



# Tuvalu

## Millennium Development Goals Progress Report 2010/2011



Stories of Progress and the Struggle towards the attainment of  
Millennium Development Goals (2000-2010) **May 2011.**



# Tuvalu

## Millennium Development Goals

Progress Report 2010/2011



“I pronounce these people to be the most quiet, peaceable, friendly and affectionate toward one another, the most strongly attached to children and hospitable to strangers, of any people I have ever met”

Captain Henry Pease,  
Ship Planter, 1856



**“Keeping the promise 2015: Together as one, we can achieve the Millennium Development Goals.”**

Tuvalu National MDG Summit Theme - 11th November, 2010





# Table of Contents

<b>Foreword</b> .....	vi
<b>Abbreviations</b> .....	vii
<b>Glossary</b> .....	ix
<b>List of Tables and Graphs</b> .....	x
<b>Map of Tuvalu</b> .....	xiii
<b>Introduction</b>	
- Tuvalu and the MDGs.....	xiv
<b>Executive Summary</b>	
- Achieving the Millennium Development Goals.....	1
- Poverty, Hunger, Safe Drinking, Water and Sanitation and housing.....	2
- Education.....	3
- Gender.....	3
- Child and Maternal Health.....	4
- HIV/AIDS, Malaria and Other Disease.....	4
- MDG Progress Score Card: 2006 vs 2010.....	5
- Environment.....	6
<b>Country Development Profile</b>	
- The Land.....	7
- The People.....	7
- Government.....	9
- National Development Plan Profile.....	9
- Economic Setting.....	11
<b>Goal 1: Eradicate extreme poverty and hunger</b>	
<b>- TARGET 1.A</b>	
- Definition.....	17
- Progress.....	18
- Challenges and Opportunities.....	21
<b>- TARGET 1.B</b>	
- Definition.....	24
- Progress.....	24
- Challenges and Opportunities.....	27
<b>- TARGET 1.C</b>	
- Definition.....	30
- Progress.....	30
- Challenges and Opportunities.....	32
<b>Goal 2: Achieve universal primary education</b>	
<b>- TARGET 2.A</b>	
- Definition.....	35
- Progress.....	35
- Challenges and Opportunities.....	37
<b>Goal 3: Promote gender equality and empower women</b>	
<b>- TARGET 3.A</b>	
- Definition.....	41
- Progress.....	41
- Challenges and Opportunities.....	45

#### **Goal 4: Reduce child mortality**

- <b>TARGET 4.A</b>	
- Definition.....	49
- Progress.....	49
- Challenges and Opportunities.....	51

#### **Goal 5: Improve maternal health**

- <b>TARGET 5.A</b>	
- Definition.....	55
- Progress.....	55
- Challenges and Opportunities.....	56
- <b>TARGET 5.B</b>	
- Definition.....	58
- Progress.....	58

#### **Goal 6: Combat HIV/AIDS, malaria and other diseases**

- <b>TARGET 6.A&amp;B</b>	
- Definition.....	63
- Progress.....	63
- Challenges and Opportunities.....	67
- <b>TARGET 6.C</b>	
- Definition.....	70
- Progress.....	71
- Challenges and Opportunities.....	73

#### **Goal 7: Ensure Environment sustainability**

- <b>TARGET 7.A</b>	
- Definition.....	77
- Progress.....	77
- Challenges and Opportunities.....	83
- <b>TARGET 7.B</b>	
- Definition.....	86
- Progress.....	86
- Challenges and Opportunities.....	89
- <b>TARGET 7.C</b>	
- Definition.....	91
- Progress.....	91
- Challenges and Opportunities.....	92
- <b>TARGET 7.D</b>	
- Definition.....	95
- Progress.....	95
- Challenges and Opportunities.....	96

#### **Goal 8: Develop a global partnership for development**

- Progress.....	97
- Challenges and Opportunities.....	102

<b>The Way Forward.....</b>	104
-----------------------------	-----

#### **Annexes:**

<b>Tuvalu National Summit on Millennium Development Goals (MDG).....</b>	105
--	-----

<b>MDG Taskforce .....</b>	113
----------------------------	-----

<b>References.....</b>	115
------------------------	-----

# Foreword

Talofa

At the dawn of the new Millennium in September 2000, the then Prime Minister of Tuvalu together with other 188 Head of State and Government of the United Nations (UN) member states, commit themselves to the implementation of the Millennium Declaration. It was recorded as one of the outstanding events in the sixty-year history of the United Nations. The summit plays an important role in Tuvalu history as Tuvalu became the 189th member of the United Nations.

As a continuation to this commitment, I am honored in presenting our progress towards it in the form of a report for the second time- Tuvalu National Millennium Development Goals (MDG) Report 2010/2011. The report is an account of our achievements, progress and struggle towards the attainment of MDGs. It is an update to the first report published in 2006.

In the National Strategy for Sustainable Development 2005-2015 (Te Kakeega II), the Government and the people of Tuvalu set out and agreed on eight development strategic areas the nation should focus on for the next ten years. The MDGs are parallel and enmeshed into these strategic development areas and they are also embedded in the "Malefatuga Declaration" which is the foundation of the Te Kakeega II. Because of this parallel, Tuvalu ensures that MDGs are adapted to the country specific conditions, as institutions and entities have to prepare sector plans, and departments design corporate plans directly linking to the Te Kakeega II. This created a more efficient and effective way to mobilize national and development resources and people as a nation to generate outcomes and reach targets for each strategic area, and therefore the MDGs.

As a member of the UN family, Tuvalu is there to prove itself and to commit itself to the implementation of the Millennium Declaration with the desire for a more beautiful and prosperous planet with more sustainable and equitable development.

With its own unique macroeconomic instability and the recent effects of the global economic crisis, Tuvalu cannot implement the Millennium Declaration without receiving support in the form of both financial and technical assistance from Government, international donor community, UN agencies and regional institutions and organizations. Through this report, Tuvalu and its development partners will identify strengths and weaknesses in the overall development efforts to achieve the ultimate objectives of reducing poverty, improving health care and education. The report will also raise public awareness of the national commitment to meet the MDGs.

I thank everyone who involved in the writing of this report. I acknowledge the dedication and determination of staff of the Department of Planning and Budget, contributions and guidance from members of the MDG Taskforce and financial support from UNDP Multi-Country Office and AusAID. Lastly I pay tribute to my fellow Cabinet Ministers for their support and endorsement of this report.

Fafetai lasi



Hon. Lotoala Metia  
Minister of Finance and Economic Development



# Abbreviations

ADB	Asian Development Bank
AUD	Australian Dollar
AusAID	Australian Agency for International Aid
CEDAW	Convention on the Elimination of Discrimination against Women
CFC	Community Fishing Centre
CSD	Central Statistics Division
CSO	Civil Society Organizations
DBT	Development Bank of Tuvalu
DHS	Demographic Health Survey
DoW	Department of Women
PBD	Planning and Budget Department
EDF	European Development Fund
EEZ	Economic Exclusive Zone
EFL	Education for Life
EU	European Union
FTF	Falekaupule Trust Fund
GDP	Gross Domestic Product
GEC	Global Economic Crisis
GIS	Geographical Information System
HIES	Household Income and Expenditure Survey
HIPC	Heavily Indebted Poor Countries
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome
ICPD	International Conference on Population and Development
ICT	Information Communication Technology
IMF	International Monetary Fund
IMR	Infant Mortality Rate
IPPC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
IWP	International Water Project
KAP	Knowledge, Attitudes and Practice
MDGs	Millennium Development Goals
MOH	Ministry of Health
MP	Member of Parliament
NCDs	Non Communicable Disease
NGOs	Non Government Organizations
NHP	National Health Plan
NSSD	National Summit on Sustainable Development
NZAID	New Zealand Agency for International Development
ODA	Overseas Development Assistance
ODS	Ozone-depleting Substance
OI	Outer Islands
PPA	Participatory Poverty Assessment
PPP	Purchasing Power Parity
PMH	Princess Margret Hospital
POPs	Persistent Organic Pollutants

PSIP	Public Sector Investment Programme
PTA	Parents Teachers Association
PWD	Public Works Department
ROC	Republic of China
SPC	Secretariat of the Pacific Community
SPREP	Secretariat of the Pacific Regional Environment Programme
STIs	Sexual Transmitted Infections
TANGO	Tuvalu Association of Non Government Organizations
TB	Tuberculosis
TEIP	Tuvalu Education Implementation Plan
TMTI	Tuvalu Maritime Training Institute
TMDGs	Tuvalu Millennium Development Goals
TNCW	Tuvalu National Council of Women
TNPF	Tuvalu National Provident Fund
TTC	Tuvalu Telecommunications Corporation
TTF	Tuvalu Trust Fund
TuFHA	Tuvalu Family Health Association
TV	Tuvalu
TVET	Tuvalu Vocational and Education Training
UN CDP	United Nation Committee Development Policy
UNDP	United Nations Development Programme
UNDP MCO	UNDP Multi-Country Office
UNESCO	United Nations Scientific and Cultural Organizations
UNFCCC	United Nations Framework Convention on Climate Change
WHO	World Health Organizations

## Glossary

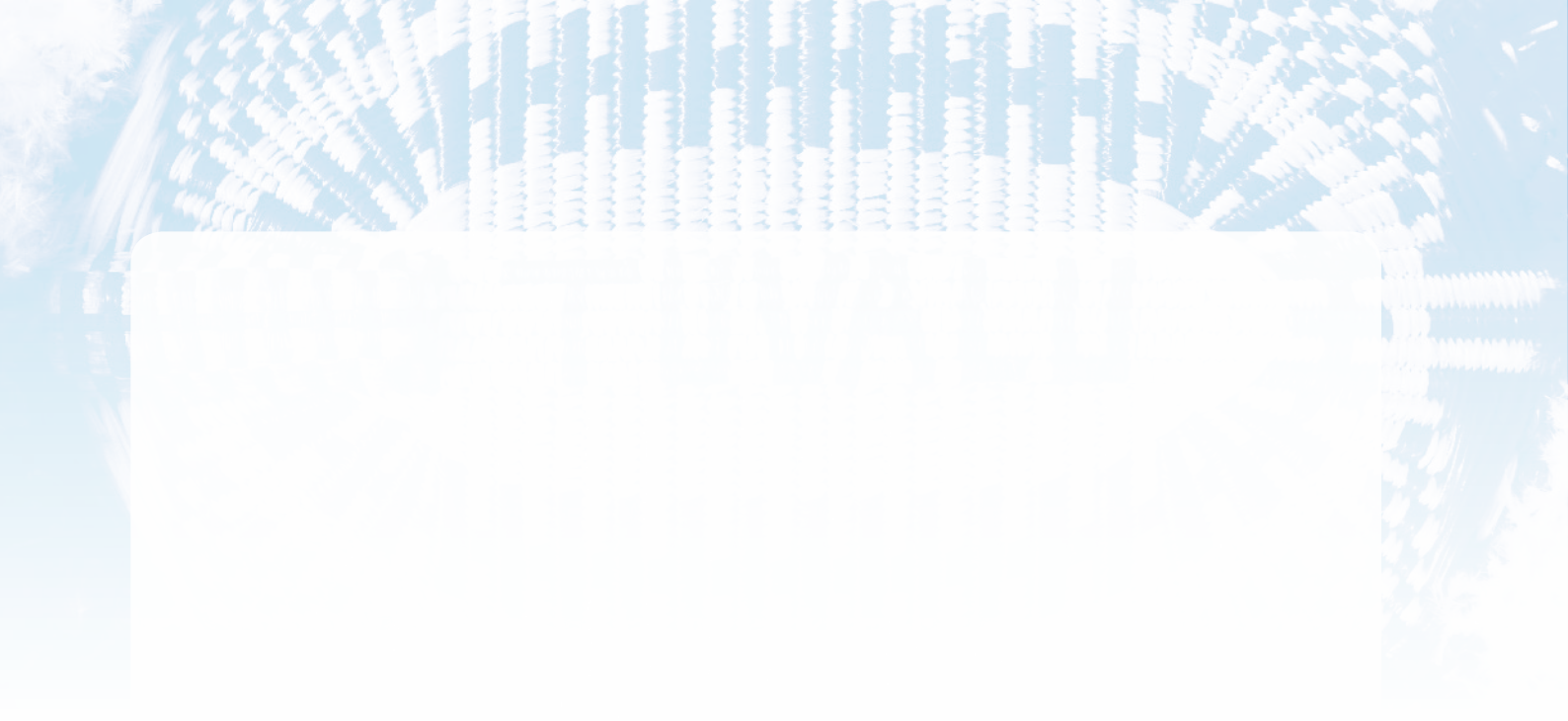
Falekaupule	The traditional assembly in each island of Tuvalu, compromise of elders including the Island Chief and in accordance to the island culture.
Kaupule	The executive arm of the Falekaupule and shall in the Falekaupule area perform all the functions conferred on by the Falekaupule.
Te Kakeega II	Tuvalu Strategic Development Plan

# List of Tables and Graphs

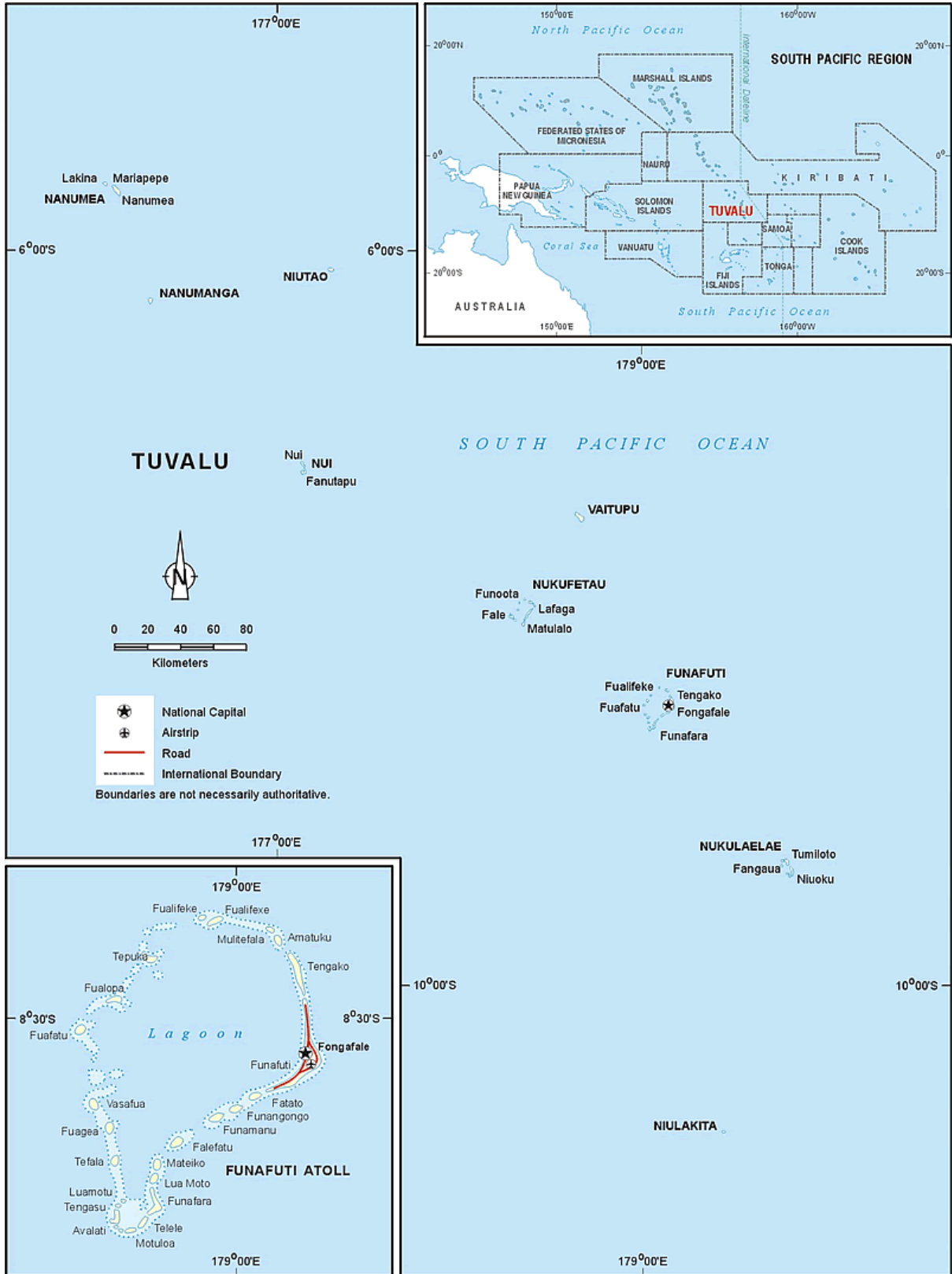
TABLES		
Table1A.1	Gini Coefficient	20
Table1A.2	Level of severity of poverty	20
Table1A.3	Pacific Human Poverty Indicators	20
Table1B.1	Employment-to-population ratio	23
Table1B.2	Youth unemployment-to-population ratio	24
Table1C.1	Tuvalu food poverty lines	27
Table3A.1	Female to male ratios in selected fields of studies for new pre-service scholarships (average) 2003-2005 and 2007-2009	37
Table3A.2	Women's representation in parliament, 1978-2006	38
Table6A.1	HIV/AIDS knowledge and prevention among 15-24 year olds	55
Table6A.2	AIDS provision and spending of funds in 2008 and 2009	56
Table6A.3	Challenges and remedial actions in response to HIV/AIDS	58
Table7A.1	Tuvalu maximum allowable consumption under Montreal Protocol and forecast consumption	68
Table7A.2	Contribution of fishing license payments to total Government core revenue	70
Table7A.3	Per capita consumption early 1990's (kg per year)	70
Table7B.1	Water storage capacity on Funafuti and Outer Islands (2009)	74
Table7B.2	Tuvalu islands conservation area key information, 2010	75
Table8A.1	Tuvalu main source of national income in comparison to other Pacific Island countries	84
Table8A.2	Public outstanding debt (end of December 2009)	86
GRAPHS		
GraphS.1	Tuvalu population, 1931-2009	11
GraphS.2	2009 SPC population estimates and 2002 population census	10
GraphS.3	GDP growth rate, 1997-2008	14
GraphS.4	Tuvalu GDP, GNI, GNDI 2001-2008	15
Graph1A.1	Tuvalu Population Below Poverty Line	
Graph1B.1	Employment-to-population ratio	23
Graph1B.2	Growth rate of GDP per person employed	24
Graph 1B.3	Proportion of own-account and contributing family members in total employment	25
Graph1C.1	Population below food poverty line	27
Graph1C.2	Changes in CPI food index, 1999-2009	28
Graph2A.1	Primary school net enrollment ratios	31
Graph2A.2	Primary school pupils/teacher ratio	31
Graph2A.3	National year eight passing rate	32
Graph2A.4	Passing rate for secondary school	33
Graph3A.1	Primary and secondary school gender parity index, 2002-2009	36
Graph3A.2	Tertiary gender parity index, 2000-2009	37

Graph3A.3	Share of women in paid jobs and female income as percentage of male income, 1999-2008	38
Graph3A.4	Women whose first sexual intercourse was against their will	39
Graph3A.5	Pacific Islands GDI (2008)	40
Graph4A.1	Under-five mortality rates (per 1,000 live births), 1992-2009	43
Graph4A.2	Infant mortality rates (per 1,000 live births), 1992-2009	44
Graph4A.3	Proportion (%) of 1 year old children immunization against measles, 1995-2008	44
Graph4A.4	Children in poverty (Pacific Islands)	45
Graph5B.1	Teenage age specific fertility rate (per 1,000) women	50
Graph5B.2	Teenage (age15-19) specific fertility rate (per 1,000) - PICs	51
Graph5B.3	Selected services (%) by women who attended antenatal and care for their most recent birth	51
Graph6A.1	HIV epidemiology for Tuvalu 1995-2009	54
Graph6A.2	Prevalence of STIs among antenatal women, 2005-2008	55
Graph6C.1	TB incidence rate and actual numbers (case notification of all forms)	60
Graph6C.2	Average TB incidence rate (per 100,000 population) according to age and gender	61
Graph6C.3	TB deaths rates and actual numbers, 1991-2009	61
Graph6C.4	TB treatment success (%) rate, 2006-2007	62
Graph6C.5	Heart disease deaths (per 100,000 population)	62
Graph6C.6	Five leading causes of mortality - 2006	62
Graph7A.1	Percentage of imported fuel by type, 1984-2007	69
Graph7A.2	Prices (per litre) and trend of imported fuel, 1996-2009	69
Graph7A.3	Estimate purse seine and long line values in Tuvalu waters, 2005-2009	70
Graph7C.1	Percentage of households, with access to safe drinking water, 1991-2007	79
Graph7C.2	Percentage of households with improved toilet facility	80
Graph7D.1	Funafuti: percentage of households with un-improved drinking water and sanitation; and average households size, 1991-2007	82
Graph8A.1	Grants as percentage of GDP and GNDI	84
Graph8A.2	Total percentage of ODA by sector, 1991-2008	85
Graph8A.3	Public debt, 2006-2009	86
Graph8F.1	Telephone lines (per 100 population)	87





# Map of Tuvalu



Source: Asian Development Bank/Tuvalu Government (2005)

# Tuvalu and the MDGs

In September 2000, all 189 members of the United Nations came together at the Millennium Summit in New York and set out a global agenda to encourage equitable and sustainable development for the start of the 21st century. Taking into account the other international agreed development agenda<sup>1</sup>, the outcome of this meeting was the Millennium Declaration.

The Millennium Development Goals were drawn directly from the Millennium Declaration. They were defined during the summit after consultations among international organizations such as the World Bank, International Monetary Fund, and specialized UN agencies. The Millennium Development Goals highlighted values that are crucial for development such as freedom, equity and solidarity, tolerance and non violence, respect for nature and shared responsibility.

The Millennium Development Goals consist of eight goals, 18 targets with clear boundaries to be achieved in 2015 and 48 indicators that are measurable. The goals and targets are interrelated and should be seen as a whole. The structure of the Millennium Development Goals was revised in January 2008 with 4 new targets, 16 new indicators added (& modified), and numbering system changed (refer to page 2).

The purpose of this report is to update the progress of Tuvalu in achieving the Millennium Development Goals. It reflects an updated story of achievements and challenges on Tuvalu's progress towards the achievement of Millennium Development Goals. It is a follow up to the first progress report published in 2006. It is an advocacy tool with the intention to inform the public and to assist in mobilizing both national and international development resources. The report is presented to create a 'can do' atmosphere so that policy makers and development partners are encouraged to act. It should be noted that this Millennium Development Goals progress report may not contain all policy recommendations. However it provides a foundation to design and plan future programmes and policy directions. The report is useful reference material for reviewing the National Strategy for Sustainable Development 2005-2015 (Te Kakeega II) to be carried out in the year 2011. Coming in the aftermath of several crises (fuel, food and Global Economic Crisis) the report offers the opportunity to look at the effect of these crises on the progress towards the achievement of the Millennium Development Goals.

All eight goals are interrelated and should be seen as one, representing a partnership between the developed countries and the developing countries "to create an environment - at the national level and the global level alike - which is conducive to development and the elimination of poverty" (United Nations Development Group 2008)

The preparation of this report took place in a period of five months from the middle of October 2010 to the end of February 2011. It involved desk reviews, participatory workshops and consultations with Government departments, private sector and civil society organizations (CSOs). The MDG Taskforce set up by the Government in 2004 offered guidance and support. The writing of this report is an outcome of a UNDP project, implemented by the Department of Planning and Budget under the Ministry of Finance and Economic Planning - Millennium Development Goals Capacity Building Initiative in Tuvalu, Project No.006981.

<sup>1</sup> United Nations Conference on Environment and Development, Rio de Janeiro 1992; International Conference on Population and Development (ICPD), Cairo 1994; Fourth World Conference on Women, Beijing 1995; Global Conference on Sustainable Development of Small Islands Development States (SIDS), New York 1999

The eight Millennium Development Goals are listed below with their updated targets.

## The Millennium Development Goals

(Updated official list effective 15 January 2008)

<b>Goal 1:</b>	<b>Eradicate extreme poverty and hunger.</b>
Target 1.A:	Halve between 1990 and 2015, the proportion of people whose income is less than one dollar a day.
Target 1.B:	Achieve full and productive employment and decent work for all, including women and young people.
Target 1.C:	Halve, between 1990 and 2015, the proportion of people who suffer from hunger.
<b>Goal 2:</b>	<b>Achieve universal primary education.</b>
Target 2.A:	Ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.
<b>Goal 3:</b>	<b>Promote gender equality and empower women.</b>
Target 3.A:	Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015.
<b>Goal 4:</b>	<b>Reduce child mortality.</b>
Target 4.A:	Reduce by two-thirds, between 1990 and 2015, the maternal mortality rate.
<b>Goal 5:</b>	<b>Improve maternal health.</b>
Target 5.A:	Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio.
Target 5.B:	Achieve by 2015, universal access to reproductive health.
<b>Goal 6:</b>	<b>Combat HIV/AIDS, malaria and other disease.</b>
Target 6.A:	Have halted by 2015 and begun to reverse the spread of HIV/AIDS.
Target 6.B:	Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it.
Target 6.C:	Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.
<b>Goal 7:</b>	<b>Ensure environment sustainability.</b>
Target 7.A:	Integrate the principles of sustainable development into country policies and reverse the loss of environmental resources.
Target 7.B:	Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss.
Target 7.C:	Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.

## The Millennium Development Goals

(continued)

Goal 8:	Develop a global partnership for development
Target 8.A:	Develop further an open, rule-based, predictable, non-discriminatory trading and financial system. Includes a commitment to good governance, development and poverty reduction – both nationally and internationally.
Target 8.B:	Address the special needs of the least developed countries. Includes: tariff and quota free access for the least developed countries' exports; enhanced programme of debt relief for heavily indebted poor countries (HIPC).
Target 8.C:	Address the special needs of landlocked developing countries and small island developing states (through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the twenty-second special session of the General Assembly).
Target 8.D	Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term.
Target 8.E	
Target 8.F	In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries.  In cooperation with the private sector, make available the benefits of new technologies, especially information and communications.



# Executive Summary

The following summarises the report findings on Tuvalu's progress towards the achievement of Millennium Development Goals. The colors identified progress base on UNDP guidelines.

MILLENNIUM DEVELOPMENT GOALS	PROGRESS STATUS 2010	STATUS OF NATIONAL SUPPORT
<b>Goal 1: Eradicate extreme poverty and hunger</b>	Given the poverty data from the HIES2010, Tuvalu is unlikely to meet ITS national define poverty target by 2015.	Mixed support in creating employment opportunities
<b>Goal 2: Achieve universal primary school education.</b>	Very likely Tuvalu will achieve this target by 2015.	Education sector has the highest share in the National Budget and therefore remains a top priority for the Government.
<b>Goal 3: Promote gender equality and empower women.</b>	There is great potential for Tuvalu to achieve this goal by 2015.	Achievements have been made in education and employment but there is still opportunity to encourage women's participation in politics and in Island community decision making bodies (Falekaupule and Kaupule).
<b>Goal 4: Reduce child mortality</b>	Tuvalu already met targets and is on track to achieve Goal 4 by 2015.	There is strong support from both the Government and development partners to address child mortality issues.
<b>Goal 5: Improve maternal health</b>	Maternal deaths are rare in Tuvalu and therefore Tuvalu is on track to meet Goal 5 by 2015.	Strong national support has been given in this area.
<b>Goal 6: Combat HIV/AIDS, malaria and other disease</b>	Mixed progress with potential to meet goal. Base on progress of different initiatives related to HIV/AIDS and TB, Tuvalu is on track to meet Goal 6. However NCDs such as diabetes are common and need to be addressed.	There is strong support from the Government and NGOs through assistance of development partners.
<b>Goal 7: Ensure environment sustainability</b>	Mixed progress with great potential to meet goal. Tuvalu is making good progress in the sustainable use of marine and land resources, however enforcement of legislation needs to be address. Tuvalu is vulnerable to climate change and sea level rise and this will have an effect on all other MDG Goals.	Internationally the Government is vocal in the area of climate change and sea level rise.
<b>Goal 8: Develop a global partnership for development</b>	Tuvalu is on track to meet Goal 8.	Tuvalu has strong partnerships with development partners.

# Achieving the Millennium Development Goals

In the last quarter of 2008 and 2009, Tuvalu along with countries in every corner of the world has been overwhelmed by series of global crises, firstly the food and fuel crises and then the global economic crisis, a formidable period for the entire globalised world. This series of effects played a role in some of the mixed results towards the achievement of the Millennium Development Goals. Targets that are likely to take a step backward in terms of progress include employment opportunities for the poor; alleviation of hardship and hunger, official development assistance from abroad and debt sustainability.

## Poverty, hunger, safe drinking water, sanitation and housing.

There is good support from the Government to address the issues of hardship and poverty in Tuvalu.

The Government of Tuvalu, realizing the need to create employment opportunities and reverse the decline in Outer Islands economic activity, created and set aside a pool of funds in 1998 to address these issues. 'Special Development Expenditures (SDE)' is a pool of funds largely spent on Outer Island projects and sourced from the Government main general account. Since 1998, it has been an instrument of success for the Outer Islands social and human development. In addition, the Government in 1999 secured a loan from the Asian Development Bank and created the Falekaupule Trust Fund (FTF). Outer Islands take a leading role in using the allocations from the fund to cater for their own development needs. During the preparation of the National Budget for the year 2009, the Government was aware of the effect of the fuel and food prices on the poor and created a subsidy for basic commodities. Noting that old people are the most vulnerable cohort in the society the Government in 2008 introduces a scheme in which elderly citizens are given a monthly benefit payment to cover basic expenses.

In 2009, the Government distributed plastic (polyethylene) 10,000 litre water tanks to every household on the capital Funafuti under the 10th European Development Fund. The Government will also distribute water tanks to every household in the Outer Islands in 2010. Fourth coming programmes under the 10th EDF also include improvement to the storage of waste material and improve sanitation.

The Government is supportive of programmes that assist the poor and improve social conditions. The next challenge is to improve the quality of this assistance by targeting the elusive, vulnerable groups. This includes people with disabilities. Another challenge is to decentralize some of its services to the private sector and NGOs and maintain high quality services. This ensures creating more employment opportunities for all and a pathway to poverty alleviation.



## Education

Education by law is mandatory from the age of 6 up to 15. This is the age group for primary school education up to level 2 of secondary education. The Government does not impose any fees for primary education. Because of this mandatory and free service, Tuvalu enrollment rates are one of the highest in the world, achieving near-universal primary education for all. The Government of Tuvalu is focusing on improving facilities and infrastructures for schools.

Despite these achievements and success the greatest challenge of all is the quality of education. In some of the primary schools, the prevailing situation indicates weakness in critical thinking, creativity, reading, writing and arithmetic which are the basis for critical learning in all ages. The fall in the pass rate for the compulsory secondary school entrance examination in some primary schools indicates the lack of learning skills in basic subjects such as mathematics, English and basic science. It is critical to develop teachers' skills, reform curriculum to best fit Tuvalu education needs and to improve the students per teacher ratio. The use of computers in the modern era is critical to bridge the gap between Tuvalu and developed countries' classrooms. Finally, expanding and developing cultural and traditional skills outside the classrooms add to the 'quality' agenda. There are people with skills in making handicraft, and those with skills in local fishing and agricultural techniques. These traditional skills will assist people to survive through difficult financial situation.



## Gender

Like many other countries in the Pacific, Tuvalu offers equal opportunities to men and women in almost every area. Tuvaluan girls and boys have equal education opportunities at all level and the labor market is open to everyone. Tuvalu ranks 9th out of the 14 Pacific island countries with available recent data (2008) on the Gender Development index.

Te Kakeega II and the CEDAW 2008 Report indicate few areas that need to be improved to achieve all gender equality and empowerment targets. The picture is more robust in the Outer Islands compared to the Capital. These key issues are the burden of women's responsibilities in the family and community, lack of market facilities to sell their products, participation in community decision making, inequitable laws governing the distribution of land, women's participation in resolving land disputes and unfair custodian rights. Because women tend to have no capital, few have access to credit to start businesses. Widespread issues such as domestic violence (much of which is unreported) constitute a dreadful assault on the rights and dignity of women. The problem requires urgent and renewed action from law enforcement agencies and related civil society organizations with assistance from the public.





To rectify these issues, the Department of Women in 2007 has endorsed a Gender Policy Document that set ambitious targets to promote gender balance in every development areas.

### **Child and maternal health**

Tuvalu has made good progress on child and maternal health. Immunization is almost universal. Improved training programmes, the number of skilled midwives and improved health facilities contribute to the improvement in child mortality in Tuvalu since 1990. The public hospital on the Capital and Outer Islands' clinics provide free ante-natal and post-natal check up and immunizations of children. Tuvalu Family Health Association, a non government organization, has also come to the fore with assistance with ante-natal and post-natal checks.

However as with education, improving the quality of health services is a top priority. With the number of patients referred to overseas hospitals in Fiji and New Zealand for treatment, there is a call to upgrade skills for health personnel.

### **HIV/AIDS, malaria and other disease**

Tuvalu has a small number of HIV patients. In 1995, Tuvalu recorded its first case of HIV, and since then a total of 11 cases has been confirmed. By international standards and by comparing to the size of the population, Tuvalu has one of the highest per capita rates of HIV/AIDS in the Pacific. Those who are affected and at risk from HIV/AIDS and STIs are those who are central in driving the economy forward. Seafarers and students studying abroad are at most risk in the population cohort. HIV/AIDS remain a challenge for Tuvalu and the risk is too high for targets not to be achieved by 2015. Confirmatory HIV tests are still being sent to Fiji for tests and this has caused some problems when results are not returned. The main hospital on the Capital offers free counseling and initial HIV testing to all residents.

Like most other Pacific Island countries, Tuvalu's main health concerns are non-communicable diseases (NCDs). With limited choice of food, Tuvalu relies heavily on imported food often low in nutritious value. Add to this the concern that there is no dialysis equipment, therefore all dialysis patients are being sent to Fiji for treatment. In addition, most of the essential drugs occasionally run out. Because of the increase in chronic disease in recent years, the Tuvalu Medical Scheme has experienced increased costs from half a million Australian Dollars in 2007 to over two million in 2009. The scheme offers patients free air transport, medical care and stipend.

To face these challenges, the Tuvalu Health Strategic Plan is focusing more on preventive care and health promotion that emphasizes multi-sectoral collaboration at both national and island community level.



## MDG PROGRESS SCORE CARD: 2006 vs 2010

GOAL	2006 ASSESSMENT	2010 ASSESSMENT
Goal 1: Eradicate extreme poverty and hunger.	THERE IS POTENTIAL	UNLIKELY
Goal 2: Achieve universal primary school education.	ON TRACK	ON TRACK
Goal 3: Promote gender equality and empower women.	ON TRACK	POTENTIALLY
Goal 4: Reduce child mortality	THERE IS POTENTIAL	ON TRACK
Goal 5: Improve maternal health	THERE IS POTENTIAL	ON TRACK
Goal 6: Combat HIV/AIDS, malaria and other disease	OFF TRACK	POTENTIALLY
Goal 7: Ensure environment sustainability	THERE IS POTENTIAL	POTENTIALLY
Goal 8: Develop a global partnership for development	THERE IS POTENTIAL	ON TRACK



## Environment

Climate change and the effects of global warming is a serious concern for Tuvalu. The Government has been vocal in the international arena on the issue of global warming.

There are concerns and issues with regard to waste management. The growing population of the Capital has a strong connection to the improper dumping of waste, which has a direct link to human and ecosystem health. The other main challenge is the effect of sea level rise on atolls agricultural crops, coastal erosion and flooding.

The Government of Tuvalu has made some progress to mitigate the effect of dumping waste. In 1997 the Government introduced its National Environment Strategy (NEMS). As a result the National Environment Protection and Environment Impact Assessment (EIA) guidelines have been produced. More recently in 2009, the Government introduced a separate waste legislation as a separate part of a comprehensive Environment Management Act. The Act ensures the public disposes of their waste appropriately in designated facilities and areas. In addition, the Government in 2009 also introduced its National Biodiversity Strategy Action Plan (NBSAP) to combat the loss of both terrestrial and marine life.



# Country Development Profile

## The Land

Tuvalu, formerly the Ellice Islands in the Gilbert and Ellice Island colony, comprises nine islands. These are scattered over 1.2 million square kilometers of the Pacific Ocean stretching in a North-South direction between latitudes 5 and 11 degrees south and over longitudes 176 and 180 degrees east. The total land area is 25.6 square kilometers.

Tuvalu is formed of nine low lying coral islands seldom rising no more than four metres above sea level. Five of the islands (Nukufetau, Nanumea, Nui, Funafuti and Nukulaelae) are true coral atolls, with a reef platform surrounding a central lagoon while Nanumaga, Niutao and Niulakita are single islets composed of sand and coral materials thrown up by wind and wave action. Only Vaitupu has the character of both an atoll and reef island.

The atoll physical land formation imposes special ecological constraints to crop production. The limited land in Tuvalu is generally of a low quality with poor fertility. With sea levels rising due to climate change and global warming, Tuvalu's main constraint is the high concentration of salt in the soil. The range of plant species which can survive in such habitat is limited to pandanus, breadfruit and bananas. Root crops such as pulaka and taro are common in the Outer islands. Cash is becoming an increasingly important adjunct to the islands economy. With the growth in cash incomes from overseas remittances and relatives from Funafuti, there is a growing tendency for imports to replace local products.

The climate of Tuvalu is tropical. Consistent and uniform temperatures ranging from 26 to 32 degrees Celsius with high humidity and rainfall averaging from 256.5 millimeters per month from 2008 to 2009. Droughts of up to three months can occur, especially in the northernmost islands. Some of the islands lie within the cyclone belt, with the most recent cyclone to occur being Amy in 2003.

The country's exclusive economic zone (EEZ) covers an area of approximately 900,000 square kilometers and is rich in oceanic fish stocks. The Government offers fishing licenses for foreign fishing companies to operate their fishing vessels within the EEZ. Tuvalu has received a substantial amount of money from these fishing licenses. In 2008, Tuvalu Fisheries resources within this area also offered potential for upgrading the country's small scale fishing to meet the local demand for fish. Overfishing is an issue in both the open ocean and in coastal areas.

## The People

The population of Tuvalu is ethnically Polynesian. They have close ties with Samoans and Tokelauans and the local language is a Polynesian tongue closely related to that spoken in Samoa. One of the islands (Nui), uses I-Kiribati language indicating a connection and settlement of some I-Kiribati in the 1900s. English language remains a priority in the education curriculum.

The society's social fabric is based around the chiefly social system where traditionally decisions are made by the Falekaupule, which is made up of the island chief and men above the age of 50. Women's sphere lies outside the Falekaupule, in the home as caregivers.

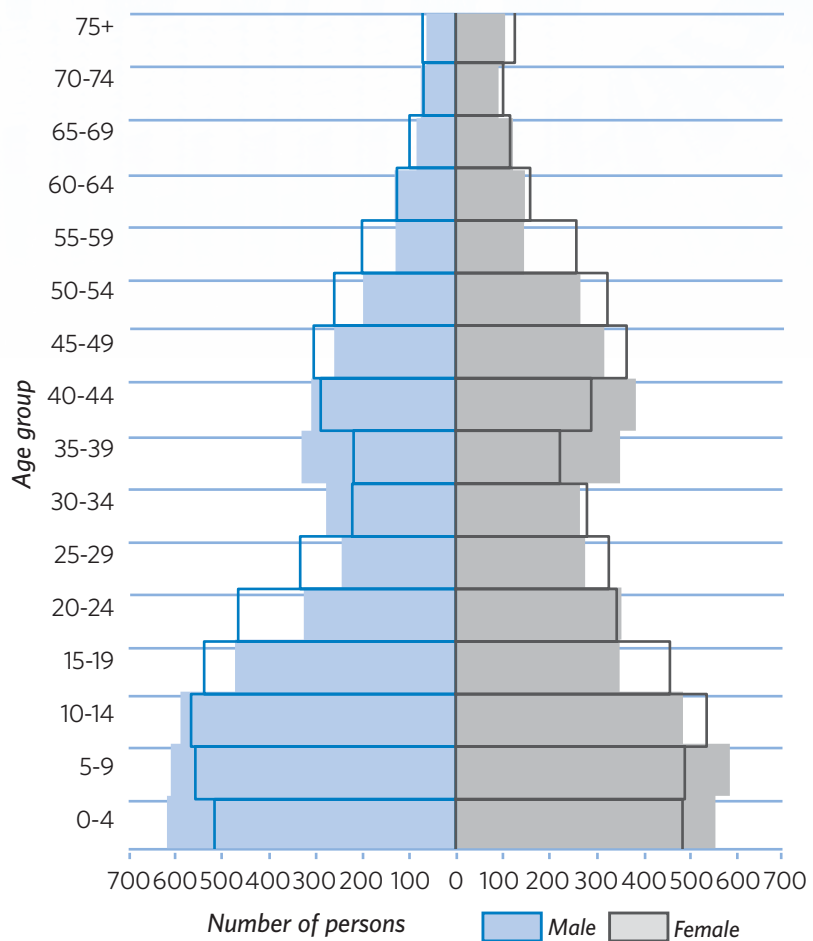
It was estimated that Tuvalu had a population of 2,812 in 1866 around the period when foreigners began trading in Tuvalu. According to statistical data collected by administrative officers working in the Ellice Island District of the former colony, in 1931 the population of Tuvalu increased to 3,994. Nearly a half century later in 1979, this population count had almost doubled with population count of 8,229. In the 1991 Population Census, the population of Tuvalu stands at 9,043. The most recent population census in 2002 indicates that Tuvalu had 9,561 people. This indicates an average annual population growth rate of 0.57% between 2002 and 1991. According to population estimates by the Secretariat of the Pacific Community (SPC) based on updated data from household surveys, in 2009, the population of Tuvalu stood at 11,093. This represents an estimated average annual population growth of 1.8%.

The population pyramid (Graph 52) indicates that the Tuvalu population is young, with 43 percent younger than 20 years of age (2002 Population Census). Older age groups are very small in comparison with the young age group.

Commonly, this type of age structure lends built-in momentum to the growth of the population. This means that when young people reach reproductive age, the result will be a high population growth rate.

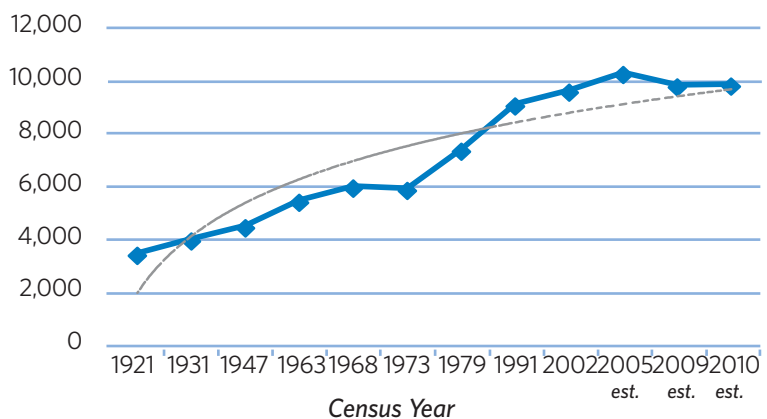
However this may not be the case because of out migration. The special feature of the population pyramid is the shift in of the 15-34-year age group. This is a sign of out-migration in search of employment. Before 2003, Tuvaluans could travel to New Zealand without the need to have an entry visa. This may have contributed to the distinct demographic feature of the population pyramid. The median age of the Tuvalu resident population decreased from 25.1 years in 1991 to 23.6 years in 2002 (i.e. in 2002, half of the resident population was younger and the other half older than 23.6 years). However, according to SPC estimates for 2009, the total median age increased from 23.6 in 2002 to 24.2. Females tend to have a higher median age than males. In 2002, the median age for females was 26.04 while for males the median age was 21.04. The dependency ratio (ratio of the young 0-14 plus the old 60+, to the population of working age 15-59) is higher in the Outer Islands compared to the capital, Funafuti. This indicates that there is a higher number in the 15-59-year age group in Funafuti compare to Outer Islands.

**Graph S2: 2009 SPC Population Estimates (outline) & 2002 Population Census (shaded)**



Source: SPC and Central Statistics Division, 2010

**Graph S1: Tuvalu Population 1931-2009**



Source: Population Census Report (1971, 1991 & 2002), Central Statistics Division



In both the 2002 population Census and the 2004/05 household income and expenditure survey (HIES2004/05), almost half (47%) of the total population for Tuvalu resides on Funafuti. This is an increase of 5% if compared to the 1991 population census. The effect of the population shift from Outer Islands to Funafuti results in higher degree urbanization. This high degree of urbanization causes serious social and human development issues on the capital, Funafuti. These include the rise in settlement squatters and low quality housing, waste management, few income earners per household and land disputes between Funafuti landowners and migrants from Outer Islands.

## Government

Tuvalu became constitutionally independent on October 1st 1978. Her Majesty Queen Elizabeth II is the Head of State and is represented in the country by a Tuvaluan Governor General and whose powers are, however, limited.

Tuvalu has a political structure which provides for an elected Government, complemented by a strong local council system under the control of the Falekaupule (Outer Islands executive arm). Each island has an Island council (Kaupule), an island court with specific powers and limited jurisdiction in criminal and civil matters. Kaupule usually consist of six elected members of whom one becomes a president and another vice president. The Kaupule Secretary looks after the overall management of the Kaupule. Each Kaupule is responsible for the financial management and maintenance of local services such as health and education.



Parliament has a single chamber of 15 members, with two members from each island except Nukulaelae. Parliamentary terms are for four years and Members may take as many terms as for which they are elected. Cabinet is responsible for policy and administration and is made up of the Prime Minister and seven ministers. Caucus is made up of 10 members including the Prime Minister, Speaker to Parliament, Cabinet Ministers and a MP. The highest court in Tuvalu is the High Court. Rulings from the High Court can be appealed in the Court of Appeal.

For the first time between 2000 and 2003, Tuvalu experienced a period of political instability with three Prime Ministers in two years. However in recent years (2006-2010), politics have been stable, despite a move from the opposition for a vote of no confidence.

Tuvalu's main bilateral partners are Japan, Taiwan, Australia and New Zealand. Tuvalu is a member of several multilateral organizations such as the Asian Development Bank, World Health Organizations and the United Nations. Tuvalu became a full member of the International Monetary Fund and World Bank in 2010.

## National Development Plan Profile

The United Nations Committee for Development Policy (UN CDP) categorizes Tuvalu as a Least Developed Country (LDC) according to three criteria of gross income per capita, human assets index and economic vulnerability.

Tuvalu's status as an LDC and being a small island states signify major constraints and challenges in terms of social and human development. These constraints and challenges can be overcome with coherent Government policies combined with overseas development aid. These strategies are in the National Strategies for Sustainable Development 2005-2015 (Te Kakeega II). Te Kakeega II is Tuvalu's main development framework for the year 2005 to 2015. This development framework envisioned that in the year 2015, Tuvaluans will have more employment opportunities, higher economic growth, better health and education, improved basic infrastructure and with continued social stability. The vision is articulated in

the Malefatuga Declaration, the foundation of Te Kakeega II and of which arises from the National Summit on Sustainable Development.

The summit was the biggest gathering in Tuvalu called to design a strategic plan for development for 2005 to 2015. Those who attended included Island Chiefs, Presidents of the Island Councils, Cabinet Ministers, Members of Parliament, representatives of the civil society and private sector, Government ministries and departments and development partners. Te Kakeega II is framed around the Millennium Development Goals.

The Malefatuga Declaration addresses leaders' commitment towards achieving the Millennium Development Goals:

*“Reaffirming as well our commitment to achieving sustainable development in line with the United Nations Millennium Development Goals and international sustainable development agenda;”*

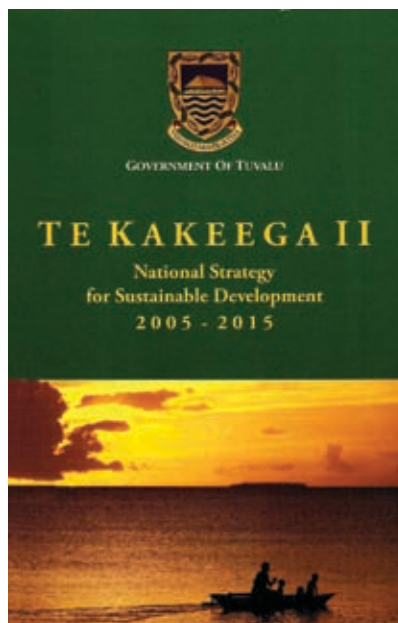
Eight strategic areas underpinned in the Te Kakeega II are:

- 1) Good Governance
- 2) Economic Growth and Stability
- 3) Social Development
- 4) Falekaupule and Outer Islands Development
- 5) Employment and Private Sector Development
- 6) Education and Human Development Resources
- 7) Natural Resources
- 8) Infrastructure and Support Services.

The implementation of strategies and priorities set out under each eight strategic path requires effort from all sectors. Each sector has to prepare a Sector Master Plan that address key priorities in Te Kakeega II and includes programmes directly linked to the national budget, its multi-year framework, and the Public Sector Investment Programme (PSIP) for donor support. Under each sector plan are department corporate plans, describing roles and responsibilities linking directly to the sector plan. The annual national budget and the PSIP provide the resources to implement programmes. Funding allocations to programmes within the development framework will be agreed between the Ministry of Finance, which sets macroeconomic policy and ministries and departments that set their own funding requirements.

To ensure progress towards the vision, the eight strategic areas in the NSSD must be measurable and monitored. Monitoring is a means towards an end, and not an end itself – the end is improved performance. To achieve that end, the derived performance indicators need to be analyzed and evaluated. Indicators under each strategic area are a measure to monitor performance, and they are based on regularly collected data or other information available. Because these indicators measure performance they give a reading of the symptoms; analysis and evaluation provide the diagnosis and the basis for defining an appropriate remedy. Most of the performance indicators are in line with Millennium Development Goals indicators. Examples of these include poverty indicators, primary and secondary school enrollment rates, under-five mortality rate, infant mortality rate, maternal mortality ratio and HIV prevalence among 15-24 age groups.

The national statistical system plays an important role in updating performance indicators. The updating of Te Kakeega II and Millennium Development Goals performance indicators rely on published data from various statistical agencies in key departments and Institutions. Quality and timely updated data provide and updated progress performance on each strategic area under Te Kakeega II and the Millennium Development Goals. The Tuvalu national statistical system is





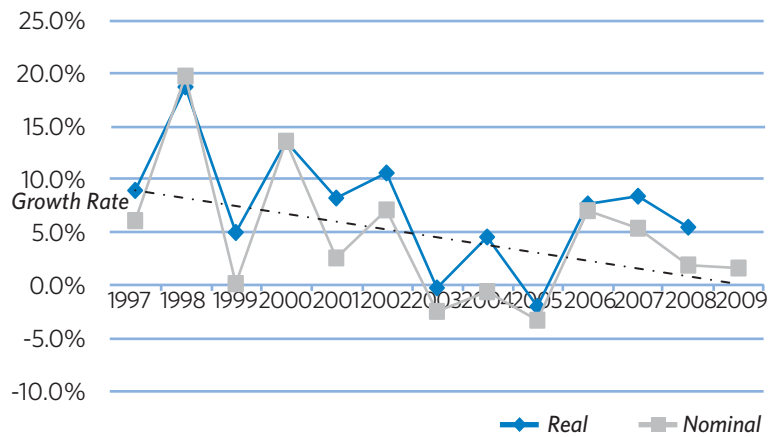
working to ensure that weaknesses are addressed. Common weaknesses are: lack of skilled staff and their turnover, lack of coordination from data primary sources and lack of funding to carry out household surveys. Another key weakness is having no statistical master plan to run household surveys and Population Censuses to be completed in line with reviewing of the National Development Plan and Millennium Development Goals. Add to this ,key departments' Annual Reports are not updated annually.

## Economic Setting

Tuvalu has a very limited resource base which narrows down options available for development. In addition, Tuvalu is relatively remote from major markets, has a comparatively high cost of transportation for trade, a huge gap between exports and imports and therefore relies on foreign aid and overseas remittances to bridge the gap, and it is also vulnerable to external factors (mainly the exchange rate between the local currency of Australian Dollar against the US Dollar).

Tuvalu's overall economy is measure in Gross Domestic Product (GDP). GDP is a measure of the value of goods and services produced in a country. Because Tuvalu is heavily relying on foreign aid and overseas remittances rather than domestic production, Gross National Income (GNI) is sometimes referred to as a more practical indicator than GDP. GNI is derived from GDP and it includes primary income earned by residents in Tuvalu and from abroad.

**Graph S3: GDP Growth Rate, 1997-2008**



Source: IMF and Central Statistics Division, 2009

Between 1996 and 2002, the Tuvalu economy grew at a real rate of 7.3% per annum or 6.1% in per capita (head) terms. However, recent figures release by the Central Statistics Division and the International Monetary Fund in July 2009 reveal that economy grew at a lower rate of 1.5% between 2001 and 2008. Figure 3 indicates that Tuvalu has a volatile economy. In some years, Tuvalu growth rate is high while in other years the growth rate is low or has negative growth. In 2002, real GDP growth rate was 6.7% but the following year in 2003 the growth rate came down to 3.2%. Although 2009 and 2010 Gross Domestic Product (GDP) figures are not available, the Asian Development Bank estimates (taking into account the recent global economic crisis) put the 2009 and 2010 real growth rate at no more than 1.0%.

Windfall revenue from fishing licenses resulted in a high level of annual growth in 1998 with 19.7%. This is also seen in neighboring country Kiribati, where they also had the highest annual growth of 20% in 1998 due to buoyant revenue from fishing licenses (Kiribati MDG National Report 2007). The same scenario also occurred between 2000 and 2002, when fishing licenses combined with dot TV revenue and the contribution from foreign reserves helped deliver an average annual growth rate of 4.3%. Because of these revenues, the Government finances large public projects such as the Funafuti tar sealed road. The public sector also continued to expand and as bank lending also increased thereby increasing activities in the private sector. From 2003 to 2005, the economy slowed down to an average growth rate of -2.7% mainly because of the completion of some of the major projects such as the Government Building and the Princess Margret Hospital. The economy then had a positive annual growth rate of 3.1% between 2006 and 2008 due to the strong US Dollar and undertaking major projects such as the new Funafuti Power House (2007) and the Funafuti Wharf (2008). The positive annual growth rate occurred despite food and fuel prices increasing. The annual inflation rate in the last quarter of 2008 was 10.4%. This is an increase of 6% from the average inflation rate of 3.4% between 1999 and 2007.

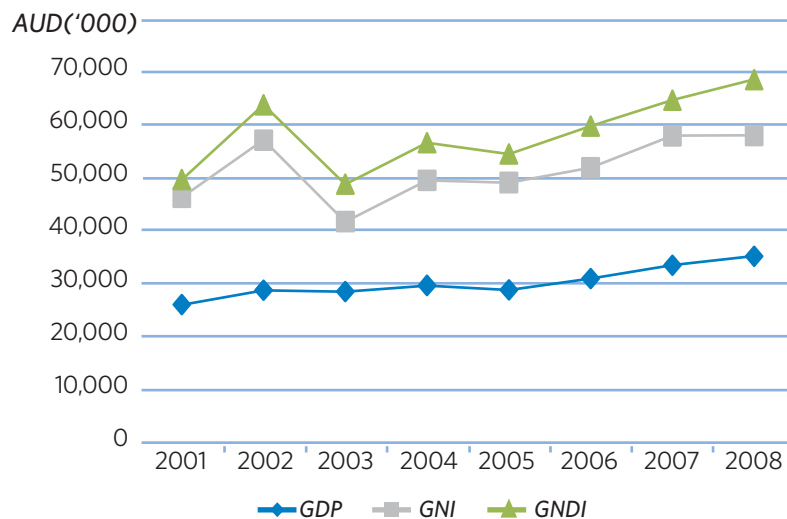
In terms of income earned within the country and from the rest of the world, Figure 4 shows that both the Gross National Income and Gross National Disposable Income (GNDI) doubled that of the Gross Domestic Product (total domestic activities in the country). GNDI derives from GNI and unlike GNI, it includes current transfers (payments or transfer of ownership e.g. overseas aid and private gifts).<sup>2</sup> Remittances from overseas fall under GNI. The ratio between GDP versus GNI and GNDI indicates that Tuvalu is a country relying heavily on its foreign exchange revenue and donors' assistance. The sum of foreign receipts, less current transfer to the rest of the world, doubles the amount that Tuvalu can produce locally from economic activities in the country. The average proportion of GNDI to GDP is 1.9 (between 2001 and 2008) with the highest ratio of 2.2 in 2002. Main contributing factors to this increase are fishing licenses and marketing of Tuvalu internet domain name, do TV.



Between 2002 and 2007, the average annual trade deficit was equivalent to -54.6% with the highest in the year 2002 of -70.1%.<sup>3</sup> Exports represent an average 1% of the value of imports within the same reference period. The country's main export product has been copra, however due to the decline in the world price for copra there is a minimum volume of exports, despite Government subsidy.

According to the 2002 Population Census, the total number of people with formal employment (employed full time for cash) was 1,978, and this represented 35.6% of the adult working population (15-65 years of age) or 33.2% of the total population above 15 years of age. Data from the Household Income and Expenditure Survey in 2004/05 recorded a total number of people with formal employment of 1,673 which represent 33.5% of the total population of 15 years and above. Therefore this is an increase of 0.3% from 2002 to 2004/05.

**Graph S4: Tuvalu GDP,GNI,GNDI, 2001-2008**



Source: IMF and Central Statistics Division, 2009

<sup>2</sup> System of National Accounts 1993, UNSD

<sup>3</sup> Central Statistics Division Statistical Report 2008 and National Account Report 2009.

Working on foreign vessels as seamen provides employment for Tuvaluan men. In 2007 there were 335 seafarers actively engaged as seamen on overseas sea vessels.<sup>4</sup> This is 11% of the estimated adult male working population (15-65 years of age). The average total cash remittances from seafarers as recorded from 2001 to 2003 was AUD4.2 million. It is estimated that in 2007, the total remittances from seafarers was AUD2.2 million dollars. This is 6.3% of GDP or 3.8% of GNI in 2007.<sup>5</sup> Overseas remittances have a more direct impact at household level in improving social welfare than some of the aid programmes. Opportunities are at minimum level recently due to poor discipline, alcohol abuse and high transportation costs (airfares).



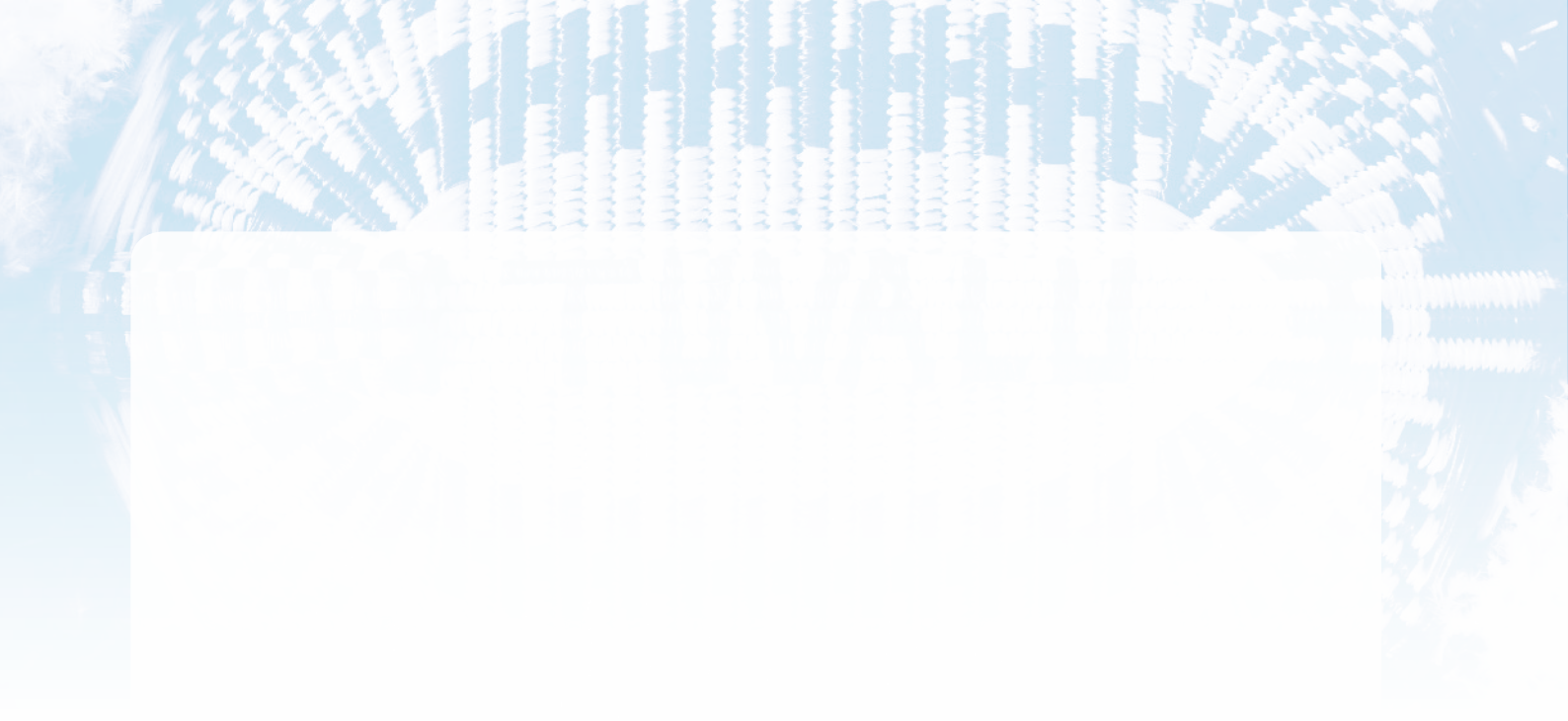
The 2002 Population Census recorded that the public sector, which include both the public service and public enterprises, provided 37% of all employees in the country, followed by construction industries (22%) and businesses (20%). Although the public sector provides substantial employment opportunities, it has an adverse effect in crowding out the private sector and therefore prevents the country's long term growth. The large public sector undertakes jobs that could be undertaken by private businesses. Public reform studies have concluded that some of the public sector activities are not Government or public sector businesses. Evidence has pointed to substantial over employment in the public sector with pay far exceeding their value.<sup>6</sup> The public service total wage bill for 2009 was estimated to be around 25.7% of GDP. This large proportion of the public sector wage bill may lead to being at the expense of the provision of basic services and as a result lead to the decline in social welfare status of the disadvantage, especially in Outer Islands.

<sup>4</sup> The Social and Economic Status of Vulnerable People 2007/08, Department of Community Affairs.

<sup>5</sup> Estimates base on figures from National Account Report 2009 and data from National Bank of Tuvalu.

<sup>6</sup> Tuvalu 2006 Economic Report, Asian Development Bank









## MDG 1: Eradicate poverty and hunger

MDG Target 1.A: Based on recent information, Tuvalu is unlikely to meet this target. This is mainly because of the surges in prices of food and fuel in 2008 and the global economic crisis in 2009 that negated some of the achievements made in previous years.

MDG Target 1.B: From analysis and evidence gathered, the MDG target of having full and productive employment and decent work for all is unlikely to be met. However there is progress in some areas.

MDG Target 1.C: The MDG target of halving the number of people who suffer from hunger has been achieved. The prevalence of underweight children under the age of five is low (although there is lack of statistical data). Overweight is becoming a problem mainly because of poor diet.



# Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day

## Target Score Card

Tuvalu is unlikely to meet this target by 2015				
Indicators	1994 Baseline	2004	2010	2015 Target
Population below Basic Needs Poverty Line <sup>1</sup>	National: 23.2% Funafuti: 28.8% Outer Islands: 20.4%	National : 16.5% Funafuti : 19.7% Outer Islands:14.3%	National: 19.7% Funafuti: 19.8% Outer Islands: 19.7%	National: 11.6% Funafuti: 14.4% Outer Islands: 10.2%
Poverty gap index	National: 7.6 Funafuti: 9.3 Outer Islands: 11.2	National : 5.6 Funafuti : 7.5 Outer Islands: 4.1	National: 6.2 Funafuti: 8.1 Outer Islands: 6.6	National: 3.8 Funafuti: 4.7 Outer Islands: 5.6
Share of poorest quintile in national consumption	National: 7% Funafuti: na Outer Islands: na	National: 10.2% Funafuti: 10.7% Outer Islands: 11.4%	National: 8.1% Funafuti: 9.8% Outer Islands: 9.5%	National: 3% Funafuti: na Outer Islands: na

Sources: Household Income & Expenditure Survey

### Tracking progress

Monitoring and Evaluation Components	Assessment	
	2006 MDG Report	2010 MDG Report
Data collection capacity	fair	strong
Capacity to analyze data	weak	strong
Data continuity and quality of survey information	fair	strong
Capacity to incorporate statistical analysis into policy planning	weak	weak
Monitoring and evaluation mechanism	weak	fair

<sup>1</sup> Tuvalu uses its national poverty lines for monitoring. This is in line with UNDG recommendations.



# Definition

## Definition of Poverty in the Local Context

There are no known cases of deaths as a result of starvation or proof that there are beggars in Tuvalu. These indicators are the widely held international perception of the definition of poverty. However, hardship or 'poverty of opportunity' is experienced by many people in Tuvalu. Therefore in the local context, poverty is best defined as hardship or the lack of opportunities. It is hardship in the sense that people do not have sufficient financial resources to cover basic needs expenses such as medical and education related expenditure. Those facing 'poverty of opportunity' are considered to have a lack of access to basic services such as education, health, employment, freedom of choice, or the opportunity to realize their aspirations. They must constantly make choices about their daily expenditure priorities: purchase of food items or school fees, religious and community obligations or electricity and telephone bills. This is the definition agreed to by participants in the Asian Development Bank (ADB) Participatory Poverty Assessment (PPA)<sup>2</sup> carried out in 2003 across six communities in Tuvalu.

## Causes and the Most Vulnerable

The causes of poverty in the PPA consultations reflect the above definition and terminology of poverty in the local context. These are:

1. Limited access to quality basic services and infrastructure;
2. Limited income generation opportunities, particularly for women and youth and those with low qualifications;
3. Overcrowding and overpopulation of households and communities, particularly on Funafuti;
4. Weakening social support system;
5. Too many family, church, community and island contribution commitments; and
6. Idleness and 'dependency attitude' among families.

The vulnerable groups identified in the PPA consultation include:

1. Physically handicapped and mentally challenged people
2. Couples without children
3. Women with alcoholic spouses
4. People without regular sources of income
5. Orphans
6. Individuals without access to land or settlers
7. People with large families (several children and other relatives to support)
8. Abandoned elders
9. Families living in squatter areas
10. Widows and single mothers without regular incomes

## Definition of National Poverty Line

Instead of using the USD1.00 (PPP) as a poverty line, Tuvalu set and uses its national poverty line as a base for monitoring purposes. This is in line with UNDG recommendations.

The National Poverty Line (NPL) is best defined as the absolute amount of income needed to meet daily basic needs. In Tuvalu, the NPL is calculated from the sum of Food Poverty Line (FPL) and the Non-Food Poverty Line (NFPL).

FPL is the "low cost of a minimum nutritious" basket of food with the total energy value 2100 calories per day per adult equivalent.<sup>3</sup>



<sup>2</sup> ADB Reta 6047: REG/ Consultation Workshop on Poverty in Tuvalu

<sup>3</sup> Per adult equivalent is based on the size, age, weight of a person, e.g. 2 children can be equivalent to one adult (assuming size and weight of person is constant)

This is the minimum amount of food energy a person (per adult equivalent) should take in per day as recommended by the UN Food and Agriculture Organization (FAO).

NFPL is based on FPL and it is calculated using a non-food factor based on expenditures patterns of the lowest quintile households.

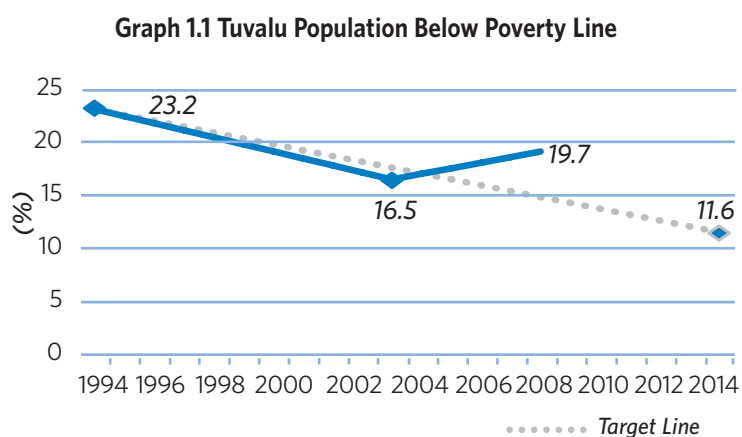
Therefore, the Basic Needs Poverty Line (BNPL) reflects the amount of income needed for daily basic needs. The source of data to calculate FPL and NFPL is the household income and expenditures survey (HIES), usually carried out every five years. Household expenditure is often used instead of income as experience shows people are more reluctant to divulge their true income in the survey questionnaires.

## Progress

### Level of Poverty Incidence

Tuvalu has carried out two household income and expenditure surveys and is currently running a third during the writing of this report (2010). The first one was carried out in 1994 and the recent one was in 2004.<sup>4</sup> Poverty data from the first survey are regarded as baseline data for poverty monitoring, as there were no estimates nor any data prior 1994.

Based on the first household survey (1994), the population below the national basic needs poverty line was 23.2%. Therefore the target for 2015 is to halve this figure to 11.6%. Latest figures from the 2010 HIES shows that Tuvalu is not on track to meet the target for 2015. Tuvalu population below the national poverty line was 19.7% in 2010. On this trend, Tuvalu is unlikely to meet the goal of halving population below the national poverty line (see Graph 1.1).



Source: TTFAC Report, Oct 2010

There are more people below the poverty line in the capital Funafuti compared to the Outer islands. In 1994, 28.8% of Funafuti population was below the national poverty line and 14.3% for the Outer Islands. As a result of urban drift, many families on Funafuti are experiencing financial distress and their household income sheets are becoming increasingly unhealthy due to their increasing level of expenditure.

<sup>4</sup> Tuvalu Household Income and Expenditure Survey 2004/05 - implemented by Central Statistics Division.



## Income Distribution

Overall between 1994 and 2004, there was an improvement in the level of inequality for income distribution. However between 2004 and 2010 level of inequality did not improve, mainly as a result of the hike in food and fuel prices between 2007 and 2008, plus the more recent global economic crisis. The Gini Coefficient is a measure of the inequality of income distribution. A value of zero (0) means total equality and a value of one (1) maximal inequality (see Table 1A.1).

**Table 1A.1 Gini Coefficient**

	1994	2004	2010
<b>National</b>	0.43	0.24	0.34
<b>Funafuti</b>	0.37	0.24	0.27
<b>Outer Islands</b>	0.39	0.21	0.28

*Source: TTFAC Report Oct 2008 & 2010*

The level of inequality at national level fell from 0.43 in 1994 compared to 0.24 in 2004. There was more progress for the Outer Islands compared to Funafuti during the reference period. Outer Islands improved by 0.18 whereas for Funafuti it was 0.13.

The level of inequality increased from 0.24 in 2004 to 0.34 in 2010. Because of the decline in world trade between 2008 and 2010 due to the global economic crisis, the number of Tuvaluan seaman working abroad also decreased.

The severity level of poverty supports the analysis that the incidence of poverty and hardship in Tuvalu increased over the period between 2004 and 2010 (see Table 1A.2).

A final indicator which supports the increase in inequality over the period 2004-2010 is that the share of expenditure by households in the lowest expenditure quintile fell. In 2004, the lowest quintile had 10.2% of all expenditure and by 2010 this has decreased to 8.1%.

**Table 1A.2 Level of Severity of Poverty**

	1994	2004	2010
<b>National</b>	3.3	2.2	2.3
<b>Funafuti</b>	3.7	3.3	3.1
<b>Outer Islands</b>	5.9	1.3	2.6

*Source: TTFAC Report Oct 2008 & 2010*

## Prices of Basic Commodities

As a result of the global hike in food and fuel prices in mid 2008, much of the progress has been lost.

In this period, there was more pressure on household budgets compared to previous years. The average annual inflation rate between 2003 and 2007 was 3.08%. In mid 2008 the average annual inflation rose to 11.38% and by end of 2008 rose again to 12.34%. The price of petrol rose from an average of AUD1.72 between 2006 and 2007 to AUD2.50 in mid 2008.



## Human Development and Poverty Indices

The MDG Tracking Report released in June 2010 under the Cairn Compact on improving aid effectiveness showed that Tuvalu ranked ninth with its Human Development Indicator of 0.700 in 2008. This is an improvement compared to its 1998 HPI of 0.583 and rank of eighth amongst the fourteen Pacific Island Countries for which data were available.

The same report indicated that Tuvalu ranked sixth amongst the thirteen Pacific Island countries for which data were available with a Human Poverty Index (HPI) of 9.2. This was calculated from a composite measure of human development indicators plus indicators of access to health services, primary enrolment levels, the chance of not surviving past forty years and the proportion of children underweight. It is worth noting that Tuvalu HPI has not improved compared to the 1998 HPI of 7.3 (see Table 1.2).

**Table 1A.3 Pacific Human Poverty Indicators**

Country	1998		2008	
	Index	Rank	Index	Rank
Cook Islands	6.1	3	3.7	1
Tonga	5.9	2	4.5	2
Samoa	8.6	7	5.1	3
Palau	10.8	8	8.2	4
Fiji Islands	8.5	6	9.0	5
Tuvalu	7.3	4	9.2	6
FSM	26.7	12	11.1	7
Marshall Islands	19.5	11	12.4	8
Nauru	12.1	9	15.0	9
Vanuatu	46.6	13	19.8	10
Kiribati	12.6	10	22.9	11
Solomon Islands	49.1	14	31.3	12
PNG	52.2	15	41.8	13
Niue	4.8	1	na	na
Tokelau	7.6	5	na	na

Source: MDG Tracking Report June 2010

## Challenges and constraints

The Tuvalu economy is very open with imports of goods and services equivalent to roughly 75-80% of GDP and distributions from the Trust Fund and license fees each accounting on average for about 15-20% of GDP of Government budget revenues annually (TFFAC Report Oct 2008).

The openness of the economy to external shocks put more pressure on the most vulnerable to fall below the poverty line. In addition, Outer Islands' remoteness from Funafuti constrains economic development and potentially new avenues of social and economic development (TKII).

With limited permanent job opportunities in the Outer islands resulting in urban drift to Funafuti (and overseas) and consequent depopulation of the Outer Islands gives higher dependency ratios amongst those remaining. With urban drift to the capital, 'poverty of opportunity is being experienced on Funafuti where population pressure is high, generating social tensions and land disputes.



To achieve targets for poverty alleviation including the 2015 target of 11.6%, prompted the Government to set policies and strategies aimed at providing a stable macroeconomic environment, including sound budget management, political stability and appropriate environment policy environment. (MDG 2006)

Continued progress and improvement will be needed in order to meet the target and the priorities include:

### 1. Creating an 'enabling environment' to support the private sector.

There is a significant opportunity to advance a healthier development path for the private sector. Recent growth has been a result of an expanding public sector. The private sector could be as much or larger and through discipline raise substantially the economic productivity and therefore provide more income opportunities.

There is still clear space and opportunity for the Business Unit and the National Development Bank to provide access to those who have limited land and capital to start small businesses, including young entrepreneurs and those with large families.

### 2. Targeted Budget Allocation

More effectively targeted budget allocations for poverty reduction measures are required, especially in the Outer Islands. One of the poverty reduction measures in the national budget is the 'Special Development Expenditures' (SDE) which encourages income generation in the Outer islands. A scheme for older people in which residents above the age of 70 get a support allowance of AUD70 per month relieves pressure on those whom they depend upon. Earmarked funds for disabled persons are to cater for their essential needs, similar to the older people's scheme.

### 3. Tuvalu Maritime Training Institute (TMTI)

Maintaining commitment to the TMTI and continuing to look for more opportunities overseas for Tuvalu seaman.

Upgrading TMTI to meet standards for facilitating courses that will train Tuvaluans to work on fishing vessels.

#### **4. Decentralizing implementation**

A combined effort by the Government, Kaupule and NGOs is required to produce a poverty-targeting and monitoring tool suitable for vulnerable locations.

Transferring some of the responsibilities of capacity building for poverty alleviation, good governance and community development to NGOs and local communities. Ensuring transparency of funding and performance appraisals.

#### **5. Frequent household surveys**

Frequent household surveys improve targeting measures and ensure that the vulnerable are identified. A thorough poverty profile of disadvantaged groups continuously updated enables different agencies in the Government and NGOs to mobilize resources in areas of need.

Based on information from household surveys; undertake and improve research on broad based redistribution policies and measures with emphasis on their effectiveness.



# Target 1.B: Achieve full and productive employment and decent work for all women and young people.

## Target Score Card

Target unlikely to be achieved				
Indicators	1991+	1994*	2002+	2004*
GDP per person employed	Total: \$8,596	Total: \$9,132	Total: \$14,660	Total: \$15,188
Growth Rate of GDP per person employed (base on TNPf data)	Total (1998): 2.65	Total (2001): 1.00	Total (2006): -1.73	Total (2007): -0.19
Employment-to-population ratio	Total: 26.8 Male: 37.0 Female: 18.4	Total: 29.8 Male: 44.5 Female: 18.5	Total: 32.4 Male: 44.9 Female: 22.7	Total: 33.5 Male: 42.5 Female: 26.0
Proportion of own-account and contributing family workers in total employment	Total: 8.4 Male: 6.4 Female: 11.7	Total: 10.2 Male: 8.1 Female: 14.0	Total: 3.6 Male: 4.3 Female: 2.4	Total: 19.2 Male: 24.1 Female: 12.2

Sources: + Population Census, \*Household Income & Expenditure Surveys (CSD)

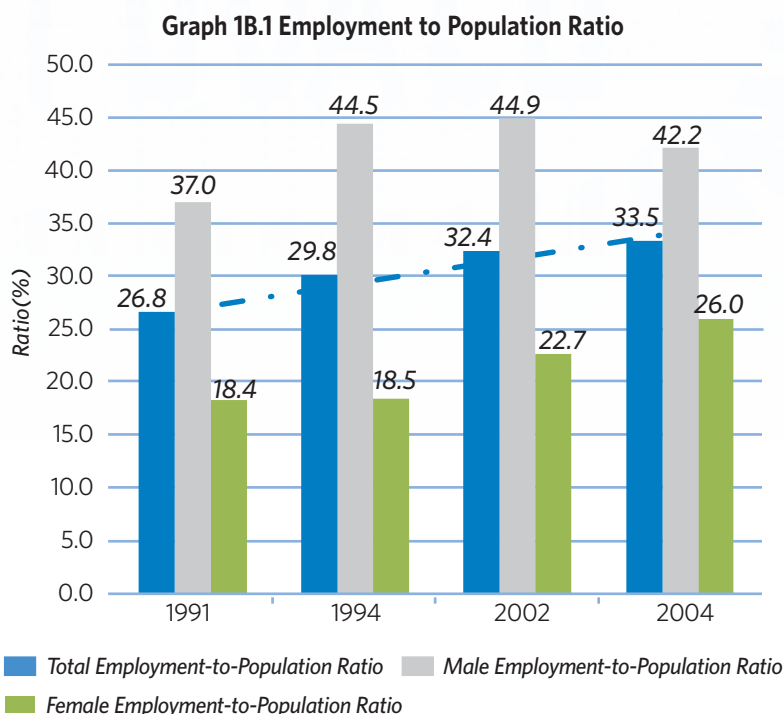
### Tracking progress

Monitoring and Evaluation Components	Assessment	
	2006 MDG Report	2010 MDG Report
Data collection capacity	fair	strong
Capacity to analyze data	weak	strong
Data continuity and quality of survey information	fair	strong
Capacity to incorporate statistical analysis into policy planning	weak	weak
Monitoring and evaluation mechanism	weak	fair

## Definitions

The first indicator for the above target is the growth rate of GDP per person employed or labour productivity where it is defined as the growth rate of output per unit of labour input (persons employed). Data from the TNPF can provide estimates on the number of people employed (number of active members).

The growth rate of GDP per person employed is based on the productivity per person employed (GDP per person employed). Number of persons employed can be collected from TNPF as above or from population census and household surveys (official employment data).



Source: Population Census (1991, 2002) and HIES (1994, 2004)

The second indicator, employment-to-population ratio provides an estimate on the proportion of people in the working age group of 15 and above who have one or more paid jobs during the year, including part time jobs and selling produce. Using data from Population Census and household surveys provides estimates on the number of employed above the age of 15+. Youth unemployment-to-population ratio is the number of young people (between age of 15 and 24) who are unemployed (without work, currently available for work and actively looking for work).

The last indicator for this target, proportion of own-account and contributing family workers gives an indication of vulnerable employment in the country. This is defined as the sum of own-account workers and contributing family workers over total employment. Own-account workers are those who work by themselves or with one or more partners and remuneration depends on goods and services produced. Contributing family workers (also known as unpaid family workers) are those who are self employed and work in a market-oriented establishment operated by a person living in the same household.

## Progress

### Employment Trends

Increase of employment by 50% as stated in the National Strategy for Sustainable Development Plan (TKII) is far from achievement. However, employment has been positive since 1991. Official employment figures from population census and household surveys indicated that employment-to-population ratios have improved from 26.8 in 1991 to 33.5 in 2004 (see Graph 1B.1). Much of the increase in employment is in the public sector, common to many of the other small island states. Much of the employment is in the capital (Funafuti) where approximately 85% of the public service is located. In 1991, 50.1% of the economically active population (15+) on Funafuti was employed while only 14.5% was employed in the Outer Islands (see Table 1B.1).

The 2004 household survey (HIES) showed 45.8% of the economically active people on Funafuti were employed while only 24% were employed in the Outer Islands.

Outer Islands employment-to-population ratio has improved from 14.5 in 1991 to 22.7 in 2004. Two reasons for this:

decline in population and more employment opportunities in the Outer Islands over the years. This is not the case for Funafuti as employment does not keep up with population growth as a result of urban drift.

The other reason for the net increase of employment seen over the years is because of investment in infrastructure. Construction related projects both on Funafuti and Outer Islands have been more frequent in recent years. Some of the significant projects on Funafuti that employed large numbers of employees recently are; tar sealing of the road (2000), main hospital for Tuvalu (2002), main Government Building (2003), power house (2006) and main wharf (2008). Examples for Outer Islands include classrooms, jetties, causeways, health clinics and other small size projects.

With a higher labour participation rate (economically active) in 1991 compared to 2002, the employment-to-population ratio suggests that fewer are employed out of the economically active population in 1991 compared to 2002 and 2004.

Like many other countries, more males than females in terms of their respective cohort are employed. Note, however, that women have a higher growth rate of employment over the years in terms of the proportion being employed. In 1991, the employment-to-population ratio for females was 18.4 and in 2002 it was 26.0. This is an increase of 7.6% while for males it was 5.2% for the same reference period.

## Youth Unemployment

Youth unemployment is a problem in Tuvalu. Unemployment figures for youths (15-24) are high, although they have improved, based on official unemployment figures from 1991 and 2002 population census (see Table 1B.2).

In 1991, youth unemployment as a proportion of all youth was 75.7 and in 2002 it improved to 70.6. There are more youths on Funafuti unemployed compared to the Outer Islands. Like the whole population, there are more unemployed females compared to males. Because of definitions and survey methodology more recent estimates are not available as data are not presented in accordance to the definition.

**Table 1B.1 Employment-to-Population Ratio (Funafuti & Outer islands)**

Years	Funafuti	Outer Islands
1991	50.1	14.5
1994	45.8	18.4
2002	49.6	20.9
2004	49.2	22.7

Source: Population Census & HIES

**Table 1B.2 Youth unemployment-to-population ratio**

		1991	2002
Tuvalu	<b>Total</b>	75.7	70.6
	<b>Males</b>	73.1	67.3
	<b>Females</b>	78.4	74.3
Funafuti	<b>Total</b>	63.1	56.4
	<b>Males</b>	62.0	53.9
	<b>Females</b>	35.2	59.9
Outer Islands	<b>Total</b>	86.6	82.2
	<b>Males</b>	86.0	78.4
	<b>Females</b>	87.0	86.4

Source: 1991 & 2002 Population Census

## Productive Employment Trends

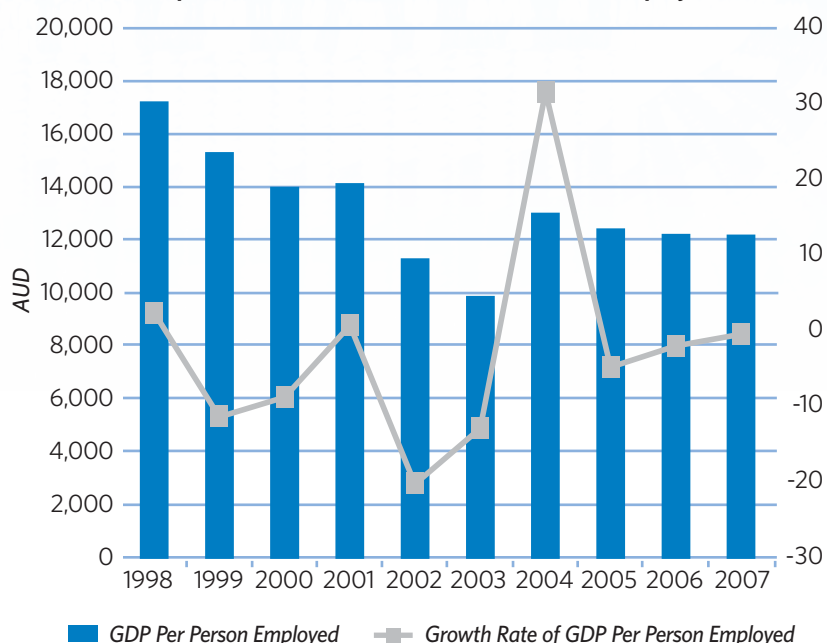
Although formal employment numbers increased in Tuvalu over the years (1998-2007), productivity per person employed declined (see Graph 1B.2). From TNPF estimated employment data, productivity measured as GDP per person employed showed an average negative trend from 1998 to 2007. From 1998 to 2003, there was a significant fall from \$17,342 to \$9,921 (GDP per person employed). This was an average decline of \$1,484 per year. The difference began to stabilize from 2004 to 2007 when there was difference of \$836 between the highest and the lowest.

In terms of growth rate of GDP per person employed, Tuvalu has had a negative growth rate in since 1998 except for the years 1998, 2001 and 2004 (see Graph 1B.2). Nevertheless, it has improved in recent years from -4.5% to -0.19% in 2007 (productivity improvement).

## Own-account and contributing family workers

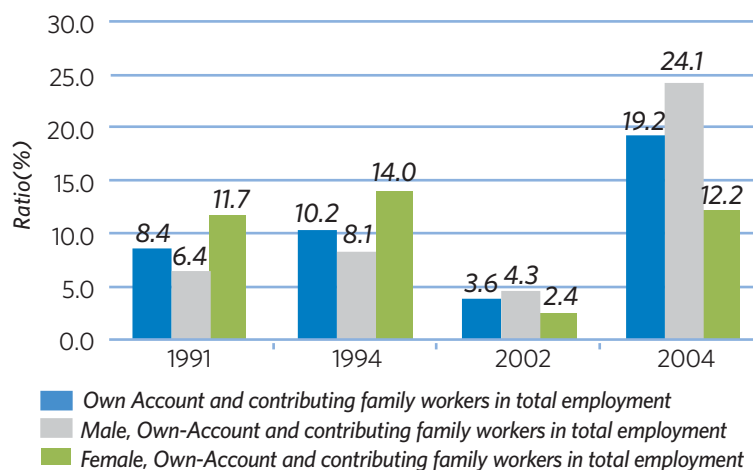
More private and small household businesses set up both in the capital and Outer Islands result in more people being in 'vulnerable employment'. Added to this are part time workers for construction (dominated by men) on major projects, resulting in men being more 'vulnerable' than women (see Graph 1B.3). This was not the case in 1991 and 1994 when there were more females in 'vulnerable employment'. Since 1991, 'vulnerable employment' has increased from 8.4 to 19.2 in 2004.

Graph 1B.2 Growth Rate of GDP Per Person Employed



Source: PFTAC (IMC) & employment estimates base on TNPF members data

Graph 1B.3 Proportion of own-account and contributing family workers in total employment



Source: Population Census (1991, 2002) and HIES (1994,2004)



## Challenges and Opportunities

The MDG Target of having full and productive employment for all is unlikely to be met because of the following reasons: (1) since 1991, Tuvalu economic growth per capita has been weak and negative in growth; (2) although employment-to-population ratios have increase over the time, it remains low; and (3) in the absence of formal employment many are in the informal sector with household businesses, part-time work and construction work which are not stable in volume over time. The youth unemployment-to-population ratio is declining but still high. Further action is needed, to monitor trends, mainly on youth unemployment, and with intervention policies.

Priorities (many of which are recommendations in the TKII) include:

### 1. Maintaining regular population census and household surveys

Employment in the informal sector is hard to determine and requires ongoing household surveys to provide an actual view of the status of unemployment in Tuvalu. Monitoring unemployment rates by area (Funafuti and Outer Islands) and youth. TNPF to maintain database on number of employers and employees contributing to the fund to indicate levels of employment in Tuvalu.

### 2. Public Sector Investment Programme (PSIP)

Government to ensure in its PSIP to focus on economically viable projects, phased in such a way as to provide a steady volume of work for the construction industry.

### 3. Island Councils (Falekaupule) Investment

Encourage and support the Falekaupule to develop costed and realistically phased island development plans and to utilize the resources available to them from the FTF distributions for island development.

### 4. Sound Fiscal and Private Sector Policy

Maintain a sound fiscal and private-sector friendly policy environment; the proposed tax and tariff reform (including the introduction of consumption tax) should be supportive of this objective; restoring balance sheets of NBT and DBT would also assist in enabling more credit to be available to the private sector; ensuring sound budget management underpins this strategy.

### 5. More Government Land for the Private Sector

Government should free up more of its unused leased land for commercial businesses.

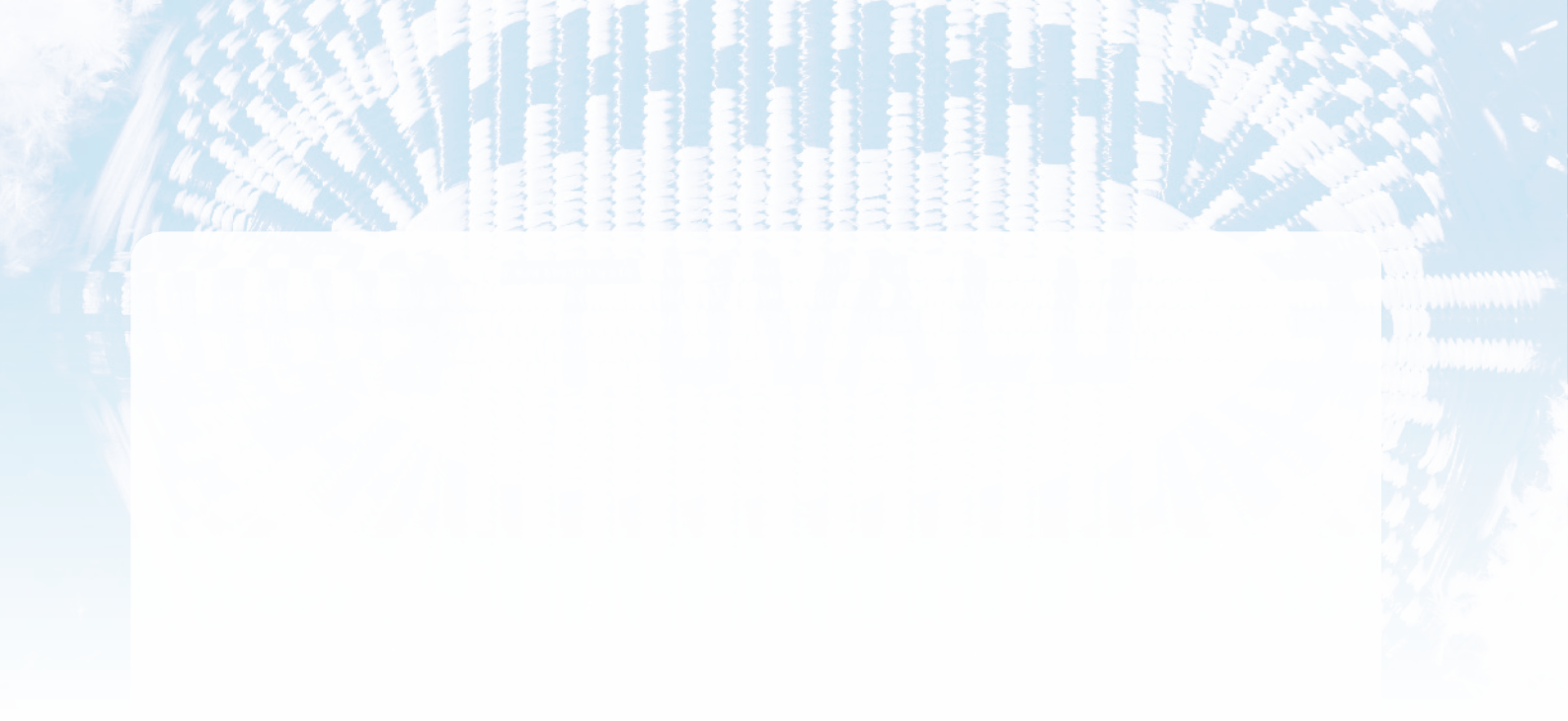
### 6. Providing skills to the Private Sector

The Government should provide business training at all levels of the community. Training should cover business related legislation which can sometimes be difficult to understand.

### 7. From strategic planning to action

There are many strategies and plans to enlarge the private sector but action is slow due to lack of capacity. Government needs to invest in capacity building for business.





# Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger.

## Target Score Card

Target unlikely to be achieved				
Indicators	1994*	2004*	2007+	2015 Target
Prevalence of underweight children under five years of age	(1983**) National 3.0%	n.a	National: 1.6% Urban: 1.2% Rural: 2.0%	National: 1.5%
Proportion of population below the minimum level of dietary energy consumption	National: 6.0% Urban: 5.8% Rural: 6.2%	National: 3.5% Urban: 3.9% Rural: 3.2%	n.a	National: 3.0% Urban: 2.9% Rural: 3.1%

Sources: \* Household Income & Expenditure Survey, + Demographic & Health Survey, \*\* National Nutrition Survey

### Tracking progress

Monitoring and Evaluation Components	Assessment	
	2006 MDG Report	2010 MDG Report
Data collection capacity	fair	weak
Capacity to analyze data	weak	fair
Data continuity and quality of survey information	fair	weak
Capacity to incorporate statistical analysis into policy planning	weak	fair
Monitoring and evaluation mechanism	weak	fair

## Definitions

There are two indicators under the target of halving the proportion of people who suffer from hunger: (1) prevalence of underweight children under five years of age and (2) proportion of population below the minimum level of dietary energy consumption.

**Table 1C.1: Tuvalu Food Poverty Lines**

A\$1 per capita adult equivalent per week	1994	2004	2010
National Average	6.75	12.28	14.0
Funafuti	8.03	16.98	24.20
Outer Islands	5.99	9.31	19.3

*Source: Household Income & Expenditure Survey & TTFAC Report 2008, 2010*

The first indicator reflects body mass relative to chronological age and is influenced both by the height of the child and weight. The indicator is useful in tracking trends for child malnutrition. Malnutrition places children at increased risk of morbidity and mortality and has been shown to be related to impaired mental development. Data on children under-five being underweight are collected from the 2007 Demographic and Health Survey.

The second indicator reflects undernourishment or those individuals whose food intake falls below the minimum level of dietary requirement. Because of limited data from nutritional surveys, Tuvalu uses data from household income and expenditure surveys to determine levels of dietary energy consumption. A basket of food is selected to contain the minimum dietary energy threshold of 2,100 kilo joules (KJ) and costed to determine the food poverty line (see Table 1C.1). Households with food expenditure per adult equivalent below the threshold are considered to be below the food poverty line.

## Progress

### Children being underweight

Cases of children (under five years of age) being underweight are not significant in Tuvalu. It was reported in the 1983 National Nutrition Survey that only 3.0% of the children were underweight. This percentage of underweight children falls to 1.6% in the 2007 Demographic Health Survey (albeit surveys may have different methodologies and samples). Further investigation on under reporting is warranted. In terms of obesity, DHS2007 recorded 3.9% of children as being overweight. From the same source, the problem is greater on Funafuti with 4.2% compared to the Outer Islands, 3.6%.

### Lack of micronutrients (iron)

Micronutrients deficiency is a concern, especially for iron. The DHS2007 reported that more than half (61.2%) of Tuvalu children below five years of age were anaemic due to lack of iron, which is the main component of haemoglobin or red blood cells. Again, the problem lies on Funafuti with 63.6% compared to the Outer Islands with 58.7%. A good sign, however, is that many of the children have mild anemia (32%) compare to those with severe anemia (0.6%).

Lack of vegetables and resulting poor diet is the main cause for lack of micronutrients in mothers and their children.

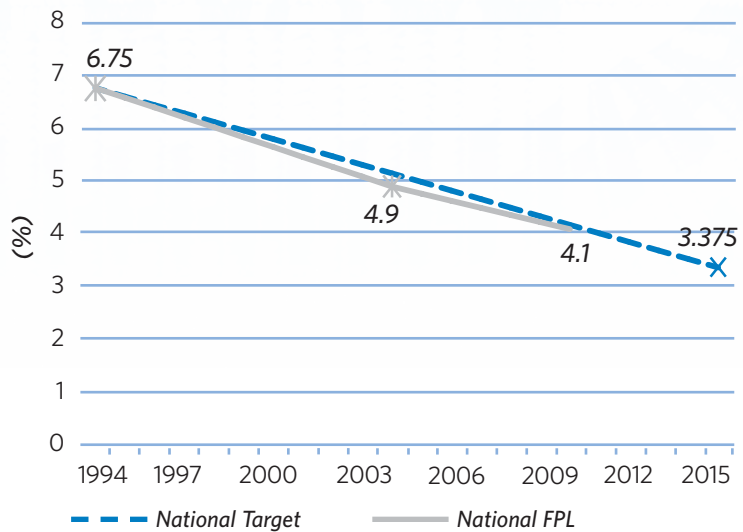


## Population below minimum energy consumption

Based on trends in the two household income and expenditure surveys, Tuvalu has already met the target of halving population below the minimum level of dietary energy consumption (see Graph 1C.1).

In 1994 (considered to be the baseline), 6% of the population did not have a sufficient amount of cash to buy the minimum 2,100 calories basket of food; in 2004 this fell to 3.5%. Tuvalu will meet the target of 3.0% in 2015 given this trend.

Graph 1C.1 Population below food poverty line



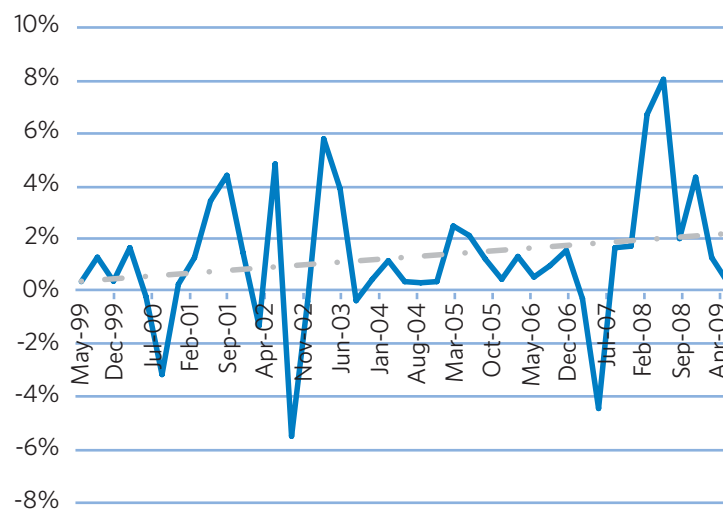
Source: TTFAC Report, Oct 2010

## Tuvaluans are becoming more reliant on imported food

A significant observation currently is the growing number of patients with chronic diseases, mainly because of poor diet. More people nowadays rely on processed imported food than home produced food. In 1995, 27.3% of all imports (value) was food and this percentage increased to 30.2% in 2007. Figures from the 2004 HIES suggest that there is a high percentage of household expenditure going on the four basic imported foods (rice, flour, biscuits and sugar). On average for Funafuti, 50.3% of total expenditure is on these basic imported foods and 48.7% for the Outer Islands (TTFAC 2008). The problem now is that the prices of food in general have gone up over the years (see dotted line in Graph 1C.2) making it more difficult for people to buy.

There is of more concern on Funafuti, where more people do not grow or make their own food at home. On average 17.6% of total household consumption on Funafuti (a fall of 1.8% from 1994 levels) is of home produce (including fish) while for the Outer Islands it is 62.2% (a rise of 0.9% from 1994 levels). Moreover, fewer people on Funafuti sell their own produce, according to the same survey. Of an average household total income on Funafuti, only 7.5% of all income is from own production while for Outer Islands it is 40.2%. Chronic diseases have now become a major burden on

Graph 1C.2 Changes in CPI Food Index, 1999-2009



Source: Quarterly Statistical Reports Central Statistics Division

the national health budget, particularly as most cases needing dialysis cannot be treated in Tuvalu. All dialysis patients are sent to Fiji with an average cost of FJD36,000 per patient per annum (including accommodation, DSA, transport, etc)) all covered by tax payers in Tuvalu. By international standards this is very high.

## Challenges and Opportunities

The MDG target of alleviating hunger has been met as there is no such thing as destitution in Tuvalu. However there is a problem of people eating less nutritious food, mostly processed imported food. Preference needs to be given to:

### **1. Establishing nutritional surveys and setting up a database in all health clinics in Tuvalu to monitor under five underweight.**

There is a need for another national nutrition survey since the last one was held in 1983. This ensures, Government, NGOs and development partners can mobilize resources to counter problems of micronutrient deficiencies.

### **2. Supporting local gardening**

Availability of vegetables from gardens in the country would minimize problems with regard to food security and malnutrition. Government and development partners should engage and put more priorities into this by: (1) expanding availability of basic agricultural tools and equipment; (2) assisting private entrepreneurs to produce and market local food; (3) incorporate more agricultural subjects into school curriculum; and (4) improve and expand agricultural extension in the Outer Islands.

### **3. Government to assist business in importing vegetables from nearby Fiji island of Rotuma.**

In March 2011, the first shipments of taro arrived on the capital from Rotuma. A TNPf project for a local market to sell local produce is currently under way. It is anticipated that local produce from island communities can be sold in the market to encourage local food consumption.

### **4. Consumer Board**

Strengthen consumer protection mainly on types of food imported by establishing a Consumer Council to monitor imported food products standards.



## MDG 2: Achieve universal primary education

MDG Target 2.A: Since independence (1978), Tuvalu has made significant progress in education and the target is highly likely to be achieved. The Government provides free primary education for all. All tuition, books, and stationery are being funded by the Government and assistance from development partners. By law, it is compulsory for everyone between the ages of 6-15 to attend school. These features and Tuvalu's small geographic size/composition make primary education easy to access for all.





## Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

### Target Score Card

#### Target is highly likely to be achieved

Indicators	1991+	2002+	2007*	Target 2015
2.1 Net enrolment ratio in primary education	National: 99.5 Males: 98.5 Females: 100	National : 96.9 Males: 95.6 Females: 98.5	National: 98.1 Males: 97.3 Females: 99.1	National: 100 Male: 100 Female: 100
2.2 Proportion of pupils starting grade 1 who reach last grade of primary education <sup>1</sup> .	National : 81.3 Males: 79.4 Females: 83.3	National : 86.5 Males: 90.2 Females: 82.3	(2004) National: 91.2 Males: na Females: na	National: 100 Male: 100 Female: 100
2.3 Literacy rate of 15-24 year old women and men.	National: 98.7 Males: 98.9 Females: 98.4	National: na Males: na Females: na	National: 98.6 Males: 97.9 Females: 99.3	National: 100 Male: 100 Female: 100

+Population Census and MOE, \* Demographic and Health and Survey, 1 based on completion rates due to unavailability of data (15-24)

#### Tracking progress

Monitoring and Evaluation Components	Assessment	
	2006 MDG Report	2010 MDG Report
Data collection capacity	fair	fair
Capacity to analyze data	weak	fair
Data continuity and quality of survey information	fair	strong
Capacity to incorporate statistical analysis into policy planning	weak	weak
Monitoring and evaluation mechanism	weak	fair



## Definitions

There are three indicators relating to the target that by 2015, all children will be able to complete a full course of primary schooling.

The first indicator is net enrolment in primary education. It is the number of children of official primary school age (year 2010: age 6 to age 13) who are enrolled in primary schools as a percentage of the total children of official school age population.

The second indicator is the proportion of pupils starting grade 1 who reach last grade of primary or survival rate to last grade of primary. It is the percentage of a cohort of pupils enrolled in grade 1 of the primary level of education in a given year who are expected to reach the last grade of primary school, regardless of repetition.

The third indicator, literacy rate of 15-24 year-olds, or the youth literacy rate, is the percentage of the population aged 15-24 who can read and write with understanding of a short, simple statement on everyday life.

Push-outs and drop-outs are frequently mentioned in this chapter. Drop-out students are those who leave or transfer within an academic year and push-outs are students who fail exams or face expulsion during the academic year.

## Progress

### High Primary School Enrolment Ratios

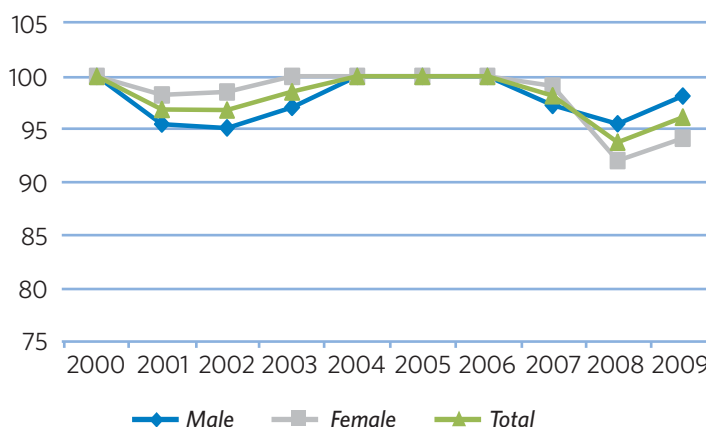
The average net enrolment ratio from 1991, 2002 and 2007 official data is 98.1. This makes Tuvalu primary enrolment ratios one of the highest in the Pacific.

Estimates based on the 2002 population Census, indicated that enrolment ratios are high and does not vary very much (see Graph 2A.1). Years with lower enrollment ratios than average indicate push-outs and drop effects. The drop-out and push-out effects are due to voluntarily not attending school and poor performance respectively. It is common in Tuvalu that some parents send their children to Fiji for primary and secondary education. These students are regarded as drop outs as they are not recorded in the education system.

Drop-out and push-out effects are most common in the last grade of primary school as according to the DHS2007. A similar situation of increase in drop-outs and push-outs also been recorded between 2007 and 2009 according to the same source.

Meanwhile, there were more females than males attending primary school between 2000 and 2004. The reverse occurred more recently between 2008 and 2009 when male enrollment ratios were higher. There is no reason known for the trend during the writing of this report. Total enrollment ratio in 2009 was 96.2.

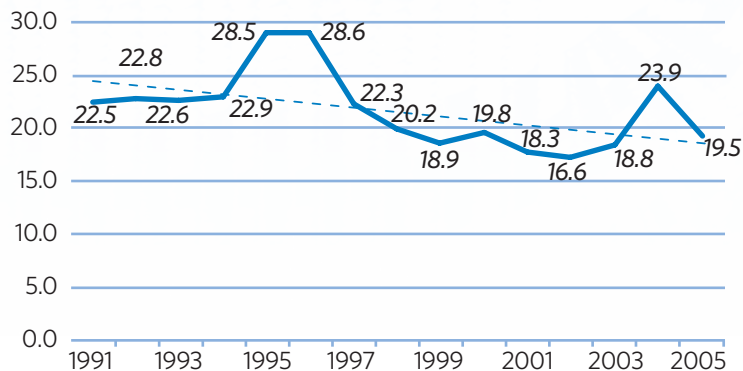
Graph 2A.1 Primary School Net Enrollment Ratios, 2000-2009



Source: Quarterly Statistical Report (2003, 2004, 2005), Department of Education, Population Census

Tuvalu is a signatory to the UN Convention on the Rights of the Child and Government has progressively worked toward the achievement of children's rights in Tuvalu, especially access to primary education. Since 1996, the Government has built new classrooms in all the islands with assistance from the European Development Fund. Most recently, in 2010, the island of Vaitupu (next most populated island to Funafuti) completed new classrooms. Based on Tuvalu DHS 2007, Outer Islands in general have a higher primary school enrolment ratio, 98.7 than Funafuti with 97.5. There are also increasing numbers of teachers in primary schools as more graduate on Government and development partners scholarships. Because of this the children per teacher ratio has improved over the years from 1991 to 2005 (see Graph 2A.2). More recent figures from the Ministry of Education in 2009 specify the total children per teacher ratio in Tuvalu primary school as 18.4. Sharp changes to the children per teacher ratio are mainly due to changes in enrollment and teachers being absent due to long term study leave.

**Graph 2A.2 Tuvalu Primary School Pupils/ Teacher Ratio ,1991-2005**



Source: Department of Education, 2010

More recent figures from the Ministry of Education in 2009 specify the total children per teacher ratio in Tuvalu primary school as 18.4. Sharp changes to the children per teacher ratio are mainly due to changes in enrollment and teachers being absent due to long term study leave.

### Survival to the Last Grade of Primary School

Data to estimate survival rates (the proportion of pupils starting from Year 1 who reach the final year (8) of primary school) for primary school are not available. There are factors that make it difficult to track each cohort because of emigration, immigration, drop-outs, push-outs and repetition.

Nevertheless, the best estimate available to indicate the survival rate is the primary school completion ratio base on the population census and household surveys.

Nationally, it was recorded in the past two censuses and the 2007 DHS that completion ratios have improved from 81.3 in 1991 to 91.2 in 2007.

### Literacy

Youth literacy rate records were available from the 1991 Population Census and the 2007 DHS. Nationally in 2007, the youth literacy rate was 98.6 and this has not changed to any large extent from the 1991 figure of 98.7. For 15-49 year olds the literacy rates recorded are 99.1 in 1991 and 94.9 in 2007. Therefore in general literacy rates are very high.

These high literacy rates indicate that many of youths have accomplished eight years of primary school. Reading and writing are therefore not major education issues in Tuvalu.

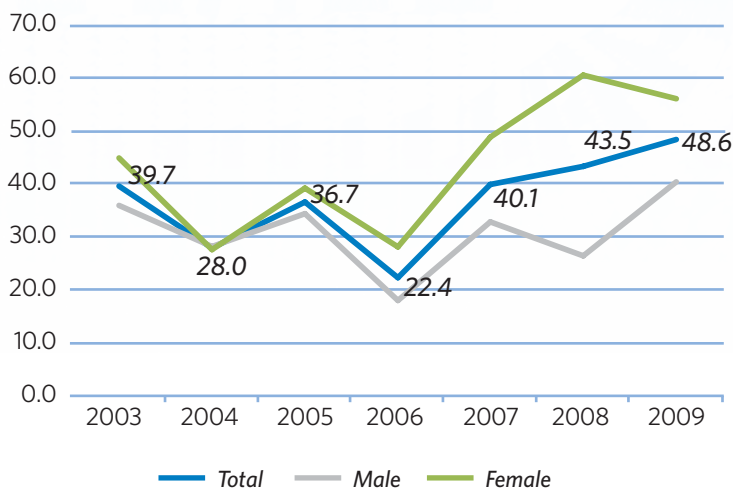
### Quality of Education

The main concern for Tuvalu is quality of education. Results from the national year eight exam reveal a low, although improving, passing rate (see Graph 2A.3). The average passing rate between 2003 and 2009 is 37.0 This low average passing rate indicates weakness in critical thinking, creativity, reading, writing and arithmetic which are the basis for critical learning in all ages. Mathematics and English are the subjects of main concern. An important part of improving the quality of education is investing in teachers and curriculum. Providing a healthy learning environment to students both inside the classrooms and at home is also warranted. For secondary level, the passing rate for Fiji Junior Certificate reveals an improving level since 2001,

although there was a drop from 2005 to 2009 (see Graph 2A.4).

To improve both access and quality of education, the Government formulated the education strategic plan (2006-2010). The plan places greater emphasis on curriculum and expansion of non-formal education skills for young people as well as expanding upper secondary education opportunities through a well-regulated partnership between the Government, parents, communities and the private sector. In addition, the Government also introduced the Tuvalu Education and Training Master plan. This provides suitable education and training opportunities for those who leave schools early (drop-outs). Tuvalu Vocational Educational Training (TVET) was introduced into secondary schools in 2009 and into primary school in early 2010.

**Graph 2A.3 National Year Eight Passing Rate 2003-2009**



Source: Department of Education, 2010

## Challenges and Opportunities

Tuvalu's performance in education has been impressive on MDG indicators. Based on results, the MDG target of universal primary school education is likely to be met. Priorities for Tuvalu are:

### 1. Investment in early education

The concern for Tuvalu is school performance in basic education and it is therefore an area to investigate and invest in.<sup>1</sup> Investing in basic education is the fundamental building block for a sustained economic growth. Basic education establishes the foundation for all future learning and has high potential returns for society. The Government, with assistance from development partners needs to invest in early education where the most concern is focused. On average, between 2008 and 2010, 82.1% of primary school total expenditure (including donor assistance) is absorbed by staff salaries and housing allowances, leaving little for operations and school learning materials. An increase to the expenditure on operations, curriculum development, teacher training, teaching materials and maintenance is warranted in order to improve performance in classrooms.

### 2. Access to Information Technology

In today's world, Tuvalu needs to look towards information technology. Access to information technology can improve the quality of education and expand the range of educational services everywhere. A strong prerequisite for the contemporary labor force is a high level of IT literacy, especially the use of computers and internet. It is important for the Government, with assistance from development partners to support the development of ICT at all education levels. With internet available in all Outer Islands since 2009, internet access for all schools is warranted,

### 3. Improving the enabling environment for learning

Upgrading and maintaining school facilities including dormitories and staff houses in secondary and primary schools, especially in the Outer Islands are essentials for improving the learning environment and quality of service. Improvement in the learning environment in homes is also warranted.

<sup>1</sup> Tuvalu Economic Report -ADB2006

#### **4. Improving monitoring capacity**

There is still opportunity to strengthen Department of Education capacity to monitor progress of achievements in education through regular updated and verifiable data. There are still some gaps and weak areas that can be improved in terms of monitoring.

#### **5. Education services for special needs students:**

As articulated in the national development plan (Te Kakeega II), the Government and development partners need to support worthy private schools and provide special needs education for preschoolers and the disabled, with NGO support.

#### **6. School Curriculum**

There are still opportunities for the Government to improve teacher training, capacity building and curriculum to enhance the quality of education at all levels. Encouragement should be given to teachers, parents, private sector, NGOs and island communities to identify needs for improvement of education services, to be achieved with support from the Government and development partners.





## MDG 3: Promote gender equality and empower women

MDG Target 3.A: Tuvalu has made significant progress towards the achievements of gender equality in education and employment. Despite these achievements there is much to work on in terms of female participation in Parliament. Since 1990, there has been no female voice in politics despite there being no ceiling on the number of women who may be elected. However there are progressive efforts by women's agencies and organizations at different levels to ensure that women's participation in Parliament will be realized.



## Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015.

### Target Score Card

#### There is potential to achieve target

Indicators	1991	1994	2002	2004	2007	2015 Target
Ratios of girls to boys in primary, secondary and tertiary education	Primary -1.05 Secondary-1.05 Tertiary - 0.42	(2001) Primary-1.03 Secondary -1.21 Tertiary - 1.11	Primary -1.03 Secondary -1.28 Tertiary -1.27	Primary -1.00 Secondary -1.29 Tertiary -1.36	(2009) Primary-0.96 Secondary-1.12 Tertiary-1.72	1.00
Share of women in wage employment in the non-agricultural sector	36.4%	n.a	36.0%	41.6%	36.0	50%
Proportion of seats held in national parliament	(1990) 6%	0%	0%	0%	0%	30%

Sources: HIES (1994&2004), Census (1991&2002) and SPC Population estimates 2000-2015

#### Tracking progress

Monitoring and Evaluation Components	Assessment	
	2006 MDG Report	2010 MDG Report
Data collection capacity	fair	fair
Capacity to analyze data	weak	fair
Data continuity and quality of survey information	fair	fair
Capacity to incorporate statistical analysis into policy planning	weak	weak
Monitoring and evaluation mechanism	weak	fair

## Definitions

There are three indicators under the MDG target of eliminating gender disparity in schools and employment.

The first indicator is the ratio of girls enrolled at primary, secondary and tertiary levels of education to the number of boys in each level. To standardize the effects of the population structure of the appropriate age groups, the Gender Parity Index (GPI) of the Gross Enrolment (GER) for each level is used. The GPI is calculated by dividing the female GER by the male GER ratio for each given level of education. The population of the official age for tertiary education is the 5 year group immediately following the end of secondary education (age 20). Data on the number of pre-service scholarships awarded each year was used to estimate number of tertiary students.

A GPI of 1 indicates parity between the sexes; a GPI that varies between 0 and 1 typically means a disparity in favor of males; whereas a GPI of greater than 1 indicates a disparity in favor of females.

The next indicator is the share of women in wage employment in the non-agriculture sector. The non-agricultural sector includes industry and services as per the International Standard Industrial Classification of All Economic Activities (ISIC Rev.2). Wage employment refers only to wage earners and salaried employees.

The third indicator is the proportion of seats held by women in national parliament expressed as percentage of all occupied seats.

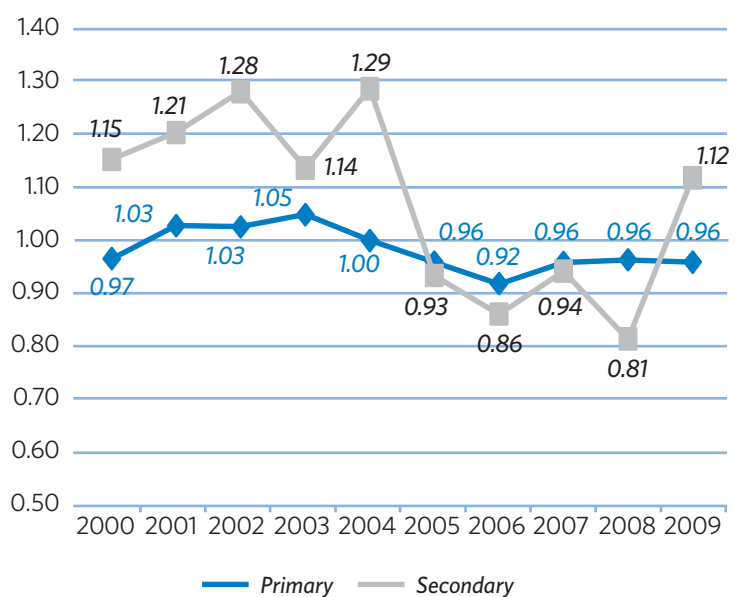
## Progress

### Better Gender Parity Index (GPI) for girls in education

Tuvaluan girls and boys have equal educational opportunities. Opportunity to go to the next level of education in secondary and tertiary institutions (on scholarships) is based on merit.

Available data indicates mixed results for primary and secondary education gender disparity. Generally there is a disparity in favor of girls in secondary compared to primary education. Secondary schools GPI is generally higher than at primary education level (see Graph3A.1). The long term average GPI from 2000 to 2009 is 0.98 for primary and 1.07 for secondary school. Disparity was in favor of girls between 2000 and 2004 for primary and secondary education. Disparity favouring boys occurred between 2005 and 2008 in both primary and secondary education and therefore investigation is warranted

Graph 3A.1 Primary & Secondary School Gender Parity Index , 2000-2009



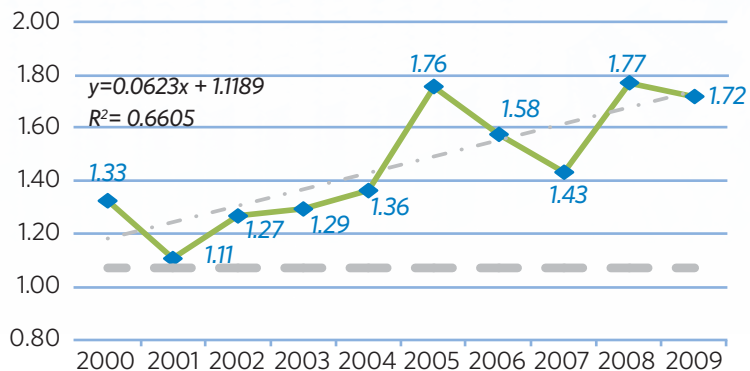
Source: Department of Planning and Budget Estimates (based on data collected from Department of Education, 2010)



to avoid such disparity. The long term average GPI for both primary and secondary education was 1.05 between 2000 and 2009. This indicates that Tuvalu has already achieved the target of eliminating gender disparity in both primary and secondary education level.

Anecdotal evidence indicates that girls progressively tend to do better than boys as the education level rises. Based on Tuvalu tertiary data this sketchy evidence is supported. Based on number of pre-service scholarships (a close estimate on the level of tertiary enrolment) from 2000 to 2009, gender disparity was in favor (progressively) of females at tertiary level (see general trend in Graph 3A.2). The long term average gender parity index from 2000 to 2009 is 1.46. GPI has increase from 1.33 in 2000 to 1.72 in 2009. Therefore there are more females than males in tertiary education (taking into account their population structure as in primary and secondary levels). The GPI has improved from the 1991 figure of 0.42 (less than half the number of males awarded scholarships). In this, Tuvalu has met the target of eliminating gender disparity in tertiary education.

**Graph 3A.2 Tertiary Gender Parity Index, 2000-2009**



Source: Department of Planning and Budget Estimates (base on data collection from Department of Education, 2010) and SPC Population Estimates.

### But gender disparity still exists by fields of study

Although Tuvalu gender disparity improved in all levels of education, gender disparity exists by fields of study. Men are still dominant in the fields of engineering, construction and information technology. But there are signs of change. Average data from number of new pre-service scholarships between 2003-2005 and 2007-2009 shows female to male ratios for business and finance, law, management and administration have all improved, ranging from 0.67 to 1.72 (see Table 3A.1). For the same period, women are still dominating the field of health (in particular nurses) and education service.





## Women in wage employment

Like many other countries in the Pacific, the traditional and stereotype perception is that women do unpaid home duties.

Although as mentioned in MDG1 indicator 1.5 that 'employment-to-population ratio' (with population coming into effect) increases occurred over the years from 18.4% in 1991 to 26.0% in 2004, women as a percentage of paid employment in the non-agriculture sector (not including women in handicrafts and fishing) fell in recent years. Official figures from the

population census and household surveys indicate that there was an increasing trend from 36.4% in 1991 to 41.6% in 2004 that fell back to 36.0% in 2007. Data from TNPF support this trend (see Graph 3A.3). One of the reasons for the decline is the growing number of males in employment, especially due to the number of large construction related projects in recent years (2006-2008) and the compulsory seamen's TNPF contributions (2008). Men dominate construction, from the field of study to the sphere of work, but there are women seafarers in Tuvalu. Surprisingly, the female average income is reasonably similar to that of men for the same period (1999-2008). On average between 1999 and 2008, female income as a percentage of male income is 103% (non-MDG). Although between 2007 and 2008 the share of women in wage employment in the non-agricultural sector fell from 36% to 28%, female income as percentage of male income fell only 10% below male earnings. This indicates that most of the men in construction projects have low pay on average compared to female pay in other non-agricultural sectors. This may need further investigation to verify against other sources of information.

## No women in politics since 1993

The Tuvalu Constitution and electoral laws provide equal opportunities for women and men to contest elections.

Despite this, there was only one female ever to be presented in Parliament and this is from the period 1986 to 1993 (6.7% of total representatives). In 2002 there were two women who contested but both were unsuccessful.

The same also happened in 2006 when two women contested but were unsuccessful. In the 2010 election, there were no women contesting for a seat in Parliament.

**Table 3A.1 Female to male ratios in selected field of studies for new pre-service scholarships, (average) 2003-2005 and 2007-2009**

Field of study	2003-2005	2007-2009
Business & Finance	0.78	2.50
Engineering	0.05	0.00
Information Technology	0.50	0.20
Construction	0.01	0.00
Education	4.00	3.33
Medical and health related (including nurses)	4.67	9.00
Law	0.67	1.33
Management & Administration	2.17	4.00
Mathematics	1.50	1.00

Source: Central Statistics Division and Ministry of Education

**Table 3A.2 Women's Representation in Parliament 1978-2006**

Year	Male	Female	% of female
1978-1985	12	0	0
1986-1989	14	1	6.7%
1990-1993	14	1	6.7%
1994-2009	15	0	0

Source: Tuvalu Parliament Records, 2009

## Decision making in the Government

High-level positions in the Government and public enterprises remain spheres for men.

While women account for nearly half of the civil service (average of 47% from 2002 to 2006), they hold only 19% (average 2002 to 2006) of high-level positions both in the Government and public corporations.

On statutory boards, only 11% (2006) of board members are females. On Government boards, committees and task forces including the MDG Taskforce, females account for 37% (2008). Women's representation in these committees and taskforces tends to be in areas related to children and women (UNESCO, CEDAW, HIV/AIDS, etc).

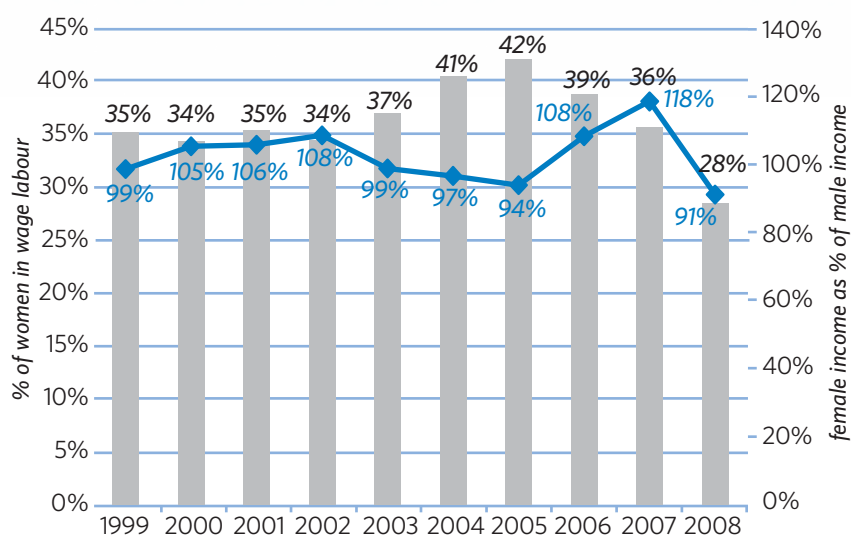
Women tend to be more represented on NGO boards and committees. In 2006, women accounted for 38% for all NGO committee members. The main reason for this is the Tuvalu National Council of Women (TNCW) which is predominantly women.

In terms of decision making at high level in Falekaupule and island Councils (Kaupule), it is not encouraging although numbers have been noted to increase over recent years, mainly at Kaupule level. Prior to 2001, there were no women elected to be in Kaupule. Since then women have been elected in small numbers. In 2005, 6.3% of all Kaupule members were women (a drop from the 2001 level of 20.8%).

## Domestic abuse of women

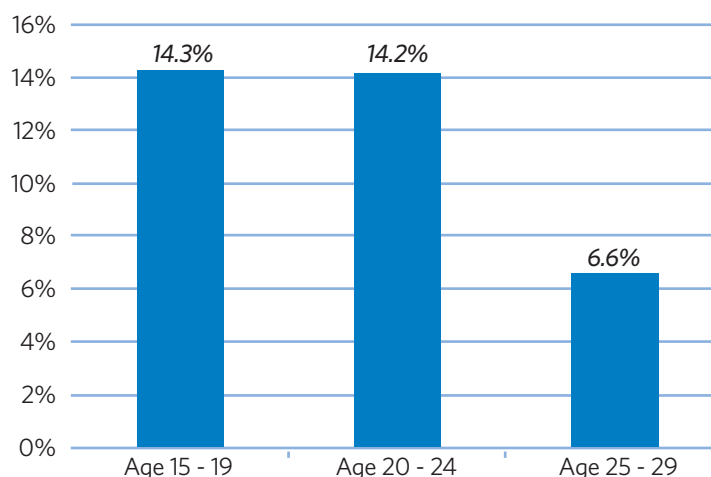
Domestic violence against women, many of which are unreported, is an issue in Tuvalu. It constitutes a dreadful threat to the rights and dignity of women.

**Graph 3A.3 Share of women in paid jobs & female income as percentage of male income, 1999-2008**



Source: Department of Planning and Budget estimates (base on TPNP records)

**Graph 3A.4 Women whose first sexual intercourse was against their will**



Source: Demographic and Health Survey 2007

The DHS 2007 reported that four in 10 women have been subjected to some type of physical violence, with their current husbands or partners being the main perpetrators (84.6%). Wives whose partner drinks alcohol excessively are far more likely (72%) to experience physical, emotional, or sexual violence than those whose partner does not drink (27%), according to statistics drawn from women who have experienced domestic violence. About half of all reported acts of physical violence were reported by women aged 25-29. Youths are more vulnerable (see Graph 3A.4). One in five reported having been exposed to sexual violence, with one in seven young women (15-24) reporting having been forced into their first ever sexual experience. Women who experienced sexual violence without physical violence were less likely to seek help.

The DHS also reveals that domestic violence against women does not have correlation with place of residence (Funafuti or Outer Islands), employment status, marital status, educational level or the woman's number of children.

The incidence of such violence is manifested right across Tuvalu society, which underlines the importance of strong Government leadership and whole-of-community involvement to tackle this problem effectively.

### Gender Development Index (GDI)

Amongst 14 countries in the Pacific with available data on development achievements disaggregated between male and female, UNDP ranks Tuvalu 9th (2008).

GDI is calculated from the HDI (see Goal 1) adjusted for gender inequality. GDI ranges from 0 to 1, with 1 being equal achievements between male and female. Tuvalu GDI is 0.691 in 2008. Cook Islands is the highest in the Pacific with 0.829.

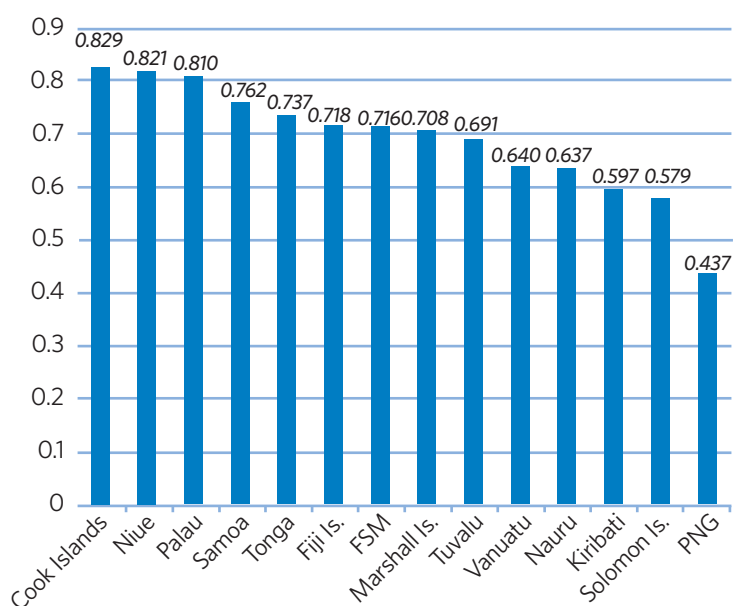


## Challenges and Opportunities

Tuvalu MDG gender targets have been met at all education levels. But there is still room and opportunity for improvement in employment and for a voice in decision making for women.

Tuvalu ratified the UN Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) in 1999 and was a signatory to the Beijing Platform for Action 1995. In 1999, based on outcomes for the Beijing Platform of Action and the Beijing Declaration, Tuvalu's first National Women's Policy was formulated. The policy provided the basis and direction to pursue the development of women in

Graph 3A.5 Pacific Islands GDI (2008)



Source: Pacific MDG Tracking Report, 2010



eight areas of concern: Institutional Strengthening, Women and Health, Women and Education, Women and the Environment, Women and the Law, and Women and Economic Development. An action plan was also developed to provide the framework for implementing the new women's policy. **Despite this there was minimal progress due to financial constraints.** There is a need for development partners to work with institutions in Tuvalu for women to realize their full potential in development. There is a need to promote income generation projects for women both on Funafuti and Outer Islands. The other main barrier for women to advance in development and in key decision making is custom and culture. (PIFS2006) Some of the priorities as listed under the National Women's Policy and Department of Women's Strategic Plan included:

1. Conducting training and awareness in the public service and communities to change stereotypical attitudes among men and women.
2. Develop a statistical database and gender sensitive indicators in conjunction with key development partners and organizations with the aim of ensuring the use of sex disaggregated data.
3. Increasing opportunities in decision making positions in Parliament, Government and Island Kaupule.
4. Improving educational opportunities for women at all level of society. This includes the introduction of women to TMTI to become seafarers. Encouraging women to take part in business training and to access to appropriate credit facilities.
5. Enhancing legislation to accommodate the need to address issues of equality and equity for women, especially woman in Parliament.

Other priorities as mentioned by different women's groups include:

6. Improving Government commitments to CSOs and to support counseling of women.
7. Mainstreaming gender into other sectors.







## MDG 4: Reduce child mortality

MDG Target 4.A: Tuvalu is on track to meet the target of reducing child mortality by two thirds. Access to child health care is available to everyone. All health services in Tuvalu are financed by tax payers with some development partner assistance. These free health services include intrapartum care, ante-natal care, post-natal care, and immunization.



## Target 4.A: Reduce by two thirds (2/3), between 1990 and 2015, the under-five mortality rate

### Target Score Card

#### There is potential to achieve target

Indicators	1990	1995	2000	2005	2007	2009	2015 Target
Under-five mortality rate	(1991) 68.7	58.1	34.6	46.8	15.2	24.6	22.9
Infant mortality rate	(1992) 57.3	53.9	34.6	38.3	15.2	14.8	19.1
Proportion of 1 year old children immunized against measles.	na	94	81	84	93	(2008) 90	100

Sources: Ministry of Health 2009

#### Tracking progress

Monitoring and Evaluation Components	Assessment	
	2006 MDG Report	2010 MDG Report
Data collection capacity	fair	fair
Capacity to analyze data	weak	fair
Data continuity and quality of survey information	fair	strong
Capacity to incorporate statistical analysis into policy planning	weak	weak
Monitoring and evaluation mechanism	weak	fair

## Definition

There are three indicators under the target of reducing mortality rates for the under-fives and infants.

The first indicator of the under-five mortality rate (U5MR) is the probability expressed as rate per 1,000 live births of a child born in a specified year dying before reaching the age of five if subject to current age-specific mortality rates. A live birth is the complete expulsion of the baby from the mother with sign of life (beating of heart, sign of movement, and pulsation of umbilical cord).



The direct method of calculating U5MR is to divide number of under-five (age of five not included) deaths by number of births then multiple by a constant of 1,000. Under-five deaths are collected from the Ministry of Health. Information collected from the DHS 2007 was also used for comparison. The DHS collected information on birth histories of women of childbearing age and produced the probability of dying before age five.

The second indicator, infant mortality rate (IMR); like U5MR also uses information from the Ministry of Health and comparisons to DHS 2007 data. The same method of under-five mortality rate applies (use of number of deaths for under-one instead of under-five). The third indicator is the proportion of one-year-olds immunized against measles. This is the percentage of children under one year of age who received at least one dose of measles vaccine. It is generally recommended for children to be immunized against measles at the age of 9 months.

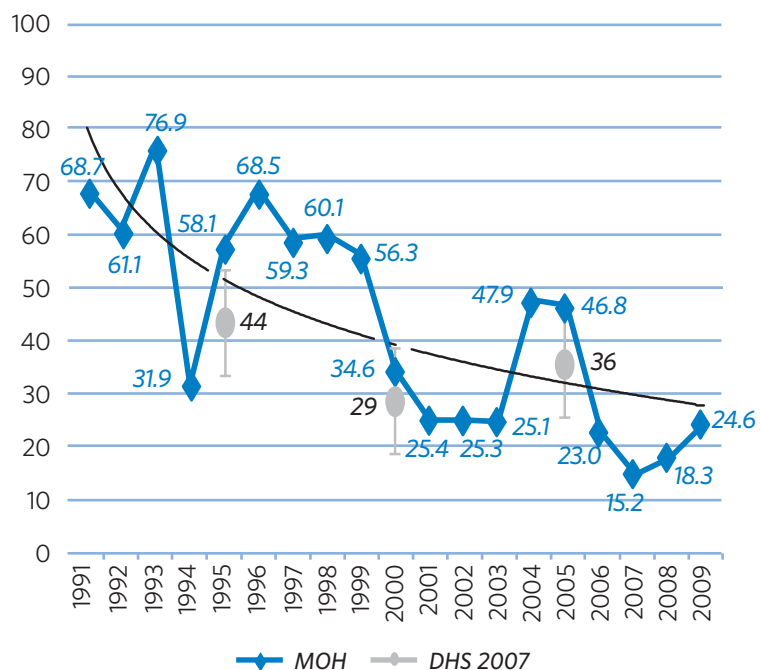
## Progress

### On track to achieve results for under-five mortality rates

Encouraging results indicated that Tuvalu is on track to reduce child mortality by 2/3 (66.7%).

Data available from the Ministry of Health reveal that in 1991, the U5MR was 68.7 and reduced to 24.6 in 2009, resulting in a 64.1% reduction. There were 20 under-five deaths in 1991 from 291 live births, resulting in U5MR of 68.7 (per 1,000 live births). In 2009 there were 5 under-five deaths and 203 live births resulting in U5MR of 24.6.

**Graph 4A.1 Under-five mortality rates (per 1,000 live births) 1992-2009**



Source: (1) Department of Public Health, 2010 (2) Population Census and (3) SPC Population Estimates



The U5MR general trend (see Graph 4A.1) over time from 1991 to 2009 indicates a falling rate. In the year 1991 it was 68.7 (20/291), in year 2000 it was 25.4 (8/231), in year 2005 it was 46.8 (11/235) and 2009, 24.6 (5/203). The long term average from 1991 to 2009 is 43.5. U5MR data from the DHS 2007 are consistent with Ministry of Health data as they are within margin of error (+/-10). The DHS recorded U5MR of 36 in 1995, 29 in 2000 and 44 in 1995 (1995 MOH data not in margin of error of DHS mainly because many of the mothers cannot remember during interview in DHS).

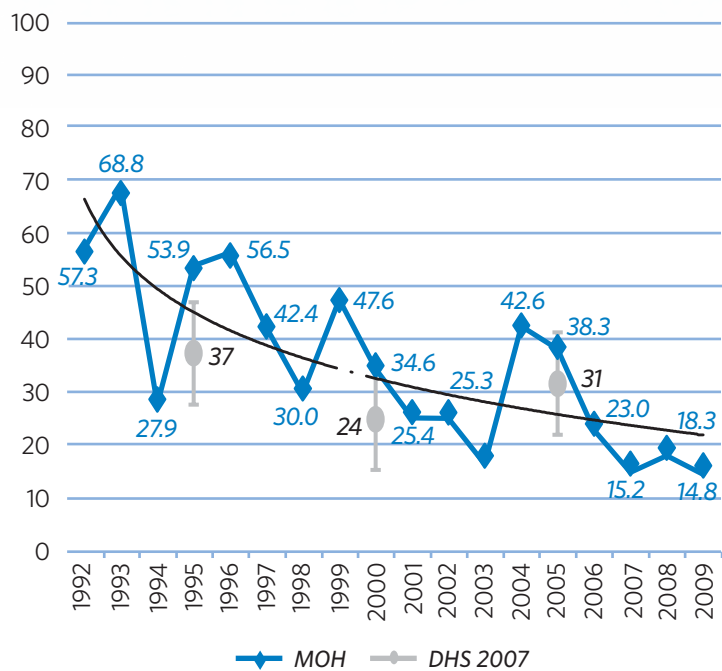
### Infant mortality rates (IMR) reduced

Like the U5MR, the infant mortality rate has declined remarkably from 57.3 (15/262) in 1992, to 34.6 (8/231) in 2000, 38.3 (9/235) in 2005 and 14.8 (3/203) in 2009 according to MOH data.

Based on the above, Tuvalu has reduced the IMR by 2/3 (66.7%) over the period from 1992 to 2009, equivalent to the IMR target.

The long term trend indicates a fall in the under-one IMR (see Graph 4A.2). Again there is consistency if compared to the DHS data (all within margin of error of +/- 10% except 1995). The 1995 IMR of 27.9 was underestimated as compared to the MOH data mainly because of 'lack of memory' of mothers during the DHS interview (like under-five MR).

**Graph 4A.2 Infant mortality rate (per 1,000 live births) 1992-2009**



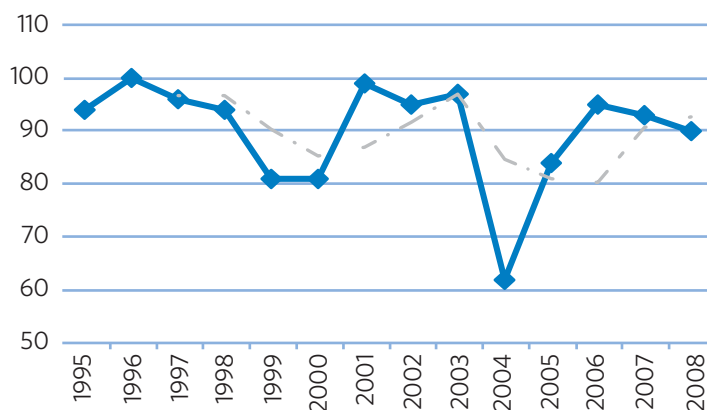
Source: (1) Department of Public Health, 2010 (2) Population Census

### Immunization against measles

Universal immunization of children against measles and other vaccine-preventable diseases is crucial to reducing infant and child mortality.

Available data from the MOH indicate a long term average of 90.0% (1993-2008) of children immunized against measles before they reach age of one. Discrepancies of immunization coverage between the DHS and MOH data remain to be solved. The DHS reveals that in 2007 (based on vaccination cards and

**Graph 4A.3 Proportion (%) of 1 year-old children immunized against measles, 1995-2008**



Source: (1) Department of Public Health, 2010 (2) Population Census



mothers report) immunization coverage for measles is 74.1. This is 18.9% below the MOH data. Despite of the discrepancy, all data point to the fact there is room and opportunity to close the gap (see Graph 4A.3). Since 1997, there has been no reported case of measles in the country (WHO). A drop in immunization coverage was observed in 2004 mainly due to the introduction of the combination of rubella with measles immunization to the immunization program which result in a drop of coverage of single dose for measles immunization only.

### Children in poverty

There is strong evidence from various studies that there is a positive correlation between a family's poverty and the health and social welfare of their children. Anecdotal evidence indicates that poor couples tend to have more children (because of lack of education and therefore family planning). Because of this, there are more children (in their cohort) below the basic needs poverty line than the average of the population as whole. Data available from other Pacific Islands countries supports this (see Graph 4A.4, next page).

## Challenges and Opportunities

The National Health Strategic Plan (2009-2019) places priority on Mother and Child Health (MCH) in these areas:-

Immunization, integrated management of childhood illness, healthy nutrition, breastfeeding, safe motherhood and reproductive health.

Many of the above areas are co-funded by development partners. The challenge for Tuvalu and development partners is to sustain these crucial services. Other priority areas for MOH with regard to children's (under-five and under-one) health are:

### 1. Increased investment in development of capacity for health personnel.

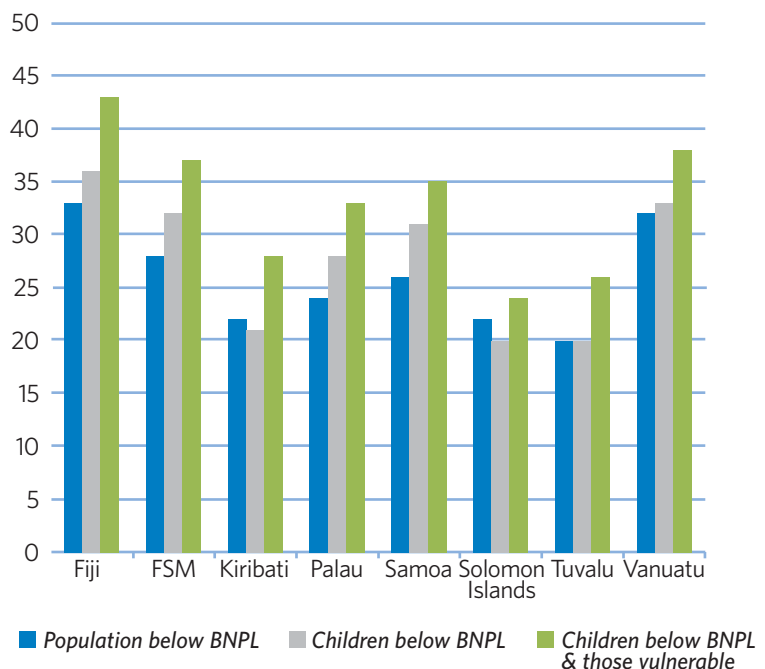
Nurses and mid-wives, especially in the Outer Islands where there are no doctors need to be trained regularly on any new diagnoses and reporting of deaths.

### 2. Improved immunization for all other diseases under immunization program.

Immunization should not only focus on measles but other diseases under the immunization program including tuberculosis, diphtheria, tetanus, whooping cough and polio.

### 3. Strengthening to sustain work efforts between NGO and development partners.

Graph 4A.4 Children in Poverty (Pacific Islands)



Source: Pacific MDG Tracking Report 2010, PIFS

NGOs can play a part in training in family planning, high risk fertility behavior and the use of contraceptives. The Tuvalu Family Health Association (TuFHA) has been very active in this role especially with youth. Government and development partners should not isolate their efforts. Collaboration and a partnership approach should be encouraged to achieve results.

#### **4. Funding sustainability.**

All of the above strategies and priorities cannot be implemented without funding support both from development partners and the Government.





## MDG 5: Improve maternal health

MDG Target 5.A: Maternal deaths are not common in Tuvalu. Between 1990 and 2009, there were only three deaths related to pregnancy. In the same reference period around 98% to 100% of births take place in the hospital and are therefore attended by skilled personnel.

Because of low maternal deaths coupled with low births and the fact that nearly all births take place in hospital, this target is not applicable to Tuvalu.

MDG Target 5.B: Based on data from the MOH and DHS, Tuvalu is likely to meet the target of universal access to reproductive health.



## Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio

### Target Score Card

#### Target already met and not applicable

Indicators	1990	1995	2003	2005	2006	2009	2015 Target
Maternal mortality ratio (MMR)	1 death in 242 births	0	1 death in 231 births	0	1 death in 217 births	0	Achieve lowest possible level
Proportion of births attended by skilled health personnel	Not applicable as around 98% to 100% of births take place in hospital and are therefore attended by skilled health personnel						

Sources: Ministry of Health 2009

#### Tracking progress

Monitoring and Evaluation Components	Assessment	
	2006 MDG Report	2010 MDG Report
Data collection capacity	fair	strong
Capacity to analyze data	weak	fair
Data continuity and quality of survey information	fair	strong
Capacity to incorporate statistical analysis into policy planning	fair	fair
Monitoring and evaluation mechanism	weak	fair



## Definition

There are two indicators under the target of reducing maternal mortality by 75%.

The first indicator, maternal mortality ratio (MMR)\* is the annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days or termination.

The maternal mortality ratio can be calculated by dividing recorded maternal deaths by total recorded live births for each year and multiply by 100,000. Because of Tuvalu small number of annual births and even smaller number of maternal deaths, a single death will put Tuvalu MMR the highest in the region. Given this, monitoring the actual number of maternal health deaths is clearly a more realistic measure in Tuvalu (Tuvalu MDG Report 2006).

The second indicator, percentage of births attended by skilled health personnel (doctors, nurses and midwives) is the percentage of deliveries attended by personnel trained in providing life saving obstetric care, including giving the necessary supervision, care and advice to women during pregnancy, labor and the post-partum period; to conduct deliveries on their own; and to care for new born.

The second indicator can be calculated by dividing number of women aged 15-49 with a live birth attended by skilled health personnel over percentage of women aged 15-49 with a live birth (same year).



## Progress

### Maternal Mortality

ICPD Programme of Action (PoA) states that countries with intermediate levels of mortality should aim to achieve by the year 2015 an MMR below 60 per 100,000 live births. Between 1990 and 2009, Tuvalu has an MMR of 65 per 100,000 live births (3 maternal deaths from 4,567 live births). Tuvalu is likely to meet the ICPD PoA target.

Based on the Tuvalu MDG progress report in 2006 and MOH data, Tuvalu had three maternal deaths (1990, 2003 and 2006) between 1990 and 2009.

Detection of risky pregnancies and the increase of trained midwives contribute to the very low maternal deaths. Reproductive health programs such as screening mothers for hepatitis, anaemia, sexually transmitted diseases, HIV/AIDS and monitoring of mothers in antenatal and post natal clinics also contribute to the success.

### Proportion of births attended by skilled health personnel

Since medical service provided by hospital and medical clinics is free in Tuvalu, proportion of all births attended by skilled health personnel is high. DHS 2007 reveal that nationally, 98% of all live births have been attended by health personnel. Cases where delivery took place at home were due to the fact there was not time to 'rush to hospital' at the time of delivery.

A considerable number of deliveries also take place overseas for parents who seek better medical care.

\* Maternal mortality ratio should not be confused with maternal mortality rate (which denominator refers to the number of women of reproductive age), which measures the likelihood of becoming pregnant and dying during pregnancy or the puerperium (six weeks after delivery).

# Challenges and Opportunities

Although the target of the maternal death ratio is not applicable in Tuvalu, there are challenges and room for improvement.

Tuvalu 2006 MDG progress report stated that:

'The major challenge for maternal and newborns' health is the provision of emergency obstetric care when birth complications and problems arise. The challenge is in the Outer Islands where there is a limited number of health personnel (no doctors). Ensuring that nurses (midwives) in the Outer Islands have adequate maternity skills will have an immense impact on the well-being of both the mother and the baby.'

Priorities to improve maternal health include the following:

## 1. Training of both parents in maternity care

This ensures that both parents-to-be share responsibility for maternity care and it is not left entirely to health personnel. Tuvalu Family Health Association (TuFHA) has been effective in providing this type of training and is encouraging strengthening of this in their curriculum. Other NGOs are also encouraged to share responsibility.

## 2. Improving training of health personnel to detect risky pregnancies

To increase access to 'quality' reproductive health services, ongoing training of midwives and health care personnel is essential.

## 3. Improving monitoring and evaluation

Causes of maternal deaths are of paramount importance. Without updated data this cannot be traced. Better understanding of the situation can provide policy interventions to meet outcomes.

### Other priorities include:

- 4. An obstetric emergencies program to identify ways to provide better for obstetric emergencies.
- 5. A Healthy Family program to improve care in home and capacity in all Outer Islands health clinics.



## Target 5.B: Achieve, by 2015, universal access to reproductive health

### Target Score Card

Target likely to be achieved					
Indicators	1991	1995	2000	2007	2015 Target
Contraceptive prevalence rate	na	na	na	31%	
Adolescent birth rate	38.6	18.4	41.3	(2005) 44	Lowest possible
Antenatal care coverage	na	na	na	97%	100%
Unmet need for family planning	na	na	na	24.2%	Lowest possible

*Sources: Population Census (1991 & 2002) and Tuvalu DHS 2007*

### Tracking progress

Monitoring and Evaluation Components	Assessment	
	2006 MDG Report	2010 MDG Report
Data collection capacity	fair	fair
Capacity to analyze data	weak	weak
Data continuity and quality of survey information	fair	weak
Capacity to incorporate statistical analysis into policy planning	fair	fair
Monitoring and evaluation mechanism	weak	fair



## Definition

There are four indicators under the target of universal access to reproductive health:

**The contraceptive prevalence rate** is the percentage of those currently using, or whose partner is using, a method of contraception among women of reproductive age (usually 15-49) who are married or in union.

**Adolescent birth rate (ABR)** represents the risk of childbearing among adolescent (teenage) women 15 to 19 years of age. It is also referred to as the age-specific fertility rate of women aged 15-19. The ABR measures the annual number of births to women 15 to 19 years of age per 1,000 women in that age group.

**Antenatal care coverage** is the percentage of women aged 15-49 with a live birth in a given time period who received antenatal care provided by skilled health personnel (doctors, nurses, or midwives) at least four times during pregnancy, as the percentage of women age 15-49 years with a live birth in a given period of time. The antenatal period presents opportunities for reaching pregnant women with intervention that may be vital to their health and wellbeing and that of their infants.

**Unmet needs for family planning** point to the gap between women's reproductive intentions and their contraceptive behavior. Women with unmet needs are those who are fecund (productive) and sexually active but are not using any method of contraception and who are not wanting any more children or are wanting to delay the next child. Unmet need is expressed as percentage based on women who are married or in a consensual union.

## Progress

### Contraceptive prevalence rate

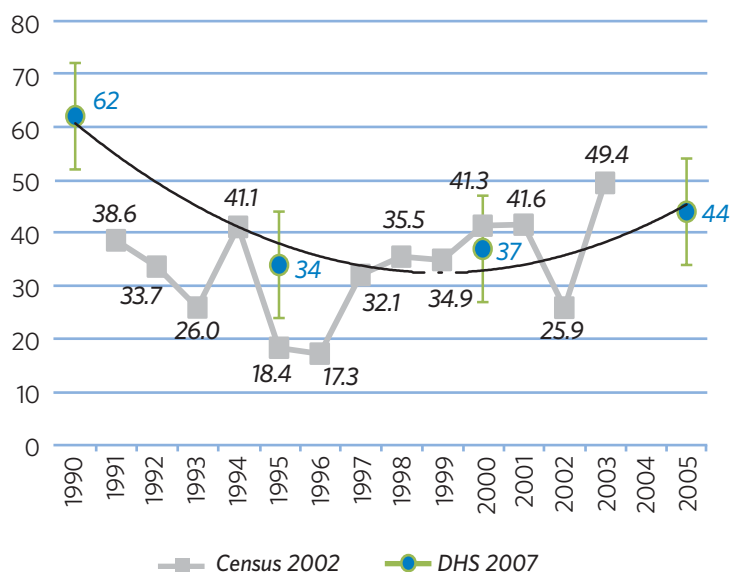
According to the DHS 2007, 31% of currently married (or in union) women are using a method of family planning. Of these women, 22% are using modern methods (pill, injection, IUD, implants, male condom, and female sterilization) and 8% are using traditional methods such as withdrawal. Use of contraception increases with age and most commonly used methods amongst currently married women are sterilization and injection.

### Teenage pregnancies

Recent figures based on the DHS 2007, indicate that about 8% of women aged 15-19 years reported that they were either pregnant or had a child at the time of the survey.

Data from the Census (1991&2002) and MOH indicate that there is no general trend from 1991 to 2003. Data from these sources indicated that the Tuvalu long term average from 1991 to 2003 is 33.5. More data are needed from the MOH to reach a conclusion on the general trend.

**Graph5B.1 Teenage age-specific fertility rate (per 1,000 women)**



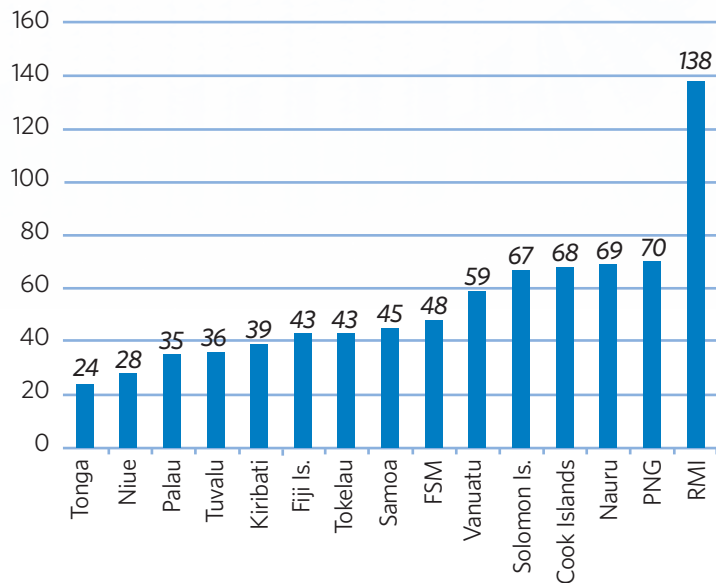
Source: (1) Population Census 2002, (2) Department of Health, (3) DHS2007



The DHS 2007, however, indicates that there is a general trend (although limited data). In 1990, the teenage fertility rate was 62. This decreases to 34 in 1995 and 37 in 2000. The rate then increases to 44 showing that there is downward and upward trends overtime.

Out of the 15 countries in the Pacific where recent data are available for teenage pregnancies, Tuvalu is the fourth lowest (see Graph 5B.2). This indicates that Tuvalu teenage pregnancy is not a problem from a regional perspective. However, anecdotal evidence points out that most of the women in this cohort are single and therefore may experience psychological effects and family exclusion. More attention is therefore required to monitor and to take action to minimize teenage pregnancies in Tuvalu.

**Graph 5B.2 Teenage (age 15-19) age-specific fertility rate (per 1,000 women) -PICs latest data**



Source: SPC 2010

In the education system, reproductive health is being taught as units under health science subjects starting at year 6.

### Antenatal care coverage

Tuvalu DHS 2007 recorded that about 97% of all women in Tuvalu received care from a skilled provider during their last pregnancy. This is relatively very high in comparison to other countries in the region with available data (the highest in fact). In line with WHO guidelines, Tuvalu's Ministry of Health and medical services recommend that a woman who is having a normal pregnancy should attend four antenatal care visits, the first of which should take place in the first trimester. Only two out of three women reported having the recommended four or more visits. It should be noted that a further 21% of women could not recall the number of their antenatal visits. Therefore the DHS does not fully reflect the true number of antenatal visits.

Although coverage of antenatal visits is high, the survey results highlight some areas in which the antenatal care system could be improved, in particular encouraging women to begin their antenatal visits earlier in their pregnancy and including education about the signs of pregnancy complication on routine visits (see Graph 5B.3).

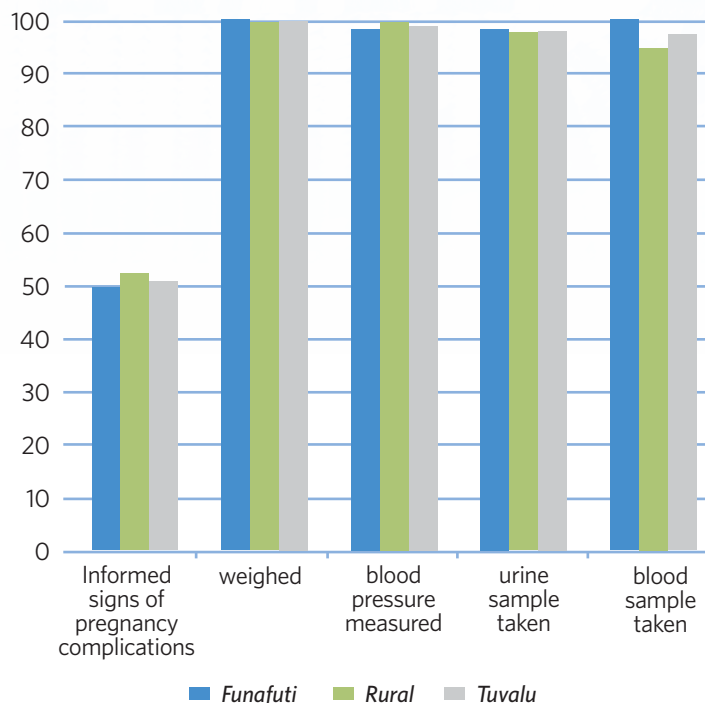
### Unmet needs for family planning

Tuvalu DHS 2007 recorded that 'there appears to be some unmet needs for family planning' as the desired total fertility rate is 2.8 per woman, compared with an actual fertility rate of 3.9 children.



The estimated unmet need for family planning based on the DHS is 24.2%. In comparison to other countries in the region this is high (second highest). More than half (54.7%) of the women currently married or in consensual union in 2007 (DHS) said they need family planning for spacing and limiting number of children. The demand for family planning increased with the age of women currently married or in consensual union. To achieve the target of universal access to reproductive health, family information services should not ignore these vulnerable groups. Anecdotal evidence suggests that there are cases where men prevent their wives from getting services in family planning. This is a challenge for Tuvalu in terms of practice and attitude.

**Graph 5B.3 Selected services (%) by women who attended antenatal care for their most recent birth**



Source: DHS 2007





## MDG 6: Combat HIV/AIDS, malaria and other diseases

MDG Target 6.A & B: Based on the progress of different initiatives to address HIV/AIDS, there is potential for Tuvalu to meet the target of stopping progress and reversing of the spread of HIV/AIDS.

MDG Target 6.C: There is no evidence of cases of malaria in Tuvalu and therefore it is not applicable. For tuberculosis Tuvalu has already met its targets. The main issue for Tuvalu is heart related diseases and kidney failure with poor diet the main cause.





# Target 6.A & B: (A) Have halted by 2015 and begun to reverse the spread of HIV/AIDS and (B) universal access to HIV/AIDS treatment

## Target Score Card

Target already achieved							
Indicators	1990	1996	2003	2005	2007	2009	2015 Target
HIV prevalence among population aged 15-24 years*	0%	na	na	na	na	0%	0%
Condom use at last high-risk sex	na	na	na	na	M - 48.9% F - 0%	na	100%
Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS	na	na	na	na	M- 60.7% F -39.4%	na	100%
Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years	Not applicable						
Proportion of population with advanced HIV infection with access to antiretroviral drugs	na	na	na	na	na	100%	100%
<i>Sources: Tuvalu DHS 2007 and Ministry of Health 2009 *detailed data on HIV cases by age are not available</i>							

### Tracking progress

Monitoring and Evaluation Components	Assessment	
	2006 MDG Report	2010 MDG Report
Data collection capacity	fair	weak
Capacity to analyze data	weak	fair
Data continuity and quality of survey information	fair	strong
Capacity to incorporate statistical analysis into policy planning	fair	weak
Monitoring and evaluation mechanism	weak	weak

## Definition

There are three indicators under the target of reversing the spread of HIV/AIDS.

**HIV prevalence among population aged 15-24 years** is the percentage of individuals living with HIV. This can be calculated from dividing the number of individuals aged 15-24 living with HIV by the total population aged 15-24. Because population of Tuvalu is small this indicator is not applicable in Tuvalu. Actual numbers of HIV positive cases form the basis for monitoring purposes.

**Condom use at last high-risk sex** is the percentage of young men and women aged 15-24 reporting use of a condom during intercourse with a non-cohabiting, non-marital sexual partner in the last 12 months.

**Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS** is the percentage of young persons aged 15-24 years who correctly identify the two major ways of preventing the sexual transmission of HIV (using condom and limiting sex to one faithful, uninfected partner).

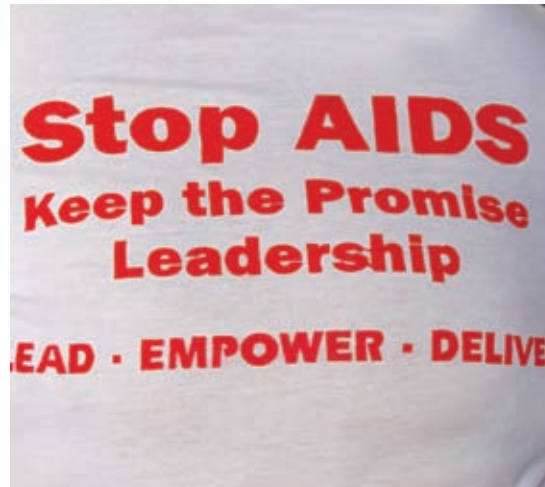
**The indicator - ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years** - is measured through the ratio of the current school attendance rate of children aged 10-14 whose both biological parents have died as a result of HIV/AIDS to the current school attendance rate of children ages 10-14 both whose parents are still alive and who currently live with at least one biological parent. There is no evidence to suggest that cases of such orphans exist in Tuvalu, therefore this indicator is not applicable.

The last indicator of **proportion of population with advanced HIV infection with access to antiretroviral drugs** is the percentage of adults and children with advanced HIV infection currently receiving antiretroviral therapy according to nationally approved treatment protocol (or WHO/Joint UN Programme on HIV and AIDS standards).

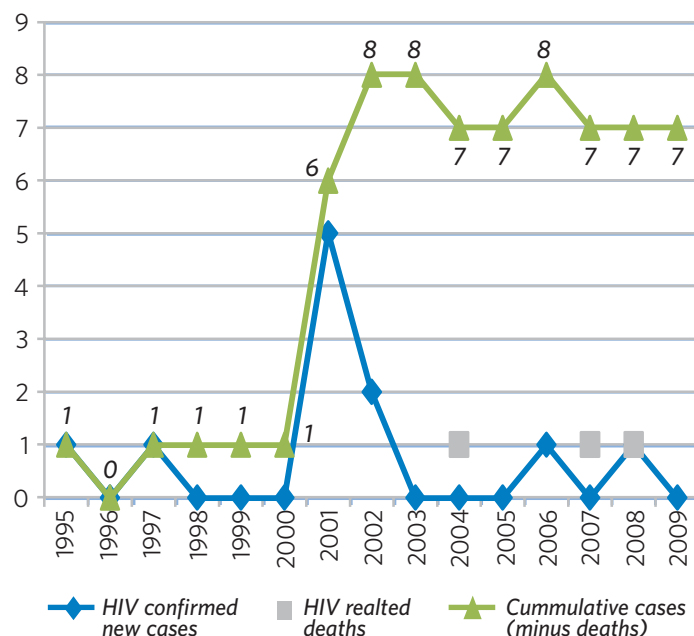
## Progress

### HIV/AIDS and STIs

In 1995, Tuvalu recorded its first case of HIV and since then there have been 11 confirmed cases to date. Out of the 11 confirmed cases, three have died of HIV-



Graph 6A.1 HIV Epidemiology for Tuvalu 1995-2009



Source: SPC and Tuvalu UNGASS Progress Report, 2010

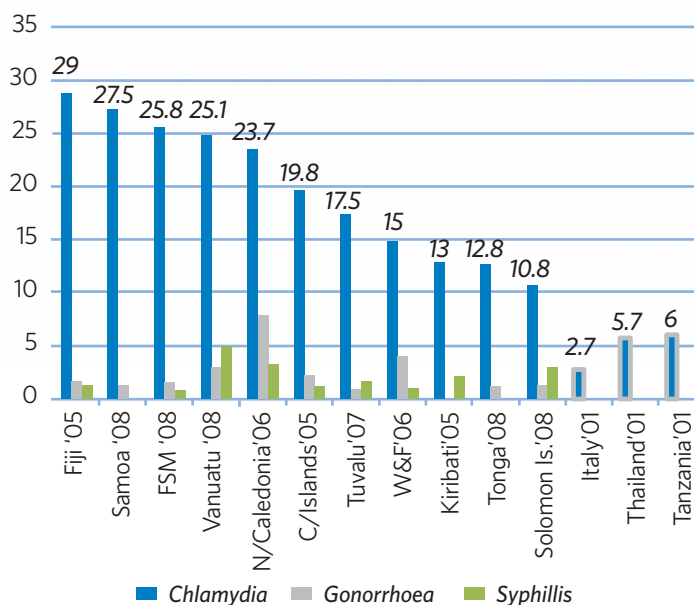
related illness (three males, 2004, 2007 and 2008). Seafarers account for eight (72%) of all cases; the others are: a wife of one of the seaman and her child; and a student who contracted the disease while studying in Fiji.

The general trend for Tuvalu in terms of accumulated cases has been 'stable' over the years between 2002 and 2009. Accumulative HIV cases (excluding HIV related deaths) have been at 7 with 8 in 2001 and 2002 (see Graph 6A.1).

While HIV has been 'stable' there are some serious concerns over the number of sexually transmitted infections (STIs). Main findings from the Tuvalu UNGASS progress report in 2010 reveal that since 2006, detection rates of STIs have:

- **Increased for gonorrhoea** with 3.8% in 2010 compared to 0.9% in 2006.
- **Increased for syphilis** with 3.7% in 2010 compared to 1.7% in 2006.
- **Remained constant for chlamydia** with 17.0% in 2010 and 17.5% in 2006.

**Graph 6A.2 Prevalence of STIs among antenatal women, 2005-2008**



Source: SPC 2010

The above coupled with a large workforce of seaman and students indicate how vulnerable Tuvalu is to HIV/AIDS.

Chlamydia is a common STI worldwide, particularly among young people aged 15-25 years. Chlamydia infections contribute significantly to morbidity, particularly amongst women, impacting on pregnancy outcome and fertility. They also cause conjunctivitis and pneumonia in new borns. Comparing STIs statistics in the Pacific to other countries in the world (Italy, Thailand and Tanzania), indicate an area of concern (see Graph 6A.2) and therefore more action and interventions are needed to rectify the problem.

As indicated by characteristics of those infected, the most vulnerable in the society are seaman, students and youth, especially men. According to the DHS 2007, the median age at first sexual intercourse is considerably lower for men aged 25-49 (17.7) than for women (21.6). Because men tend to get married later than women, they are more likely to expose themselves to STIs while they are single and became sexual active earlier compare to women.

### Use of condom for high-risk sex

According to DHS 2007, 48.9% of young men (15-24) having high-risk sex use condoms while none of the young women use any condoms.

From the same source, 13% of young women (15-24 age) and 52% of young men had sexual intercourse before they turned 18. Very few women (1.9%) in the same cohort reported using a condom the first time they had sex compared to men (21.0%). Youth in the Outer Islands are more vulnerable to STIs because few are using condoms the first time they have sex. Women in the Outer Islands were more likely to have sexual intercourse before age of 15 and 18 than those on Funafuti.

Sex under the influence of alcohol can impair judgment, compromise power relations and increase risky behavior. Among young people aged 15-24, 1% of women and 18.5% of men reported having sex while they were drunk.



## Knowledge of HIV/AIDS

The proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS is 39.4% for young women and 60.7% for men (see Table 6A.1). Percentage with comprehensive knowledge of HIV/AIDS increases with age for both men and women (age 15-24).

**Table 6A.1 HIV/AIDS knowledge and prevention among 15-24 years old**

	M	F
Comprehensive knowledge	60.7%	39.4%
Knowledge of condom use	92.9%	90.6%
Used condom during sex	21%	1.9%
% who had sex in the last 12 months and had high-risk sex	14%	48.9%
% who reported using a condom during higher-risk sex	0%	44.1%

Source: Tuvalu DHS 2007

## Access to antiretroviral drugs

All people living with advanced HIV infection in Tuvalu are entitled to receive free antiretroviral drugs (funded by the Global Fund). There is six months supply of antiretroviral and other drugs for STIs with a three month buffer. According to the Tuvalu UNGASS 2010 progress report, out of the seven people living with HIV, one person has been receiving treatment (male 30-39 years of age) since December 2007. The person and his family also receive free counseling and general support from the hospital.

## AIDS funding commitment

Financial support is crucial to achieve the target of halting and reversing the spread of HIV/AIDS in Tuvalu. The Government allocated USD6,369 (2010 Budget) to the Ministry of Health for HIV treatment. The Global Fund also donates funds to the Ministry of Health and NGOs to run HIV related activities.

NGOs have been active and collaborate closely on running HIV related activities with Global Fund financial support – TuFHA, TANGO and Tuvalu Red Cross Society (TRCS).

- TuFHA the leading NGO in the area of sexual and reproductive health receive funding mainly to provide an awareness program to youths about HIV/AIDS.
- The TRCS program for HIV peer education among seafarers received financial support from UNICEF for the period 2008-2009.
- TANGO, the umbrella body for NGOs in Tuvalu, received direct funding from SPC/Response Fund (2010) focusing on capacity building and empowerment of NGOs nationwide.



Table 6A.2 provides background information on budget and spending according to source of funding. Over 90% of funding is from development partners. The challenge for Tuvalu and development partners is to sustain funding assistance over the long term. The other main challenge is the capacity to run activities. Often, as in many other cases, spending is always below the provision of funds mainly to the lack of capacity to run programs.

**Table 6A.2 AIDS provision and spending of funds in 2008 and 2009**

Agency	Project Name	Donor	2008 Provision (USD)	2008 Exp. (USD)	2009 Provision (USD)	2009 Exp. (USD)
MOH	Global Fund/ HIV Program	GFATM	47,750	47,750	64,166	32,000
	National HIV Program	Government of Tuvalu	6,369	6,369	6,369	6,369
TuFHA	IPPH HIV Program	IPPF	4,710	4,710	10,127	10,127
	PRHP HIV Program	PRHP	34,556	34,556	0	0
TRCS	Peer education Program on HIV	UNICEF	4,424	4,424	10,528	10,528
	World AIDS day	ARC (Fiji & Australia)	2,323	2,323	2,270	2,270
<b>TOTAL</b>			<b>100,132</b>	<b>100,132</b>	<b>93,460</b>	<b>61,294</b>

Source: Tuvalu UNGASS Report 2010

### Tuvalu National AIDS Committee (TuNAC)

To address the issue of HIV/AIDS in Tuvalu, in the year 2000 the Director of Health under the direction of the Minister of Health set up a committee comprising of key stakeholders from the Government and NGOs. The role of the committee (TuNAC) is to:

- Conduct awareness and educational programs on HIV/AIDS;
- Monitor the process of HIV/AIDS programs in Tuvalu;
- Create a favorable environment for people to get tested for HIV;
- Work together with the Government of Tuvalu, NGOs and CSOs, to halt the spread of HIV;
- Work together with individual or group partners in trying to minimize the spread of HIV;
- Follow the National Strategic Plan (NSP) for HIV/AIDS, and also regional and international guidelines and standards for the elimination of the spread of HIV/AIDS.

Since then, TuNAC has been proactive in ensuring that activities and programs are running in accordance to the NSP (2009-2013).

## Challenges and Opportunities

Issues and priorities for achieving the target of halting and reversing the spread of HIV/AIDS are in the NSP (2009-2013). The NSP was set up in 2007 with contributions from all key sectors to ensure that outcomes of the plan reflect a cross section of social priorities and issues. The following are the priorities of the NSP:

1. Achieving an enabling environment.
2. Prevention of HIV and other STIs
3. Treatment care and support
4. Program Management

Tuvalu made significant progress in implementing some of the programs under its NSP. As a result, some of the best practices learned are (Tuvalu UNGASS progress report 2008-2009):

1. Effective and collaborative working relationships between the Government and NGOs in their response to HIV/AIDS and STIs.
2. Growing political support from the Government through provision of public funds to cater for HIV treatment.
3. Capacity building across NGOs through TANGO assisting in the preparation of proposals across the nine islands.
4. TuNAC has secured the support of the Ekalseia Kelisiano Tuvalu\* (EKT) for the NSP. This is a significant achievement given the previous resistance to the national program, in particular the marketing and promotion of condoms.

The main issues with regard to HIV/AIDS response is shown next page (see Table 6A.3).



\* Over 92% of the population are followers



**Table 6A.3 Challenges and remedial actions in response to HIV/AIDS**

Base on discussion with Government, NGOs and CSOs	
<b>1. Outer Islands access</b>	<b>Remedial Action</b>
Ensuring reach of prevention programs and access to testing, counseling and treatment in the Outer Islands.	Expand education programs to Outer Islands and develop testing protocol for the Outer Islands.
<b>2. Ongoing stigma towards people living with HIV/AIDS (PLWH)</b>	<b>Remedial Actions</b>
In Tuvalu, PLWH do not want their HIV status to be disclosed in their communities. As a result, there are PLWH who are not registered for treatment for fear others may learn of their status.	<ol style="list-style-type: none"> <li>1. Ensure PLWH feel secure and reassured about the confidentiality of voluntary confidential counseling and testing (VCCT) processes.</li> <li>2. Support for PWLH to ensure they feel both confident and protected to act as positive ambassadors to encourage greater uptake of testing and treatment.</li> </ol>
<b>3. Ongoing stigma and fear of HIV/AIDS within the community</b>	<b>Remedial Actions</b>
The Tuvalu DHS 2007 highlighted the ongoing stigma about HIV/AIDS - only 30% of women and men expressed acceptance attitudes on all four indicators.	<ol style="list-style-type: none"> <li>1. Strengthening the HIV training for peer educators on stigma and discrimination.</li> <li>2. Inclusion of other population groups in education programs, in particular parents and grandparents, as their messages need to resonate with wider education and prevention programs for youth.</li> <li>3. Expansion of stigma and discrimination education about HIV/AIDS to Outer Islands.</li> <li>4. Revise the secondary school curriculum and train teachers to deliver the HIV/AIDS and STI curriculum.</li> </ol>
<b>4. Seafarers</b>	<b>Remedial Actions</b>
Mandatory testing for HIV/AIDS has been for a long time a requirement for seafarers wanting to work on overseas ships. From 2010, mandatory testing will no longer be required.	1. MOH is exploring the possibility of testing and not linking for the most at risk population, and is giving careful consideration of the legal and ethical implications of this approach.
<b>5. Other most-at-risk populations</b>	<b>Remedial Actions</b>
The Tuvalu 2007 DHS identified a low incidence of sex workers and men who have sex with men.	TuNAC will continue to monitor these groups and will target as appropriate.
<b>6. High knowledge levels but continuing high risk behavior</b>	<b>Remedial Actions</b>
Knowledge of prevention strategies for HIV/AIDS is high across the population, however high risk sex continues	<ol style="list-style-type: none"> <li>1. Developing a behavioral change strategy for Tuvalu</li> <li>2. Devising a condom distribution strategy and a national monitoring system to track promotion and distribution</li> <li>3. Developing tailored prevention plans to meet the specific needs of high-risk groups especially seafarers and their wives/ partners, men who have sex with men, frequent travelers, students studying abroad, and youth.</li> </ol>
<i>Source: Tuvalu UNGASS 2010 Progress Report</i>	

## Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases

### Target Score Card

Target already met							
Indicators	1990	1996	2003	2005	2007	2009	2015 Target
Incidence and deaths rates associated with malaria	Not applicable						
Proportion of children under 5 sleeping under insecticide-treated bed nets							
Proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs							
Tuberculosis incidence rate	23	132	136	35	24	35	
Tuberculosis prevalence rate	(1991) 102	172	331	165	162	162	100
Tuberculosis death rate	n.a	0	31.0	0	27.0	9.0	0
Proportion of tuberculosis cases <u>detected</u> under directly observed treatment short course (DOTS)	0.25%	42%	78%	60%	100%	100%	100%
Proportion of tuberculosis cases <u>cured</u> under DOTS	n.a.	n.a.	(2002) 82%	100%	56%	100%	100%

Sources: Tuvalu DHS 2007 and Ministry of Health 2009 \*detail data on HIV cases by age are not available

### Tracking progress

Monitoring and Evaluation Components	Assessment	
	2006 MDG Report	2010 MDG Report
Data collection capacity	fair	strong
Capacity to analyze data	weak	fair
Data continuity and quality of survey information	fair	strong
Capacity to incorporate statistical analysis into policy planning	weak	fair
Monitoring and evaluation mechanism	weak	strong

## Definition

Since malaria is not endemic to Tuvalu, therefore all indicators for malaria are not applicable in Tuvalu. Two other indicators are to address tuberculosis.

The first indicator includes the following:

The tuberculosis incidence rate is the estimated number of new tuberculosis (TB) cases arising in one year per 100,000 population. Because of Tuvalu's small population the actual number of TB cases is useful for monitoring purposes as the incidence rate can be a lot higher compared to other countries.

Tuberculosis prevalence refers to the number of cases of TB in a population at a given point of time. It is expressed as the number of cases per 100,000 population.

The tuberculosis death rate indicator refers to the estimated number of deaths due to TB at a given point of time.

The second indicator, the tuberculosis detection rate is the percentage of estimated new infectious tuberculosis cases detected under the internationally recommended tuberculosis control strategy directly observed treatment short course (DOTS) or Direct Observation Therapy treatment method.

DOTS is the internationally recommended approach to TB control, which forms the core of the STOP TB Strategy (WHO, 2006b). The five components of DOTS are:

- Political commitment with increased and sustained financing;
- Case detection through quality-assured bacteriology;
- Standardized treatment with supervision and patient support;
- An effective drug supply and management system; and
- A monitoring and evaluation system, and impact measurement.





## Progress

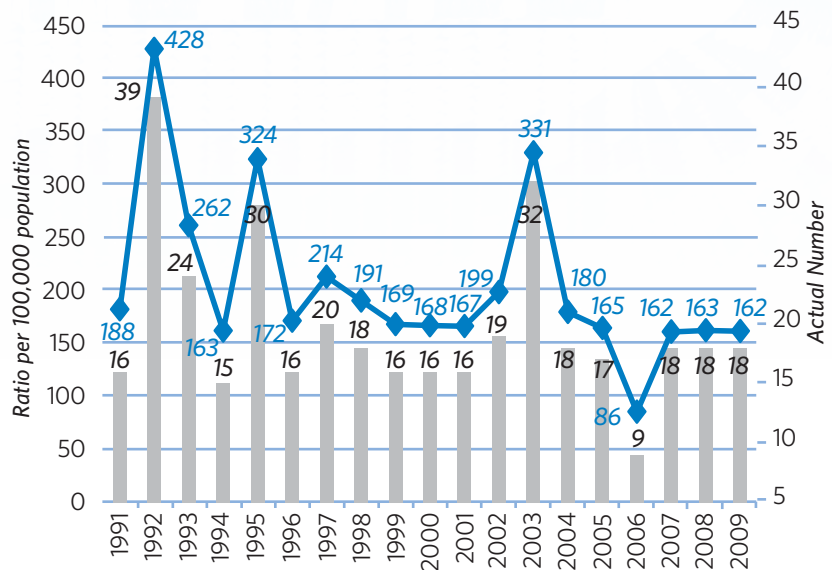
### Tuberculosis incidence and prevalence rate

Tuvalu TB incidence rate and notification numbers indicate a slight improvement over time from 1991 to 2009 (see Graph 6C.1). Actual numbers of cases are low in comparison to other Pacific Islands.

According to Ministry of Health data, Tuvalu had the highest number of TB cases (and therefore incidence rate) in 1992 with 39 cases (or incidence rate of 428 per 100,000 population). After vigorous efforts to address TB, notification numbers steadily declined through the 1990s reaching the lowest of 16 (rate of 167 per 100,000 population) in the year 2000. However the number of TB cases peaked again in 2003 with 32 cases (331 per 100,000 population). In 2006, the number of TB cases reached 9 (86 per 100,000 population), the lowest incidence rate recorded between 1991 and 2009. Incidence levels have been maintained at around 18 ever since. The most vulnerable to the disease are old people (especially men) and they record the highest average TB incidence rate compared to other cohorts (see average from 1991-2009 in Graph 6C.2).

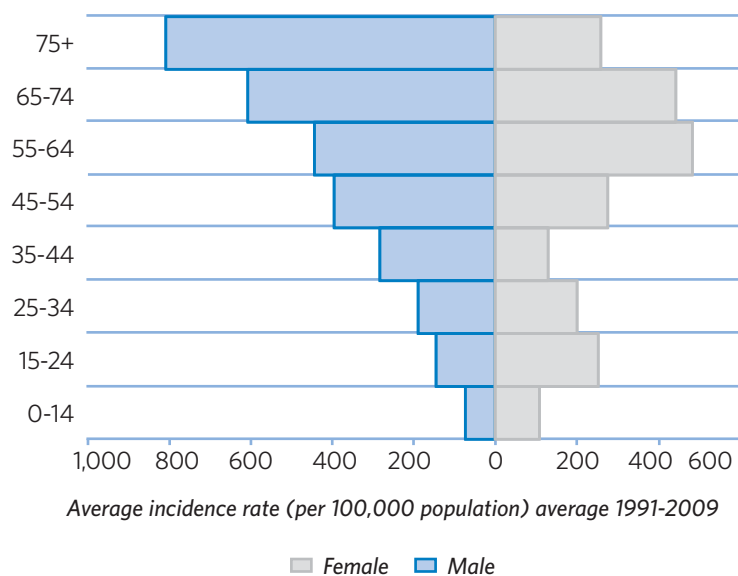
According to SPC estimates, the prevalence rate for Tuvalu in 2007 was 203. This is an improvement from the 2006 incidence rate of 504. The high variation of prevalence rates points to the fact that Tuvalu has a small population in comparison to other countries and therefore actual numbers are useful for monitoring purposes.

**Graph 6C.1 TB Incidence Rate & Actual Numbers (new cases notifications of all forms), 1991-2009**



Source: TB Monitoring Unit, Ministry of Health

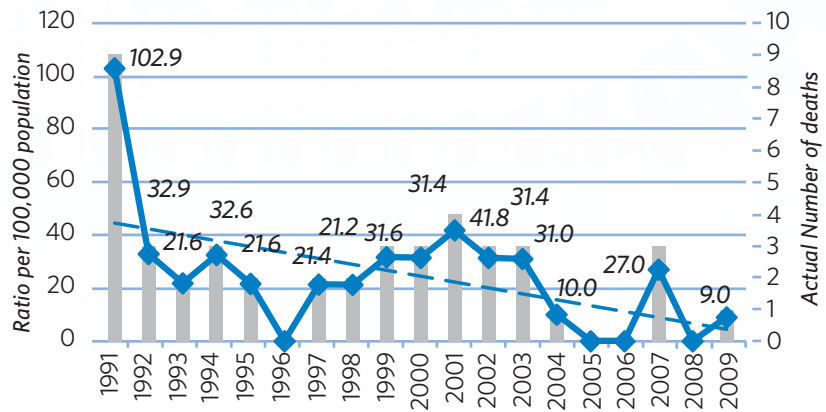
**Graph 6C.2 Average TB incidence rate (per 100,000 population) according to age and gender**



Source: TB Monitoring Unit, Ministry of Health

Death rates related to TB illness decline over time from 1991 to 2009 (see Graph 6C.3). The highest record of TB deaths was in 1991 with 9 deaths yielding a death rate of 102 (per 100,000 population). Between 1992 and 2000, deaths related to TB remain at an average of 2 deaths per year (23 deaths per 100,000 population). However, in 2001, it increased to 4 deaths (41 per 100,000 population). Due to improvement in detection and treatment, TB deaths have been in decline over the period from 2002 to 2009. Between 2005 and 2006 there were no TB deaths.

**Graph 6C.3 TB deaths rates & actual numbers, 1991-2009**

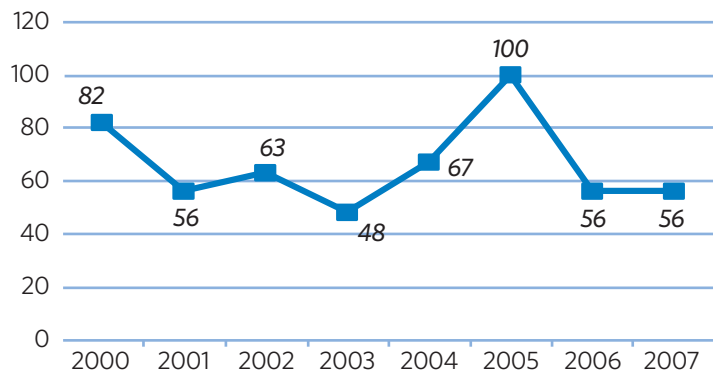


Source: TB Monitoring Unit, Ministry of Health

### Demand for TB treatment success

Data from the Secretariat of the Pacific Community (SPC) indicate that there is still opportunity for TB treatment to succeed.

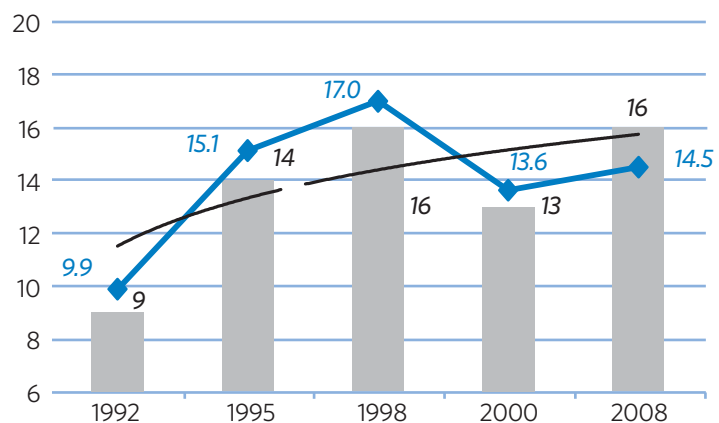
**Graph 6C.4 TB treatment success (%), 2000-2007**



Source: TB database, SPC 2007

SPC data reveals that the average treatment success rate between 2000 and 2007 was 66%. This clearly indicates that there is room for improvement. In June 2004, it was to perform sputum smear microscopic tests under DOTS, which has been effective in the control of TB. As a result, the following year (2005), the success rate improved from 67% in the previous year to 100% (see Graph 6C.4).

**Graph 6C.5 Heart disease deaths (per 10,000 population)**



Source: Ministry of Health, 2010

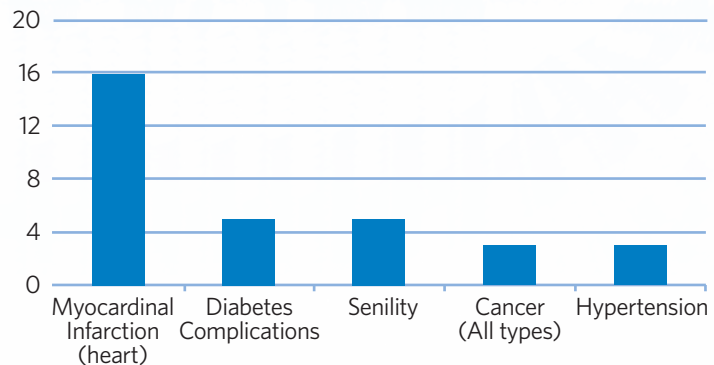
A TB contact tracing program started in 2009. This included the screening and treatment of TB contacts of sputum positive cases, and immune-compromised individuals (e.g. diabetic, PLWHA). This program is currently funded by the Global Fund - TB.

## Cardiac disease is a growing concern

Heart disease is a leading cause of mortality in Tuvalu.

According to Ministry of Health records, in 1992 the number of heart disease deaths was 9, yielding a prevalence rate of 9.9 (per 10,000 population). This was increased to 14 deaths in 1995, resulting in a heart disease prevalence death of 15.1 (per 10,000 population). In 1998, the heart disease prevalence death rate reached a record level of 17.0 deaths per 10,000 population (number of deaths - 16). There was an improvement in the year 2000 with 13 heart disease deaths (prevalence death rate of 13.6 per 10,000 population). However in 2008, the number of deaths increase again to 16.

Graph 6C.6 Five leading causes of mortality, 2008



Source: Ministry of Health, 2010

Another particular concern is diabetes. According to the Ministry of Health 2008 annual report, diabetes is second to heart disease in terms of the five leading causes of death (see Graph 6C.6). The Ministry of Health has been working closely with the World Heart Foundation in the area of rheumatic heart disease.

People of Tuvalu are vulnerable to both heart diseases and diabetes because of limited choice of food and lifestyle.

## Challenges and Opportunities

The Ministry of Health continues to carry out TB activities, notably through DOTS strategy which according to the first MDG progress report in 2007 had 'shown very good results since its introduction in the late 1980's and its reinforcement in 1999 based on a WHO resolution'.

Priorities to address TB included the following:

### 1. To sustain and optimize the quality of DOTS and go beyond target sets.

Increase in case detection and improvement in case management is critical to reducing TB prevalence and mortality. Poor quality of DOTS implementation undermines success. For example according to the SPC TB 2008 surveillance report, it was revealed that in the year 2006, 22% of TB suspects in Tuvalu were screened using one slide instead of the usual two or three slides.

### 2. Strengthening the health system

The above mentioned issue indicates that Tuvalu needs a more systematic approach to increasing human resource competences, further investing in strengthening laboratory capacity and quality especially sputum microscopy and monitoring. Adapting innovations from other fields is also warranted.





### 3. Ensure equitable access to high quality TB care for all people with TB.

Providing quality service for those affected by TB is essential to halt the spread of TB. Strategies to influence the supply and demand side of services need to be implemented. For example promoting participation of communities and health seeking behavior that would result in early case detection while at the same time provide quality services. It is also essential to provide emotional and psychological support throughout treatment because of stigma. International Standards for Tuberculosis Care (ISTC) cannot be ignored.

It is also critical to address the need of old people as they are more vulnerable to TB. NGOs such as TANGO and TuFHA shall be encouraged to provide training and awareness programs in the Outer Islands.

Strengthen the TB contact tracing program with the support of development partners and NGOs. This program is important in preventing the spread of TB in Tuvalu.

### 4. From curative to preventive health services.

The 2006 National MDG progress report indicated that the use of direct taxes from tobacco and alcohol for health promotion is to be considered. The Ministry of Health has shifted their attention from curative to preventive services. An awareness program to have a healthy lifestyle and good diet is essential to minimize the problem of diabetes.





## MDG 7: Environment sustainability

MDG Target 7.A: Tuvalu is committed to having a prosperous global community where environmental resources are used in a sustainable manner. Progress has been made in areas such as conservation and marine protection through legislation. The Tuvalu Environment Vulnerability Index (1999) is 367, which according to the United Nations Environment Programme classification is 'extremely vulnerable' to climate change and sea level rise.

MDG Target 7.B: Tuvalu has made good progress on protecting biodiversity through legislation. Water resources storage is improving over time at household level, especially on Funafuti through development partner financial support. However, there is more to be done on a range of environmental concerns.

MDG Target 7.C: Tuvalu has a high level of access to safe drinking water and sanitation. The MDG Target of improving access to drinking water sources has been achieved. The quality of water, however, still requires urgent attention and action.

MDG Target 7.D: There is substantial improvement in the proportion of the population living in slums. Further improvements could be still be made on Funafuti where high population density offers many social and economic challenges.





## Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environment resources.

### Target Score Card

There is potential to achieve target						
Indicators	1991	1994	2002	2004	2007	2015 Target
7A.1: Proportion of land area covered by forest.	NA	NA	(2000) 43.0%	(2005) 33.0%	na	
7A.2: CO2 emissions, total, per capita, and per \$1 GDP (PPP)	NA	NA	NA	10.3Gg	(2013 Projection) 13.0 Gg	
7A.3 :Consumption of ozone-depleting substances	NA	(2000) 0.20	0.16	0.12	0.006	
7A.4: Proportion of fish stocks within safe biological limits	NA	NA	NA	NA	NA	

Sources: \$1 GDP (PPP) estimates are not available

### Tracking progress

Monitoring and Evaluation Components	Assessment	
	2006 MDG Report	2010 MDG Report
Data collection capacity	fair	fair
Capacity to analyze data	weak	fair
Data continuity and quality of survey information	fair	strong
Capacity to incorporate statistical analysis into policy planning	weak	weak
Monitoring and evaluation mechanism	weak	fair



## Definitions

There are five indicators under the two MDG targets of integrating principles of sustainable development into country policies and programs and reversing the loss of environmental resources.

The first indicator, proportion of land area covered by forest is defined as the percentage of total land area covered by forest. Forest is defined as land spanning more than 0.5 acres with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ (UNFAO – Global Forest Resource Assessment). Trees stands in agricultural and urban settlements are excluded.

The second indicator, carbon dioxide total emissions is defined as total carbon dioxide emissions including anthropogenic emissions less removal by sinks, of CO<sub>2</sub>. Typical sectors for which CO<sub>2</sub> emissions estimated are energy, industrial processes, agriculture, waste, and the sector of land use, land-use change and forestry (LULUCF). CO<sub>2</sub> per capita is measured as the total amount of carbon dioxide emitted by the country as a consequence of all relevant human (production and consumption) activities, divided by the population of the country.

The third indicator, consumption of ozone-depleting substance (ODS) is used to monitor the reduction in the usage of ODS as a result of the Montreal Protocol. Therefore only ODS controlled under the Montreal Protocol are covered by the indicator. The indicator signifies progress made towards the meeting the commitments to phase out the use of ODS of the countries which have ratified the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer and its Amendment of London (1990), Copenhagen (1992), Montreal (1997) and Beijing (1999). ODS is any substance containing chlorine or bromine, which destroys the stratosphere ozone layer that absorbs most of the biological damaging ultraviolet radiation.

The fourth indicator, proportion of fish stocks within safe biological limits is defined as a total estimate of fish stocks within the Exclusive Economic Zone (EEZ). Over fishing and extinction of some species are the main reasons for having this indicator.

## Progress

### National Environment Management Strategy (NEMS)

In 1997, Tuvalu environment management plan was developed with assistance from SPREP and endorsed by the Government. The NEMS indicates management approaches, strategies and programs in many different areas of the environment, which can serve as initiatives and guidelines in the development of appropriate and sound environmental policy. The primary aim of NEMS is to assist Tuvalu in its efforts to achieve sustainable development. The NEMS identified the following priorities and programs:

1. Keep global warming on the international agenda;
2. Monitor sea levels;
3. Recruit an Environment Officer;
4. Undertake Environment Impact Assessments (EIAs);
5. Environment Protection Act;
6. Improve waste management through implementing the Water and Sanitation Plan;
7. Fill the Funafuti borrow pits with sediments dredged from the lagoon;
8. Second phase of the coastal protection projects; and
9. Train Meteorological Division Scientific Officer on forecasting tropical cyclones.



Many of the activities have been implemented including the production of:

1. EIA Guidelines;
2. National Environment Protection Act;
3. Environment education and awareness programs;
4. Investigation of traditional knowledge;
5. Training of Meteorological Scientific Officers on weather forecasting;

Since the release of the NEMS in 1997, according to several reports including the National Biodiversity Strategy Action Plan 2010, there are still gaps and weaknesses that need be urgently addressed. The following are some of the gaps and weak areas identified.

1. Information and data inefficiencies still exist;
2. There is no comprehensive land-use plan, thus creating conflicts and tensions from rubbish disposal, solid and liquid disposal and clearing of vegetation;
3. Limited community involvement;
4. Lack of action on systematic and institutional matters.

### **Loss of forest despite improvement in conservation efforts**

Since the last one and a half decade, Tuvalu has been active in conserving forest through protected areas. Since 1996, every island in Tuvalu has formulated and established protected areas including terrestrial, which result in regenerating forests.

Despite these efforts, data from SPC indicated that the proportion of land area covered by forest fell from 43.0% in 2000 to 33.3% in 2005. This is mainly due to clearing of forest for construction of houses and other infrastructure. In addition, Tuvalu's infertile soil contributed to the low level of area covered by forest. According to Tuvalu National Biodiversity Strategy Action Plan, approximately 20 acres of coconut have been lost on four Outer Islands due to incursion of sea water during high tides. Small areas of mangroves and coastal marsh relict stands of inland forest are often found on uninhabited islands. Tuvalu UNFAO Global Forest Resources Assessment Report (2010) indicated that approximately 1,000 ha of land are covered by forest. A decline in mangroves was also noted in the report -- from 50 hectares in 1990 to 40 hectares in 2005.



Under the Community Tree Care Project, multipurpose tree nurseries have been established on the Outer Islands since 2008 (five islands completed). TANGO has also been active in the community since 2007 in establishing a Management Plan to better manage forests. Tuvalu Overview Project planted mangroves in a community project at Funafala islet on the capital Funafuti in 2007. Because of this, it is anticipated that latest figures could result in an increase in land area covered by forest. Women's organizations in the Outer Islands have also been reported as active in planting of trees.

### **CO2 emissions and ozone depleting substances**

There are no recent estimates on the amount of carbon dioxide (CO2) emissions. However, based on the Tuvalu Energy Review in 2004 by SPREP, Tuvalu's current (2004) CO2 production is estimated to be around 10.3 Gg (gigagramme) per year, with a 2013 projection of 13.0 Gg assuming no addition of renewable energy or energy efficiency measures. Based on the review, with the maximum expected use of solar energy and biofuels by 2013 saving about 0.8 Gg per year and energy efficiency measures saving of about 1.4 Gg per year, a 17% reduction in GHG production in 2013 appears possible.

In August 2009, Tuvalu released its National Energy Policy with the vision of having a prosperous living standard that is fostered through an energy policy that promotes the provision of socially, financially, economically, technically, politically and environmentally sustainable energy systems within the framework of Tuvalu's initial national communication under the UNFCCC. The policy acts as a framework that sets out the Government policies for planning and management of the energy sector over the next fifteen years and to ensure that energy become part of socio-economic development goals. Six strategic areas are: (1) energy sector planning, coordination, and management, (2) petroleum (3) transport (4) electricity, (5) renewable energy, (6) conservation and efficiency and (7) environment.



Tuvalu does not produce any ODS and therefore all ODS are imported. Tuvalu ratified the 1985 Vienna Convention and the 1987 Montreal Protocol on the 15th July 1993. It also ratified the 1990 London Amendment and the 1992 Copenhagen Amendment on 31st August 2000. Tuvalu is classified as operating under Article 5 of the Montreal Protocol and as such is entitled to assistance from the Multilateral Fund to comply with its obligations. According to the National Compliance Action Strategy to implement Montreal Protocol (SPREP) Tuvalu is required to freeze its consumption (i.e. import of bulk substances) at a maximum level of 0.328 ODP tones from 1st July 2009. Based on CFCs imports data in the year 2000,

**Table 7A.1: Tuvalu maximum allowable consumption under Montreal Protocol and forecast consumption**

Year	Montreal Protocol percentage reduction	Maximum consumption	Forecast consumption if no other intervention*
<b>Base Year</b>	0%	0.328	
<b>2000</b>	0%	0.328	0.2
<b>2001</b>	0%	0.328	0.18
<b>2002</b>	0%	0.328	0.16
<b>2003</b>	0%	0.328	0.14
<b>2004</b>	0%	0.328	0.12
<b>2005</b>	50%	0.164	0.10
<b>2006</b>	50%	0.164	0.08
<b>2007</b>	85%	0.049	0.06
<b>2008</b>	85%	0.049	0.04
<b>2009</b>	85%	0.049	0.02
<b>2010</b>	100%	0	0

*Source: SPREP, Note: \* Based on 2000 data*

Tuvalu has met its obligations to freeze its consumption comparing to the 1999 as base level. Because of this, Tuvalu is in full compliance with all of its obligations under the Montreal Protocol (see Table 7A.1). The most common ODS used in Tuvalu was CFC-12, found most in refrigerators and air conditioning. Because most ODS refrigerants were imported through Fiji, the decision by that country to cease imports of CFCs on 1st January 2000 has meant that CFC imports into Tuvalu effectively ceased at the same time.

Tuvalu has developed its National Compliance Action Plan (NCAP) with assistance from SPREP in 1999 and at the same time established a national committee to oversee the implementation of the plan. The plan adopted an early phase-out date that send a strong signal to the global community, demonstrating Tuvalu's commitment to global environment issues. Targets set out in the plan cannot be achieved without the support of the Multilateral Fund and the Pacific Regional Projects in collaboration with the private sector and public sectors, NGOs, and other Government and international agencies.



## Renewable Energy

Tuvalu's target is to generate electricity through 100% renewable energy by 2020. This underlines Tuvalu's strong commitment to reduce the effect and amount of global warming gases from burning of bio-fuel. The target is specified under Tuvalu's first ever National Energy Policy, endorsed by the Government in August 2009.

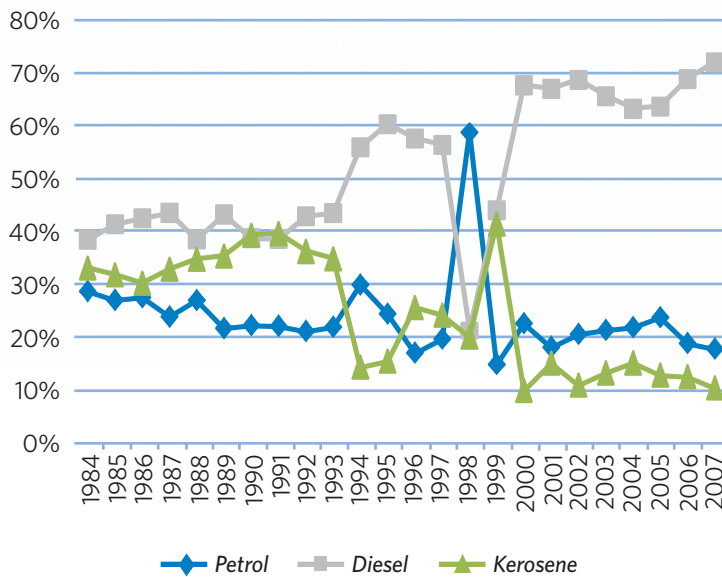
According to the National Energy Review (SPREP 2004), Tuvalu imports all its fuel from overseas and the main users are in the marine and power sectors where diesel is commonly used. This is supported through data collected from the Department of Energy, where diesel was the highest total percentage of imported fuel between 1984 and 2007 (see graph 7A.1). According to the review, future growth and demand is expected to occur at the rate of 3% to 4% over the next 10 years. This is also evident from the data collected from the Department of Energy in 2010. This is a concern as price of fuel are also rising over time (see Graph 7A.2).

A number of initiatives have taken place recently to provide alternative (renewable) energy to meet demand - mainly electricity and fuel. In the year 2008, a Non-Government Organization (Alofa Tuvalu) set up a site on one of the islets on Funafuti (Amatuku) to collect biogas from manure of pigs. In 2009, the Government of Japan constructed a 45kW solar system on Funafuti that provides about 20kWh per day to several households. In 2010, the Government of Italy set up another solar system on the island of Vaitupu with approximately the same capacity as the one on Funafuti.

## Ocean Fish Stocks

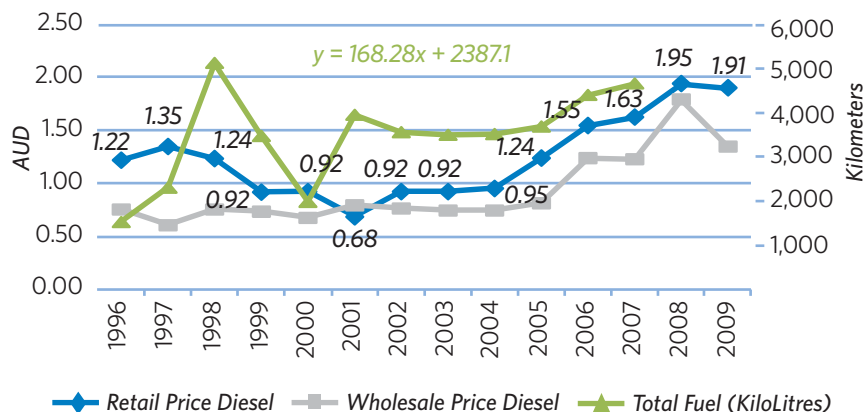
Tuvalu's sea area (Exclusive Economic Zone) is approximately 900,000 km<sup>2</sup> (UNEP 2009). This is nearly 35,000 bigger than its land area of only 26 km<sup>2</sup>. The massive sea area indicates Tuvalu's dependency on its ocean resources for both food and income.

Graph 7A.1 Percentage of imported fuel by type, 1984-2008



Source: Department of Energy, 2010

Graph 7A.2 Prices (per litre) and Trend of Imported Fuel, 1996-2009



Source: Department of Energy, 2010

Tuvalu diet is predominantly that of fish. Tuvalu's consumption is one of the highest in the Pacific with an average per capita consumption of 113.0kg (See Table 7A.2), which is significantly higher than the global average of only 13.2kg (UNFAO 1995).

Tuna makes up a substantial portion of all fish consumed. The fact that tuna is such an important part of the diet in Tuvalu attests to the important role of tuna in the country's food security.

Tuna fishery in Tuvalu waters has been commercially occupied by Distant Water Fishing Nations (DWFNs) that Tuvalu grants access through fishing licenses (see Table 7A.3). Additionally, Tuvalu fishers have been involved in the tuna fishery, mostly on subsistence and artisanal level. There are no domestic vessels operating commercially or on a large scale except Taumoana, a commercial joint venture fishing vessel with a Taiwanese fishing company. Gear used by DWFNs vessels is the subject of concern because of overfishing of tuna resources. Gear used (in the order of highest amount of catch per defined period) is: purse seine, long-line and pole and line. The biggest concern is that the number of purse seine vessels has increased over time, but pole and line gear appeared to decline. This is evident from the total value of catch (in millions) for each type of gear (see Graph 7A.3).

To address concerns of tuna overfishing, Tuvalu and other Pacific Islands neighbors have signed and ratified numbers of agreements (Nauru Agreement - 1982 and the FSM Agreement - 1997) that aim to prevent overfishing, restore depleted resources, ensure sustainable use and maximize economic and social benefits.

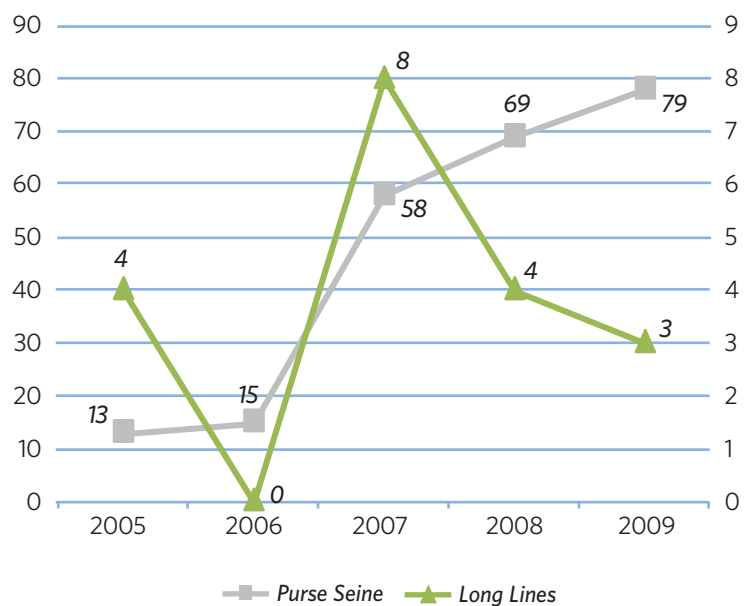
In October 2010, the Fisheries Department, with technical assistance from the FFA, completed drafting the Tuvalu Tuna Management and Development Plan 2011-2015. The vision of the plan is to ensure long term conservation and suitable and optimum utilization of highly migratory species

**Table 7A.2: Contribution of fishing license payments to total Government core revenue**

Year	Total License Payment (AUD)	Total Government Revenue (AUD)	License as % of Total Government Revenue
2000	9,480,076	42,467,676	22.32
2002	11,795,440	22,365,212	52.47
2003	8,694,953	41,931,352	20.74
2004	1,474,3000	21,384,693	6.89
2005	3,144,672	19,580,402	16.06
2006	5,232,030	21,240,548	24.63
2007	3,321,552	20,957,595	15.85
2008	8,400,035	25,801,229	32.56
2009	9,005,663	31,143,499	28.92

Source: Government Accounts

**Graph 7A.3: Estimated Purse Seine and Long line values in Tuvalu waters, 2005-2009**



Source: FFA Economic Tuna Indicators, 2010

for the benefit of Tuvalu people. The plan, once endorsed, will be a Tuvalu high-level fisheries policy document that contains the mandate of the

Fisheries Department to deliver services with regard to the effective conservation, management, exploitation, utilization and development of Tuvalu tuna fisheries.

### Coastal Fish Stocks

Coastal resources play an important role in the social and physical well being of Tuvaluan society and contribute significantly to the nation's economy. Major use of coastal marine resources in Tuvalu is for subsistence and artisanal fisheries.

Marine resources in coastal areas are dependent on the condition and productivity of critical ecosystem and shoreline features such as coral reefs, beaches and sea grass beds. The outer slopes of the reefs surrounding the lagoons in Tuvalu are reported to be rich in both cover and biodiversity, although faunal inventories have not been prepared. There are approximately 400 fish species recorded at Funafuti (ADAB – 1985, Kaly 2001).

Although the rich in biodiversity, there is growing concern about the environment of coral reefs. Human-induced threats to the coral reefs including land based sediment and nutrient pollution, destructive fishing methods, dredging activities, costal development and overfishing due to the population increase are some of major concerns. According to studies carried out by the Department of Fisheries, eutrophication has occurred due to high nutrient levels in the lagoon waters.<sup>1</sup>

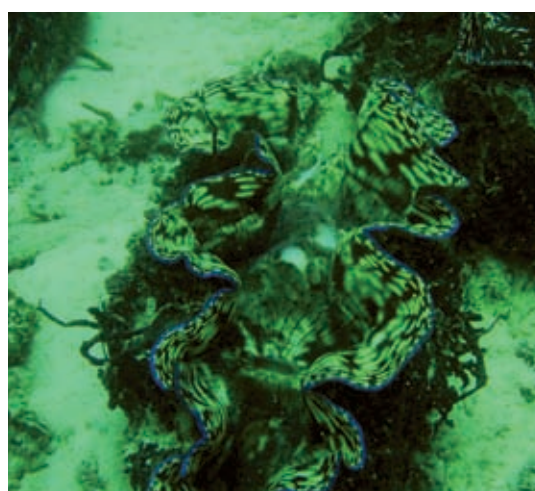
### Ocean and Coastal Legislations

Tuvalu has a comprehensive Acts that regulate the major activities in ocean (Exclusive Economic Zone) and in coastal areas. These include the National Fishing Corporation of Tuvalu Act, Environment Protection Act, Marine Resources Act, Marine Zone (Declaration) Act, Prohibited Area Act, Marine Pollution Act, and Conservation Areas Act. These Acts are supplemented with major policies and plans, Te Kakeega II, National Adaptation Program of Action and Tuvalu National Biodiversity Strategies Action Plan.

**Table 7A.3: Per Capita Consumption, Early 1990s (kg/year)**

Countries	Per Capita Fish Consumption
Cook Islands	67.8
FSM	73.4
Fiji	41.8
Kiribati	181.6
Marshall Islands	61.3
Nauru	50.0
Niue	62.3
Palau	107.7
Papua New Guinea	16.9
Solomon Islands	44.8
Tokelau	129.4
Tonga	34.5
Tuvalu	113.0
Vanuatu	27.0
Samoa	31.8

Source: FAO1995 (Tuna: A key Economic



<sup>1</sup>Also supported by JICA study "Assessment of Ecosystem, Coastal Erosion and Protection/Rehabilitation of Damaged Area in Tuvalu" January 2011



## Climate Change and Sea Level Rise

Scientific reports and evidence from different international agencies and institutions (including IPCC reports) always point to one conclusion – one of the greatest challenges for Tuvalu in sustainable development is sea level rise and climate change. Tuvalu supports this view and some of the country's statesmen have gone beyond Tuvalu borders to let the international community know that climate change and sea level rise decides Tuvalu future existence base on facts and experience.

Tuvalu signed on 8th December 1992, and ratified on 26th October 1993, the United Nations Framework Convention on Climate Change (UNFCCC). In 2006, Tuvalu completed its National Adaptation Plan of Action (NAPA). The NAPA was developed with the close participation of all stakeholders including Government agencies and communities both on Funafuti and Outer Islands, including Falekapule and Kaupule, women's organizations (TNCW), TANGO and other non-state actors.

With regard to sea level rise, Tuvalu sea trend is +5.1mm per year as the data set grows. Accounting for precise leveling results and inverted barometric pressure effect, the trend is +4.77mm per year.<sup>2</sup> Data are taken from Geoscience Australia and SOPAC monitoring equipment <sup>3</sup> which are stationed permanently on Funafuti. In January 2009, the Government of Tuvalu and Government of Japan signed a Memorandum of Understanding for a development planning study to be done by Japan to propose short-term measures for the prevention of coastal erosion. The project, Eco-technological Management of Tuvalu against Sea Level Rise, objectives includes:

1. Assessing ecosystem, coastal erosion and protection/rehabilitation of damaged areas,
2. Making a plan on sustainable measures for coastal protection/rehabilitation,
3. Strengthening capacity of institutions and communities for coastal management.

The study draft completed in January 2010 recommended adopting beach nourishment graded gravel on the lagoon coastline to prevent waves overtopping coastline. This is a short-term measure that further, will contribute to the long term countermeasures (beach rehabilitation) being promoted by the JICA Science and Technological Research Partnership for Sustainable Development project (Forum Sand Project). The construction of beach nourishment graded gravel on Funafuti atoll only is expected to be completed by 2020.

## Climate change and health

Climate change and sea level rise poses real problems for health. Frequent droughts caused by climate change result in water shortages. Anecdotal evidence based on experience indicates that there was a correlation between droughts and water borne diseases such as diarrhoea. In terms of sea level rise, diseases such as skin and eye infections are most common.

## Challenges and Opportunities

Principles of partnership, public participation and sustainable development cannot be ignored. Lack of capacity and understanding of environment issues including actions are some of the gaps still existing in island communities. Internationally there is a lack of political leadership for the full implementation of the Kyoto Protocol (including new binding agreements) targeting greenhouse gas emissions reduction and for comprehensive and urgent further commitments and funding on mitigation and adaptation that will continue to be a serious concern for Tuvalu.

### Strategies and Priorities include:

1. Encourage addressing climate change through mainstreaming environment concerns into all sectors.
2. Improve awareness programs on the relationship between human activities, climate change and sea level rise.
3. Tuvalu should continue to raise its concern on climate change and sea level rise in the international arena.
4. There is a need to improve international adaptation funding coordination and simplify procedures to facilitate easy access to funding.

<sup>2</sup> Tuvalu Sea Level Country Report – December 2009 (data between 2000-2009)

<sup>3</sup> SEAFRAME – Sea Level Fine Resolution Acoustic Measuring Equipment

5. The following policies for renewable energy are stated in Tuvalu National Energy Policy:
  - a. Promote and implement the use of appropriate, proven, affordable and cost effective renewable energy technologies, both urban and rural applications
  - b. Establish and maintain a knowledge base for all available and appropriate renewable energy sources and technologies
  - c. Ensure Tuvalu's limited biomass, copra bio-fuel and other renewable energy resources are used efficiently, in an economically, environmentally and culturally sustainable manner
  - d. Develop local expertise in the installation, operation, management and maintenance of technically and economically proven renewable energy systems
  - e. Develop partnership with potential foreign and local investors, donors and agencies in seeking funding sources for the development of renewable energy programs
  - f. Develop an implementation plan to realize the target of 100% of electricity generation through renewable energy technologies by 2020.
  
6. The following are strategies and policies for the sustainable use of ocean and coastal fish resources:
  - a. Government to consider endorsing and implement Tuna Management and Development Plan (2011-2015) with the key focus to improve effective conservation and management of fisheries resources through: Ensuring clear, transparent and robust management policies and guidelines for setting and allocation of management limits, and processing or administering licensing and implementation of a robust licensing system that increases revenue.
  - b. Improve staff capacity to monitor and negotiate fishing license agreements.
  - c. Formulate and implement a clear, coherent and integrated fishing sector development programme.
  - d. There is a need to undertake effective monitoring and assessment of coastal fisheries resources, and to develop capacities in these areas.
  - e. National Fishing Laws are comprehensive, but there is a need to promulgate more regulations to conserve and manage marine resources.
  
7. Other priorities include:
  - a. Improve training at all levels of linkages between human activities and their effect on the environment.
  - b. Improve enforcement of environment and marine legislations.

## Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss

### Target Score Card

#### There is potential to achieve target

Indicators	1991	1994	2002	2004	2007	2015 Target
7B.5: Proportion of total water resources used	NA	NA	NA	NA	NA	NA
7B.6: Proportion of terrestrial and marine areas protected	NA	NA	NA	NA	NA	NA
7B.7: Proportion of species threatened with extinction	NA	NA	NA	NA	NA	NA
Sources: \$1 GDP (PPP) estimates are not available.						

#### Tracking progress

Monitoring and Evaluation Components	Assessment	
	2006 MDG Report	2010 MDG Report
Data collection capacity	fair	fair
Capacity to analyze data	weak	weak
Data continuity and quality of survey information	fair	weak
Capacity to incorporate statistical analysis into policy planning	weak	fair
Monitoring and evaluation mechanism	weak	fair



## Definitions

There are three indicators under the MDG target of reducing biodiversity loss, achieving, by 2010, a significant reduction in the rate loss.

Proportion of total water resource withdrawn is the total volume of groundwater and surface water withdrawn from their sources for human use expressed as a percentage of the total volume of water available annually through the hydrological cycle (total actual renewable water resources). The terms water resources and water withdrawal are understood as freshwater resources and freshwater withdrawal.

Proportion of terrestrial and marine area protected is defined as 'geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values' (Dudley, 2008). A GIS analysis is used to calculate terrestrial and marine protection. The total area of a country's/territory's terrestrial protected areas and marine protected areas in territorial waters is divided by the total area of its land areas (including inland waters) and territorial waters to obtain the relative coverage (percentage) of protected area.

Proportion of species threatened with extinction (last indicator) indicates the change in threat status of species in their natural habitat, based on population and range size and trends, as quantified by the categories of the IUCN Red list of Threatened Species ([www.redlist.org](http://www.redlist.org)).

## Progress

### Water Resources

Rainfall and rainwater harvesting is the primary source of water supply and surface water does not exist. The limited groundwater resource suffers from increasing salinity and pollution from septic tank effluent infiltration and therefore is not an option for human consumption in Tuvalu. The Government and community storage supplement household storage during dry conditions and two desalination plants are available on Funafuti to refill household tanks with a charge of AUD13.50 per 500 litres (2009) which covers less than half of the operation costs.

Table7B.1 provides an overview of Funafuti and Outer Islands water storage capacity and indicates the number of days that supplies would be able to sustain the community without rainfall and assuming all storages are full. It is clear that households on Funafuti have by far the highest storage capacity compared to households in the Outer Islands. Funafuti households have benefitted from the provision of approximately nine hundred 10,000 litres household tanks donated by the European Union and the Government of Australia in 2009. The situation at household level in the Outer Islands will be improved once water tanks are distributed late in 2011, funded by the European Union (EDF10).

**Table7B.1: Water Storage Capacity on Funafuti & Outer Islands (2009)**

Source	Total Storage (Full Capacity -Litres)	Litres (L)/ Person	Days 50L/ person/ day	Days 80L/ person/ day	Days 100L/ person/ day
<b>Funafuti</b>					
<b>Government Reserves</b>	3,018,020	615	13	8	6
<b>Community Reserves</b>	2,626,564	584	12	7	6
<b>Household Tanks</b>	23,291,736	5,176	104	65	52
<b>TOTAL</b>	28,936,320	6,430	129	80	64
<b>Outer Islands</b> (excluding Nukulaelae & Niulakita)					
<b>Household Tanks</b>	9,247,000	2,055	41	26	21
<i>Source: Water Section, Public Works Department</i>					
<i>Note: Funafuti population - 4,500, Outer Islands Population - 5,207</i>					

In comparison to other countries, having access to 20 litres per person per day is considered a luxury.<sup>1</sup> Daily household water needs have steadily increased over time as there are more people, western lifestyle dominates people's homes and hygiene improves. There is no information available to accurately calculate daily water demand per person per day. However several reports have quoted that the daily demand per person per day is approximately between 50 and 100 litres. Recently the National Water and Sanitation Committee arbitrarily determined and established 100 litres as the daily consumption.

Due to high rainfalls (average of 3229 mm per year: 1945-2005), water supply is usually adequate but quickly becomes a concern during dry periods of approximately 0.1 mm per day. Poor construction and maintenance of household roof gutters means that supply is depleted easily in a two week dry spell. Tuvalu has a water acquisition provision in the Constitution which gives the Government and the Kaupule the right to acquire all available freshwater resources during drought and distribute water equitably in the community.<sup>2</sup>

## Protected Terrestrial and Marine Areas

Significant progress has been made over time in nature conservation and biodiversity. Legally, conservation areas have been set up since 1996, started on Funafuti with Outer Islands following after. In 1999, Conservation Act became effective on 1st September enabling Falekaupule to establish their conservation under the power of the Minister which conservation portfolio falls under. Kaupule are responsible for the management of their conservation areas. Objectives of the Act include:

**Table 7B.2: Tuvalu Islands Conservation Area Key Information, 2010**

Island	Name of Conservation Area	Size (km <sup>2</sup> )	Designation Date	Management Plan	Conserved Areas	Species
<b>Nanumea</b>	Momea Tapu	2.75	2006	Yes	Terrestrial, Lagoon and Ocean Reef.	Turtles, clams, reef crabs, fish
<b>Nanumaga</b>	Hapai, Kogaa Koga Tapu ote Fenua	0.9	NA	No	Terrestrial, mangroves, ponds, ocean reefs	Turtles, clams, conch (kalea), birds
<b>Niutao</b>	Feitu Tapu	0.54	NA		Terrestrial and ocean reefs	Turtles, birds, lobsters, fish
<b>Nui</b>	Terikiai (Motu Tapu)	8.18	1997	No	Terrestrial, lagoon, and ocean reefs	Turtles, clams, land and sea crabs, coconut crabs, birds
<b>Vaitupu</b>	Namo, Togo, Fatu o Isa, Fatu Tupata	1.25	NA	Yes	Terrestrial, ocean reefs and lagoon.	Turtles, land crabs, birds, fish
<b>Nukufetau</b>	Koga Tapu	NA	2003	Yes	Terrestrial, ocean reefs, lagoon	Turtles, land and sea crabs, coconut crabs, birds, fish
<b>Funafuti</b>	Kogaa koga puipugina	35.95	1996	Yes	Terrestrial, ocean reefs, lagoon	Turtles, lobsters, conch, birds, fish
<b>Nukulaelae</b>	Koga Tapu	1.73	NA	Yes	Terrestrial, ocean reefs, lagoons	Turtles, sea cucumber, fish
<b>Niulakita</b>	Niulakita	0.40	NA	No	Terrestrial, ocean reefs, lagoons	Turtles, crabs, fish

Source: Tuvalu Association for Non-Government Organizations (TANGO), 2010

<sup>1</sup> EDF10th: Annex II – Technical and Administrative Provisions for Implementation (p4)

<sup>2</sup> Tuvalu National Integrated Water Resources, SOPAC 2007

1. protecting the environment, including coastal, marine and terrestrial;
2. conserving living and non living natural resources of island communities and in providing for their sustainable utilization by present and future generations;
3. preserving the biological diversity of conservation areas, especially species which are endemic, threatened, or of special concern and the coastal and marine habitats upon which the survival of these species depend.

The Act indicates that no person shall hunt, kill or capture any turtle, birds, or fish in designated conservation areas.

Table 7B.2 indicates the size, designation date and other key information for each island conservation areas. According to the TANGO, the total known conservation area in 2010 is 51.70 km<sup>2</sup> with Funafuti being the highest with 35.95 km<sup>2</sup>. Total conservation area includes both terrestrial and marine protected areas.

## Threatened Species

Tuvalu signed the Convention on Biological Diversity in 1992 and ratified it on 20th December 2002. Tuvalu recently in 2010 produced its – National Biodiversity Action Plan (NBSAP) which includes the following goals:

1. Prevent air, land and marine pollution;
2. Control and eliminate invasive species;
3. Rehabilitate and restore degraded ecosystems;
4. Promote and strengthen conservation and sustainable use of Tuvalu’s biological diversity;
5. Recognize, protect and apply traditional knowledge, innovations and best practices in relation to the management, protection and utilization of biological resources;
6. Protect wildlife;
7. Protect the seabed and control overharvesting in high seas and territorial waters;

NBSAP vision is that **“by the year 2020, Tuvalu would have a clean and healthy environment, full of biological resources where the present and future generations of Tuvalu will continue to enjoy the equitable sharing of benefits of Tuvalu abundant biological diversity”**.

Tuvalu fourth report to the UN Convention on Biological Diversity in 2009 indicates that perceived threats to island biodiversity can be summarized as arising deleterious human actions and negative attitudes to the environment leading to inappropriate behavior such as littering, overfishing and hunting, ignorance and climate change. The report revealed that there flora on the islands is limited with 300 existing species out of which only 65 are native species while the rest are introduced. Fish species is quite abundant with 350 species of fish have been recorded. There are no official figures on threatened species in the report. However according to the 2008 IUCN Red List, the main threatened species are turtles (hawksbill - and leatherback).



## Challenges and Opportunities

Principles of partnership, public participation and sustainable development cannot be ignored. Again, climate change is the main challenge for Tuvalu as it disrupts rainfall pattern and affects marine ecosystem.



The following are key priorities and strategies the Government is currently undertaking or in process for implementation:

### 1. Improve water management and storage.

Key strategies include:

- Improve knowledge of available water resources, demand and prediction of extreme events.
- Increase water conservation and demand management strategies.
- Improve household and communal rainwater storage.
- Improve awareness and training on maintain of gutters, roofs and storage tanks.

### 2. Sustainable use of natural resources

Key strategies include:

- Develop management plans for conservation areas that do not have management plans.
- Formulate and enforce legislation to enhance the protection of conservation areas
- Conduct baseline surveys to determine where new conservation areas should be established.
- Acquire the necessary equipments and funding to support management of conservation areas, and train staff so that all islands have trained people.
- Establish benchmarks for use and sustainable management of conservation areas.
- Conduct economic evaluation of biodiversity and mainstream these values into the national policy framework and sector plans.
- Review EIAs and enforce relevant legislation to ensure protection and conservation of biodiversity.
- Conduct comprehensive inventory and assessment of all species; establish management plans for improving and restoring the status of threatened species.
- Legislation to protect marine turtles needs to put in place.



## Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.

### Target Score Card

#### There is potential to achieve target

Indicators	1991	1994	2002	2004	2007	2015 Target
7C.8: Proportion of population using an improved drinking water source	90.5	92.4	92.5	95.1	97.6	100
7C.9: Proportion of population using an improved sanitation facility	77.1	80.7	76.3	89.2	80.7	100

Sources: *Housing and Population Census 1991 & 2002, HIES 2004/05, DHS2007*

#### Tracking progress

Monitoring and Evaluation Components	Assessment	
	2006 MDG Report	2010 MDG Report
Data collection capacity	fair	fair
Capacity to analyze data	weak	fair
Data continuity and quality of survey information	fair	strong
Capacity to incorporate statistical analysis into policy planning	weak	weak
Monitoring and evaluation mechanism	weak	fair

## Definitions

There are two indicators under the MDG target of halving by 2015 the proportion of people without sustainable access to drinking water and basic sanitation.

The first indicator, proportion of population using an improved drinking water source is the percentage of the population who use any of the following types of water supplies for drinking: piped water into dwelling, plot or yard; public tap/standpipe; borehole/tube; protected dug well; protected spring and rainwater collection. It does not include unprotected well, unprotected spring, cart with small tank/drum, tanker truck, or surface water (river, dam, lake, irrigation channel).

The above indicator is computed as the ratio of the number of people who use an improved drinking water source to the total population, expressed as percentage.

The second indicator, population using an improved sanitation facility is the percentage of the population with access to facilities that hygienically separate human excreta from human contact. Improved facilities include flush/pour flush toilets or latrines connected to a sewer, septic tank, or pit, ventilated improved pit latrines, pit latrines with a slab or platform of any material which covers the pit entirely except for the drop hole and composting toilets/latrines.

The above indicator is computed as the ratio of the number of people using improved sanitation facilities to the total population, expressed as percentage.

Because of the way data was presented in population census and household surveys, all data for this report are presented at household level.

## Progress

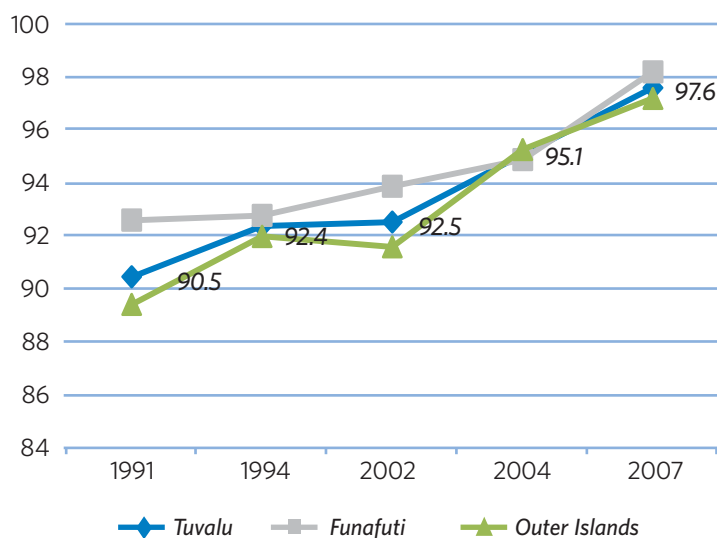
### Access to Safe Drinking Water

The proportion of households having access to safe drinking water is high and has increased from 90.5% in 1991 to 97.6% in 2007. The increase was more significant in the Outer Islands, rising from 89.4% in 1991 to 97.2 in 2007. Table 7C.1 indicates that the greater disparities existing previously have been effectively closed. According to DHS2007 93.5% of people boil their drinking water. Base on these facts and trends, Tuvalu is on course to meet MDG Target 7.C8.

### Quality of Water

Recent studies<sup>1</sup> conducted by the Public Works Department Water Division signify great concern with regard to the quality of drinking water. The results of the study indicate that on average 58% of Outer Island household tanks have tested positive

**Graph7C.1 Percentage of Households with access to safe drinking water, 1991-2007**



Source: Census 1991, 2002, HIES1994, 2004/05, DHS2007

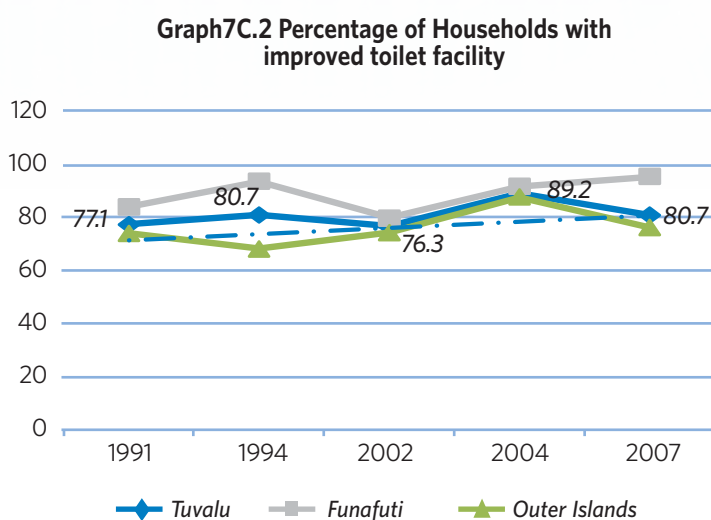
<sup>1</sup>Submitted during National MDG Summit 11th Nov, 2011 (un-published) by IWRM Project Manager (Water, Division, PWD) - note that sample is limited.



for hydrogen sulfide (H<sub>2</sub>S) and 86% of all community water cisterns. Community water tanks are more vulnerable as they are not always cleaned and maintained properly, unlike household tanks. Three of the five islands being surveyed have 100% of their community water tanks testing positive for H<sub>2</sub>S. Drinking water that tests positive for H<sub>2</sub>S indicates a small amount of sulphur due to a large number of bacteria in the water.

## Improved Sanitation

The proportion of households with improved sanitation facilities improved from 77.1% in 1991 to 80.7% in 2007 (see Graph 7C.2). This indicates that Tuvalu is on track to halve the proportion of households with unimproved sanitation facilities. While this shows general improvement, there remain serious concerns about households with no sanitation facilities. Between 1991 and 2007, an average of 18.9% of all Outer Island households had no sanitation facilities, a matter of continuing concern. Although the focus is on the Outer Islands, households on Funafuti cannot be ignored as the population is considerably more dense compared to the Outer Islands.



Source: Census 1991, 2002, HIES1994, 2004/05, DHS2007

## Challenges and Opportunities

In general, Tuvaluans have excellent access to safe drinking water and sanitation. However, there is still room for improvement. The following are some of the strategies that can be implemented or are in the process of implementation:

### 1. Institutional strengthening

Officials need to work to improve the environment by supporting the Government and Parliament in the revision and enactment of the Water Resources Act (formerly known as the Resources and Sanitation Management Bill). Cabinet should take necessary steps to ensure that the National Integrated Water Resources Plan is endorsed and for the National Water and Sanitation Committee to monitor progress. Support and endorsement of the draft Building Code so that it will be implemented, including the regulations with regard to improving piping standards, water storage and maintenance of sanitation facilities, with improvement in designs to limit contamination of soil and marine life.

### 2. Improved monitoring

Data collection and evaluation can detect where issues are, and therefore enable responsible agencies to develop strategies for improvement. It is important that there are enough personnel with tools to monitor bacteria levels in rainwater storage facilities.

### 3. Training and awareness

There appears to be limited understanding of the linkages between poor sanitation and water borne diseases, degradation of the marine and aquifer environment and the indirect and direct impacts on livelihood and food security. Practical training will not only raise skills and actions but also raise awareness.

It is important that there is strong support from the community and Non-Government Organizations in awareness and training. Health and media cannot be ignored in training and awareness.

#### **4. Improved coordination**

As several reports stated (including the National Integrated Water Resources Report - 2007), there is a complex array of agencies that each have a role in monitoring the quality of rainwater in storage facilities. However there is no proper document or policy outlining these. It is important to ensure that different Government agencies, groups, and Kaupule coordinate their activities properly to avoid duplication and overlapping responsibilities.



## Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers.

### Target Score Card

#### There is potential to achieve target

Indicators	1991	1994	2002	2004	2007	2015 Target
7D.10 Proportion of urban population living in slums	23.6	13.7	26.6	13.5	6.5	0

Sources: Housing and Population Census, HIES and DHS

#### Tracking progress

Monitoring and Evaluation Components	Assessment	
	2006 MDG Report	2010 MDG Report
Data collection capacity	fair	fair
Capacity to analyze data	weak	fair
Data continuity and quality of survey information	fair	strong
Capacity to incorporate statistical analysis into policy planning	weak	weak
Monitoring and evaluation mechanism	weak	fair



## Definitions

There is one indicator under MDG Target 7.C - Proportion of urban population living in slums.

A slum household is defined as a group of individuals living under the same roof lacking one or more of the following conditions:

- Access to improved water
- Access to improved sanitation
- Sufficient living area
- Durability of housing

Sufficient living area - if the house is shared by not more than three people (minimum of four square metres) per room.

Durability of housing - if the house is built in a non-hazardous location and has a structure permanent and adequate enough to protect its inhabitants from the extremes of climatic conditions such as rain, heat, cold and humidity.

Because of the way data are presented in census and surveys reports, progress analyses are given at the household level.

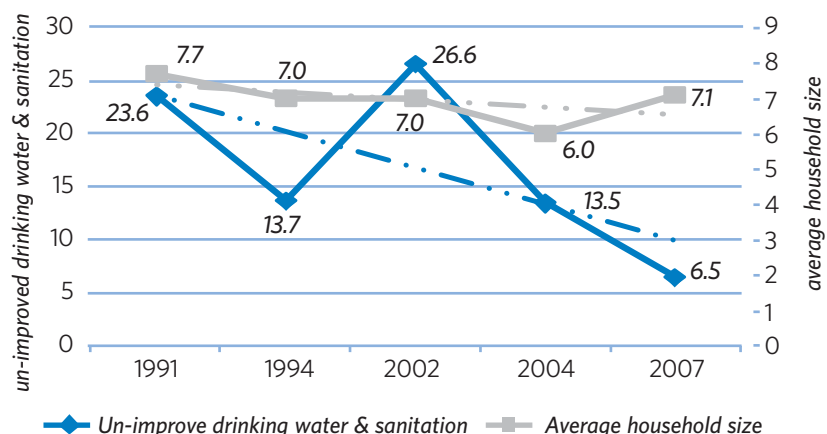
## Progress

### Urban households living in slums

There are no official records that specify the proportion of households living in slums. However, based on the previous MDG Target (Target 7C) indicators, Graph 7D.1 indicates that in general, there is a downward trend in the percentage of Funafuti households with unimproved drinking water and sanitation (living in slums as per the above definition). Comparing 1991 and 2007, there was a substantial decrease in the percentage of households defined under the MDGs as slums on Funafuti with 23.6% and 6.5%, respectively. This improvement is the result of income opportunities, growth and improvement in wages and salaries.

The average household size on Funafuti indicates that in general, over time, the proportion of households living in slums as defined above, has improved (see Graph7D.1). In 2010, the Government, under its Social Development Expenditure, approved the construction of 50 houses to rent to people to live in. This should improve average household size as more houses have become available to the public.

**Graph 7D.1 Funafuti: percentage of household with un-improved drinking water & sanitation and average household size, 1991-2007**



Source: Census 1991, 2002, HIES1994, 2004/05, DHS2007

## Challenges and Opportunities

In order to improve the lives of people living in poor standard housing on Funafuti, the following strategies are currently implemented or in the process of being developed.

### 1. Incorporated participatory approach

Slum dwellers are the only people who experience the problems and challenges they face. The best practice in finding solutions to their problems is to include them in policy and decision making.

### 2. Urban Management

As stated under Te Kakeega II, there is a need to develop an Urban Management Plan that offers land for housing. There is also a need to establish a housing authority that can handle housing problems.

Recently more emphasis has been put on conditions of houses located on borrow pits.



# GOAL 8: DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT

## Goal 8 is important to Tuvalu's achievement of MDGs

As mentioned previously in this report, Tuvalu is classified as a Least Developed Country (LDC) by the Committee for Development Policy under the United Nations Department of Economic Affairs and Social Affairs (UNDESA), mainly because of its low economic vulnerability index. Tuvalu is made up of nine island atolls, and therefore always classified as a Small Island Developing State (SIDS). Tuvalu is also regarded as one of the most remote countries in the world. Transportation and transaction costs are very high.

These factors single out that Tuvalu is a country dependent on overseas development assistance (ODA). On average, between 32 and 35 percent of Government core revenue is ODA budget support. The IMF indicated through the Tuvalu quota calculation report (January 2010) that Tuvalu is the second highest recipient of overseas development per capita in the world. Tuvalu's elevated Gross National Income (GNI) is 75% higher than its Gross Domestic Product (GDP), clearly indicating its dependency on the world economy, despite its remoteness.

Therefore it is clear that Tuvalu's achievement of Goals 1 to 7 is highly dependent on development partners' ODA commitment. This report shows that sustainability of overseas development assistance is a challenge from Goal 1 to Goal 7. Goal 8 is therefore a means to achieve the other seven goals.

## Tuvalu and its commitment to enhance aid effectiveness

The Government of Tuvalu has established a successful planning tool in the form of a Matrix to focus and intensify donor assistance, better coordinate that assistance within the framework and objectives of the Tuvalu National Strategy on Sustainable Development (Te Kakeega II) and work within the context of each donor's unique aid policies, budgets, strengths, development interest, administrative procedures, and other issues that bear on Tuvalu-donor cooperation.





In August 2009, the Government of Tuvalu and the Government of Australia signed a Partnership for Development. The main objective of the partnership agreement was to make progress towards the attainment of the Millennium Development Goals. The partnership is founded on principles of mutual respect and mutual responsibility for improved development outcomes.

Under the United Nations Assistance Framework (UNDAF), various UN agencies have developed Country Program Actions (CPAP) in consultation with host Government agencies to effectively deliver results. One of the most common areas is building capacity in various Government departments, NGOs and communities. This is one of the critical challenges mentioned throughout each of the MDG Goals in this report.

At regional level, Tuvalu has signed development partnership and Strategic Action Plans with ADB, SPC, SOPAC, FFA and SPREP and other Council of Regional Organizations (CROP) agencies. Tuvalu is also a member of the Pacific Islands Forum and therefore recognizes the Pacific Plan as a way forward to realize the "Pacific Vision". The main goal of the plan is to: Enhance and stimulate economic growth, sustainable development, good governance and security for Pacific countries through regionalism (that is, countries working together for their joint and individual benefits).

More recently in August 2009, Forum leaders including the Prime Minister of Tuvalu signed the Cairns Compact on Strengthening Development Coordination in Cairns, Australia. The key objective of the Compact was to drive more effective coordination of available development resources from Forum member countries and all development partners, centered on the aim of achieving real progress towards the Millennium Development Goals.

### Overseas Development Assurances

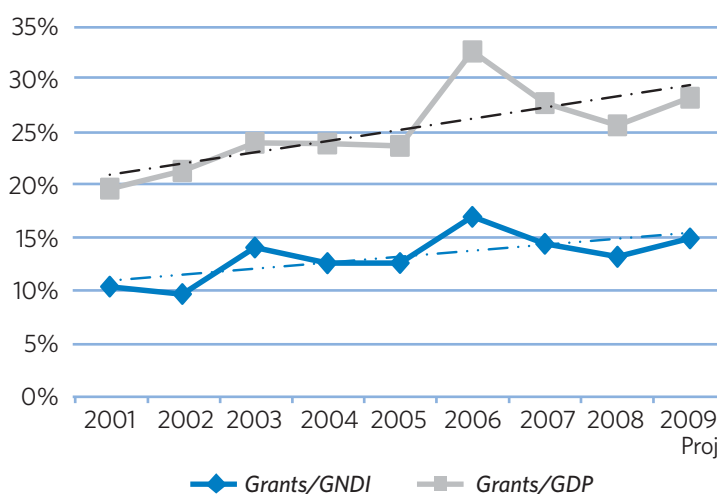
As mentioned before, the ODA per capita that Tuvalu receives is one of the highest in the world. Recent IMF

**Table 8A.1: Tuvalu main source of national income in comparison to other Pacific Island countries (latest year available)**

Country	Remittances (% of GDP)	Fishing Licenses (% of GDP)	ODA ( per capita, USD)
FSM	1.0	6.7	1,034
Palau	n.a.	0.7	1,100
RMI	0.6	5.1	879
Kiribati	6.7	42.8	285
Fiji	7.0	0.0	69
Tonga	33.6	0.1	304
Samoa	14.2	0.1	197
PNG	0.2	0.2	50
Vanuatu	1.7	0.1	251
Solomon Is.	0.0	0.1	500
<b>Tuvalu</b>	<b>7.9</b>	<b>23.8</b>	<b>1,115</b>

Source: IMF (January 2010)

**Graph 8A.1 Grants as % of GDP and GNDI**



Source: IMF Estimates (January 2010)

estimates indicate that Tuvalu receives about USD1,115 ODA per capita. Among the 10 Pacific island countries with recent available data, this is the highest (see Table 8A.1). Grants (excluding capital) as a percentage of GDP and Gross National Disposable Income (GNDI) have increased over time from 2001 to 2009 (see Graph 8A.1).

Major donors by order of highest contributions are: Japan, Republic of Taiwan (ROC), Australia, New Zealand, European Union (EU), ADB and other international and regional organizations such as UNDP, WHO, FFA, UNICEF, UNFPA, SPC and SPREP.

### Proportion of ODA to basic social services

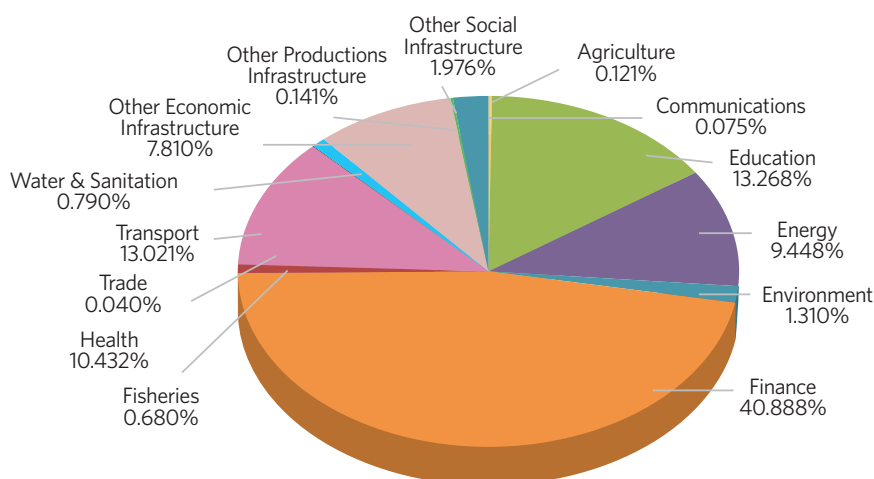
*(basic education, primary health care, nutrition, safe water and sanitation)*

Based on estimates from the Aid Unit under the Department of Planning and Budget, on average between 2001 and 2008 about 6.9% of financial grants goes to basic social services. Recent anecdotal evidence suggests that this percentage should have increased in more recent years. This is mainly due to the increase both in number and amounts of ODA in the environment sector, especially projects related water and sanitation. Donors involved in water projects include EU, AusAID and Japan. Under EDF 10th, the EU is focusing on water and sanitation for Tuvalu. In the water component, the EU works closely with Japan, AusAID, and Government implementing agencies (PWD) to reduce any parallel implementation on water related projects.

In basic education, Canada Fund and NZAID have been active in providing early childhood care education (ECCE) related supplies including funding of teachers salaries (NZAID). Most of the activities under primary health care are funded by WHO. HIV training, Health Master Plan (2008-2015), adolescent reproductive health training and lymphatic filariasis mass screening and treatment are some of the activities funded by WHO. In early 2009 and 2010 Japan built new health clinics in three of the Outer Islands with the intention of building new clinics in the remaining islands. ROC and the Government of Australia have been providing professional doctors on short term visits to supply health services that are not available in the country. The new main hospital on the capital was built with Japan ODA in 2003. Other major sectors include finance, transport and energy (see Graph 8A.2).



**Graph 8A.2 Total percentage of ODA by sector from 1991 to 2008**



Source: Tuvalu Aid Statistical Report (2001 - 2008), Department of Planning & Budget

## Market Access

Internationally, Tuvalu is not a member of the World Trade Organizations (WTO), although Tuvalu is among the African, Caribbean and Pacific (ACP) countries that signed a partnership agreement (Cotonou Agreement) with the European Union in 2000. Under the Cotonou Agreement, the European Union grants duty-free access to all imports of all products from ACP LDC member states without any quantitative restrictions, except for arms and munitions. Only imports of fresh bananas, rice and sugar were not fully liberalized. Duties on those products will be gradually reduced until duty free access is granted (Revised Cotonou Agreement June 2005).

Regionally, Tuvalu is a party to the negotiations for the Pacific island Country Trade Agreement (PICTA - not including Australia and NZ)) and the Pacific Agreement for Closer Economic Relationship (PACER - including Australia and NZ) and PACER Plus. Under PICTA, Forum member countries including Tuvalu are encouraged to gradually reduce their import duties on goods that originate from member countries. Under PACER Plus, Tuvalu will benefit from Australia and New Zealand in terms of building capacity through research, involving short and long term studies to improve trade negotiations among local trade officials.

As a result of trading under PICTA, Tuvalu's full trade liberalization presents a major fiscal as well as administrative challenge as there would be loss of revenue due to the reduction of import duties. To counter this problem, Tuvalu undertook taxation reform in 2008 and 2009. One of the reform measures was the introduction of a Tuvalu Consumption Tax (TCT) in mid 2009. This should ensure that Tuvalu's fiscal regime is not affected as a result on trading under PICTA terms and conditions.

Progress has been made in the area of trade in services or labor mobility in terms of securing new offshore employment opportunities for seaman (although the numbers are declining because of the Global Economic Crisis and alcohol problems and for workers under the Regional Seasonal Employment Scheme (RSE) initiated by the Government of New Zealand). About 100 men and women have been recruited to work in New Zealand since the scheme started in 2008. High travel costs and repatriation from New Zealand, coupled with alcohol problems while in New Zealand are some of the issues of concern with the scheme.

Donors, especially the Government of Australia, have been active in providing short courses in the area of trade with the primary aim of building local capacity. Tuvalu was part of an AusAID Pacific Training Program 2009-2010. The main objective of the training was to build capacity of Pacific Islands trade officials to negotiate trade agreements.

**Table 8A.2: Public Outstanding Debt (end December 2009)**

	AUD Million	Ratio-to-GDP
<b>External Debt</b>	<b>13.54</b>	<b>37.8</b>
Falekaupule Trust Fund (FTF)	5.12	
TMTI Original Loan (ADB)	2.74	
TMTI Supplementary Loan (ADB)	2.66	
DBT Equity Injection: EIB	0.53	
Air Fiji Loan Guarantee: Bank of Baroda, FIJI	0.42	
Air Fiji Loan Guarantee: Fiji Development Bank (original)	0.36	
Air Fiji Loan: Fiji Development Bank (in dispute)	1.70	
<b>Domestic Debt</b>	<b>4.05</b>	<b>9.8</b>
Outer Islands Suspense Account: NBT	2.05	
Air Fiji Overdraft	0.69	
NAFICOT Loan Guarantee: NBT	1.31	
<b>Gross debt</b>	<b>17.59</b>	<b>47.6</b>

*Source: Ministry of Finance, TTFAC Estimates 2010*



## Debt Sustainability

One of the strategies under the National Strategy for Sustainable Development (Te Kakeega II) is to limit external debt to no more than 60% of GDP (p.19).

There are no public debt data available prior 2005. Tuvalu Economic Report 2006 stated that the estimated public debt at the end of 2005 stood at AUD24 million, which is equivalent to 90% of GDP (pg. xvii). This is above the target of 60% set in Te Kakeega II and therefore debt level in 2005 is regarded as unsustainable. According to the IMF, public

debt including guarantees as a percentage of GDP fell to 65.8% in 2006. The level of public debt as a percentage of GDP continues to fall over time between 2006 and 2009 (see Graph 8a.3). In 2009, the Government paid some of its debt under Outer Islands Suspense Account using a grant from ADB primary to clear the specified debt.

Based on TTFAC Reports and Tuvalu Economic Report 2006, some of the major debts in 2005 are: Falekaupule Fund Loan, TMTI loan, DBT Global Loan II, NaFICOT loan and Air Fiji Loan, and Outer Islands Suspense Account.

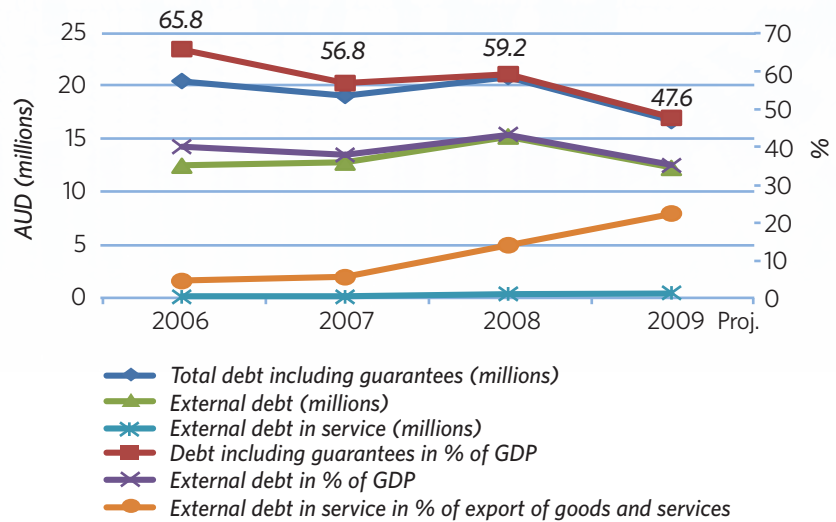
## Access to affordable essential drugs on a sustainable basis

As mention earlier in the report under Goal 4, 5 and 6, Tuvalu provides free health care services to the entire population.

Tuvalu benefits from procuring drugs regionally with Fiji, Kiribati and Nauru in large volume from pharmaceutical companies in India, Australia and New Zealand. Other drugs such as those to treat TB and HIV/AIDS antiretrovirals are provided free by WHO under the Global Drug Facility and Global Fund respectively. UNFPA has continued providing free contraceptives over the years.

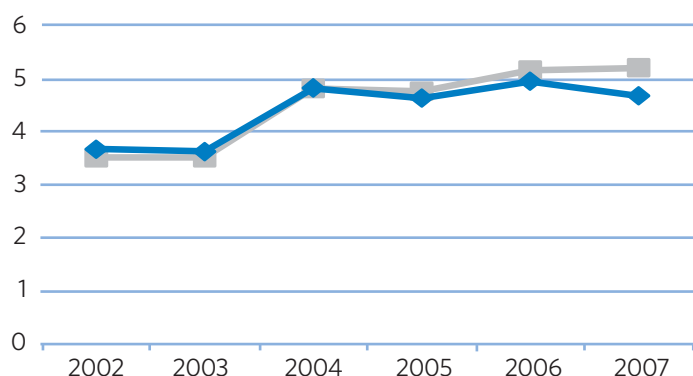
Drug supplies are provided monthly or whenever there is a shortage in the Outer Islands. Every nurse in each clinic in the Outer Islands keeps a profile on population numbers and various other indicators to make sure there are enough supplies.

Graph 8A.3 Public Debt 2006-2009



Source: IMF Article IV (January 2010)

Graph 8F.1 Telephone Users (per 100 population)



Source: Tuvalu PRISM Website, SPC

## Telephone, Cellular and Internet users

There has been growth in telephone line usage over the years since 1991. According to SPC population publications and Tuvalu PRISM website, the estimated telephone lines per 100 population was 3.79 (3.7% of population) in 1991 and in 2009 it was 4.67 (4.6% of population). In terms of households, the main capital Funafuti has the highest proportion of households with telephones compared to the Outer Islands, with 39% and 8.7% respectively.

Since the introduction of mobile services in 2003, it is estimated that in 2010 there are about 837 mobile connections (7.5% of total population) . Growth prospects for mobile use are closely linked to affordability.

Internet was introduced to Tuvalu households in 1998-1999. In 2010, according to the Tuvalu Telecommunication Company (TTC), about 43% of the population uses internet although 9% are subscribers.

Current estimates from TTC indicate that there are 24 active subscribers to Sky TV (sole TV service provider). This is about 1.1% of the population or approximately 10% of the population of the capital.

In 2011, the Government of Japan started a major project to establish a new radio station with state of the art equipment that is expected to provide clear radio signals to the people in the Outer Islands.



## Challenges and Opportunities

### ODA sustainability

As mentioned earlier in this chapter, Tuvalu is a country heavily dependent on foreign aid. The challenge for Tuvalu and its development partner is to sustain the volume of ODA over the long term. The achievement of MDG targets depends on the continuation of donor assistance. Tuvalu's main development partner countries have to ensure they reach their ODA target of 0.7% of their Gross National Income (GNI) under the Monterrey Consensus. According to the Doha Declaration for Financing Development in 2008, there has been an overall decline in ODA from developed countries between 2006 and 2007(pg.18). The other main challenge is designing economic projects that lift the poor out of poverty, and climate change adaptation. Tuvalu receives ODA subject to some conditions (tied grants) from its main development partners that undermines its capacity to take initiatives to efficiently solve its problems.



### **Improve local capacity**

Lack of capacity and staff turnover in the Aid Management Unit are reasons why monitoring and keeping track of donor driven projects progress is considered to be weak.

Development of trade officers' capacity to negotiate trade agreements is crucial and needs to be supported. Currently there are two trade officers but one is on long term study, leaving the Department of Trade with only one, a situation that needs to be better resourced and supported. Proper training of trade officers in international trade and finance should not be ignored.

### **Improve debt process and management**

Having a weak economy poses high risks of having an 'unsustainable level of debt'. There is opportunity for the Government to centralize all its debt under one Ministry and agency. With one agency, a clear register of all loans and guarantees could be maintained at all times.

### **Information technology**

Support should be sought from development partners to upgrade information technology and universalize internet, especially in the Outer Islands. Related priorities under Te Kakeega II include improving ICT services and extending ICT service nationwide, especially to schools, clinics and Kaupule. Government should encourage foreign direct investment in high technology by creating an enabling environment for competition.



## The Way Forward

The 2nd MDG National Report process commenced at the time of Parliamentary elections and formation of Government in late 2010. With the new Government formed, Tuvalu is entering a new era of opportunities to share progress and of challenges for the Government to move forward. With ten years down and just five years to go before development targets are due, Tuvalu must do better to fulfill its promise made under the Millennium Declaration ten years ago. The main ingredient for Tuvalu to be a prosperous nation is for the Government to be accountable to its people. Decades of experience conclude that good governance is the key to success and therefore to reaching our MDGs.

The main purpose of this report is to fast track achieving the MDGs for Tuvalu. The report indicates progress, designates challenges and signals opportunities for every Tuvaluan to take forward. The report contains various strategies and priorities under the Tuvalu main development plan (Te Kakeega II) and other sector plans that relate to the achievements of MDGs. Therefore it cannot be viewed as different document, but rather as a support for, and interpretation of other national development documents. Government, in cooperation with development partners and NGOs, aims to adopt and refine its strategies under these respective strategic plans to address gaps and weak areas under each target and goal as mention in the report. In addition, development partners should comprehend clearly that Tuvalu development is not to be dictated from foreign capitals. Everyone including Government departments, Island Kaupule, NGOs and local communities, as well as development partners, needs a clear understanding that they have a mutual responsibility to achieve the MDGs.

As the responsibility for human development shifts to Island communities, the effectiveness of decentralization will be vital to achieving and maintaining service quality. This MDG report and Te Kakeega II should act as a framework for Island Falekaupule to refine their development outcomes. It is important to ensure that not only Island Kaupule but also island communities actively engage and contribute to the formulation of their Island Falekaupule development plans. Sustainability of the MDGs also depends on local ownership at island community level.

Developing effective policies and making sound policy decisions require quality data that are continuously and frequently updated. Experience indicates the link between the two is always broken. As indicated in this report, Tuvalu has limited capacity in data collection and analysis. With assistance from development partner, Tuvalu will need to invest to overcome these constraints. Principle 8 of the UN Fundamental Principles of Official Statistics indicates that the coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system.

The National MDG Taskforce must take the lead in advocacy and ensuring that Tuvalu meets the MDGs by 2015. Their mission is clear under their Terms of Reference (approved by Cabinet): To oversee the successful attainment and monitoring of the MDGs in Tuvalu; and to advocate and promote the MDGs.

As mention earlier in this chapter, Tuvalu is a signatory to the Millennium Declaration: It has to fulfill its promise by 2015.

# Tuvalu National Summit on Millennium Development Goals (MDGs)

Funafuti, 11th November 2010

## Keeping the Promise 2015: together as one, we can achieve the Millennium Development Goals

We, the representatives at the Tuvalu National Summit on Millennium Development Goals (MDG) under the overarching Tuvalu Islands Leaders Summit (TILA) comprising of all island Chiefs, Presidents of Island Kaupule, women and youth leaders, representatives of the civil society, different church denominations and private sector, Government ministries and departments adopt the following outcome document for the Summit;

### Summit Outcome Document

#### Summary

1. **We** representatives at the Tuvalu National Summit on Millennium Development Goals welcome the progress of Tuvalu towards the attainment of the Millennium Development Goals. Recalling our commitment to achieving sustainable development in line with United Nations Millennium Development Goals as in the Malefatuga Declaration, we **reaffirm** our resolve to '**work together as one to achieve the targets of the Millennium Development Goals by 2015**'.
2. **We reiterate** our deep concern as stated in the Malefatuga Declaration of the critical challenges facing the people of Tuvalu as caused by the lack of resources and opportunities, isolation and vulnerability, and compounded by the effects of climate change and sea level rise.
3. **We are deeply concern** about the poverty incidence level and for the fact that Tuvalu may not reach its poverty MDG targets by 2015. **We are also deeply** concerned at the multiple and interrelated crises including the financial and economic crisis, volatile energy and food prices and the ongoing concern of food security and loss of biodiversity because of sea level rise and climate change, all of which have affected and reversed Tuvalu development gains.
4. **We recognize** the importance of development partners in realizing our Millennium Development Goals by 2015 and addressing gaps and weak areas in need of assistance. **We also acknowledge** that global development partners have **reaffirmed** their development assistance in the Monterrey Consensus of the International Conference on Financing for Development, the Plan of Implementation of the World Summit on Sustainable Development, the 2005 World Summit Outcome, Doha Declaration on Financing for Development and the subsequent action on the International Conference on Financing for Development to Review the implementation of the Monterrey Consensus.
5. **We are committed** to make every effort with renewed assistance from development partners to achieve the Millennium Development Goals through **Te Kakeega II** strategies and priority areas, actions under the action agenda of this outcome document and related policies addressing issues of gender, population, health, education, environment and development.
6. **We call upon** development partners and institutions to acknowledge that national ownership is critically important in the Tuvalu development process. **We acknowledge** that development efforts at the national level need to be supported by an enabling national and international environment that complements all key national strategies stipulated under **Te Kakeega II** and actions under the **action agenda** as part of this outcome document.
7. **We seek** civil society organizations, non-government organizations, different associations and groups, different communities at different island levels, the private sector, different church denominations and other relevant key stakeholders at local,

regional and global levels to enhance their role in national development efforts as well as the Government of Tuvalu to recognize their contributions to the attainment of the Millennium Development Goals by 2015.

8. **We acknowledge** the role of the Tuvalu national parliament in advancing the achievement of the Millennium Development Goals.
9. **We express** our sincere appreciation to the Government of Tuvalu for organizing the summit and the UNDP Fiji Multi-Country Office for providing financial resources and technical support.

### **Stories of progress, challenges and opportunities**

10. **We recognize** that Tuvalu is a major donor recipient in the Pacific and globally and that developed countries play an important role and have made significant efforts towards the attainment of the Millennium Development Goals by assisting Tuvalu. As presented before us in this National Summit, successes have been achieved in child health, reducing maternal deaths, expanding access to clean water, free access to HIV/AIDS prevention, treatment and care, controlling tuberculosis and diabetes mainly due to ongoing development partners' financial and technical support.
11. **We acknowledge and are deeply concern** that much more is needed to be done in achieving the Millennium Development Goals by 2015. As presented before us and **acknowledge** by us, although improving, there has been negative growth rate in productive employment and Tuvalu may not reach target of full and productive employment by 2015. Progress has been made in gender equality and women's empowerment, but much more support is needed to have at least a woman's voice in Parliament. Because of the global economic crisis, hikes in food and energy costs, coupled with ongoing concern about food security due to sea level rise and climate change, progress on some of the Millennium Development Goals are fragile and must be sustained to avoid going backward.
12. **We recognize** that with increased political commitment, successful policies and approaches in the implementation and achievement of the Millennium Development Goals could be scaled up for accelerating progress, including by:
  - a. Strengthening national ownership and leadership of development strategies;
  - b. Adopting forward-looking macroeconomic policies that promote sustainable development and lead to sustained, inclusive and equitable growth and increase productive employment opportunities;
  - c. Promoting national food security strategies that strengthen support from island communities and therefore contribute to alleviating hardship;
  - d. Supporting participatory, island community-led strategies aligned with the *Te Kakeega II* priorities and strategies;
  - e. Improving capacity to deliver quality services equitably to all islands;
  - f. Ensuring full participation of all segments of the society including vulnerable groups – disabled and others, in decision making processes;
  - g. Working towards transparent and accountable systems of governance at all levels including island community groups, at island and national levels;
  - h. Promoting effective public-private partnerships;
  - i. Strengthening statistical capacity to produce timely, reliable, disaggregated data for better policy decisions and evaluations, with improved formulation programs,
13. **We recognize and agree** that climate change and sea level rise pose serious risks and challenges to Tuvalu. We urge the international community to take note of our challenges and commit to addressing climate in accordance with and within the principles and provisions of the United Nations Framework Convention on Climate Change. Addressing climate change will be a key factor in safeguarding and advancing progress towards achieving the Millennium Development Goals.
14. **We also recognize** that policies and actions must focus on those in the most vulnerable situations, including persons with disabilities, so that they can also benefit from the progress towards the Millennium Development Goals. In this respect, there is a need to provide a more equitable access to economic opportunities and social services.



15. **We call** on our development partners to take note of Tuvalu's unique challenges as a Least Developed Country and a Small Island State and to take action to address these challenges.

### **The way forward to 2015: an action agenda for achieving the Millennium Development Goals**

16. **We resolve** to promote and strengthen national ownership and leadership of development as a key determinant of progress in achieving the Millennium Development Goals.
17. **We encourage** all key stakeholders to continue to design, implement, and monitor development strategies tailored to their specific situations, including through broad consultations and participation at all levels of the society as appropriate to each island context. **We also call** on our development partners to support the design and implementation of these strategies if the requests arise.
18. **We call** for the expeditious delivery of commitments already made by developed countries in the context of the Monterrey Consensus and the Doha Declarations.
19. **We acknowledge** that the Tuvalu cultural dimension is a key value underlying the Tuvalu Constitution and is therefore important for achieving development. We encourage all island communities to cooperate in the cultural field, aiming at achieving sustainable development.
20. **We welcome** the efforts to improve the quality of official development assistance (ODA) and to increase its development impacts based on principles of the 2005 Paris Declaration on Aid Effectiveness and the 2008 Accra Agenda for Action, including fundamental principles of national ownership, alignment, harmonization, and management for results.
21. **We resolve** to work together and strengthen partnerships to achieve the Millennium Development Goals. **We recognize** that the private sector and non-state actors including civil society organizations play a vital role in Tuvalu development.

### **Millennium Development Goal 1: Eradicate extreme poverty and hunger**

22. **We acknowledge** that there is no evidence of extreme poverty and hunger in Tuvalu. However, we acknowledge that there is 'hardship' or 'poverty of opportunities' – where people having limited financial resources to have a freedom of choice, to cover education related expenditures and opportunity to realize their aspirations.
23. **We also acknowledge** the fact that, given the current hardship (poverty) incidence levels in 2010 indicated in the 2010 Household Income and Expenditure Survey (HIES) in comparison to previous surveys (HIES) in 1994 and 2004/2005, Tuvalu may not reach its target of halving people below Tuvalu's defined poverty line.
24. Because of this, **we will commit** ourselves to improving and accelerating progress in order for Tuvalu to achieve Millennium Development Goal 1, including through:
  - a. Addressing the root causes of hardship
  - b. Adopting forward-looking economic policies that lead to sustained, inclusive and equitable economic growth and sustainable development and which increase employment opportunities
  - c. Increase efforts at all levels to mitigate adverse social and economic impacts, particularly as a result of the multiple economic, food and energy crises
  - d. Pursuing job-intensive, sustained, inclusive and equitable economic growth and sustainable development to promote full and productive employment and decent work for all, including women, young people, people with disabilities and the Outer Islands population, and promoting small and medium sized businesses through initiatives such as skills enhancement and technical training programmes, vocational training and entrepreneurial skills development
  - e. Supporting social protection that provides access to essential social services consistent with *Te Kakeega II*
  - f. Support small scale gardening at home to address issues of food security and food nutrition. Support large scale gardening in Island Kaupule and schools to meet local demand and raise health standards. Seek development

- partners' assistance to address issues of food security
- g. Establish nutritional surveys and set up a database in all health clinics and the main hospital to monitor under-five underweight
- h. Addressing environmental challenges such as water quality, storage and conservation, sea level rise, land and soil degradation, drought and unpredictable weather patterns and loss of biodiversity
- i. Establish a Population Policy and other policies including strengthening of the Social Policy that addresses different issues as a result of urban drift
- j. Make special efforts to meet basic needs of children, older persons and persons with disabilities, as well those living in vulnerable situations, through targeted and effective programming.

## **Millennium Development Goal 2: Achieving universal access to primary education**

25. **We welcome** the facts that Tuvalu's achievement in accessing primary education and literacy rates is high in comparison to other countries in the Pacific region and in the global world, and that Tuvalu is likely to meet the target under Millennium Development Goal 2.
26. **We acknowledge** that the main concern is quality of education. As presented to us, national year eight examination passing rates are low although improving. This low passing rate indicates weakness in critical thinking, creativity, reading and writing which are the basis for critical learning.
27. **We commit** ourselves to maintain Tuvalu's achievements under Millennium Development Goal. To maintain them, we have to address our challenges for improved strategies including:
  - a. Realizing the right of everyone to education at all levels of society
  - b. Removing barriers, outside and within the education systems, so as to provide equitable educational and learning opportunities for all children, since knowledge and education are key factors for sustained, inclusive and equitable growth and for the achievements of the Millennium Development Goals
  - c. Addressing the root causes of failures, drop-outs and push-outs and enhancing retention and participation of children by implementing strategies under the Tuvalu Education Strategic Plan. Additional efforts should be undertaken to work across all sectors to reduce drop-outs, push-outs and repetitions, especially for poor and vulnerable people
  - d. Ensuring quality of education and progression through the school system. This requires increasing the number of teachers, improving their quality through comprehensive policies that address issues of training, retention through salary review, professional development, evaluation, employment and teaching conditions as well as status of teachers: increasing national capacity and building classrooms, improving teaching materials, the quality of the curriculum and harnessing the capabilities of information and communications technology (ICT) now internet has become available to all outer islands.
  - e. Strengthening the sustainability and predictability of funding for the national education system by ensuring adequate national budgets to, inter alia, address infrastructural, human resources, financial and administrative constraints. These systems should be supported by adequate and predictable development assistance and international cooperation for education.

## **Millennium Development Goal 3: Promoting gender equality and empowerment of women**

28. **We welcome** Tuvalu's significant progress towards achievement of gender equality in education and employment and the great potential for Tuvalu to achieve Millennium Development Goal 3.
29. **We acknowledge** that despite these achievements there remains gaps for women in decision making at all levels of society and because of this, the Tuvalu gender development index (GDI) rank in the Pacific region is below half way.
30. **We also acknowledge** that the women's overarching council (Tuvalu National Council of Women) has formulated a strategic plan to develop women in eight areas of concern in institutional strengthening, women and health, women and law and improved economic opportunities. An action plan was developed, but made minimal progress due to lack of funds. In addition, there are no opportunities for women to work abroad on foreign vessels as seafarers because these opportunities are only available for men through the Tuvalu Maritime Training Institute (TMTI).

31. To address the above challenges, **we commit ourselves** to further improve and accelerate progress to achieve Millennium Development Goal 3, including through:
  - a. Empowering women, in particular women in vulnerable groups, through inter alia, social and economic policies that guarantee them full and equal access to all levels of quality education and training and vocational training, including technical, managerial, and entrepreneurial training
  - b. Ensuring that women benefit from policy measures to generate full and productive employment and decent work for all
  - c. Taking action to improve and enhance the numbers and active participation of women in all political and economic decision-making processes, including by investing in women's leadership in community decision-making structures and processes, encouraging appropriate legislative action and creating an even playing field for men and women in political and Government institutions
  - d. Strengthening national laws, policies and programmes to enhance accountability and raise awareness, prevent and combat all forms of violence against women and girls which undermine their human rights, and to ensure that women have access to justice and protection, and that all perpetrators of such violence are duly investigated, prosecuted and punished in order to end impunity, in conformity with national legislations and international human rights law
  - e. Improving national-level capacity to monitor and report on progress, gaps, and strategies through better generation and use of sex, place and age-disaggregated data, also with the support of development partners
  - f. Enhancing the impact of development assistance in advancing gender equality and empowerment of women and girls through targeted activities including capacity building, as well as through gender mainstreaming and improved dialogue between donors and partners, involving, as appropriate, civil society organizations and the private sector, with view to ensuring adequate funding
  - g. Facilitating access by women to affordable microfinance, in particular microcredit, which can contribute to poverty (hardship) alleviation, gender equality and the empowerment of women
  - h. Promoting women's equal access to adequate housing, land and other rights.

#### **Millennium Development Goal 4: Reducing child mortality**

32. **We welcome** the fact that Tuvalu is on track to meet target of reducing by two thirds child mortality by 2015.
33. **We acknowledge** that many of the immunization programmes are either co-funded or fully funded by development partners and this signifies the main challenge of funding sustainability. We also acknowledge there are no doctors in the Outer Islands to detect and diagnose diseases to which children are most vulnerable.
34. To address the above challenges, we commit ourselves to further improve and accelerate progress to achieve Millennium Development Goal 4, including through:
  - a. Scaling up of efforts to achieve integrated management of childhood illness, particularly actions to address and prevent the main cause of children mortality, including new born and infant mortality, these being , inter alia, pneumonia, diarrhea and malnutrition, which can be achieved by developing, implementing and evaluating appropriate strategies under the Health Master Plan (2009-2013) and programmes for child survival, preventive pre-natal, para-natal and post -natal measures, vaccinations and immunizations and working in cooperation with island communities and civil society organizations.
  - b. Development partners to sustain their assistance in the long term to prevent measles, polio, tuberculosis and tetanus.
  - c. Taking action to improve child nutrition through an integrated package of essential interventions and services, including, in particular, access to nutritious food, appropriate supplements, prevention and early management of diarrheal diseases and information and support for exclusive breastfeeding and for the treatment of severe acute malnutrition.
  - d. Scaling up of efforts, including awareness programmes, to address the critical impact of increasing access to safe drinking water, sanitation coverage and hygienic care, including hand washing with soap, on reducing the death rate among children as a result of diarrhea.
  - e. Working to prevent mother-to-child transmission of HIV by providing extended and sustainable coverage and improved quality services.



### **Millennium Development Goal 5: Improve maternal health.**

35. *We acknowledge* the fact that maternal deaths are not common in Tuvalu, and combined with the fact that nearly all births take place in hospital and health clinics, Tuvalu is already on target to achieve Millennium Development Goal 5.
36. *We also acknowledge* that the main challenge remains in the Outer Islands where there are limited health personnel (doctors) to detect and diagnose diseases when birth complications arise.
37. To address our challenges we commit to further improve weak areas, including through:
  - a. Building health personnel capacity to diagnose early maternal birth complications
  - b. Building on effective, multisectoral and integrated approaches, we emphasize the need for the provision of access to reproductive health by 2015, including integrating family planning and health care services in island strategic plans, with linkages to Te Kakeega II.
  - c. Taking action at all levels to address the interlinked root causes of maternal mortality and morbidity such as domestic violence and lack of access to appropriate health services
  - d. Ensuring that all women, men and young people have information about, access to and choice of the widest possible range of safe, effective, affordable and acceptable methods of family planning.
  - e. Expanding formal and informal training at island level in reproductive health care and family planning, including counseling.

### **Millennium Development Goal 6: Combat HIV/AIDS, malaria and other diseases**

38. We acknowledge that given Tuvalu's small population, HIV/AIDS prevalence rates are very high, even though number of confirmed cases is low. We also acknowledge that cardiac disease and diabetes pose considerable health problems including economic and social problems. Tuvalu is on target to reduce tuberculosis incidence and the prevalence rate. To summarize, we acknowledge that Tuvalu has potential to meet targets under Millennium Development Goal 6.
39. We also acknowledge that the main challenges inter alia are limited choice of food, nutritious food and lack of exercises. We are deeply concerned about HIV/AIDS and STIs and their grave potential risk to our seaman, students, frequent and overseas travelers and youth, all of whom are central elements in driving the economy forward.
40. To address our challenges and our concerns, we commit ourselves to accelerating progress in order to achieve Millennium Development Goal 6, including through:
  - a. Significantly intensifying prevention efforts and increasing access to treatment by scaling strategically aligned programmes aimed at reducing the vulnerability of persons more likely to be infected with HIV
  - b. Taking into account local circumstances, ethics and respect for cultural values in prevention programmes
  - c. Developing and supporting the effort of the Tuvalu National AIDS Committee and improving a national network of sound and workable institutions and multisectoral preventions, treatment, care and support strategies, addressing the stigmatization of and discrimination against people living with HIV and promoting their social integration, rehabilitation and greater involvement in HIV/AIDS response, and strengthening efforts to eliminate mother-to-child transmission
  - d. Continuing to work together with development partners to plan and implement long-term sustainability of funding
  - e. Undertaking concerted action and a coordinated response from island community level to national level to adequately address challenges posed by non-communicable diseases, namely cardiovascular and diabetes.

### **Millennium Development Goal 7: Environment sustainability**

41. *We acknowledge* that Tuvalu is on track and making good progress to ensure environment sustainability and a prosperous environment for future generations. We appreciate the effort made to air our environmental concerns, particularly on climate change and sea level rise, to the world through global summits and international conferences. We also appreciate our effort to encourage traditional marine and terrestrial resource management through protected areas.

42. **We acknowledge** the main challenges of lack of capacity and Government funding to address issues related to environment, climate change and sea level rise. We are deeply concerned about overfishing in our Economic Exclusive Zone (EEZ), climate change and sea level rise impact which will have an impact on our progress in other Millennium Development Goals, and rising population density on Funafuti which contributes to, among other challenges, social tension, land disputes in the capital, and waste management. We welcome our development partners' efforts in supporting our monitoring and patrolling of illegal fishing in our EEZ .
43. To address our challenges we commit to further improve weak areas, including through:
- a. Pursuing environmental sustainability through nationally owned comprehensive and coherent planning frameworks and the adoption of national legislation, in accordance with Tuvalu circumstances and the appropriate implementing capacity
  - b. Seeking donor support for building capacity and providing financial resources
  - c. Strengthening political commitment and action at all levels to effectively implement the global objectives on environment and development of a comprehensive and more effective approach to financing relevant stakeholders, promoting good governance at island and national level, and enhancing cooperation to address the threats of dishonest activities.
  - d. Implementing environment impact assessment (EIA) policies, enhancing sectoral and cross-sectoral integration (mainstreaming) of biodiversity considerations with the objectives and targets of the Convention on Biological Diversity and addressing implementation gaps, where appropriate, including through the fulfillment of commitments to significantly reduce the rate of loss of biodiversity, including through promotion of both marine and terrestrial protected areas, improving legislation to address overfishing in the Tuvalu EEZ and to get best value of money from fishing licenses, and preserving and maintaining knowledge and practices of local communities
  - e. Supporting the implementation of national policies and strategies to combine, as appropriate, the increased use of new and renewable energy sources, more efficient use of energy, and promoting access to modern, reliable, affordable, and sustainable services with assistance from development partners
  - f. Continuing to call the international community to take urgent global action to address the issue of climate change in line with the United Nations Framework Convention on Climate Change
  - g. Continuing to increase sustainable access to safe drinking water and basic sanitation through prioritizing integrated water and sanitation strategies, which include provision of water tanks and promoting integrated water management and storage at island and national levels, and planning and addressing gaps and weak areas in tracking and monitoring of water quality
  - h. Improving integrated waste management systems, in partnership with all key stakeholders including island communities, Government and development partners and enforcing waste management legislations
  - i. Taking measures to ensure the sustainable management of marine biodiversity and ecosystems, including fish stocks, which contribute to food security, including through ecosystems approaches to ocean management, and to address the adverse effects of climate change on the marine environment and marine biodiversity
  - j. Fostering a greater level of coordination among local and national institutions responsible for economic and social development and environment protection, particularly with respect to the promotion of sustainable development.

### **Millennium Development Goal 8: Develop a Global Partnership for Development**

44. **We acknowledge** that Tuvalu is making good progress and the potential to achieve targets under Millennium Development Goal 8.
45. **We also acknowledge** that we have the following challenges and constraints, including:
- a. Isolation making access to major international markets expensive, with a low absorptive capacity for major investments and lack of capacity to negotiate trade agreements
  - b. Lack of capacity in overseas development assistance (ODA) coordination, monitoring and evaluation
  - c. Extremely small land area which is poor for agricultural large scale production and in minerals (limited natural resource base)
  - d. Widely scattered and sparsely populated island geography

- e. Small domestic market with little potential for economies of scale and limited opportunities
  - f. Lack of capacity to monitor public debt levels
  - g. High cost for information communication technology (ICT) and monopoly services in communications
  - h. Donor long term sustainability for funding of expensive pharmaceutical drugs and in other areas.
46. To address our challenges we commit to further improve by working together with development partners to address our challenges and constraints, including through
- a. Ensuring donor support to deliver and fully implement strategies and actions as per under each Te Kakeega II strategic area (and Te Kakeega II Matrix) and each Millennium Development Goal (as action agenda)
  - b. Improving level of capacity to negotiate trade agreements and to take part in international trade agreements (exposure)
  - c. Further seeking donor support on aid for trade to address issues inter alia of trade capacity and to increase trade opportunities
  - d. Improving capacity in coordination, monitoring and evaluation of ODA
  - e. Seeking donor support and build capacity to address issues related to food security
  - f. Improve capacity in monitoring of public debt levels
  - g. Improving trade in services and ensuring a sound development of skills
  - h. Promoting using of ICT in outer islands schools, in homes and businesses.

### **The way forward in achieving Millennium Development Goals through Good Governance**

47. **We acknowledge** that good governance is the key to moving forward in achieving the Millennium Development Goals. The main ingredient for success, including in the Millennium Development Goals and Te Kakeega II, is for the Government to be accountable to its people.

The MDG Summit Outcome Document was endorsed and signed by Hon. Willy Telavi, TILA Chairman (MP Nanumea); Mr. Kalotu Tuia (Nanumea Island Chief), Mr. Setefano Tausi (Nanumaga Island Chief), Mr. Maeaga Seluselu (Niutao Island Chief), Mr. Moenoa Mamoe (Nui Island Chief), Mr. Londoni Panapa (Vaitupu Island Chief), Mr. Penima Faapaologa (Nukufetau Island Chief), Mr. Mesako Usufono (Funafuti Island Chief), Mr. Aifou Tafia (Nukulaelae Island Chief).



# Tuvalu National MDG Taskforce

**The National MDG Taskforce was formed by Cabinet Ministers in 2004.**

**Two principal tasks of the MDG Taskforce are to:**

- A. Oversee the successful attainment and monitoring of the MDGs in Tuvalu
- B. Coordinate and prepare Tuvalu's accession towards the US Millennium Challenge Account (MCA) and coordinate Tuvalu's project submissions to the MCA once Tuvalu has qualified for such assistance

**Major tasks of the MDG Taskforce are to:**

- A. Review the relevance and applicability of MDGs to Tuvalu and, where necessary establish specific measurable targets and indicators and timelines that Tuvalu should aim to accomplish in order to meet those overall MDGs.
- B. On the basis of the above targets and indicators, to review and evaluate how Tuvalu has measured up against those targets and indicators.
- C. In reviewing Tuvalu performance against the achievement of the MDGs targets and indicators, special attention needs to be noted regarding any constraints faced and possible remedial action to be pursued in order that Tuvalu fully attains those overall MDGs targets and indicators.
- D. On the basis of above review, to prepare a Tuvalu National Report that contains specifications of measurable MDGs targets and indicators, an assessment of how Tuvalu has performed against those targets and indicators, and constraints and remedial action, with any recommendation for further action required in the achievement of those overall MDGs targets and indicators. The format for the report needs to take into account the UN standard reporting requirements and needs to be ready before the end of 2004.
- E. Inform Government on status of progress made on the MDGs through the Tuvalu National Report.
- F. Ensure and monitor the integration of MDGs into the National Development Strategy.
- G. Advocate and promote the MDGs - their relevance and importance to Tuvalu.
- H. Coordinate and prepare Tuvalu submissions towards the US Millennium Challenge Account (MCA) through gathering and compiling of the relevant information required to satisfy the eligibility requirements of MCA - candidate countries.
- I. Once Tuvalu qualifies for MCA assistance, the Task Force shall be responsible for coordinating appropriate project proposals that meet the criteria of the MCA. Those project proposals, however, will need to be vetted and approved by the Government of Tuvalu through the normal Government project cycle channels before they are submitted to the Millennium Challenge Account (MCC).

**Members of the National MDG Taskforce**

- A. Department of Planning and Budget, Ministry of Finance and Economic Development
  - a. Mr. Letasi Iulai, Director : Chairman
  - b. Mr. Stephen Boland, Budget Management Specialist: Alternate Chairman
  - c. Ms. Lototasi. Moriako, Senior Aid Adviser
  - d. Ms. Litia Mawi, UNV
  - e. Mr. Niuatui I Niuatui, MDG Project Manager – Secretariat
- B. Department of Education, Ministry of Education, Youth and Sports
  - a. Ms. Katalina Taloka, Director
  - b. Mr. Michael Noa, Senior Education Officer: Alternate Member

- C. Department of Health, Ministry of Health
  - a. Dr. Stephen Mafoa Kaimoko Homasi, Director
  - b. Dr. Nese Ituaso Conway, Chief Public Health Officer: Alternate Member
- D. Department of Environment, Ministry of Foreign Affairs, Trade, Tourism, Environment and Labour
  - a. Mr. Mataio Tekinene, Director
  - b. Ms. Pepetua Latasi, Environment Officer: Alternate Member
- E. Department of Rural Development, Ministry of Home Affairs
  - a. Mr. Lopati Samasoni, Director
  - b. Mr. Malofou Auina, Local Development Officer: Alternate Member
- F. Central Statistics Division, Ministry of Finance and Economic Development
  - a. Mr. Semu Malona, Government Statistician
  - b. Ms. Grace Alapati, Statistical Officer: Alternate Member
- G. Foreign Affairs, Ministry of Foreign Affairs, Trade, Tourism, Environment and Labour
  - a. Ms. Moe Saitala, Multilateral Officer
- H. Department of Energy, Ministry of Works, Water and Energy.
  - a. Mr. Molipi Tausi, Energy Planner
- I. Department of Women, Ministry of Home Affairs
  - a. Ms. Saini Simona, Director
  - b. Ms. Lupe Tavita, Research Officer: Alternate Member
  - c. Ms. Asita Moloti, Project & Monitoring Officer: Alternate Member
- J. Tuvalu National Council of Women (TNCW)
  - a. Ms. Pulafagu Toafa, Coordinator
- K. Department of Youth, Ministry of Education, Youth and Sports
  - a. Mr. Petueli Noa, Youth Officer
  - b. Mr. Falaoa Sione, Acting Youth Officer: Alternate Member
- L. Department of Community Affairs, Ministry of Home Affairs
  - a. Ms. Bateteba A Esela, Social Analyst
- M. Tuvalu Association for Non Government Organizations (TANGO)
  - a. Ms. Annie Homasi, Coordinator
- N. Tuvalu Family Health Association (TuFHA)
  - a. Ms. Emily Kopke, Coordinator
  - b. Mr. Lono Leneuoti, Programme Officer: Alternate Member
- O. UN Joint In-country Office
  - a. Ms. Esita Morikao, UN Country Development Manager
- P. Department of Media
  - a. Ms. Melali Taape, Director
  - b. Mr. Stanley Manao, Chief Technician: Alternate Member

## References and Websites

- ADB.2002. 'Tuvalu 2002 Economic and Public Sector Review', Published by ADB in consultation with the Government of Tuvalu.
- ADB.2006. 'Tuvalu 2006 Economic Report', Published by ADB in consultation with the Government of Tuvalu.
- Ampelosa and Pisi Seleganiu. 2008. 'Water Monitoring and Assessment for Nanumea, Nanumaga, Niutao', Public Works Department, Government of Tuvalu
- Colette Mortreux and John Barnett. 2008. 'Climate Change, migration and adaptation in Funafuti, Tuvalu', Abstract from the Global Environment Change Journal - ELSERVIER
- Commission of AIDS in the Pacific. 2009. 'Turning the Tide - An Open Strategy for a Response to AIDS in the Pacific', Presented to UN Secretary General on 2nd December 2009
- Dr Stephen Homasi. 2007. 'HIV and Other STIs in Tuvalu'. Research Paper for the Degree of Master of Medicine, University of Sydney.
- EU. 2002. 'Tuvalu Country Strategy Paper and National Indicative Plan for the period 2002-2007', CSP/TV/CSPstedfcomm.doc
- EU. 2007. 'Tuvalu Country Strategy Paper and National Indicative Plan for the period 2008-2015', CSP/TV/CSPstedfcomm.doc
- FFA. 2010. 'Draft Tuvalu Tuna Management and Development Plan', prepared by the Government of Tuvalu with technical assistance from FFA.
- FFA. 2010. 'Tuna Economic Indicators Update', download from website
- Geoscience Australia. 2009. 'South Pacific Sea Level and Climate Monitoring Project - Survey Report Tuvalu', Geocat # 69407
- Government of Tuvalu. 1992. '1991 Population Census', Central Statistics Division. Volume 1
- Government of Tuvalu. 1992. '1991 Population Census', Central Statistics Division. Volume 2
- Government of Tuvalu. 1999. 'Tuvalu Initial National Communication 1999', Tuvalu National Report to the UN Framework Convention on Climate Change.
- Government of Tuvalu. 2002. '2002 Population Census', Central Statistics Division. Volume 1
- Government of Tuvalu. 2002. '2002 Population Census', Central Statistics Division. Volume 2
- Government of Tuvalu. 2005. 'Te Kakeega II: National Strategies for Sustainable Development, 2005-2015', Tuvalu National Development Plan for 2005-2015.
- Government of Tuvalu.2006. ' Tuvalu Millennium Development Goals National Report 2006'. Ministry of Finance, Economic Planning and Industries.
- Government of Tuvalu. 2006. 'Household Income and Expenditure Survey 2004/05', Central Statistics Division
- Government of Tuvalu. 2006. 'National Action Plan to Combat Land Degradation and Drought', Department of Environment
- Government of Tuvalu. 2006. 'Pacific Country Report - Sea Level and Climate: their current state', SOPAC
- Government of Tuvalu. 2006. 'Social Data Report 2006'. Department of Community Affairs.
- Government of Tuvalu. 2008. '2008 First Half of the Year Report of Tuvalu Trust Fund Advisory Committee 09-19 April', TTFAC Secretariat.
- Government of Tuvalu. 2008. 'National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants',



Tuvalu POPs Project, Department of Environment

Government of Tuvalu. 2008. 'UNGASS Country Report for the period 2006-2007', Country Report to UNGASS.

Government of Tuvalu. 2009. 'Tuvalu Demographic and Health Survey 2007'. Central Statistics Division, SPC and Macro International Inc.

Government of Tuvalu. 2010. '2010 Second Half of the Year Report of the Tuvalu Trust Fund Advisory Committee', TTFAC Secretariat

Government of Tuvalu. 2010. 'National Compliance Action Strategy to implement the Montreal Protocol on substances that deplete the ozone layer', Department of Environment with technical assistance from SPREP.

Government of Tuvalu. 2010. 'UNGASS Country Report for the period 2008-2009', Country Report to UNGASS.

Government of Tuvalu. April 2000. 'First National Report to the UNCCD', progress report to the UN Convention to Combat Desertification

Government of Tuvalu. August 1992. 'Statistical Abstract of Tuvalu: 1984-1990', Central Statistics Division.

Government of Tuvalu. August 2001. 'Statistical Abstract for 2001', Central Statistics Division.

Government of Tuvalu. August 2002. 'Statistical Abstract 2002', Central Statistics Division.

Government of Tuvalu. August 2003. 'Statistical Abstract for 2003', Central Statistics Division.

Government of Tuvalu. August 2004. 'Statistical Abstract for 2004', Central Statistics Division.

Government of Tuvalu. August 2005. 'Statistical Abstract for 2005', Central Statistics Division.

Government of Tuvalu. November 1998. 'Household Income and Expenditure Survey 1994', Tuvalu Assets Management and Statistics Project, Central Statistics Division.

Government of Tuvalu. October 2010. 'Draft Tuna Management and Development Plan (2011-2015), Prepare with technical assistance from FFA.

Government of Tuvalu. 2007. 'Waste Management Strategy', download from SPREP Tuvalu Environment Library

Government of Tuvalu. 2008. 'Sustainable Integrated Water Resources and Waste Management Project in the Pacific Islands - Demonstration Project Proposal by the National Water and Sanitation Committee',

Government of Tuvalu. 2009. 'International Aid for Tuvalu - Statistical Summary 2001-2008', Department of Planning and Budget.

Government of Tuvalu and UNDP, Fiji. 2006. 'National Millennium Development Goals', Ministry of Finance, Economic Planning & Industries.

Graham B. Powell. 2007. 'Review of Environment Related Laws in Tuvalu', Department of Environment, Government of Tuvalu.

Greg Wolf and Pisi Seleganiu. 2008. 'Water Monitoring and Assessment for Nui, Vaitupu, Nukufetau', Public Works Department, Government of Tuvalu

Helena. McLeod. 1999. 'Tuvalu Environmental Vulnerability Index Data Gathering Report', SOPAC.

IMF. 2010. Article IV Report, Prepared by IMF visiting team

Kaly, U.L. 1997. Monitoring training and first survey of Funafuti Marine Conservation Area, Tuvalu. SPREP

Mere Pulea, David Farrier. 1994. 'Environmental Legislation Review', Report prepared for SPREP and the Government of Tuvalu.

Miller, C. 2009. 'Current state of knowledge of certain threats, diversity and habitat in the Pacific Islands Region'.

Nathan Associates Inc. 2007. 'Pacific Regional Trade and Economic Cooperation', Joint Baseline and Gap Analysis submitted to PIFS

Pacific Sexually Transmitted Infections Working Group. 2008. 'Improving National Sexually Transmitted Infections Surveillance in Pacific Islands and Territories'. A Consensus Document

Padma Lal, Kelesoma Saloa, Falealili Uili. SPREP 2006. 'Economics of liquid waste management in Tuvalu'. IWP-Pacific Technical Report (International Water Project No.36)

Pisi Seleganiu and Catherine Moulogo.2010. 'Dry Sanitation: The Solution', IWRM Project, Public Works Department, Government of Tuvalu

Samasoni. Sauni, Mecki Kronen, Silvia Pinca, Lillian Sauni, Kim Firedman, Lindsay Chapman and Franck Magron, 'Tuvalu Country Report: Profiles and Results from Survey Work at Funafuti, Nukufetau, Vaitupu and Niutao', Pacific Regional Oceanic and Coastal Fisheries Development Programme.

SOPAC. 2007. 'National integrated water resource management diagnostic report - Tuvalu', Draft Miscellaneous Report 647.

SPC and UNDP. 2010. 'Migration, Morbidity and HIV', A rapid assessment of risks and vulnerabilities in the Pacific.

SPC. 2009. 'The Pacific Regional Strategy on HIV and Other STIs for 2009-2013'.

SPC.2010. 'Beijing + 15: Review of Progress in Implementing the Beijing Platform of Action in the Pacific Island Countries and Territories', Human Development Programme.

SPREP. 1997. 'Tuvalu National Environmental Management Strategy', produced with close consultation with the Government of Tuvalu

SPREP. 2004. ' Pacific Regional Energy Assessment - Tuvalu (Volume 15)', An assessment of the key energy issues, barriers to the development of renewable energy to mitigate climate change, and capacity development needs for removing barriers.

STI Regional Working Group. 2010. 'Breaking the Silence: Responding to the STI Epidemic in the Pacific ', STI Working Group include SPC, WHO, UNFPA and UNICEF.

Tilling.A.J and Fihaki, E. 2009. ' Tuvalu, National Biodiversity Strategy Action Plan', Fourth National Report to the Convention on Biological Diversity.

UN CEDAW. 2008. 'Tuvalu State Report on CEDAW', CEDAW/C/TUV/2, Committee on the Elimination of Discrimination Against Women.

UN CEDAW. 2009. 'Tuvalu State Report on CEDAW', CEDAW/c/SR.898, Committee on the Elimination of Discrimination Against Women - Summary Record of the 898th meeting.

UNDESA. 2009. 'Ex-ante impact assessment of likely consequence of graduation of Tuvalu from the least developed country category', prepared in close consultation with the Government of Tuvalu

UNFAO. 2010. 'Global Forest Resources Assessment Country Reports - Tuvalu', FRA2010/217

UNFAO.2007. 'Tuna: A key Economic Resource in the Pacific Islands', page 40-42.

University of the South Pacific. August 2010. 'Global Change and Coral Reef Management Capacity in the Pacific - Engaging Scientists and Policy Makers in Fiji, Samoa, Tuvalu & Tonga', Background Dossier for Tuvalu Workshop

USP.2008. 'Status of the Coral Reefs in the West Pacific: Fiji, New Caledonia, Samoa, Solomon Islands, Tuvalu and Vanuatu', Chapter 13 of the Report: Status of Coral Reef of the World, 2008.

WCFC. 2006. 'Tuvalu National Fisheries Report', Science Committee 2 Meeting , Manila, Philippines

#### **Websites:**

<http://unstats.un.org/unsd/mdg/Metadata.aspx>

[http://www.spc.int/prism/MDG/mdg\\_p.htm](http://www.spc.int/prism/MDG/mdg_p.htm)

[http://www.sprep.org/publication/pein\\_tuvalu.asp](http://www.sprep.org/publication/pein_tuvalu.asp)

[http://www.who.int/chp/chronic\\_disease\\_report/en/](http://www.who.int/chp/chronic_disease_report/en/)







