by M. A. Gayoom (Maldives) 4 December 1997, Kyoto, Japan (COP 3) (UNFCCC 2005:1)

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[112]There are estimated examples that show, if the scenario of only one meter sea-level rise will become reality, Tongatapu in Tonga will lose 10.3 km²; Yap in FSM has to expect a retreat from 9 to 96 meters; and Majuro Atoll in the Marshall Islands will lose 65 meters of land (IPCC 2001).

[113] In Trinidad and Tobago about (on average) two to four meters beach erosion has been described and in Fiji it has been reported that some beaches have been retreated by more than 30 meters within the last 70 years (IPCC 2001).

Indeed, small islands have little to say among the world leading countries, but they are not completely without options to counteract the enhancement of preservation through integrated coastal management. The SIDS could enforce the rectification and preservation of the natural protections with measures such as mangroves reforestation, protection of coral reefs, use of artificial nourishment and relocation or raise of the village (IPCC 2001). Regarding to those options, islanders will have to decide which island is more important than another, since building materials are rare, and therefore the consumption of natural resources from (un)inhabited islands might be the only chance (IPCC 2001). The Caribbean Islanders in particular, put more emphasis on "..."precautionary" approaches such as enforcement of building set-backs, land-use regulations, building codes, and insurance coverage" (IPCC 2001:857).

4.2.3.2 Biodiversity as a part of The Climate Change

> 'Climate change is one of the most serious threats to the planet's biodiversity. We now have strong scientific evidence that global warming will result in catastrophic species loss across the planet ...' Dr Malcolm of the University of Toronto (Conner 2006:1).

One of the aspects of climate change is that not only but also fauna and flora humans have to find niches to adapt into the global climate change. Islands have very fragile ecosystems and a high degree of endemism (IPCC 2001).[114] Stable ecosystems are enormously valuable for recreation (e.g. after natural hazards) and tourism. In this way they are the most important contributors to the national economies of e.g. Antigua, Bahamas, Barbados, Jamaica and St. Lucia (Christian 1999).

Invasive species[115] or the degradation of ecosystems alter the fragile livelihood base for island animals and plants, often in an irreversible way (IPCC 2001). To make an example: The brown tree snake[116] was native to Australia, and introduced in Guam accidentally by a cargo ship in the 1950s. Today the snake is a serious threat since almost all indigenous birds are extinct (Thaman 2002 and http://www.invasivespeciesinfo.gov). Due to the invasive species and the high pressure on the natural resources, for example, the Pacific has 50% of the total biodiversity at risk (GEF 2006). Some studies even report about 80% of endemism rates in many islands (GEF 2006).

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[114] Cuba, for example, has 50 % flora and 41 % fauna on endemism rates (IPCC 2001).
[115] Invasive species successfully compete with indigenous island flora and fauna. Island species normally lost, due to the islands isolation and absence of big predators, their defence or dispersal mechanisms and are therefore quite fragile to the newcomers (Thaman 2002).
[116] Brown tree snake = scientific name: Boiga irregularis (http://www.invasivespeciesinfo.gov/animals/bts.shtml, Accessed, 18.05.2007).

"The regional biological uniqueness is well illustrated by their bird population – the Pacific has 15% (408 of 2700) of the world's restricted range bird species in only 0.4% of its total land area." **(**GEF 2006:3)

But why should we care about biodiversity? This is a highly debated topic, which is far beyond the scope of this thesis[117]. But looking the anthropocentric perspective it can be said that humans benefit from the pragmatic conservation of nature because humans are completely and entirely dependent on the diversity of living things for survival (www.starfish.ch). A look at the marine ecosystem of coral reefs makes it palpable. Coral reefs support the livelihood of millions of islanders, for example in seafood, tourism, medicine, building materials and coastal protection (www.starfish.ch). In the case of the altering global climate patterns and non-climate stress, human will have to live with less biodiversity in the near future (IPCC 2001). Worldwide and in the SIDS many species live already on their thermal limits (IPCC 2001).

Map 13: Marine Hotspots Regions that are especially endangered

(yellow=not very rich in marine species / orange = rich / red = very rich / dark red = regions with a lot of endemic species (= hotspots)[118]
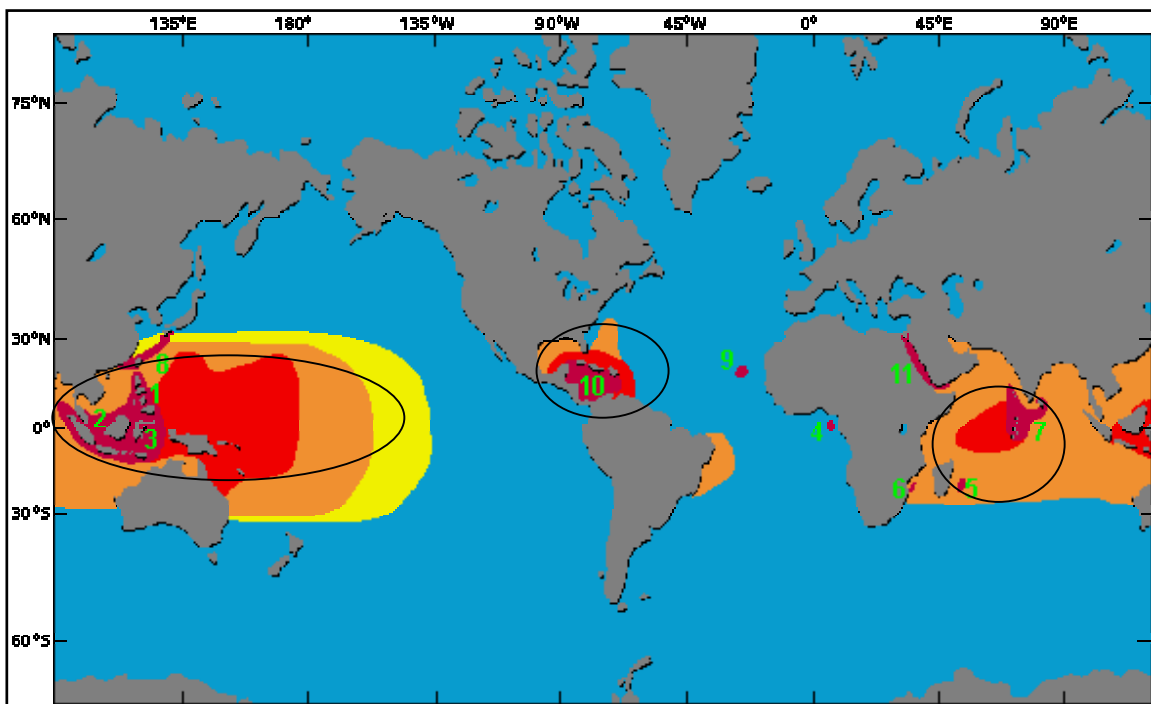
Scientists mark the world in so called hotspots[119] of biodiversity in the marine and terrestrial ecosystems. The Map 13 shows clearly that many SIDS have high numbers of endangered

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[117] For further information on the importance to protect biodiversity visit following website: http://redpath-museum.mcgill.ca/Qbp/2.About%20Biodiversity/importance.html (Accessed, 17.05.2007).
[118] Source: www.starfish.ch/Zeichnung/Karten/Hotspots..gif (Accessed, 17.05.2007).
[119] Biodiversity Hotspots: Regions that harbour a great diversity of endemic species and, at the same time, have been significantly impacted and altered by human activities (www.starfish.ch/Zeichnung/Karten/Hotspots.GIF, Accessed, 16.05.2007).

marine species. Currently the prognoses are not positive e.g. for the Caribbean or the Indian Ocean, since reefs have been debilitated by anthropogenic stresses (IPCC 2001).

Environmentalists, politicians and concerned people are now trying to build up as much nature reserves as they possibly can to secure at least the livelihood base within the hotspot areas.

> "Where forest have been destroyed, degraded or reduced, the plants, animals, and human cultures that depend on them have also disappeared." (Thaman 202:24)

By offsetting one piece of the island environment, which has grown during a long-lasting process, it offset the whole puzzle will be offset. The deforestation of mangrove forests, for example, produces multiple stresses on the human and non-human environments. First, the mangroves are natural protectors from hazards such as cyclones. Man-made changes or the increase of natural hazards events threaten the soil of the islands, agriculture and buildings. Second, mangrove forests are important breeding places for marine and terrestrial habitants: if these species cannot find other breeding places, only a few or no young animals will be the outcome (Thaman 2002). Third, the mangroves as natural resources are being over exploited for e.g. firewood or medicine materials (Thaman 2002). Additionally, by cutting down mangrove forests, coastal erosion, salt-water incursion and salt spray damage to crops become likely to occur (Thaman 2002).

Thaman (2002) warns and notes that in many Pacific island ecosystems important 'keystone' species[120] are by now endangered or lost and that this can result in the overall breakdown of an island ecosystem. Calculating the climate change into the debate, the species will either find new niches or become extinct.

Another point Thaman (unpublished and 2002) placed on his agenda, is to call for the preservation of the knowledge of ethnobiological diversity[122]. By forgetting, the local names, uses and management systems of their islands biodiversity, the chances for preservation will diminish (Thaman 2002). Thaman (unpublished) points out that there are only few places on the earth were eco-tourists could discover the strong connection of a society or ethnic group to their island environment. Therefore, Thaman (unpublished) preaches that the stressed island environment can, through the practise of a real sustainable tourism lead to ecodevelopment[123]. Besides the promotion of more green tourism and economic development in the Pacific he suggests to add some other arguments such as highly emphasizing the implementation of

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[120] Keystone species are species such as "... insects, spiders, birds, fruit bats, crabs, sharks, and parrotfish [that] serve as pollinators, dispersal agents, decomposers, top predators or sand producers, and play critical roles in maintaining the balance within, and the healthy functioning of, ecosystems (Thaman 2002:23).

[121] Currently the tick is, due to the mild winter and changing climate patterns, enlarging its living environment from southern up to northern Europe and creates in this way a real health threat (Hibbeler 2007).

[122] Ethnobiological Diversity describes Thaman (unpublished), as the "... knowledge, uses, beliefs, resource-use systems and conservation practices and language that a given society (or ethnic group), including modern scientific community, has for their ecosystem, species, taxa and genetic diversity.

[123] Ecodevelopment is a holistic approach, which includes all aspects of development: economic, social and spiritual development as well as environmental protection (Thaman unpublished).

poverty alleviation, general environmental and ecotourism awareness rising, protection and restoration of threatened biodiversity and the promotion of stakeholders' health, social and spiritual well-being (Thaman unpublished). Pacific Islanders in particular, have a deep relation to the integral concept of their land, which includes the people, their cultural and spiritual roots as well as the marine and terrestrial environment (Thaman unpublished).

Many of the SIDS have already established national parks and protected areas for forest conservation, to maintain the biodiversity, and for the reduction of land degradation (Christian 1999). Dominica in the Caribbean area is an island of volcanic beauty and large natural forest resources, which accounts for about 21% of the National Parks and Reserve Systems (Christian 1999). In this regard, Dominica can diversify its economy with the ecotourism branch (Christian 1999). However, the challenge for Dominica and other SIDS is to see if cooperation of people and wildlife can benefit both.

In order to regulate the environmental problems globally, many international agreements, local initiatives and networks started to flower and boost (Murray 2006). Islanders have been caught by this wave from above and below. People slowly start to raise the awareness for the relations of a healthy environment and for an economical as well as social community well-being. In this line, responsible policy makers have to rush to utilize environmental actions. This is a rather tough task, because environment and development are interrelated in a complex manner (Murray 2006). Nevertheless, the primary goal is to achieve a global sustainable environmental development, which is also a question of fair economic and equal social development.

The United Nations Development Programme has a wide global climate change overview and has suggested to concentrate on a small-scale development projects on: agriculture, health and the island environment, water resources and energy independency through renewable energy products (UNDP 2004). The UNDP proclaims that the reduction of vulnerability will enhance the mitigation of vulnerability and raise the adaptation of the SIDS (UNDP 2004).

Nurse et al. (2005) postulate the implementation of adaptation strategies, as the only option for the SIDS, even if their adaptation capacities are limited. Indeed SIDS do not actually have a real chance to fight against the climate change effects. The only realistic and achievable goal is to set sail on the reduction of their vulnerabilities (Nurse et al. 2005). In this connection they argue furthermore that the possible, reachable ways are the claim of international funds[124] to optimize existing resources and the implementation of development strategies (with a high emphasis on environmental issues). So it is possible to enhance resilience building and to cope with climate change (Nurse et al. 2005).

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[124] Not for all SIDS it is easy to actually access international monetary funds, since most SIDS are "to well of". Indeed only this nine SIDS: Cape Verde, Comoros, Haiti, Kiribati, Maldives, Samoa, Solomon Islands, Tuvalu and Vanuatu are listed at the official list of the 25 most LDCs in the world (Nurse et al. 2005).

4.3   Socio-Cultural Consequences and Changes of Globalization

The socio-cultural impacts of globalization are highly debated. In this section I want to consider that the globalization of culture depends on internal as well as external forces, which are highly complex (Murray 2006). Internal forces can be for example, technical developments, innovations or shifts in paradigms, whereas external forces may be colonialism or tourism (Murray 2006). In this context Murray (2006:219) notice, "Cultures became less spatially bounded than they once were, leading to more intense cultural traffic." Furthermore, through the process of deterritorialization individuals of cultures can lose the kit that defines them within national state boundaries (Schmeidler 2001).

Within the history of globalization, the process of cultural diffusion and the strengthening of cultural characteristics have been particularly important as cultures are interacting constantly (Diamond 1998). The outcome of this interactions can be according to Murray (2006), conventionalized into three concepts of cultural interaction assimilation[125], acculturation[126] and autarkism[127]. Another widely debated paradigm is the process of glocalization, which is examined within this section. Thomas Friedman defines glocalization in the following:

> "the ability of a culture, when it encounters other strong cultures, to absorb influences that naturally fit into and can enrich that culture, to resist those things that are truly alien and to compartmentalize those things that, while different, can nevertheless be enjoyed and celebrated as different."[128]

However within the globalization process the interaction combinations were in the past highly dominated in the past by flows from the "West" to the rest of the world e.g. through the development of mass tourism, migration waves (Murray 2006) or the distribution of the Christian religion. In the cultural globalization debates, the loss of cultural diversity and the establishment of culture homogeneity are a reason for apprehensiveness in various cultures (Lockwood 2004). This goes in line with the worldwide considerations of

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[125] Assimilation is the complete loss of cultural traits of a culture through the domination by another culture. Globally this leads to universalization and spatial homogeneity (Murray 2006). For example the assimilation of Afro-Americans into the American culture.
[126] Acculturation means that a cultural group incorporates common cultural traits of another group, but retains some elements of their own. Globally this leads to hybridity and heterogeneous patterns. To make an example, acculturation is practised by Indo Fijians, which still practice their Indian culture, but also make use of Fijian cultural practices.
[127] Autarkism develops if a culture reasserts its characteristics and authenticity against another cultural group. The global outcome is localization and mosaiced heterogeneity (Murray 2006).
[128] (http://www.d.umn.edu/~cstroupe/ideas/glocalization.html, Accessed 24.05.2007).

"McDonaldization"[129], "global cultural imperialism"[130] or Samuel Huntington's notion of the "Clash of Civilizations"[131] (Lockwood 2004, Murray 2006 and Schmeidler 2001). In contrast to this, various protagonists refer to "western" characteristics, which could not been established in "non-western" cultures such as individualism, equality, universal human rights or free media (Schmeidler 2001).

The contributions of this section to the socio-cultural impacts of globalization to the SIDS societies are the developments of the past as well as future challenges that will determine the cultural development of the island cultures. Unfortunately there are plenty of issues, which have to be left out due to the limited scope of this thesis. However, the focus is on the emergence or stabilization of plural- or multicultural island societies, their identities and preservation of cultural traditions in the context of tourism as well as their reaction on the shifting values and society patterns.

4.3.1   Customs and Traditions

In this section the main point is to concentrate again on the aspects of tourism but here in relation to socio-cultural consequences. Within the authors own research on the Pacific German Regional Forestry environmental changes will be addressed in the context of social and cultural consequences in Chapter 5. Here the view comes back onto the consideration of tourism, because this is one important issue, which today shapes the islanders everyday life for the most part. These consequences might even increase in the near future, if there is no following of economical future developments. However, it should be noted at this point that here the Pacific Islands are supposed to serve exemplarily for other the small island destinations.

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[129] McDonaldization is defined by Murray (2006:237) as "... the process through which the organizational, productive and representational principles of McDonald's were redefining globalization." McDonald is seen as having a key role to the cultural diffusion of American values such as efficiency and standardization.

[130] Cultural imperialism used to be practiced by imperial powers. Today global acting TNCs construct the new elements and paradigms of cultural imperialism. They are the global players, which are represented by a small elite (mainly American) and their interests (Murray 2006).

[131] Huntington's' theory proposes that people's cultural and religious identities will be reasons for upcoming conflicts in the post-Cold War world (http://en.wikipedia.org/wiki/Clash_of_civilizations, Accessed, 24.05.2007).

Customs and tradition are particularly important for the indigenous cultures of the Pacific Islands. Islanders, which have strong relations to their culture and heritage, started, within the tourism wave, to recognize that that culture and cultural activities can be actually marketed as a tourism commodity (Ayres 2002). Ayres goes even further and argues that islanders take rational advantage of the uniqueness of their culture to maximize their profits. The question in this sense is only what price islanders will have to pay?

> "Under the logic of a "culture of consumption," the value to the individual consumer of the travel mode, cultural events, and associated goods packaged through the tourism-production process lies in the quantity and quality of the experience promised and symbolically "sold"." (Conway 2004:118)

Figure 6. Traditional Handicraft for Tourists: A Fijian Masi[132]

This discussion goes back to the rise of the "consumer culture"[133] debate. Kreisel (2004) contemplates the commodification of culture, from two widely accepted contradicting approaches. In the first instance, he argues that tourism has the function of maintaining and preserving the traditional cultural values, customs and ceremonies. That means that quite a number of traditions would be lost by now if they would not be continuously practised. On the other side, customs could remain in regions where "western" influence was limited. Aside from this Kreisel (2004) (but also Stymeist 1996) admits that various customs and traditions remained only because tourists have an enormous demand and expectance for them. He warns that this is leading to superficial reinventions of traditions and to satisfy the tourism demands. But this, again, is alienated from the actual traditional meaning (Kreisel 2004). It is even argued, that this implies patterns of the "prostitution of culture", in the meaning that cultures loose control and give cultural e.g. symbols "... into the hand of market forces." (Murray 2006:251). Moreover Lockwood (2004:24) brings it directly to the point, "... tourism promotes the "commercialization of culture," where island cultures become commoditized, degraded and "sold" to tourists as entertainment."

In the case of the movie "Cannibal Tours"[134] Silverman (2004) disagrees in the point that commodification is per se bad per se. In his view, locals express new emerged concepts of

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[132] Source: http://www.bluewaters.us/Wood_Carvings.htm (Accessed, 14.06.2007).

[133] Consumption within the debate is understood as more than a transaction process. It refers to brands, which are symbols of identity; therefore consumption has become a "... key source of social and cultural differentiation." (Murray 2006:248).

[134] One example for the commodification of culture is the famous "Cannibal Tours" movie from 1987 made by Dennis O'Rourke. In this movie "We see these intrusive visitors sunning themselves in bikini abroad the ship, zipping along the river in small speed boots, and wandering through several Sepik communities." (Silverman 2004:340).

self-identity and ethnicity, and the Sepik[135] people create "... cultural hybridity, resistance and aesthetic innovations." (Silverman 2004:354).

With the production of traditional art crafts such as Tapas[136]/Masis[137] or wood- and jade carvings islanders can generate significant income earnings (Kreisel 2004). Sometimes, this is even the only way to profit from tourism, as the author has shown in the context of cruise ship tourism in the Caribbean. However, in some cases, this resulted in mass production and the modification and invention of traditional art as airport art[138] (Kreisel 2004).

Figure 9. Fijian Fire Walking[139]

Cultural music, dances, performances or ceremonial rituals become reinvented or modified just as traditional art man-made products. Kreisel (2004) brings up the example of the

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[135] Sepik people are indigenous inhabitants of various parts in Papua New Guinea, along the Sepik River.

[136] The word tapa comes from Tahiti. Captain Cook picked it up and introduced it to rest of the world. Tapa cloth (or simply tapa) is a bark cloth made in the islands of the Pacific Ocean, primarily in Tonga and Samoa, but as far a field as Java, New Zealand, Papua New Guinea and Hawaii. In French Polynesia it has completely disappeared, except for some villages in the Marquesas (http://en.wikipedia.org/wiki/Tapa_cloth, Accessed, 22.05.2007).

[137] Masi is the Fijian word form tapa.

[138] Airport art is generally understood as cheap souvenirs or ethno kitsch, which was manufactured in mass production in the third world. In this way the products are competing with real traditional and handmade art. The name comes from the place where this kind of art is usually sold; at airports. Frequently the cultural background is missing or/and is new invented. The design, colours, weight and fabrics primarily follow tourists' favours (http://www.oeko-fair.de/oekofair.php/cat/485, Accessed, 22.05.2007).

[139] Source: http://www.ryanphotographic.com/images/Scenes/Fire%20walking%20Fijian%20Cultural%20Cetre%20deuba.jpg (Accessed, 01.07.2007).

Hawaiian ukulele, which was introduced to Hawaii by the Portuguese. Today it represents for many people as the typical sound of the South Sea[140].

One other example from Fijian is examined in detail by Stymeist (1996) in "Transformation of Vilavilairevo[141] in Tourism", which developed into a stages display (Stymeist 1996). It used to be performed only by residents of Beqa Island, but today Vilavilairevo can be experienced on daily or weekly shows in tourists' resorts or cultural centres. Economical profits are earned and it became a symbol as well as an international image for indigenous Fijians. Traditionally the performance still refers to war and cannibalism. However, "The event is no longer performed by the members of a folk community for themselves but is enacted only for tourists in exchange for money." (Stymeist 1996:13). On the negative side inter- and intra-village conflicts developed and it declined to a "pseudo-event" (Stymeist 1996). In the conclusion Stymeist (1996:15) notices that:

> "The commercialization of Vilavilairevo has decontextualized the event to allow its transformation and recontextualisation in touristic practice as a signpost of radical alternity in the geography of world tourism."

However, it is evident that this reinvention and modification of traditional customs, performances or/and art crafts are instruments to adapt, integrate or assimilate to the globalization process, like in this case through the global tourism. All around the world scientist notice that there are shifting values around the concept of tradition. Keeping in mind that the utilization of traditions can be positive (e.g. the use of myth to unify communities) or negative (e.g. to use it as a critique to modernity). Nevertheless cultures were and are always hybrid. At the end islanders, as they always did, have to decide by themselves which traditions, customs, beliefs, practices and values they want to save or offer to the globalization wave. Here the process of nation building and the search for identity comes into the discussion. The author will examine this in the Section 3.3.3.

Finally the focus goes to a short look at the tourists' perspective on traditional customs and traditions and examines why tourists have such a demand of culture consumption. The question is answered by Jane C. Desmond who wrote a book named "Staging Tourism" where she pictured that the way how exotic images and bodies are displayed within the search of harmony. She observed the following:

> "... industries of cultural tourism and animal tourism: each represents a vision of a world in harmony, a vision that is at once nostalgic, utopian, and futuristic – a vision of Edenic past as prototypical futures. To erect this vision, each industry rests on the

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[140] The author herself, experienced at the arrival in the Fijian airport (2005) ukulele music. Dressed in typical Hawaiian beach shirts, three Fijians were everyday performing Fijian welcome music on guitars and the ukulele, which were traditionally not used in Fiji. They were paid by the Fijian government to present some "typical traditional" music as one of the Fijian musicians noticed.
[141] Vilavilairevo literally means "jumping into the oven". It is a cultural ceremony of fire walking on heated stones on the island of Beqa (pronounced Bengga) (Stymeist 1996).

physical display of bodies perceived as fundamentally, radically, different from those of the majority of the audience who pays to see them." (Desmond 1999:251).

4.3.2   Migration

At the beginning of Section 4.1, the author already mentioned the concept of the so-called MIRAB economies of small- and microstates in the Pacific, as a model of a unique development strategy. However, the following section attempts to provide more information about the Caribbean migration situation and to answers the questions such as: What are the patterns and consequences of the Caribbean migration flows? In which sense, is migration a contributor to culture change? In addition, what will be future trends?

International Trends

According to the observations of Murray (2006), there can be currently determined four key trends of the international migration flow. First, "Migration is globalizing ..." (2006:233) in the meaning that destinations and the country of origin are getting highly diversified. Second, it is noticed that in all regions the volume is flourishing. Third, the reasons to migrate are being increasingly differentiated. And finally, "Migration is being feminized ..." (2006:233), saying that women are dominating refugee movements and are more and more wanting to move also for economical reasons. Generally the migrations flows goes from developing countries towards the "West", mainly Europe and Northern America (Murray 2006). The dominating groups of migrants can be categorized into three groups: professional-, unskilled labour-, and refugee migrants (Murray 2006). Considering the high volume of migrants it is not surprising that they have an impact on the population composition in the destination countries (Murray 2006).

Caribbean Migration

> "Across the Caribbean archipelago, migration has been one of the most significant forces defining and shaping its island societies."(Brown 2004:118)

Migration is a feature that is widely known to the Caribbean people, since it is an important part of their history. Solely that, the pattern has shifted from being net importer to net exporter of migrants (Nurse 2004 and Brown 2004). There have been various migrational movements, which were marked by refashioning of new movements and the changing connections to their home (Brown 2004). Migration flows usually arrive in USA or Canada as well as former colonizer destinations in Europe such as France, the Netherlands or the UK, but also to neighbouring countries (Map 14).

"The Caribbean has one of the largest diasporic communities in the world, in proportion to population" (Nurse 2004:3).

Map 14: Migrants Distribution of 1,267,000 Haitians[142]
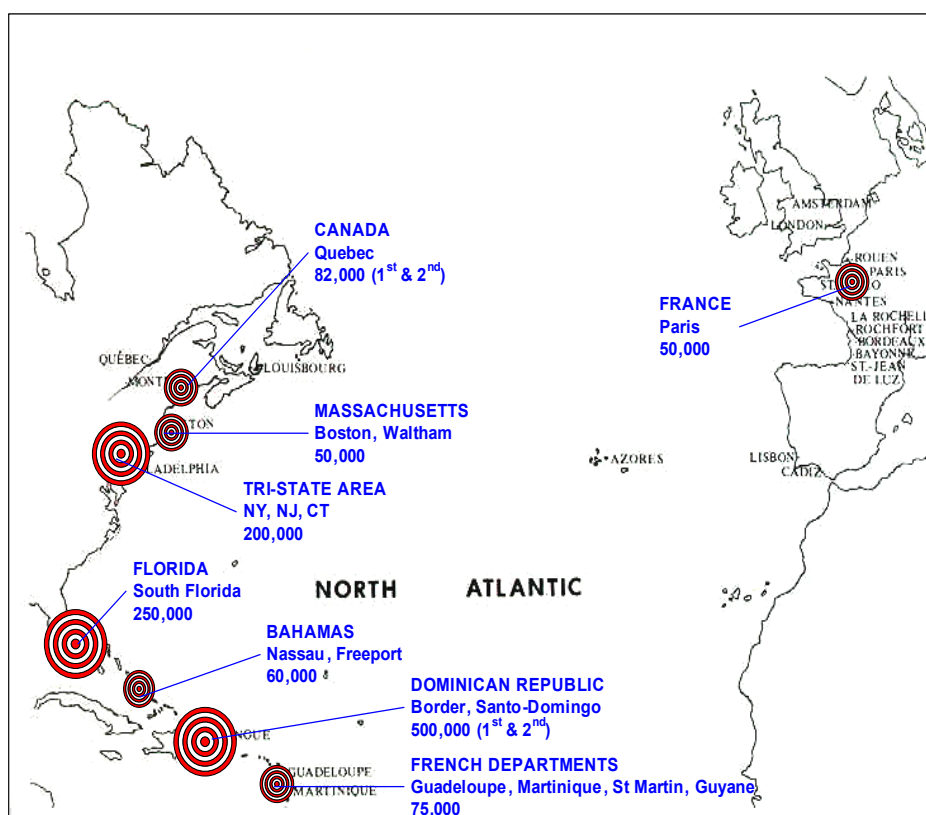
On the Map 14 the distribution of Haitian migrants', which is demonstrative for other Caribbean Islanders, shows that Haitians spread out into various regions. Migration drifts are usually connected by shared cultural, lingual, political and economical histories (Orozco 2003). The main labour exporting countries are primarily Cuba, Dominican Republic, Haiti, Jamaica and Guyana (Nurse 2004).

Migration drifts occurred due to various reasons, but mainly because of economical and political instabilities (Orozco 2003). Multiplier effects from already existing communities in the countries of destination, reinforce the flow. Nurse (2004:4) could observe that rather reciprocal flows can be determined than one-way movements, which are likely to be "... reciprocal visits, emigration, re-emigration, temporary migrant workers, return migration, illegal immigrants, refugees, asylum-seekers, and "swallows"." Segal (1996:25[143] cited in Nurse 2004:4) notices that: "Caribbean migration should be "understood as a form of extended kinship over space and time with frequent rather than one-time movements." "

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[142] Source: Baker 2005: Powerpoint presentation.
[143] Segal, Aron (1996). Locating the Swallows: Caribbean Recycling Migration' paper presented to the Caribbean Studies Association conference. Puerto Rico.

Table 8: Remittances and Other Financial Flows to the Caribbean 1996 & 2001 (in US$ billion)[144]

Year	Remittances	Foreign Direct Investment (FDI)	Official Development Assistance (ODA)
1996	2.4	0.7	0.7
2001	4.5	2.7	0.5

As well as the Pacific Islanders, Caribbeans started to utilize remittances as a stable source of income, which is now the fastest growing capital flow and foreign exchange source as visualized in Table 8 (Nurse 2004). Even in Cuba, that is still under the US embargo, remittances gain importance through informal distribution (Orozco 2003). This extra financial source is in this sense the gap filler for the state and development agencies (Nurse 2004). Orozco (2003:3) adds to remittances also tourism[145], transportation and nostalgic trade[146] and notice that they "... have opened a range of business opportunities, that enhance trade, investment and development in the region." Nostalgic trade opened not only in the Caribbean region an income base for many but also in the migration destination countries.[147]

Another interesting aspect of the migration dynamics are the flourishing hometown associations. These groups were established in the large cities of the USA or Canada, to maintain formal relationships to their local communities at home and enhance social exchange or political influence or help with small development projects in their home communities (Orozco 2003).

> "These migration flows have produced a new group - ... Caribbean diasporas – that has had an impact on the region and continues to influence the way which traditional social and economic practices take place." (Orozco 2003:2)

Besides the remittances Trans-Caribbean Diasporas are of a paramount value to Caribbean Islanders. For example, Caribbean Diasporas create an international demand for Caribbean cultural exports such as reggae music. Also for the process of hybridization of cultures, diasporic elements play key roles in inventing new cultural forms (Murray 2006) such as food or music. Within the internet the so-called "cyberdiaspora" upcoming diasporic cultural interactions find an abundant scope (Murray 2006).

> 'Diasporic identities are important because they are at once local and global, and are based on Transnational identifications encompassing both 'imagined' and 'encountered' communities.' (McEwans 2001[148] Cited in Murray 2006:243)

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[144] Source: Inter-American Dialog 2003, cited in Nurse 2004:5.

[145] To make an example, in the Dominica approximately 40 % of tourists are Dominicans themselves who live abroad, mainly in the USA (Orozco 2003:3).

[146] Nostalgic trade is the import of ethnic items from the home country, "... such as local beer, rum, cheese and other foodstuffs ...." (Orozco 2003:3).

[147] For an insight in this nostalgic trade business, see following websites: http://www.caribbeansupplies.com or http://www.sams247.com (Accessed, 25.05.2007).

[148] McEwans, C. (2001). Geography, culture, and global change. In Daniels, P.W., Bradshaw, M.J., Shaw, D.J.B. and Sidaway, J.D. (eds). Human Geography: Issues for the 21st Century, London, Pearson Education.

The challenges concerning diasporic communities are to find or to create constructions of identity and belonging since diasporas exist between places without boundaries (Murray 2006). "As such, diaspora are profoundly transforming the spatiality of nation-state cultures." (Murray 2006:244)

According to Nurse (2004) and Orozco (2003) the Caribbean Islands do fine in the remittance trade. They have enlarged the scope of development and offer challenges. But the Caribbean states loose through the brain drain, skilled labours. The HIV/Aids disease is affecting migrants and spreading over the region (Nurse 2004). Current conditions, such as unemployment, inequality, poverty and the decline of social services even stimulate more mass migration. The island governments have to act wisely. Training facilities might be one solution to counteract the migration flow and to help to meet the demand in the Caribbean Islands (Nurse 2004). Furthermore, island states as well as the receiving migration countries should secure the rights of migrants (Nurse 2004).

Map 15: The Location of Niue in the South Pacific[149]

At this point the author wants to leave the Caribbean and briefly highlight a special migration sending country: Niue is the world largest single coral island in the world and lies 67m above sea level (http://de.wikipedia.org/wiki/Niue, Accessed 25.05.2007). Nuies diaspora is so special, because its current population consists out of 2,000 people, but some 20,000 Niuians are living abroad in Pacific Rim nations such as Australia and New Zealand (Murray 2006). Proportional, the Niuean diaspora is even said to be the largest in the world. The island faces serious concerns of depopulation (Treloar 2005). The state employment sector has already collapsed in the 1990s (Murray 2006). The "cyberdiaspora" plays here a key role as well as in the Caribbean. Therefore it has to be noticed the fact, that Niue is the only country in the world, that has free internet access for everybody (Murray 2006). In web blogs people discuss about the future and the consequences for example for political elections, since the expatriate population is not allowed to vote. Overseas Niuean cultural practices are well preserved in the foreign countries, e.g. rituals and ear piercing take place frequently.

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[149] Source: http://www.niueisland.com/facts/ (Accessed, 23.07.2007).

The questions that hereby have to be considered are about the future of the demographic development in Niue and about how to compensate the loss of inhabitants. However, how can Niue attack its citizen back, if e.g. working opportunities are limited on the island? Over viewing some blogs, people speak about the return of older Niueans. But this might not help. Maybe, due to the consequences of climate change and sea level rise, neighbouring Pacific island states, especially the low-lying atoll states, will ask for asylum. In this sense, a multicultural Polynesian society will emerge.

> "To boost Niue's s tiny population of some 1,700 individuals, Niuean Premier Young Vivian said last week [January 2004] that he plans to "import" some of the 10,000 people who crowd the low-lying South Pacific atolls of Tuvalu. He said resettlement negotiations between the two small island states began last October."
> (http://www.oneworld.net/article/view/77593/1/, Accessed 26.05.2007)

4.3.3   Religion and the Search for Identity

> "Today, islanders are not only faced with the necessary of defining and articulating "national" identities in multiethnic and multicultural nation states, they are also faced with redefining their cultural and social identities in their lives and communities are barraged by change. (Lockwood 2004:31)

Indeed, islanders are confronted with the challenges of redefinition of their identity within the globalization. They do this through reinvention, preservation or delimitation (towards other ethnic groups) of their culture. As islanders have to cope with most of the changes referred to the latter chapters and sections, impacts and challenges within the globalization process on traditional values, beliefs and symbols of belonging, become especially important. Islanders aggrandized bethink that the preservation practices or re-invention of traditions are of a paramount importance to represent or highlight cultural differences. One way to express their identities is to join nationalist movements. Lockwood (2004:6) recognize the following

> "The growing number of ethnic and nationalist conflicts are organized around the notion of cultural and religious differences, of "us" and "them," and are movements that strive to differentiate, instead of integrate, competing populations."

In this sense the growing nationalist movements such as the revitalisation movements of Hawaiians and Maori (Lockwood 2004) or the Fijian coups (1987, 2000 and 2006) can be marked as signs of the search of ethnic identity. In order to achieve dissociation of western lifestyles and to lay off cultural domination, islanders orientate back to "... their "traditional" indigenous culture (kastoms or customs)." (Lockwood 2004:27).

The pluralistic and multicultural societies of many islands and microstates therefore are stressed to form national identities. Promoting a sense of national belonging is e.g. in line with advertising national commodities such as the establishment of national airlines (e.g. Solomon Airlines, Air Niugini) (Lockwood 2004) or e.g. with the promotion and celebration of national

festivals. The Hibiscus Festival[150] in Fiji was such a tool to of promoting and developing nation building. In this context Bossen (2000:123) argues that from 1956-1970 "... the Hibiscus festival contributed to the process of nation building, created a positive attitude towards tourism in the populace and fused these into an appearance of public harmony." Within this festival the indigenous Fijian culture was promoted as the norm and different identities such as the Indians or Chinese were pronounced as ethnic (Bossen 2000).

Various Pacific events in the past such as the testing of nuclear weapons in the Marshall Islands of Bikini and Enewetak, the "Green Revolution" in Bougainville, the loss of land through sea level rise in Kiribati[151] or the deportation or resettlement of Banabans[152] to the island of Rabi (Fiji) has helped some ethnic groups to rediscover their traditional values and to create a base to counteract globalization forces on the one side. On the other side, islanders reflect new desires and identities, which are mixed by "traditional" and "modern" identities (Lockwood 2004). They hybridize with the values of the modernization and search for a position in the plural society. That is why they may suffer from socio-economic inequality and class distinctions as noted in Lockwood (2004). Through the commercialization of their cultural products or the invention and merchandise of identity of e.g. consumer products or cultural symbols, identities are commonly expressed (Lockwood 2004).

Another way, in another direction - to be assimilated into the globalization- is to create the sense of belonging and to join religious movements. The increase of voodoo practices and the living of rastafarism in the Caribbean or the rising of Islamic fundamentalism in the Comoros[153] are similar signs for the search of an identity.

In the Pacific and the Caribbean area many islanders converted e.g. into the new emerging Pentecostal Churches. Especially the youth and women in the Pacific are following these new churches quite quickly (Newland 2004). Many young people come into urban areas and expect economic wealth. Since the reality is different economic frustration and the lack of community

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[150] The Hibiscus Festival was actually invented to "foster interests in civic pride and progress" 1956. The program includes e.g. ethnic nights were Indo-Fijians, Chinese, Indigenous Fijians and other Pacific Island minorities performed dances and singing. There was also the popular election of Miss Hibiscus. After the establishment of the festival, various other festivals were organized in other towns. Today, but also at from the 1970s on, the festival emerged into a tourism performance. As Bossen noticed "The country as a whole and its population became part of the tourism product." (Bossen 200:127).

[151] For example the two uninhabited islands Tebua Tarawa and Abanuean in Kiribati disappeared already in 1999. Inhabitant islands will follow (http://news.mongabay.com/2005/1124-reuters.html, Accessed 27.05.2007).

[152] On the island of Banaba (former Gilbert Island, today it belongs to Kiribati) rich phosphate reserves were discovered in 1900. After World War II the Banabans were transported to Rabi Island in Fiji, were most of them still live. Another 500 Banabans still settle on the destroyed and highly exploited island of Banaban in Kiribati. "Today, while the people struggle to survive under two separate Pacific island nations, the Banabans believe that nothing is more important than the preservation of their heritage and ethnic identity." (http://www.banaban.com/histovie.htm, Accessed 27.05.2007).

[153] In the Comoros Religious Freedom Report (2003), researchers observe on the island growing fundamentalism and more restriction of religious freedom rights (http://atheism.about.com/library/irf/irf03/blirf_comoros.htm, Accessed 27.05.2007).

security causes often suicides and psychological breakdowns. In times of globalization, poverty, inequality, injustice, unemployment and future insecurity people tend to be eager to hold onto a set of restricted behaviours and to follow an organized living-structure such as the new churches preach (Ernst 2005). A different reason for the convention into Pentecostal Churches may be that islanders faced transformations of the traditional hierarchy system (e.g. the power of the chiefdom) in the Pacific village. It is said that the convention to Pentecostalism is also a choice of political statement e.g. against the chiefs systems (Newland 2004 and Ernst 2005).

Furthermore, the new churches are more concentrated on gender issues. Women and men are seen as equal humans. This gives women the possibility to climb up the institutional hierarchy. However, the arrival of new religious groups, such as the Pentecostals, can be also seen as a general ideological expansion of the American cultural values in terms of the enlargement of capitalistic values. Peter Balleis (Cited in Kahn 2002:37) described similar impressions about the situation in Africa:

> '...they proclaim the American style of life and call it Christian. In their Churches the Bible is used to give a religious justification to capitalist ideology. What connection could there be between the arrival of capitalist market economies in third world countries and the mushrooming of these American style groups of evangelicals?'

The Pentecostalism connects a highly emotional, informal approach to worship with an ethical emphasis on headedness and hard work, and therefore this became a way for poor and marginal groups to improve their economic and social status while retaining their religious faith (Ernst 2005 and Microsoft Encarta Encyclopaedia 2004). In addition to this, some islanders feel that the new churches fill up spiritual gaps that mainstream churches lost somehow. Others have the imagination of having more freedom through fewer responsibilities from culture, for example in terms of compensation payments (Ernst 2005).

> 'Why to fight for better living conditions, why to fight poverty and why to address environmental issues or corruption if the end of the world is near? Because when Christ comes everything will be alright.' (Ernst 2003:5).

To put it in a different light when people believe in every single word of the bible: Why should they be tolerant towards homosexuals? Why should they question the gap between poor and rich? Why should people participate in elections? Why should they be tolerant of different religious groups if there is only one God they believe in? Why should they believe in their own power if God is leading them anyway?

On a small excurse, the author seeks now to demonstrate on the example of the Fijians to look behind the influence of the new departing Pentecostal groups. The Fijian society is a patrilinear orientated society. Concerning Indigenous Fijian women, rules are breaking with the influence of the new Churches. As already mentioned before, women can achieve higher positions in some Christian Churches. The position of women within the community is

unbalanced and questioning the traditional positions of power. Within the Pentecostal Church it is forbidden to take drugs, which includes the traditional beverage kava[154] as well. But kava has a strong cultural importance in Fiji, because various problems in the community are usually discussed during kava sessions. If people do not attend at kava sessions anymore, how can they still be respectful members within their communities and be aware of problems in the village?

> '[...] some of them [AOG adherents] just refused to take part in anything for the village, thus upsetting our chiefs. When this religion operated, it was a bit different from the Methodists. They restrained themselves from activities, which they believed, were worldly. They didn't want to involve themselves with any traditional activities. These were the differences. Because of these differences, some problems arose within the village.'(Newland 2004:)

Sometimes the conflicts within the community encourage individuals or families to move further outside of the village or even leave the entire village communities. These separations break up family and community connections, which are extremely important in the life of a Fijian (Newland 2004 and Ernst 2005). It can be said, that the traditional community-based society of Fiji is increasingly drifting towards an individualistic and pluralistic society (Ernst 2005). A pluralistic society in terms of religion can move closer either to a tolerant atmosphere between religious groups or into the opposite, which means intolerance between different groups of beliefs. Since Fiji is already facing problems in terms of races, referring to the coup 2000 and its racial argumentations, it will be reasonably hard to preach tolerance and understanding between each other.

> "No political system or economic system is self-justified: all social systems must be tested by what they do to and for the dignity of the person... Whatever threatens that dignity becomes business to Church. If globalisation, while it is neither good or bad in itself, has a dynamic that threatens humans' dignity, this needs to be addressed by the Church." (Kahn 2003: 39)

Manfred Ernst (Kahn 2003) claimed the churches, in the book: "Christianity, Poverty and Wealth at the Start of the 21st century", to have failed to recognize the signs of the time. Churches should take more responsibility towards problems of this generation and at the same time be active in preventing the problems of the next generation. He said "[...] low wages, poverty, the suppression of workers rights, discrimination against women, and corruption at various level of public life." (Kahn 2003:39) failed to be addressed towards the civil society. "They need to develop a critical conscience for society and participate in the struggle for a

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[154] "Kava is prepared and consumed in a variety of ways throughout the Pacific Ocean cultures of Polynesia, Vanuatu, Melanesia and some parts of Micronesia and Australia. Traditionally kava has been prepared by either chewing, grinding or pounding. ... Kava is used for a variety of purposes, medicinal, religious, political, cultural and social throughout the Pacific. These cultures have a great respect for the plant and place a high importance on it. Kava is used primarily in social gatherings to increase amiability and to relax after a day's work. It additionally has great religious significance, being used to obtain inspiration." (http://en.wikipedia.org/wiki/Kava, Accessed 25.05.2005).

truly democratic model of society." (Kahn 2003:39) Another question, which has been raised in the Fijian society, is the question of the implementation of a Christian state. Within a pluralistic society a decision for one religion would always discriminate other religious minorities.

However, Fijian Islanders find their way to live out their identity either with close connection to their traditional life, in syncretism with the new emerged religions such as the Pentecostal Churches or with the orientation towards the global "modernization".

5 CASE STUDY FIJI – CHANGING PATTERNS THROUGH ENVIRONMENTAL CHANGES

This chapter presents a small and brief insight from the authors' fieldwork. The fieldwork was a part of a postgraduate class project in human geography at the University of the South Pacific where the author spent 2005 studying. The perspective reflected in this chapter is focusing on the "global meets local junction" as an example for the impact of globalization on an island community. There will be a look into the influence of economic, social and environmental development on a rural village community in Fiji (Vanua Levu[155]) in terms of social change. This section aims to analyse the external impacts, which are caused by the development assistance provided by the GTZ and the Fijian Ministry of Forestry, Land Use and Agriculture.

5.1 Brief Overview: The Pacific-German-Regional-Forestry-Program (PGRFP)

The case study is based on the authors' unpublished research "Impacts of an Externally Supported Development Project - Based on a case study of the PGRFP (Pacific German Regional Forestry Project) in the Drawa SFM (Sustainable Forestry Management) Model Area", which was a part of a university project at the University of the South Pacific in 2005.

Map 16: Vanua Levu and the Places of Importance[156]

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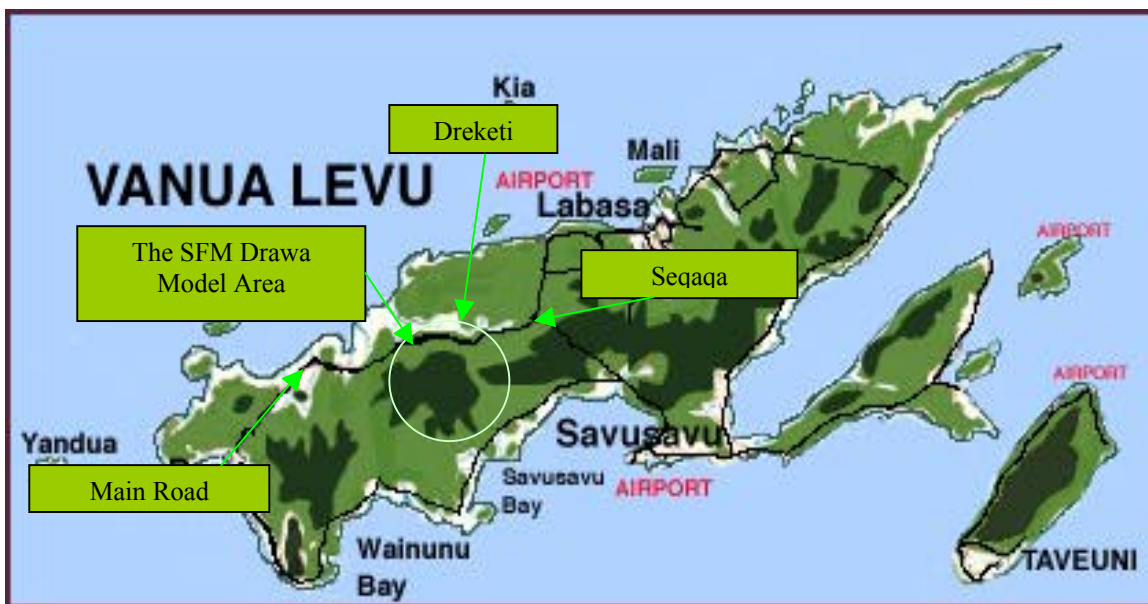
[155] Fiji has two main islands Viti Levu and Vanua Levu. Vanua Levu is the second largest island in Fiji.
[156] Source: www.fijiguide.com/Guide/Islands/images/clip_image003_003.jpg (Accessed, 24.07.2007).

The PGRFP was established by the GTZ in the Drawa Model area of Vanua Levu to install sustainable forest management in 1999. The indigenous Fijians chose the cooperation with the GTZ and the Fijian Ministry to implement an economically sustainable foundation and to generate long-lasting income instead of logging and selling their forest to the international wood market.

The Drawa region was chosen on the base of pre-studies, mainly because of its large untouched forest resources as well as because of the consent of the stakeholders, which includes the landowners: 12 mataqalis,[157] the Ministry of Forestry, Fiji Forest Industries and Native Land Trust Board (NLTB). The key objectives were to develop a sustainable management system, to introduce a "Silvicultural Sound Concept[158]" and to reduce the impacts of logging. The people of the Drawa Vanua went through workshops in sustainable forest management, household finance management and land use management. They were also involved in the pre-harvest inventory fieldwork and the management planning process. One of the most important developments for the communities was the construction of a new road, which was mainly planned for sustainable logging use but at the end became a transportation possibility.

The Drawa SFM Model Area rises over an area of 6,345 hectares in the district of Wailevu of the province of Cakaudrove. The most of the landowners are distributed over six villages: Keka, Vatuvonu, Drawa, Lutukina, Baitiri and Nayaralagi Settlement. The villages Vatuvonu and Nayaralagi are not a part of this case study. The total population of the mataqali landowners comprehended in 2000 about 429 inhabitants, although not everybody lived in the villages (Fung 2005). According to Fung (2005) the population has remained relatively stable. Out of the 12 involved mataqalis only 9 are currently a part of the PGRFP. Two mataqalis did not want to be involved while the other one is extinct, the NLTB looks after this mataqalis area.

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[157] Mataqali is the secondary sub-division of the Vanua, e.g. a sub-clan or land-owning group. The members of the mataqali stay under the authority of the Turaga ni Mataqali: the use of the mataqali land is either decided by consensus within the mataqali or by the Turaga ni Mataqali. It is defined by male descendants. Vanua refers to a group of people or tribe and embodies their belief and values. The Vanua provides a strong sense of place, of belonging to the land.

[158] Silvicultural work focuses on the establishment and conservation of sound forest stands and on the development of the necessary scientific guidelines. Research projects undertaken in the field of silviculture encompass a wide range of scientific work, from seed research, stand establishment and forest tending methods, to the conservation of genetic diversity and the establishment of Natural Forest Reserves and investigations of natural dynamic processes.

[159] Not all mataqali members live in their villages. Most resident in Vanua Levu, but some live in other parts of the country (Fung 2005).

[160] The people of the Baitiri mataqali live not exclusive in Baitiri, but also in Nayarailagi Village. Nayarailagi was due to recommendations of the GTZ not a part of the fieldwork.

[161] The total number of 98 evaluated villagers is only an approximately value, due to the high fluctuation during the interviews.

5.2 Aims, Difficulties and Limitations to the Study

Aims

This research study is targeting the impact of an ongoing development project on five local communities. It aims to reflect the two sides of a coin, both negative and positive changes, which directly and indirectly resulted through the development work of the PGRFP. The main hypothesis is that an externally supported development program on rural forest communities has not only positive but also negative impacts on the communities and their environment. Some questions, which are resulting out of the main hypothesis, are: What are the impacts on a social-, economical-, and environmental level? Are the local people satisfied with the ongoing development project? Are people able to reflect the changes in their own environment? Are all of the involved communities and mataqalis addressing the same changes, independent from their geographical location and number of members? How important are the changes occurring from the process of modernization and the conservation of traditional values? How or in which way was the PGRFP involved in the role of implementing development? Here, the main findings will be represented.

Limitations

Development is a term that can reflect a big variety of meanings and interpretations and that implies that everybody in the world has an own opinion about what development actually means. This means that speaking about development might result very contradictable and confuse. Furthermore, the interview situation can be that a researcher/ outsider and a villager (or more)/insider(s) want to talk about topics, which are not fully open to outsiders and could cause conflicts. Especially in the Fijian culture it is often a taboo to speak about certain topics within the village and towards outsiders. If the questions are not socially acceptable, the researcher will usually not get to know the answer. Notwithstanding that the researcher is not fully able to exert the Fijian language and cultural symbols.

Difficulties

Figure 10: The empty Vatuvonu Village[162]

During the first research period only four of the expected five villages could be visited and Vatuvonu Village (Figure 13) was left out. Many people left to send their children to school after the winter break. In Baitiri village not all interviews could be carried out because

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[162] Source: own picture 2005.

almost all men left for sugar cane cutting. Therefore a second visit was important for the successful fulfilment of the missing data. During the second period of visit in the SMF Drawa Model Area it was possible to visit Vatuvonu Village. Only one woman was there, taking care of the five houses, which will be filled again during school holidays. Vatuvonu can only be reached by a foot walk of 2 hours from the direction of Keka or 6-8 hours walk from Drawa. Since the village is only part-time filled no interviews were carried out here.

The women were always interviewed at first, usually in the morning after they had finished their work while men were mostly interviewed in the early evening. This sometimes was causing troubles, especially when the kava sessions[163] already started before the interview. The late night interviews were interrupted twice and continued earlier the next day. The impact of drinking kava made the men sluggish and not talkative. Especially the women were easier to interview during the cooking hours and without the presence of a group of men. But generally men seemed to be more interested in the questionnaires and at the same time scared to say something wrong.

Most villagers felt uncomfortable speaking English, except the younger generation in Drawa and the people in Baitiri. In Drawa and Lutukina a young women was helpful with translations. In Keka, difficulties established through the lack of a good translator. In Baitiri English was no problem at all.

5.3   The Methodology

The first research was carried out in the period between the 2nd September 2005 and the 15th September 2005 in Vanua Levu by visiting four villages: Keka (4 nights), Drawa (4 nights), Lutukina (2 nights) and Baitiri (2 nights). Another visit to the Drawa region was undertaken during the 3rd November 2005 – 7th November 2005 to accumulate missing data.

The mainly qualitative approach was chosen to be as close as possible to the indigenous Fijian people and to find together with them a suitable language to communicate with each other. Following this approach, the interviewer, as an outsider, needs to be a student of a local community, its culture and present situation to make an understanding possible. Furthermore, this approach was used to make the villagers comfortable with the interviewing situation. People in the rural Fijian villages may have had difficulties with quantitative methods only because they can be quite impersonal and abstract. But only the use of the quantitative approach would be too far away from the people themselves and would make it hard to create

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[163] Kava session is usually taking part in the early evening until late night, except during traditional ceremonies. It is a way of social gathering mainly for men, but also in separate or mixed groups with women. During the kava sessions the kava beverage is constantly consumed. Guests and visitors are always welcomed to refer news from outside places.

a natural interviewing situation. Despite this, some people might miss out important information because of the strictness and inflexibility of the quantitative interview structures.

The methodology, which was used to collect the data, was mainly qualitative but also contains quantitative aspects. The interview types used were: semi-structured interviews, unstructured interviews, structured interviews and oral history interviews:[164] Group and single interviews were done, usually gender separated as far as it was possible. Also through living with the villagers and taking part at every day life, participatory observations could be made. In the Fijian culture hospitality has an enormous importance. Not in all villages the participation at the every day work, e.g. washing or cooking, was easy. Because of the guest-host relation this sometimes needed a lot of convincing efforts towards the hosts.

5.4   Discussion on Empirical Findings

As visualized in Table 13, about 100 villagers were interviewed. The research questions can be found in the Annex. However, attention should be raised by examining them, because they only refer to in the content (even if the questions are fully formulated), and does not give information about how the questions were realized.

Table 9: Population of the evaluated mataqalis[165]

		Baitiri	Lutukina	Keka	Drawa	Total
Mataqali Population 2000[166]		217[167]	33	70	94	414
Evaluated villagers 2005	♀ ♂	20 14	15 14	10 11	8 6	53 45
Total		**34**	**29**	**21**	**14**	**= 98** [168]

Development

Concerning the issue of development the villagers seem to have difficulties to express themselves regarding the meaning of this concept, even if it is (following their opinion) a major goal to achieve. By summarizing the results, it can be said that the people referred very positively to development, in terms of a deep connection with positive changes for an individual, the household and for the whole community. For the villagers, development implies improvement in the way of life to make things easier through: higher income, better

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[164] For further information on the research questions please see the Annex.
[165] Source: Fung 2005 and Augustin unpublished.
[166] Not all mataqali members live in their villages. Most resident in Vanua Levu, but some live in other parts of the country (Fung 2005).
[167] The people of the Baitiri mataqali live not exclusive in Baitiri, but also in Nayarailagi Village. Nayarailagi was due to recommendations of the GTZ not a part of the fieldwork.
[168] The total number of 98 evaluated villagers is only an approximately value, due to the high fluctuation during the interviews.

infrastructure, raise of the standard of education and improvement in housing. Interestingly, nobody asserted that social as well as environmental issues concerning development are something achievable. Hence, negative sides of development were hardly ever mentioned. Only when detailed questions about the negative impacts of development were asked, some people replied on it. Baitiri Village was usually pointed out as the most developed and urbanized village- where the general infrastructure was upgraded. However, the problems of water shortage and pollution, the changes through a more western diet and the internal village conflict around the land were not mentioned. The other villages lie geographically more isolated in rural and forest areas, but are, in contrast, more environmentally concerned.

The empirical findings show that the villagers experience the outcome of development project quite one-sided. From the European point of perspective, it is fair to say that the vision of a westernized and materialized lifestyle grounded. Parallel attention to the care of their land and culture become secondary. Also Lockwood (2004) noticed, as already mentioned in Chapter 4.2.1, that for the islanders the desire to commercialization even stretches their tolerance towards their natural resources. In a way, the research results can be interpreted so that the villagers have a strong focus on economic development by ignoring and repressing the negative sides.

The New Road

Figure 11: The new road to Drawa[169]

One of the main changes for the indigenous communities was the construction of the new road. The new road was build between Drawa and Lutukina as a part of development work from the government and to guaranty good accessibility to the forest resources. It is an unsealed road. The plantation of the roadside was carried out by the people of Drawa, following the advice of the PGRFP to avoid soil erosions. Everyone was satisfied with the construction of the new road. The accessibility of the Drawa village (especially for elder people) and the plantations is now, during all weather conditions, passable and much faster. One very surprising consequence, which was observed during the second visit, was the funding of a new village called Bakibaki

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[169] Source: own pictures 2005.

Settlement[170]. The key reasons behind this development were a water conflict in Baitiri and the dependence on cash for fresh fruits and vegetables. This development is a major impact of the PGRFP to all of the mataqali communities. Nevertheless people also could observe negative impacts on their environment and social behaviour. Soil erosion was mentioned as the major environmental impact. Additionally, the disturbance of the animal life in the forest was a concern. However, an unexpected change was reported by one villager in Lutukina. Some villagers begun to steal the crops and yaqona[171] plants from the plantations of the people of Drawa since the reachability of Drawa village is now, because of the new road, easier. Looking at the occurring changes it is however evident that the road construction is offering new possibilities for a course of action. Although its construction is critically contemplated and viewed with its side-effects.

The Economical and Social Impacts of the Logging Activities

Before looking at the impacts of the logging activities, it is however important to notice, that the results are not only changes through the involvement of the PGRFP in the region but also appear because the society is also changing throughout other impacts. All societies are dynamic and in times of globalization societies change even faster. This means, that the changes the villagers described can indicated only in some cases as a direct result of the involvement of the PGRFP.

However, according to the study results, all villages significantly increased their income either through more farming and selling of crops/ yaqona, mat making and selling, and/or participating in the logging activities. Especially the demand of more land use activities leads to this increase in almost each household. This had lead to less fertile soil. In Lutukina the women argued that they did not see any money from the logging activities jet, the higher income is due to the selling of yaqona, dalo, chilli and coconut oil.

There are visible differences comparing the amount of income per village, especially the gap between Keka/Drawa and Lutukina/Baitiri. This may be due to their geographical position. Keka and Drawa are far more isolated from the major roads and must invest higher transportation costs and time to sell their goods on the market or on the road. In addition, the men and women of Lutukina and Baitiri go regularly to sugar cane cutting and earn an extra income for the community and themselves during the season May-November.

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[170] By the time of visit one household (men & woman plus three children) and one sleeping house for seven men were constructed in the mataqali land of some of the people of Baitiri. Two years ago one family started to clean the forest for a plantation in hope that the new road will bring easier access to the main road. Other seven men followed after they saw the progress of the GTZ project and the government constructing the road. Soon or later they plan to let their families follow them to the old property of the mataqali.

[171] "Yaqona is another word for Kava, which is produced from the powdered root of Piper methysticum (family Piperaceae); excessive drinking of it causes a state of hyperexcitability and a loss of power in the legs; chronic intoxication induces roughening of the skin and a state of debility." (http://cancerweb.ncl.ac.uk/cgi-bin/omd?yaqona, Accessed, 30.05.2007).

In Lutukina, the women claimed that through the availability of higher income, during the time the men did not attend the sugar cane cutting or logging, they spent their time improperly. They consume more frequently and bigger amounts of yaqona, cigarettes, marijuana and alcohol, and they sleep long into the next day. During the next day they are tired and lazy and dismiss their duties, which shift the farming work from the men to the women. Therefore the women were admitting that they now do twice as much than before. Furthermore, now they have to go to the plantations while they must keep the household properly and take care of the children, all at the same time.

The Lutukina women formed a very active women group with weekly meetings. In January 2005, in consent with all women of the village, the development project was set in progress. Most of the time, however, they spend their time with weaving mats, planting flowers and cleaning up the community hall. Furthermore women help each other with farming or taking care of the children. The lack of responsibility and help they are supposed to get from their husbands is given them by other women. Currently the village is facing other problems such as leading and development conflicts. To maintain their goals they collect the money from the weavings and save it on a bank account. At the present, they put every third week 120F$ (60 €) on the bank account. One day they dream to build a kindergarten with the money produced through their own business.

In addition to their regular income people in the villages usually rely on remittances from relatives in town or overseas. Typically remittances are sent for special occasions and ceremonies. Hereby the value varies between 100-200F$ (50-100 €) per household and occasion. Most of this money is used for the actual ceremonies, but for some families it is also important to pay the school fees and bus fares.

Concluding the research results, it is apparent that the logging itself and the income from the logging changed social graces. Social obligations remain but are handled in new ways. For the women from Lutukina, this resulted in overtime work. This new situation produced new stress to the women and brought them search for new options. Again, from the westernized perspective, the women in Lutukina made a much bigger step towards development than the men did. However, Fijian men might be nervous on these new developments and might not know how to react. The future will show if their social role behaviour will change through the new settings.

The Drawa Landowners Forest Management Cooperative Ltd (DraFCo)

DraFCo was established 2002. Since that time it is operating with one representative of each mataqali, one treasurer, one secretary, one chairman and one assistant chairman. It is a Fijian owned company. The nomination of the board members follows traditional Fijian structures. For the prevention of conflicts the "turaga ni mataqali"[172] are not members of DraFCo. The company is managing the issues of the logging activities and of ecotourism, which might be soon a more important issue. At the beginning the GTZ helped to implement the rules and organisation of the company. Since then its function is to assist through counselling issues. Even though the intra-communication improved almost everybody mentioned that there are still lacks of communication between the mataqalis, which need to be enhanced. Everybody confirmed the importance of the traditional structures of the DraFCo as very positive. This became obvious in answers from DraFCo members like: "We are used to this structure and we know how to respect them and it is easier to co-operate within the mataqali units". All of them hold the view that companies managed on a community base are not a hindrance to development. The reasons which were given to justify this comment were that: "We are one family and family relations are stronger and more effective than anything else". All people will benefit from the development, not only the present, but also future the generations.

All over DraFCo is seen as a very positive and important step towards more economic and educational development for all the people belonging to the mataqali community. The GTZ introduced on purpose an organisation system that is close to the Fijian social organisation. However, implementing DraFCo following traditional systems makes the company work and lets villagers find a niche position between traditional subsistence and modern employment. Here, the global pressures are appreciable.

Environmental Impacts

Besides the logging activities lead by the PGRFP, there are companies carrying out complete deforestation. This is causing impacts on the environment, which are immense in each village. All villages were complaining about their rivers and the vast changes, which occurred since the unsustainable logging activities were going on. The effects in the rivers were: shallow water levels and water pollution from the machines littering oil. Also the water contains out of more soil and is less clear, spoiled and warmer, while the weather is drier. In most of the

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[172] In Fiji the "turaga" (pronounced turanga) designates the chief of a village, clan or tribe. The "turaga-ni-koro" is the head of the village (koro). He is elected or appointed by the villagers. The Turaga perform as a city administrator or mayor. In the Fijian political structure he is playing a key role and gets paid a small government allowance (http://www.answers.com/topic/turaga-fijian-chief, Accessed, 15.07.2007).

villages the water even needs to be boiled before drinking since the quality of the water became a threat to the humans' health. Here it has to be noticed that the villagers do not claim these effects on the logging activities from the GTZ. But on the other side they conclude that these are the results from the unsustainable logging, which is going on for about ten years. However, it is evident for them that the impacts from logging lead by the GTZ are also causing the spoiling of the forest animals by noise and soil pollution through leaking chainsaws as well as the erosion of the animals' natural habitat.

Baitiri village is already facing water problems due to the long term pollution of the river from logging and to a new sealed road/ bridge construction on the main road, which changed the river flow entirely and upset the water level. They say that the weather and the soil got more arid because of the logging activities in the mountains, which are upsetting the natural balance. The water from their nearby river is not drinkable anymore. They deeply depend on water from a water pipeline, which was constructed with the help of the PGRFP and the government. Flushed toilets and showers supplied from the pipeline are in use. However, even this water pipeline has its limits and is only open every third day. Last year the village was even facing the breakout of the typhus virus, and the government installed a big water tank for the village.

Even if economic development is highly desired, when people are asked, they are able to list up occurring impacts in detail. It is detectable that environmental impacts change their life styles and habits. However, the villagers definitely know about the limits of their environment.

Intercommunication and Intracommunication

Most of the villages agreed to the improvement of communication between the villages and the representatives of the ministries as well as the GTZ. Especially the workshops contributed to a more frequent information flow and actually the people know now more about how the situation looks like in the other villages. All villagers welcomed the higher level of communication with each other. Nevertheless there is still a considerable demand of linking the communities even closer together. But because not every village has a telephone, all solutions which can be found, are still very time-consuming. From not always knowing what is happing in other villages prejudices develop and jealousness is going around. Especially, when the topic is about money the situation leads easily to misunderstandings and mistrusts. Only through more frequent and open intercommunication such lacks can be avoided and mistrust can be erased. Not only the Drawa Landowners Forest Management Cooperative Ltd (DraFCo) representative should meet regularly, but also social culture events, where women and non representatives could be present, need to be arranged. If only the communication agents are the representative of their mataqali, the flow of information can be easily stopped.

In the Drawa region the demand for logging of timber is expanding, and is pushed forward especially by Indo-Fijian[173] owned logging companies. These logging companies corrupt the local villagers to get an open hand over their forests. They give promises of building new houses for their community, give them cars or overhand them several thousand of Fijian Dollar in cash, which they actually hand over before the logging starts. Legal and illegal deforestation is going on all around the SFM Drawa Model Area. When visiting Lutukina, some other mataqalis, which are not involved in the PGRFP, just agreed to unsustainable deforestation in their forests. This is assumed to be the outcome of an approach from the GTZ to only train and skill the people of the involved mataqalis instead of the whole village. It is also a result of the lack of information flow in Lutukina. The women mentioned that even the two representative of the mataqali from DraFCo do not share their new skills with other villagers and almost never with their women. Here we found an enormous lack of transparency, which lead to an ongoing short-term thinking, prejudices and dissatisfaction between the villagers and genders.

Gender

The indigenous Fijian society is a patriarchal society and is still organized in traditional women- and men roles. Women have usually no official say in decision making processes. But, besides this, women play an immensely important role in the development process. Looking at the task that women and men perform in the PGRFP, the conclusion is that men and women are unequally involved in the project. Men are in charge of attending the meetings and workshops as well as participate in the logging activities. Whereas women are important to satisfy the food demand. However, in every village this was not commented in this way. Each group of men and women confirmed the equal involvement in the PGRFP. The men of Drawa village argued that they have planned to set up projects only for women. They mentioned: meke[174], cooking (for the upcoming ecotourism project), a nursery and the marketing of the products, chicken- and veg farming. Only the women of Lutukina form an exception here. The women disagreed to an equal involvement, by arguing, that only the men participate in the workshops. From all the earned money the women get only a little share. They achieve the information of better and more sustainable practices to handle the resources, but do not pass them on to the women or sometimes even other men. The women were deeply unsatisfied with the men, because they have no decisional power. This might be another reason for their active women's group. A different problem, which occurred during the open interview with the women of Baitiri was, that because they are only married to men being part

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[173] During the colonial time, the British Imperial power introduced indentured labours from India, to work on the sugar cane farms (Crocombe, 2001).
[174] Meke is a traditional Fijian dance performance.
175.

of the Drawa Vanua, they were never integrated in the workshops and interviews. This is an important claim, since the women are the ones who teach their children from the young age on, and single mothers who have to do farming and should be aware of sustainable practices too.

At this point the author wants to emphasise the problem of domestic violence. In the official questionaries it was not an aim to speak about problems of violence. It could be only questioned indirectly and nobody ever mentioned anything concerning this issue. However from observations and personal talks the problem of domestic violence occurred frequently. Especially women and children are suffering from the use of domestic violence, not only at home but also in the public. In every single village examples of the use of domestic violence were somehow visible. Everybody knows about it, but not one single case was reported to the police. Some tried to oversee it whereas others also tried to solve the problem. This draws a sad picture of the importance of human rights in this area. The government has deeply failed to address and implement those important issues into the villages. How else can development be implemented, if the basic rights are still not guaranteed for everybody?

Waste Management

In all villages the awareness of environmental pollution is quite unsatisfying. Rubbish was obviously present and visible in each village. It was especially sad to see the thoughtfulness disposing of batteries, which are spoiling the soil and the groundwater. Nobody was aware of composting and nobody was speaking about recycling. Even though recycling is a common used method to create products of need instead of buying them. The reuse or modification of products for recycling was not mentioned. Here the ministry representatives failed to address the importance of waste management on a holistic scale. The indication that environmental awareness raising through the workshops held by the PGRFP, obviously seems to ground less on a small scale (in their own households) than on the large scale (in their forests and rivers).

However, waste management was not common in the traditional Fijian society. Just in the last centuries, since many consumer products are affordable for them, the question of what to do with it was raised. The effects are not obvious yet to them and more awareness and waste management strategies need to be represented. Anyway, proper waste management is a global problem and as such the responsibility of the producers and developers of consume products to communicate working recycling or contamination strategies.

Health

Another effect of the higher income availability is the change of the everyday diet. People are now consuming a higher variety of food.[176] They definitely consume much healthier as well as unhealthy products. But this is done only when there is money available to buy it. The daily diet is still very much carbohydrate oriented (cassava, dalo, and yams) while only some vegetables were served during dinner and lunch in most of the households. Here the Ministry of Health has still to investigate in the education about diet and nutrition. Looking at the physical health of the people it can be asserted that in all villages people look quite healthy. However, everywhere skin diseases on children and an unsatisfying teeth treatment were visible. The nurse visits have increased in all villages up to three times a year. Before that time the nurse used to come only once a year. People were satisfied with this changing and welcomed it. Nevertheless, all villagers were also reporting of more diseases, even if they last shorter due to the new western medications. When speaking about traditional medicine, most of them are still aware of the medicinal plants and used them for common diseases.[177] Here, we can see the melting pot of medicine methodologies as well as the adaptation strategies of health care. The villagers use both traditional and western medicine.

5.5 Lessons learned and the Requirement for Future Actions

The results of the fieldwork show that the PGRFP grounded very well in the different villages. All local communities were highly satisfied with the program and would like to strengthen the relationship with the SPC/GTZ in order to achieve more development. Some communities were more satisfied than others, as well as some women groups were more satisfied than others. However, this has to do more with the problem, which occurred from the PGRFP than with problems within their own or other mataqali communities or with the redefinition and role search within the globalization. In the intra-village-conflicts the PGRFP can contribute by offering an external problem understanding and counselling assistance. Not every individual or group was fully satisfied and the analysis has shown some gaps, which need to be filled for a full success of the project. Five key issues could be identified:

- **Awareness Rising on Development Impacts**
- **Improve Intra- and Intercommunication**
- **Awareness Rising on Human Rights**
- **Awareness Rising on Impacts on the Environment and Waste Management**
- **Awareness Rising on Sanitary Behaviour and Diet.**

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[176] The range of products they consume goes on from meat (chicken, beef, and lamb), fish (frozen, fresh and tinned tuna), fruits (apples, pears, and citrus fruits), snacks and sweets (chewing gum, chips, cakes, biscuits, and lollipops), milk products (cheese, milk, and butter), vegetables (beans, cabbage, carrots, capsicum and letters), drinks (cola, coffee, milo, and alcohol) and other products.

[177] For further information please have a look at the Annex 2, where a list of the medicinal plants identified by each village can be found.

First, it became obvious that development was only associated with economic development. This is the main aim to achieve for the local community in order to fulfil global pressure on the developing countries. The villagers of the Drawa SFM Model Area should by now know that development can be measured in a wider scope and it also means to gain knowledge and improvements in other categories of interests. For instance, the developments of educational and human rights are key instruments to put into practice, to achieve justice and equality. Another matter, which can be stretched, is the pre-knowledge of development before interfering with the original situation. It is necessary to inform and debate with the villagers about all sorts of impacts, which could occur. For example the new ecotourism project should be widely and holistically discussed with all villagers, since everyone will be directly as well as indirectly affected through it.

Second, it is very important to improve the intra- and intercommunication in the village and between the genders. Through the lack of communication, dissatisfaction, mistrust and untaken opportunities are created and can have serious impacts on the family life and the village harmony as the case of the women of Lutukina shows. At village meetings, after DraFCo meeting or at diverse workshops, mataqali representatives should inform the whole village, men and women as well as mataqali members and non-mataqali members. Other people should have the possibility to learn from it too. Useful information based on sustainable thinking can only bring benefits to everybody in the village. Furthermore unsustainable activities will ground less where people are more aware of the impacts which can occur. The people of the Drawa SFM Model Area can take the chance to be a good example by sharing their knowledge and skills for the common well of everybody, such as it is implemented in the Fijian customs. The identification with the sustainable forest management approach will increase through sharing good experiences with it and will hopefully convince other mataqalis to try to achieve the same results. If the identification increases, people will be more motivated and convinced about it. It also can contribute to avoid mistakes and maybe encourage more discussion about it. Despite the sharing of information with their own mataqali and villages, more information is needed to be shared with the other stakeholder mataqalis of the SFM Drawa Model Area. Only on this way it is possible to keep the partnership healthy and in harmony. The need for transparency is high. Currently Navai village in the interior of Viti Levu wants to start a similar sustainable forest project. Hereby for the first time the villagers from the Model Area could act as key agents and make Navai also a successful project.

Third, it is necessary to implement the importance of human rights and to make sure that those rights are respected. Especially women but also children need to be empowered through the involvement in the project activities, decision making processes or/and create own projects for them. It is not enough to donate books to the school. The school can easily set up projects for

the children to learn more about living in a sustainable environment. To make a development project successful the entire village should be involved and informed about it. In all villages there is a basic need to fight against domestic violence in order to achieve social development. If this development will not take place injustice and the unnecessary use of violence will continue. The children will learn to do the same since it is justified in the village. Everybody has the right to live in a non-violent environment. A development project may ground on an economic level, but if it does not ground socially it can be only be a surface development. For better understanding of the problem of violence and women issues the author suggests the establishment of a women network. It is important, to know about the causes of the violence use, and how to fight against it. Throughout the wider discussion on it, maybe one external supervisor, social pressure against the use of violence can be set up. The Fijian Women's Crisis Centre could be very helpful with this, taking its steps.

Fourth, the villagers should be more informed about the opportunities of renewable energy, instead of rising money e.g. for a generator, which makes them depend on petrol and which is not future orientated at all. Especially in the rural forest village's people can utilize natural resources such as water and the sun to produce electricity. Additionally, villagers should be aware of their waste deposit and the consequences for the soil and the groundwater. Furthermore the use of pesticides has to be discussed in the village. In the background, knowing the fact that since the use of the pesticides in the 1980s and 1990s there are more diseases affecting the village; people need to be informed by the side effects of using chemicals. Especially children can play a major role here to reinforce renewable energy and recycling. Various practical tools can be developed. School teacher could work out projects where children and parents create together products from recycled waste. With the cooperation of USP the people from the PGRFP could introduce composting and compost toilets, instead of building flushed toilets. Baitiri is facing water problems: Why do they have flushed toilets, when the water is limited?

Finaly, it is essential to improve the sanitary situation. As mentioned before the introduction of compost toilets, which can be built with the own forest resources, can be a solution for the lack of proper toilets. In the villages where tap water is available, at least bamboo curtains can be installed so that there is no need for washing in the river, since it is the only drink water resource. The knowledge of a proper diet is usually already available, but in small projects vegetable gardens and more fruit trees can be set up. So that, the food supply can differ more, without the need to buy products at the market. Women need to be trained to know more. This is only one, out of multiple examples, to show how small-scale practical solutions can be developed.

By following only some of the given advices, the Drawa SFM Model Area can achieve an even more sustainable surrounding for their own and the common generations. The villagers

by themselves also need to be open and work to turn this ideas into reality. The problem of the consumption of kava still exists and the villagers need to find out a way to manage this by themselves. Nor the village by itself, neither with the support of the PGRFP all this can be realized but moreover the cooperation of the government and other non-government institutions are needed.

For future research it could be a relevant improvement to evaluate also the data from the men of Baitiri village, Vatuvonu and Nayaralagi. Furthermore it would be interesting to compare the first project of the bilateral relationship of Fiji-Germany Nakavu with the SFM Drawa Model Area and to estimate the changes and different outcomes.

This project has shown that on a small scale level, large scale changes are possible, positive as well as negative. Through the grass-root interaction between external people such as the one from GTZ or urban living Fijians intellectual values may mix with local people and influence their ideas, values, work patterns or things like fashion so that the social changes will occur. If the Fijian people work together to gain not only economic, but also social and environmental development they will all contribute to a prospering common sustainable future on their island. The PGRFP unlike many other development project succeeded, because of the deeply involvement of the community in decision making process, their own administration of it, the use of the bottom up rather than the top down approach and of the identification of the villagers with their idea of sustainability and their motivation to achieve it.

The PGRFP can be marked as an inspiring example for sustainable development work to other SIDS, especially to those, which have natural resources. As it was demonstrated in the Fijian case study, very small scale impacts can easily occur in the offsetting of personal relations, habits or/and values. The upcoming ecotourism project will have an enormous impact on the village communities because tourism is a powerful and unique change agent in communities (Mcleod 2004). Even if scientists argue that the impact of ecotourism will be less than of other types of tourists (Mcleod 2004). However, as visible the PGRFP has have impacts on grass-root interactions between the Drawa region villagers and the GTZ staff in terms of global values such as of environmental consciousness or individuality gained currency. But even the Drawa region Fijians could notice, if not the whole region works together, the environmental damage will also affect them, even if they are not responsible for it. They also start to feel the same thing, when the consequences of climate change and sea level rise will be visible. In this way, the only chance of Fijians and other SISDs Islanders is to ensure the sustainable management within their own region and continue lobby work against the emission eject of highly industrial countries so that they will not follow their patterns of development. For all island states this will be a quite tough task in order to generate more island potential, regional marketing and a less import orientated economy.

All in all the research study was a success looking at the gathered information. However, repeating the fieldwork, the author would make more use of the Participatory/ Rapid/Rural/Relaxed Appraisal (PRA) tool box. Since for instance the figure with the identification with the PGRFP (see the annex) was somehow quite difficult to understand for many villagers. Also the questionaries on the time, space and money consumption through the construction of the new road would have been worked better with e.g. a mobility map.

6 CONCLUSION AND FUTURE OUTLOOK

This thesis points out a critical analysis of the chances and risks of globalization for the SIDS. It highlights the importance of implementing diverse actions to secure the viability of unique human-environment island systems. Furthermore, this thesis intends to improve the scope of literature, which frames the SIDS as one group with similar challenges.

In a wider context, it could be shown how globalization grazes the SIDS and how islanders seek for possibilities to counteract. The island states are not passive. In fact, the Alliance of the Small Island States is one well-working tool for the island states. Their contribution to the convention on climate change was undeniably high. Notwithstanding that the battle they have to fight is also for all other islands that are dependent, such as Hawai'i, the Cayman Islands or Réunion. However, the AOSIS does not have the power and instruments to form a voice in order to receive enough attention to create an "Alliance of the Willing". The question is if the islanders need to start protest, boycott actions or even terrorist attacks to gain recognition, before they might drown.

According to their history, geographical position, politics and economical foundation, the pathways are different on each island and its region. The hindrance of the smallness becomes especially clear by looking at the political and economical dependencies to other states. In future the "giving & taking procedure" will be continuing to impel. The costs will be paid by the islanders if they continue the aid-relationships, rather than establishing or implementing their own business. Several intense regional cooperations such as the Secretariat of the Pacific Regional Environment Programme (SPREP), the Caribbean Community (CARICOM)[178], the Association of Caribbean States (ACS)[179], the Indian Ocean Rim Network (IORNET)[180], the SIDS Network (SIDSnet)[181] or the Global Island Network (GIN)[182] seem already to go in the right direction.[183] However, these networks also include non-island countries as well as more advanced countries, such as Australia, or have a specifically economical or environmental focus. In addition, those networks or regional cooperation seem not to work independently, e.g. Japan is funding the SIDSnet and at the same time is the most fish demanding country in the world. Regional and global scale networks and cooperations are in need to be independent. Besides this, the encouragement of the islanders' voice and the media attention are instruments, which need to be enlarged. Following ongoing developments in Africa for

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[178] For further information please visit the CARICOM website: http://www.caricom.org/.
[179] For further information please visit the ACS website: http://www.acs-aec.org/.
[180] For further information please visit the IORNET website: http://www.iornet.com/.
[181] For further information please visit the SIDSnet website http://www.sidsnet.org/.
[182] For further information please visit the GIN website http://www.globalislands.net/.
[183] Here it should be noticed, that the African Small Island States have in underdeveloped cooperation and networking system.

example, it can be noticed that, if the media were not there, it looked like that events or catastrophes did never happen.

> "In the case of island destinations, factors such as biophysical, economic, and political insularity and smallness, escalating global demand for marine and coastal tourism, exceptional fragility of marine and coastal resources, primary dependence of island tourism on marine and coastal resources, and the detrimental effects of global climate change and sea-level rise on marine and coastal resources have further intensified the pursuit of sustainable development by the tourism sector." (Sasidharan et al. 2002:105)

One way to make the fragilities of the SIDS more transparent is indeed, as Sasidharan et al. noticed, through sustainable tourism and if e.g. "... many Pacific Islands act as eco-tourism magnets" (Craig-Smith 2005:358). Already the conversion of normal tourism to sustainable tourism, has illustrated in some island nations, that the dire necessity can counteract globalization pressures as it happened with mass tourism. However, the communication between islanders and tourists can expand the attention potential. Critically, the three varieties of tourism forms were lighted up to draw a notion how the island states shape their tourism sector. Promoting a sustainable tourism does not mean that this tourism is significantly sustainable in reality, as the presented case of Maldives shows. The current islander generations have the choice to shape their economic and cultural live as they want. But they also have to consider that the future generations must be able to exist with it. In addition, the consumers, the tourists and tourism operators can help to strengthen this development by increasing their demand and responsibility for a sustainable tourism development.

One advantage that the globalization brought, was the erosion of some insularity features such as the transport and communication. However, the next step could be the reduction of another of their fragilities by making their energy-market less dependent on others. The introduction and support especially of more renewable energy would give the SIDS more resilience and possibilities to spend the leftover money in e.g. sustainable development project dealing with other issues such as poverty alleviation.

> "As an island nation, São Tomé and Principe continues to see our very existence threatened by global warming. Our shorelines erode, our national territory shrinks as the seas rise. Is my small country to end up nothing but a tiny volcanic peak sticking up above the waves with the last of our people clinging to the land left unclaimed by the rising sea?" Fradique Bandeira de Melo de Menezes President, São Tomé and Principe (UNFCCC 2005:27).

To mitigate the impacts on the islanders' environments, more needed. Once destroyed or overused the fragile island environments will not be able to recover. Therefore it is necessary to build up more resilience towards global, national and local pressures on natural resource consumption, which needs a wide and holistic approach. However, the natural resource demand, the habit of islands being prone to natural hazards and the worldwide climate change are global tasks, which islands can only cope with if they get ready to make their

environments less vulnerable. To do this, healthy ecosystems are needed and the awareness must be increased.

Very dynamic forces of globalization are the socio-cultural impacts towards the islanders' societies. Due to multiple impacts (e.g. through the impact of tourism), traditional systems and cultural bases become eroded, reshaped or exported. The issue of migration already influences in a massive way the cultural development of both sending- and receiving countries of migrants. This, again, raises many challenges for the concept of multiethnic societies. However, within this changing world the demand on identity is expressed differently. The increase of religious groups and the formation of more nationalist movements are currently two possible answers for how islanders can respond to the loss of identity. Those are very interesting developments and need to be further investigated.

Examining the challenges and impacts of globalization on a meta-level does not make it easy to understand how all this theoretical notions represent the reality. The evaluation of the case study, of an externally supported sustainable forestry development project in Fiji, shows how remedies can be created. The result of this development project reveals that multiple changes can easily occur. Judging those impacts in the light of a western perspective indeed varies from a Fijian villager's perspective. However, the islanders themselves should decide what is right or wrong. The global community, which has to make this decision on a same level, is in the same process of finding its way. The author hopes that this will be a sustainable one and in this sense:

'Donu toka na madigi, cagi donu na laca na nomumi waqa vakaturgana'
"May you chart the right course on your voyage, and may a true or fair wind fill the sails of your chiefly canoe on your voyages through life, now and forever."
(Fijian blessing in Thaman, unpublished:14)

7 FURTHER RESEARCH

Foremost, it is evident that overmuch literature is missing about the African SIDS as well as on the Indian Ocean SIDS focused as one region. There might be even researches carried out on it, however most of them are obsolescent or not lendable. For the reason that the SIDS are scattered around the world and transportation is time- and money-consuming, to mitigate their "information vulnerability" an official website for all SIDS, which includes publications and especially best practice example to download for everyone, is highly needed. Alternatively, the existing ones, should be enlarged and be more transparent for islanders e.g. by translating the information in the mother tongue.

> "The survival of small island developing States is firmly rooted in their human resources and cultural heritage, which are their most significant assets; those assets are under severe stress and all efforts must be taken to ensure the central position of people in the process of sustainable development." (UN Global Conference on Sustainable Development of SIDS 1994:3)

Noticing the above statement from the Barbados Programme of Action, the islands representative affirmed that the protections of their human resources as well as their cultural heritage are the main objectives to achieve. However, ensuring this, much effort towards sustainable development needs to be implemented in the process of consciousness of the SIDS Islanders. It is especially important to evaluate or examine the islanders understanding of the cultural heritage. Chasle (1986:1) noticed in this context that, "... the specific cultural characteristics of islands have not yet been given sufficient consideration" This means, that islanders themselves need to define their human resources, according to their island culture as well as their wishes and need of development. Socio-cultural or ethnological research should be carried out under this frame. Furthermore, there is a huge gap of research in the evaluation of social and traditional coping practices to mitigate the vulnerabilities.

Many studies seem to evaluate island cultures under the perspective of their traditional roots, rather than looking on how their roots are distributed within the globalization, especially through the process of migration. Learning more about diasporic identities and relationships can bring more light into the future discussion. Especially as a result of the climate change and sea-level rise as well as through the labour trade, it might be normal for future islanders to live in those wide-ranging family concepts.

The example of the history of the Rapa Nui (Easter Islands)[184] demonstrates very clear what can happen if islanders overuse their resources. However, it is not yet completely evident how

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[184] The islanders' ecosystem collapsed, because of the overpopulation and the exceeding of their wood capabilities of the small islands. Civil war and cannibalism lead to a decline of the population. Rapa Nui became an example of the impacts of an ecological disaster. (Source: http://www.netaxs.com/trance/rapanui.html Accessed, 17.07.2007).

important healthy ecosystems or biodiversity are. What is obvious is that marine, terrestrial ecosystems play certain key-roles for the survival of islands, and that this is even more important for islands if they are prone to natural disasters and sea level rise. It is suggested that further research on the importance and the inter-connections of human-environmental systems are highly desirable. Additionally the importance of culture diversity is rarely examined.

Even if, lot of research is revolving around the issue of tourism, small-scale studies as well as meta-studies on the impact sustainable island tourism are lacking. In particular studies on remote and isolated holiday destinations such as São Tomé and Principe or the Comoros would be necessitated.

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