## TEMPLATE FOR NATIONAL ASSESSMENTS OF BPOA+10

Name of Country: Tuvalu

# 1. SOCIO ECONOMIC CONTEXT: Key characteristics, challenges and responses.

- The current population of Tuvalu is 9,561 and is relatively steady though there is a migration from the outer islands to the capital, Funafuti
- Tuvalu has a limited migration scheme with the New Zealand government. Part of the reason for this scheme is to allow families that are impacted by climate change and sea level rise to move to safer land.

### Socio-economic Challenges

- Trends toward freer trade regimes place greater pressure on Tuvalu's natural resources. In particular, there is pressure to provide increased access to Tuvalu's fishing resources from various nations. As the fishing resources of the nation provide a relatively substantial source of foreign exchange, the pressure is significant. This could lead to unsustainable practices.
- Free trade regimes may limit the ability of Tuvalu to restrict imports of environmentally harmful products. This may include a variety of goods including: plastic containers, automobiles, materials with excessive packaging, harmful chemicals, genetically engineered foods and plant,
- Migration of Tuvaluan citizens from the outer islands is creating resource pressures on the island of Funafuti. Environmental issues associated with migration to Funafuti include:
  - land clearing for additional housing,
  - coral gravel mining to provide buildings materials;
  - excessive demand for limited freshwater supplies
  - human and animal waste contamination of groundwater
  - increase in solid waste and limited areas for safe disposal;
  - problems with safe storage and disposal of hazardous chemicals
  - increased pressure on marine resources;
  - Limited available space means location of housing inappropriate for increased severe weather events due to climate change and sea level rise
- increase in lagoon fishing may be resulting in over-fishing of certain species
- lack of adequate freshwater, particularly in drought periods;
- increasing concern about over-fishing of major fish stocks by distant water fishing fleets;
- potential for harmful in-shore fishing for live-fish trade continues

- unemployment:
- Government continues to be the major employer and realize that more and more
  university graduates are finding it difficult to find jobs in the civil service and add
  to it is the increasing Youth population mainly on the capital. The unemployment
  issue is made a little easier with Tuvaluan seafarers working on board overseas
  vessels earning income which they remit to family in Tuvalu
- HIV/AIDS, malaria, other vector borne diseases:
- The incidence of HIV/AIDS is relatively small, however the potential impact is quite significant. Seamen returning from crewing contracts are the most vulnerable

## Water and sanitation in rural and urban are as:

- Contamination of groundwater from human and animal waste
- Salt water intrusion of underground lenses affecting crops
- Contamination of groundwater from fuel storage areas
- Safe disposal of hospital wastes continues to be a problem
- Building adaptation measures to address the impacts of climate change on a series
  of islands no more than 4m above sea-level is a significant challenge for the
  whole nation.
- Currently tourist visitation is relatively low, however, as airfares decrease, visitations will increase. This may lead to inappropriate developments in fragile ecosystems and an increase in resource depletion and waste generation.
- The production of electricity for household use is a substantial drain on the economy of the nation and a contributor to greenhouse gas emissions. We must look for renewable alternatives.
- Potential severe danger to marine ecosystems from transshipment of nuclear waste between Japan and Europe, possibly passing through EEZ of Tuvalu

# ? Key Responses:

- In 2001-2002 Tuvalu, with the assistance of AusAID, initiated a pilot waste management project on the island of Funafuti. Vegetative matter was composted, hazardous chemicals were collected and placed in safe storage and the borrow pits used for solid waste disposal were consolidated. It is hoped to extend this project the other islands.
- Tuvalu is established a protected area on a number of islets in the Funafuti Atoll. This is an important step in restricting access and protecting the marine and island biodiversity of the coral atolls.
- Tuvalu is in the process of developing a National Adaptation Plan of Action to address the impacts of climate change. Funding for this was received in 2003.

# 2. NATIONAL FRAMEWORK FOR SUSTAINABLE DEVELOPMENT (SD)

Tuvalu has produced a National Environmental Management Strategy (1997)

# 3. NATIONAL PROGRESS MADE & PROBLEMS ENCOUNTERED IN THE IMPLEMENTATION OF THE BPOA: Sectoral and Cross-Sectoral Areas

## 3.1 SECTORAL AREAS: Progress Made and Problems Encountered

# 3.1.1 Climate Change and Sea-Level Rise

#### **Climate Change Progress:**

- Tuvalu has ratified the UN Framework Convention on Climate Change ( ) and the Kyoto Protocol ( )
- Tuvalu has participated in the Pacific Island Climate Change Action Programme under the auspices of the South Pacific Regional Environment Programme
- Tuvalu plays a prominent role in international negotiations associated with climate change and this has highlighted the concerns of Tuvalu with respect to the impacts of climate change and sea level rise;
- Climate change and sea level rise continues to be a key focus of Pacific Island Forum leaders
- Climate change is included in school curricula
- Some progress in the introduction of energy efficiency technologies, though more needs to be done

#### **Climate Change Challenges:**

- Tuvaluans are troubled by the fact that key countries have not ratified the Kyoto Protocol. In particular, there is concern that a major regional partner, Australia has not ratified;
- There is a limited understanding of climate change in some of the outer islands. This is exacerbated by the fact that most literature on climate change is in English and not Tuvaluan or Gilbertese;
- There appears to be a lack of a whole of government approach to climate change. This issue is primarily under the responsibility of the Division of the Environment:

# **Climate Change Actions Needed**

• The is a need for a national renewable energy and energy efficient implementation plan

- There is a concern that the government has not prepared a national climate change action policy that covers all sectors of government. This may need the establishment of a separate environment ministry.
- There is a need to develop a broader public awareness campaign on climate change. In particular, there is a need for local council (*kaupule*) workshops to raise awareness of climate change issues
- Need to develop more appropriate facilities for shipping in the outer island (e.g. wharves rather than channels) to avoid increasing erosion problems;
- Need to develop and initiate environmental impact assessment procedures for all major developments that may be affected by severe weather events and sea level rise;
- Need to continue high level international profile on climate change issues;
- International action is required to encourage the US and Australia to ratify the Kyoto Protocol;
- Renewable energy and energy efficiency technologies need to be more affordable
- The is a need for more climate friendly vehicle transport

## **Adaptation Progress:**

- As a Least Developed Country, Tuvalu is currently preparing a National Adaptation Plan of Action
- The development of some sea walls in the outer islands appears to be preventing erosion (though this may change in more severe weather events)
- Local weather forecasting has helped people prepare for severe weather events
- Sand and gravel extraction has been restricted on some of the islands (though this is not always enforced adequately)

### **Adaptation Challenges:**

- Tuvalu is experiencing difficulties in accessing funding for adaptation projects. Attempts to establish pilot projects under NAPA funding were rejected by UNDP.
- There is an interesting interplay between Christian beliefs that the world will never be flooded and the scientific evidence of sea level rise.
- Sea level rise is being monitored by gauges funded by the Australian government. Data from these tidal gauges is being interpreted unscientifically by the National Tidal Facility at Flinders University, South Australia, to downplay concerns about climate change and sea level rise
- Sea walls built in some of the outer islands are poorly designed and are causing coastal erosion;
- Channels through the reefs to allow boat access are also causing erosion problems;
- Climate change has caused unprecedented droughts in some of the outer islands. This has created considerable stress on the human population and caused crops to die;
- Natural defenses against climate change, such as coral reefs and mangroves

are being destroyed by development activities;

- Heat stress in some of the outer islands is causing illness;
- Islets have disappeared on some of the islands;
- Large waves during spring tides have caused considerable damage on some of the islands;
- Sea water has infiltrated pits used for growing taro (*pulaka*) resulting in the death of this important food crop

## **Adaptation Actions Needed:**

- There is an urgent need to find financial support to initiate adaptation projects on the ground. This includes:
  - o special binding to protect sensitive coastal areas to erosion and severe weather events
  - o replanting coastal vegetation
  - o possible land reclamation activities;
- There needs to be greater international financial coordination to assist vulnerable countries like Tuvalu to adapt to the impacts of climate change and sea level rise;
- Further research is needed to understand the impacts of climate change and sea level rise
- There is a need to develop an overseas migration strategy for affected citizens
- There is a need to source building materials (sand and gravel) from sustainable supplies that will not exacerbate erosion problems;

# 3.1.2 Natural and Environmental Disasters

## **Disaster Management Progress:**

- The government has developed a National Disaster Management Plan
- It has established a National Disaster Office
- The government has initiated national disaster awareness workshops
- An annual national disaster day is recognised
- There is cooperation with regional organisations concerning disaster preparedness
- A disaster management working committee has been established
- Housing construction has improved
- Dangerous trees have been cleared
- Government financial support for post-disaster rehabilitation
- Some disaster management equipment has been distributed to all islands
- Emergency desalination plants installed on some islands
- Relief assistance slow in being dispersed

## **Disaster Management Challenges:**

- Inadequate technical staff to manage the disaster plan
- Lack of financial resources to manage the disaster plan
- Lack of public awareness of the disaster plan and actions to be taken
- Inadequate early warning systems

- The role of various authorities in disaster management is unclear
- Disaster management committee not operating effectively
- Communication equipment inadequate during disasters
- Poor communication between the capital and outer islands
- Inadequate facilities to manage disease outbreaks after disasters
- Crops destroyed after cyclones

### **Disaster Management Action Needed:**

- Need for international financial support for disaster management
- Need for a disaster management rolling fund
- The Disaster Management Plan needs to be enshrined in legislation
- Emergency communications for all islands is needed
- Greater public awareness is needed
- There is a need for improved early warning systems
- The disaster management committee needs to be revised
- The disaster management office needs to spend more time in the outer islands
- Need to strengthen building codes so that houses are cyclone proof
- Bunding or other form of protection is required to protect against violent seas during cyclones

# 3.1.3 Coastal and Marine Resources, including coastal and marine biodiversity resources

#### **Coastal and Marine Resources Progress:**

- Tuvalu became a Party to the Convention on Biological Diversity in Dec 2002;
- The government became a Party to the UN Convention on the Law of the Sea in December 2002
- SPREP and Australian Volunteers Abroad have provide support to manage conservation areas
- A number of protected areas have been established in Tuvalu
- A pilot project to farm clams and trochus shells has been initiated
- The government has instituted controls over catching under-sized fish and small size nets
- The government has initiated a workshop on protected areas
- The government has undertaken a survey of ciguatera fish poisoning and is maintaining an ongoing monitoring programme
- Fish attractant devices where installed around some islands to encourage a movement away from in-shore fishing
- The introduction of an electricity supply in some of the outer island has created refrigeration and hence improved storage of fish, thus reducing waste
- Fisheries extension officers have been educated in the importance of conservation practices for marine and coastal resources
- The removal of sand and gravel from coastal areas has been regulated and enforced
- Public radio programmes have been developed to educate the public of the

importance of conservation activities

# **Coastal and Marine Challenges:**

- Tuvalu has yet to submit a first national communication for the CBD;
- The government is currently reviewing whether it should become a Party to the Cartagena Protocol on Biosafety;
- Lack of public awareness of the importance of protecting important coastal and marine habitats
- Ongoing catching of under-sized fish and inappropriate fishing methods e.g. netting
- Government redirecting funds away from the Conservation Area
- There is ongoing waste disposal into the marine environment
- Coastal erosion continues to be a significant problem
- There is a lack of resources to for surveillance of distant water fishing fleets
- There needs to be a control on the use of motorboats which give an unfair advantage in fishing
- World War II and recent shipwrecks creating a problem with oil spills and other forms of chemical contamination
- Ongoing problem of fish poisoning
- Reef fish as well as pelagic fish are being over-exploited
- Inappropriate shoreline developments, such as jetties, appears to be exacerbating coastal erosion
- By-catch of important species, e.g. turtles continues to be a problem
- There are inadequate funds to properly undertake conservation activities

#### **Coastal and Marine Actions Needed:**

- Funds are needed to strengthen institutional capacities to manage protected areas;
- Funds are needed for community education
- Funds are needed to establish conservation projects
- Legislation is needed to institute a ban on the shooting of birds
- There is a need for a national policy of conservation and the sustainable use of resources
- There needs to be a community consultation process to establish a sustainable fisheries management regime in all of the islands
- Legislation needs to be developed to ban dumping of waste at sea
- A coastal vegetation replanting scheme needs to be initiated
- The needs to be a greater effort to enforce by-laws which protect marine and coastal resources
- The government needs to establish a programme for the removal of shipwrecks
- Local by-laws needed to be established to encourage the use of canoes rather than motor boats
- The government needs to explore other options for protein production e.g. poultry farming
- Environmental impact assessment procedures are required to regulate community developments that may affect coastal resources

- The government needs to initiate a programme of fishing ground rotation to reduce overfishing
- Special protection measures are required to manage high-tech fishing in lagoons
- Resources are required to enforce appropriate fishing practices in Tuvalu's EEZ
- There is a need to develop mariculture activities e.g. pearl farms to improve the livelihood of people in the outer islands
- There is a need to develop a coastal and marine resources protection plan

# 3.1.4 Land Resources, including terrestrial biodiversity

## **Land Resources Progress:**

- Land boundary surveys have been undertaken and some zoning established
- Island land panels have been established to resolve boundary issues
- Borrow pits created during World War II to find material for airstrip construction are now being filled in, thus eliminating a considerable health hazard from stagnant water
- Materials for building construction are now being sourced from outside the country as a means of protecting vulnerable coastal areas
- Protected areas have been established
- Certain tree species have been protected

# **Land Resources Challenges:**

- Population increases are placing considerable pressure on limited land
- There is no long term land use planning in place
- There are ongoing disputes over boundaries and land ownership
- There is a lack of legislation to enforce land zoning
- There is overcrowding in some areas
- Changes in food consumption patterns mean that traditional food crops are being abandoned, resulting is a loss of traditional practices
- There is limited land use planning outside village areas
- Young people are migrating away from the outer islands
- Coastal erosion is diminishing the land available for housing and other uses
- Rats are destroying coconut plantations

## **Land Resources Action Needed:**

- There is a need to develop a long-term land use plan for the country, including a possible review of the land tenure system
- Land records and boundaries need to be updated and maintained
- There is a need to purchase land overseas for resettlement of Tuvaluan citizens
- There is a need for land zoning legislation
- Economic compensation for leased land needs to be improved
- Coastal zone management systems need to be developed
- Village planning needs to be improved

- Strategies for de-centralizing the population needs to be considered
- Housing design needs to be improved to cater for limited land available
- There is a need for new technologies to be introduced especially for composting and waste management so as to limit the land required for waste disposal
- There is a need to restrict the import of certain consumable products that contribute to the build up of solid wastes
- There is a need to explore new uses for coconuts (e.g. coconut oil as a biofuel)
- There is a need for extension programmes associated with coconut plantation management

### **Terrestrial Biodiversity Management Progress:**

- Some land-based protected areas have been established and managed by local councils (*Kaupule*)
- Community awareness of the importance of conservation is increasing

## **Terrestrial Biodiversity Management Challenges:**

- The is virtually no understanding of intellectual property or other legal systems to protect traditional knowledge of biological resources
- There is limited legal protection for terrestrial species
- Terrestrial biodiversity is suffering from a variety of impacts, including the impacts of climate change, over exploitation of certain species .e.g. for fuel wood
- There is limited surveillance or management of protected areas

## **Terrestrial Biodiversity Management Actions Needed:**

- There is a need to develop a legal system to protect traditional knowledge and use of biological resources
- There is a need to develop biodiversity research in Tuvalu as there is limited knowledge of the biodiversity
- There is a need to integrate traditional practices with modern conservation systems
- There is a need to build capacity to allow the enforcement of by-laws for the protection of biological diversity
- There is a need to harmonize government and local council (Kaupule) biodiversity management strategies
- There is a need to develop public awareness programmes of the importance of conserving species
- There is a need to develop a strategy to manage and control alien pest species

# **3.1.5** Energy

#### **Energy Management Progress:**

- Limited introduction of renewable energy technologies (domestic solar power)
- There have been improvements in the design of charcoal ovens, hence reducing exposure to fumes

# **Energy Management Challenges:**

- Renewable energy technologies have high up front costs and can be expensive to maintain in a highly corrosive environment like Tuvalu
- Diesel generations used to produce electricity are greenhouse unfriendly and the cost of fuel imports is high
- There is an increasing demand for electricity to power imported products
- There is considerable pressure on fuel wood tree species
- There is a lack of information on other types of biomass energy (e.g. methane production from human and animal waste)
- Electrical appliances are often damaged by irregularities in power supply
- Electricity is expensive
- Imported fuels (e.g. kerosene and propane gas) are expensive
- There is inadequate maintenance of diesel power generators in the outer island

## **Energy Management Actions Needed:**

- There is a need for a political commitment to renewable energy
- There is a need for more extensive renewable energy feasibility studies
- There is a need for public awareness of the impacts of different types of energy production
- There is a need to promote sustainable charcoal production
- There is a need to develop biogas and other biomass energy sources
- There is a need to promote energy efficiency technologies
- Energy technology staff need capacity building to understand new technologies

## 3.1.6 Management of Wastes & Provision of Water and Sanitation Services

#### **Freshwater Management Progress:**

- SOPAC funded drought strategy
- The government has established a Task Force on Water and is developing a vision 2015 water plan
- Communities throughout the islands have banded together to build community water cisterns
- Efforts are being made to maintain existing freshwater wells on the outer islands
- Some local councils (Kaupule) have developed water management strategies

#### **Freshwater Challenges:**

- There are inadequate freshwater storage facilities throughout the islands, though this has been helped by JICA funded community water tanks
- Poorly treated sewage has contaminated groundwater
- Technology for capturing and storing water is inadequate. For instance building codes for water storage tanks are non-existent or poorly administered
- There is no legislation to enforce sewerage standards
- There is a need to undertake an assessment of freshwater resources on the islands

- Above ground water storage has resulted in an increase in mosquitoes
- Groundwater pumps e.g. windmills are poorly maintained due to lack of replacement parts
- There is limited water for irrigation and plantations
- Household chemicals are seeping into groundwater supplies
- Water quality issues still remain with desalinized water due to technology used and the source of the seawater being contaminated

## **Freshwater Management Actions Needed:**

- There is a need for a national and island water policy
- There is a need for legislation to control sewage disposal
- Funds are needed to assist households and communities to purchase water storage tanks, improve catchments and environmentally sound sewage disposal systems
- Facilities and equipment are required to test for water quality
- Install new or repair old groundwater pumps
- A household waste water management strategy is required
- There is a need for a public education programme on freshwater conservation
- More emergency desalinization plants are required to cater for droughts
- Funds are needed to develop composting toilets
- The feasibility of ocean thermal or solar thermal energy systems is needed as freshwater is a by-product of these systems

### **Waste Management Progress:**

- Pilot waste management programme funded by AusAID established on Funafuti
- A pilot piggery waste management programme has been established on some of the islands

## **Waste Management Challenges:**

- Legislation to manage waste is outdated and ineffective
- There is limited funding from the government to manage waste
- There is a lack of public awareness of waste management issues
- There is limited space for waste disposal and some waste disposal areas are health hazards
- On a number of islands there is a lack of equipment to properly collect and dispose of non-degradable wastes
- There is an increase in the use of non-degradable products (e.g. disposable nappies)
- There is no agency or organization managing hazardous wastes particularly on the outer islands

# **Waste Management Action Needed:**

- Waste management strategies need to be extended to all islands
- Waste management legislation needs to be revised and strengthened
- Donor support is needed to initiate waste management strategies throughout

Tuvalu

- There is a need to restrict the import of non-biodegradable products and strategies developed to support the import of environmentally friendly goods (e.g. paper bags instead of plastic bags)
- Waste disposal sites need to be improved and properly managed to eliminate health risks
- Waste collection and disposal equipment needs to be supplied to all of the islands
- There is a need for public education programmes on appropriate waste management and prevention
- There is a need for recycling systems and technology to be introduced on each of the islands

#### 3.1.7 Tourism

# **Progress in Tourism Management:**

- Conservation areas have been established and are likely to attract ecotourism
- A number of guest houses have been developed on each of the islands
- World War II relics provide an opportunity for cultural tourism
- Traditional practices to restrict access to certain inland lagoons (Haapai) has helped preserve these pristine areas, making them ideal for ecotourism
- Tuvalu has a wealth of cultural practices which can enrich the experience of visitors

#### **Challenges in Tourism Management:**

- Low tourist visitation means major income source in missing in the overall economy of the nation
- Tuvalu is a remote location with expensive air transport
- There is limited land available for tourism development
- There is limited funding available to assist communities develop the tourism potential of the country
- There are cultural barriers which may discourage visitation
- There is a lack of local capacity to promote tourism
- There is inadequate protection from reef damage caused by yacht anchors
- There is a concern that Tuvaluan culture will be adversely affected by an influx of visitors
- Tuvaluans need to attend arts festivals to promote our culture
- There are inadequate recreational facilities (e.g. scuba, snorkeling) for tourists
- Current accommodation facilities are inadequate
- There is a concern that tourist could introduce diseases onto islands where there are inadequate health care facilities

#### **Actions Needed in Tourism Management:**

- Need to develop ecotourism industry to promote a sustainable industry
- The government needs to encourage investors in the ecotourism industry

- There is a need to enact legislation to set ecotourism standards
- Market surveys need to be undertaken to study the tourism potential of Tuvalu
- There is a need for public awareness programmes to promote sustainable tourism
- World War II relics need to be managed and conserved along with traditional handicrafts. A museum should be built for these artefacts
- Improvements are needed in transportation and communications (e.g. internet) to make tourist visits easier to organise
- Traditional knowledge, practices (Ha Tevanu) and artefacts need to be preserved to ensure that visitors witness a true cultural experience and to ensure that the culture is not destroyed by 'western' visitors and their customs
- Waste water and sewage systems need to be improved to reduce water contamination
- The government needs to promote Tuvalu as a tourist destination
- There is a need to develop cheap airfare packages to promote tourism
- The feasibility of investing in a Tuvaluan owned cruise ship needs to be explored
- The airstrip on Funafuti needs to be enlarged to allow larger aircraft
- The construction of airstrips on some of the outer islands needs to be explored
- There is a need for appropriate training schemes (including workshops) to assist people understand and manage the tourism industry appropriately

#### **3.1.8** Trade

- Please provide a brief summary of any community-based initiatives related to trade practices and services, including those that aim to diversify exports.
- Provide a list of key national constraints that are trade related and have impacted on SD in the country.
- Describe any national, sub-regional and regional initiatives which are currently underway that ensure that due account is taken of SIDS in the World Trade Organization work programme on trade in small economies and within the context of the Doha development agenda.

#### 3.2 CROSS-SECTORAL AREAS

## 3.2.1 Financing and Investment for SD

List national, subregional and regional initiatives in the areas of financing and investment for sustainable development that are related to your country.

Identify the key problems and constraints encountered in securing financing/investment for SD at the national level.

# 3.2.2 Institutional Capacity and Coordination

List national, subregional and regional initiatives in the areas of institutional capacity and coordination for SD that are related to your country.

Identify key problems and constraints encountered in the areas of institutional capacity and coordination for SD at the national level.

## **Institutional Capacity and Coordination Action Needed:**

- There is a need to establish a National Sustainable Development Council
- There is a need to establish a Ministry of Sustainable development which would administer national sustainable development legislation

# 3.2.3 Regional Cooperation

List subregional and regional initiatives for sustainable development that are related to your country.

*Identify key problems and constraints faced in fostering regional cooperation for SD.* 

# **Regional Cooperation Action Needs:**

• There is a need to improve coordination among regional institutions so as to avoid duplication of effort

# 3.2.4 Human Resource (Capacity) Development for SD

### **Human Resource Development Needs:**

- There is a need to ensure equal access to education for both males and females
- There is a need to develop equal employment opportunities
- There is a need to promote Tuvaluan (*gana Tuvalu*) language (including the conduct of national workshops in *gana Tuvalu*, to allow for wide participation, and ensure that all understand)
- The is a need to promote traditional culture and knowledge and for this knowledge to be written and stored appropriately

#### **Transport and Communications:**

#### **Transportation and Communications Action Needed:**

- There is a need to strengthen inter island shipping services (more reliable schedules) and improve outer island facilities (eg cargo handling)
- There is a need to consider the feasibility of an inter island air service eg introduction of seaplane/amphibian transport
- There is a need to review the Air Fiji agreement to enable other airlines to operate (competition will lower prices)
- There is a need to explore the feasibility of introducing more environmentally friendly vehicle transport (e.g. cars and boats the run on biofuel)

- There is a need to upgrade telephone systems (both internationally and interisland)
- There is a need to introduce the internet to the outer islands
- There is a need to install satellite phones for emergency purposes

## **Science and Technology**

## **Science and Technology Action Needed:**

- There is a need to build technical and scientific capacity in Tuvalu
- Need more research on what is appropriate in Tuvalu
- There is a need for the government to plan and to prioritize the technical aspects of development
- Setting up of technical communities
- The is a need for a resource data base to be developed
- There is a need for public education and extension of appropriate technology systems
- International financial support is needed to develop new and appropriate technologies

## 4. MILLENNIUM DEVELOPMENT GOALS (MDG's) AND SD IN SIDS.

# **4.1 Poverty Eradication**

- a. Tuvalu would be working on a new development strategy for the next 2-3 years with Poverty Eradication its' main focus. Tuvalu had also signed a Poverty Partnership Agreement with the ADB ensuring that Tuvalu pays close attention to the issue of poverty in their development plans and strategy.
- b. The Falekaupule Trust Fund that was set up to distribute more financial resources for development purposes to local authorities to help raise the living standards of their island communities
- c. Tuvalu had just closed a loan with the European Investment Bank (EIB). The funds from this would be given to the Development of Tuvalu (DBT) the DBT would then loan out the money to grass root organization and individuals
- d. There are several marine and land conservation areas on the different islands in Tuvalu. These conservation areas had been established with the aim of sustaining the limited resources we have. Bye- laws had also been passed restriction the use of certain nets so as not to fish that very small fish.

Constraints include the lack of funding to carry out these initiatives successfully as there is a need to employ people to do this. There is also a need for more education in business administration especially for those on the outer islands.

# 4.2 Education and reduction of child mortality

Education had been the number one priority for the Government of Tuvalu. Given this, Primary education is compulsory and free in Tuvalu. Government had also trained a lot of qualified primary teachers in order to improve the level of Primary education in Tuvalu.

The newly built hospital on the Capital with better facilities would in the long term contribute towards reducing child mortality in the country. The Health department is also continuing their program of infant immunization free of charge. The Health Department is also focusing on Mothers Health by running special programs for Mothers. ALL of the eight islands now have mid-wife at all of the health centers.

Access and quality of service delivery in the Health section at the outer islands is lower in the outer islands compared to the main capital – Funafuti, this is due to the fact that ALL the doctors are based on Funafuti. UNICEF used to provide the vaccines however, recently this had been shifted to Government and it is very expensive. There had a high turnover of Primary School teachers in the primary school

# 4.3 Gender equality and empowerment of women

• The department of Women had been established to look into the affairs of women and Government had made allocations throughout it's budget for the last 5 years for the Tuvalu National council of women to assist them in their programs.

## 4.4 HIV/AIDS, malaria and other diseases

Tuvalu National Aid Committee (TUNAC) had been established in order to have a collaborative effort to combating HIV/AIDS. The committee is made up of representatives from various government officials, NGO's, Youth and religious groups. TUNAC had formulated a national strategic plan for 2000-2005. The global fund facility had just been approved that would give the region funding to help improve facilities within the region. Australia HIV project would be used to fill the gap left by funding from the Global fund. There is a strong partnership between the government Health department and NGO'

Tuvalu is into its 3<sup>rd</sup> cycle of Filarisis aiming to stop on the 5<sup>th</sup> cycle

AID is still a misconception in Tuvalu and there is still a need for more education on it. Beside this, the Reference Lab that Tuvalu usually refers confirmation to is in Australia – it is too far and the process takes too long. A need for trained counselors for those living with HIV/AIDS and their families and the general public.

# 4.5 Environmental Sustainability

This issue is a very important issue that it is now a requirement for every project that would be implemented to ensure that the issue of environment sustainability is taken into consideration. Local councils are also restricting the mining of gravels and sand from the beach due to soil erosion.

There is a need for expertise in factoring it of environment sustainability (in terms of value) into economic policies.

# 4.6 Global Partnership for Development

Tuvalu is striving to ensure that there is coordination among its partners so as not to duplicate efforts.

There is often a conflict on areas of intervention by donors and areas that Tuvalu felt its partner could assist on.

# 5 EMERGING CONCERNS AND SPECIAL NEEDS

Tuvalu is still very much concern as to what would happen to them should phenomena of sea level rising finally submerged the islands.