REPUBLIC OF THE MARSHALL ISLANDS

MILLENNIUM DEVELOPMENT GOALS

PROGRESS REPORT 2009

RMI MDG Workgroup
Economic Policy, Planning and Statistics Office
United Nations Development Programme

An RMI - UNDP Joint Publication

Table of Contents

Text Boxes

This page is intentionally left blank

Foreword and Acknowledgements

This report provides an assessment of where the Republic of the Marshall Islands (RMI) stands as of 2009 in its quest to achieve the goals, targets and overall intentions of the Millennium Declaration.

Primarily a diagnostic analysis, this report spends more time analyzing the trends and current situation and less time prescribing strategies or actions for improving MDG outcomes. Formulating MDG strategies will be undertaken separately and as part of the next steps.

Much progress has been made, but at the same time there remains much work to do if the RMI is to achieve its MDG targets by 2015. It is hoped that this document will help raise overall awareness on the MDGs and (more importantly) call attention to what needs to happen in order for the RMI to make good on its MDG commitments.

This 2009 progress report is an update on an earlier draft report produced in 2004 by Emi Chutaro and EPPSO. Special recognition is given to Emi Chutaro and others who contributed to the 2004 draft, including John Henry (EPPSO), Yumi Cristostomo (OEPPC), Deborah Barker (OEPPC), Marie Maddison (MICNGOs and WUTMI), Catherine Maywald (United Nations Mission), Wilbur Heine (MOH), John Bungitak (EPA), Brenda Alik-Maddison (MOE), and Kaylyn Hipple (MICNGOs and Mission Pacific). Most of these individuals are now members of the official MDG Workgroup, established in December 2008 (see Appendix 2 for a description of the workgroup).

This report was written by Ben Graham under the guidance of EPPSO and the Office of the Chief Secretary, and with input and advice from the RMI MDG Workgroup, the UNDP and other UN partner agencies. Pictures used in this report were taken by Thomas Jensen.

Thank you for your interest and please do not hesitate to contact us with any questions or comments.

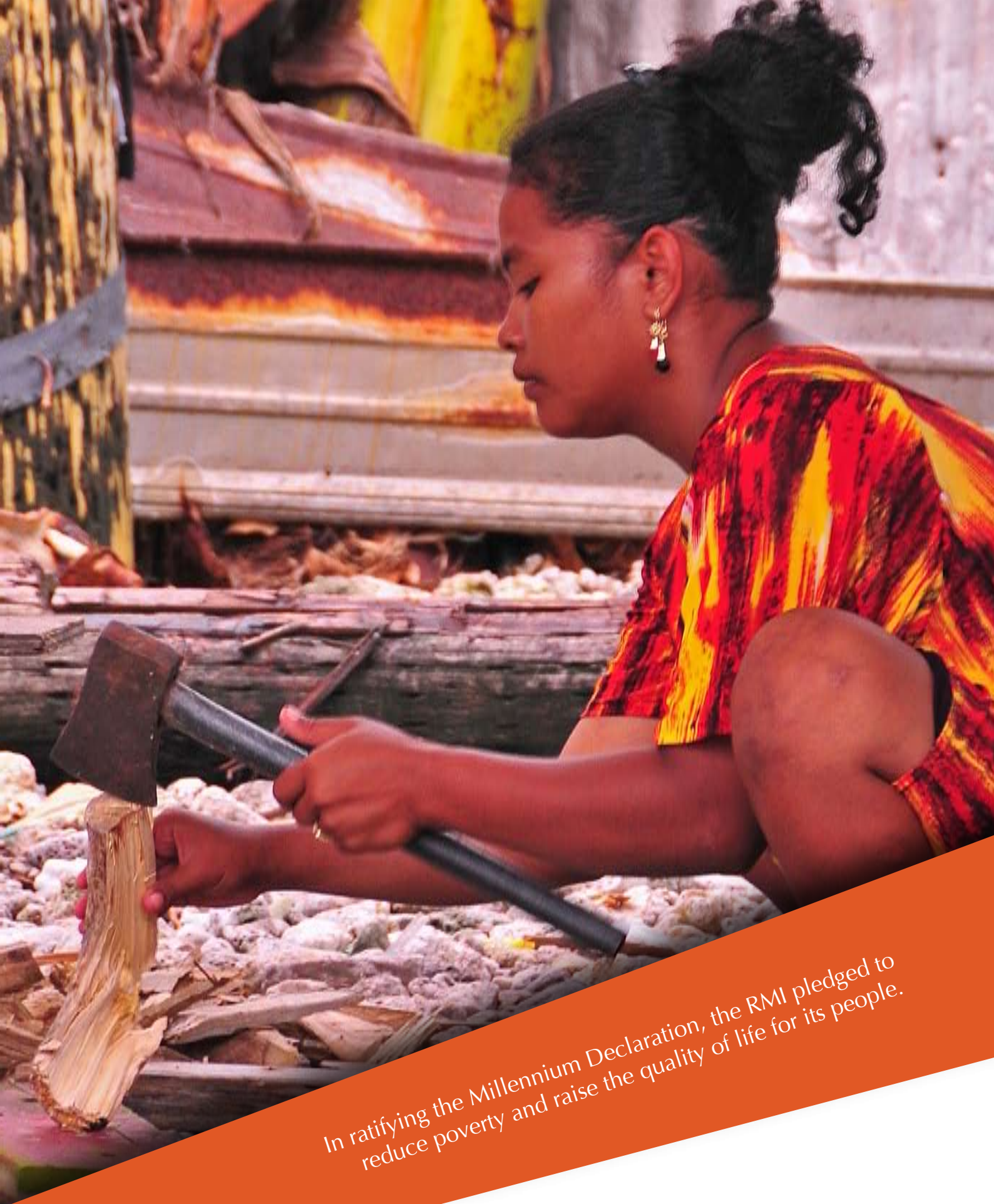
Kommool tata,

Casten Nemra
Chief Secretary
Republic of the Marshall Islands

Carl Hacker
Director
Economic Policy, Planning and Statistics Office

Abbreviations

ADB	Asian Development Bank
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CFC	Chlorofluorocarbons
CMI	College of the Marshall Islands
CNMI	Commonwealth of the Northern Mariana Islands
CPI	Consumer Price Index
CRC	Convention on the Rights of the Child
DAC	Development Assistance Committee
DHS	Demographic Health Survey
DOT	Direct Observation Therapy
DUD	Djarrit- Uliga-Delap
EPA	Environmental Protection Authority
EPPSO	Economic Policy, Planning and Statistics Office
FSM	Federated States of Micronesia
FY	Fiscal Year
GDI	Gender Development Index
GDP	Gross Domestic Product
GHG	Greenhouse Gases
GNI	Gross National Income
HDI	Human Development Index
HIPC	Heavily Indebted Poor Countries
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HPI	Human Poverty Index
IWRM	Integrated Water Resource Management
MDGs	Millennium Development Goals
MDRI	Multilateral Debt Relief Initiative
MICNGOS	Marshall Islands Council of Non-Governmental Organizations
MICS	Marshall Islands Conservation Society
MIJ	Marshall Islands Journal
MIMA	Marshall Islands Mayors' Association
MIMRA	Marshall Islands Marine Resources Authority
MISGLB	Marshall Islands Scholarship, Grant and Loan Board
MMR	Measles, Mumps, Rubella (triple cocktail vaccination)
MOE	Ministry of Education
MOH	Ministry of Health
NGOs	Non-Government Organizations
ODA	Overseas Development Assistance
OECD	Organization for Economic Cooperation and Development
OEPPC	Office of Environmental Planning, Policy and Coordination
PDMC	Pacific Developing Member Countries
PPP	Purchasing Power Parity
RH	Reproductive Health
RMI	Republic of the Marshall Islands
ROC	Republic of China
RWH	Rainwater Harvesting
SOPAC	Pacific Islands Applied Geoscience Commission
SPC	Secretariat for the Pacific Community
STI	Sexually Transmitted Infection
TB	Tuberculosis
TVET	Technical/Vocational Education and Training
UNCBD	United Nations Convention on Biological Diversity
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
US	United States
USP	University of the South Pacific
WAM	Waan Aelon in Majol
WB	World Bank
WHO	World Health Organization
WUTMI	Women United Together Marshall Islands



In ratifying the Millennium Declaration, the RMI pledged to reduce poverty and raise the quality of life for its people.

This page is intentionally left blank

The Goals and Targets

In 2000, the RMI became party to the United Nations Millennium Declaration. In that declaration, developed and developing countries agreed to focus on major global development issues with significant emphasis on poverty reduction and improved targeting of donor aid to developing countries. Eight major goals entitled the Millennium Development Goals, or MDGs, were identified as global targets that member countries agreed to meet by 2015. Each of the eight goals has a set of targets, and each target has a set of indicators. The eight goals and their respective targets are listed here below. The specific indicators for each target are listed in the proceeding chapters and are defined in Appendix 4.

Goal 1: Eradicate Extreme Poverty and Hunger

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

Goal 2: Achieve Universal Primary Education

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

Goal 3: Promote Gender Equality and Empower Women

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

Goal 4: Reduce Child Mortality

Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

Goal 5: Improve Maternal Health

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

Goal 6: Combat HIV/AIDS, Malaria and Other Diseases

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

Goal 7: Ensure Environmental Sustainability

Target 7.A: Integrate the principles of sustainable development into country policies and programmes 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

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

Goal 8: Develop a Global Partnership for Development

Target 8.A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system

Target 8.B: Address the special needs of the least developed countries

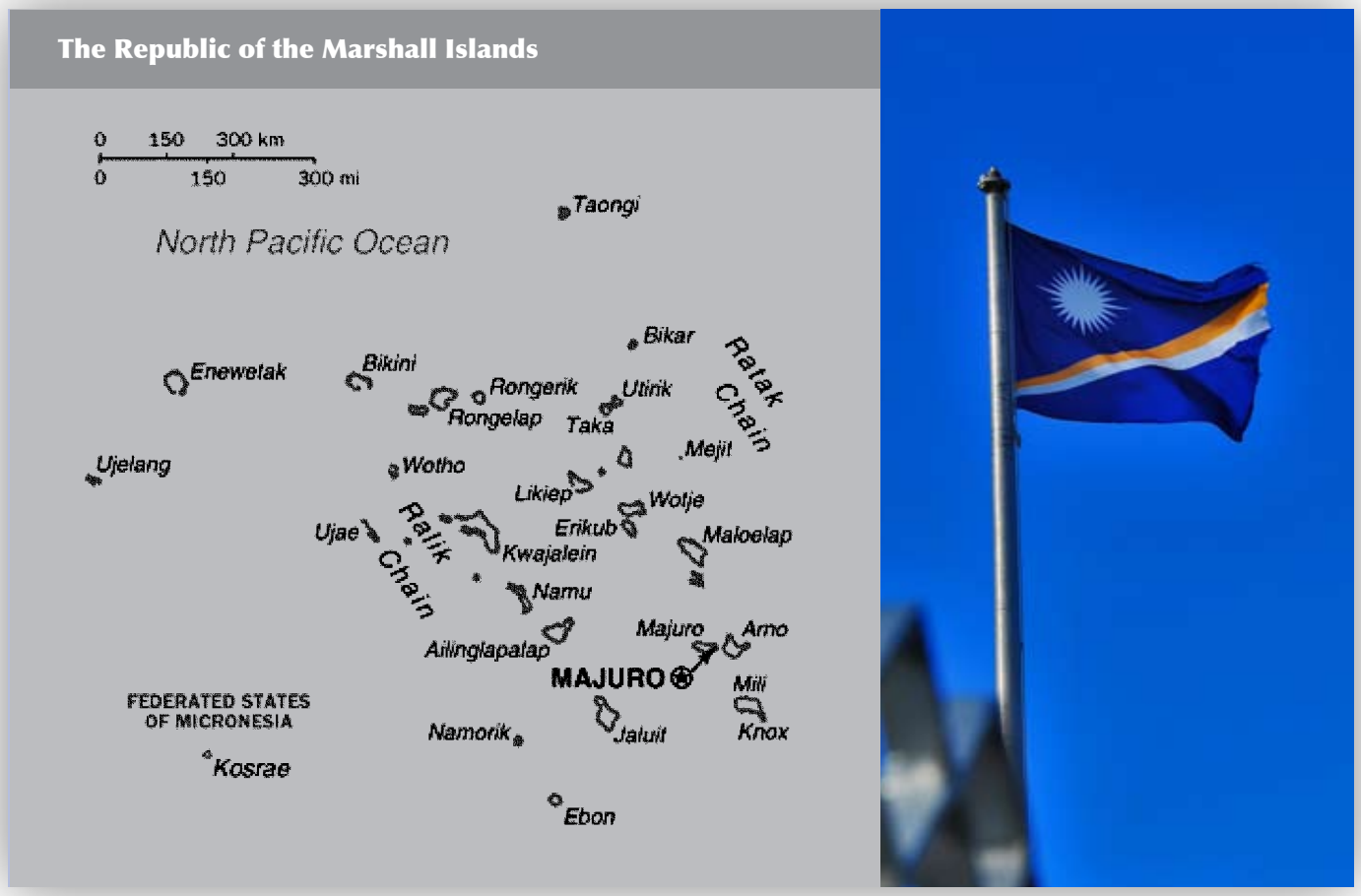
Target 8.C: Address the special needs of landlocked developing countries and small island developing States

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: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries

Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications

Country Profile



Geography

The Republic of the Marshall Islands (RMI) consists of two roughly parallel chains of 29 coral atolls and 5 single coral islands located between 160 and 173 degrees east longitude and between 4 and 14 degrees north latitude. The RMI's total land mass measures about 181 square kilometers and its exclusive economic zone measures about 2 million square kilometers. The highest elevation is only 10 meters above sea level, and average elevation is 2 meters. The southern atolls and islands are characterized by more lush vegetation relative to the northern atolls and islands.

Population

At the time of first contact with outsiders (in the 16th century) the total population of the islands was estimated to be under 10,000. The first official censuses took place in the 1920s and 1930s under the Japanese administration, enumerating a total population of around 10,000 (see chart below). By 1958 the population had exceeded 14,000 and by 1980 it had reached over 30,000. With one of the highest fertility rates in the world in the 1980s and 1990s, the RMI had one of the fastest growing populations. But steadily falling fertility rates and increased emigration (to the United States) have dampened the population growth rate, with an estimated 2007 mid-year population of around 53,000.

The population is composed primarily of indigenous Marshallese, but with a steadily increasing population of expatriates largely composed of Americans, Filipinos, Chinese, Taiwanese and persons from neighboring Pacific Island countries. The official languages are English and Marshallese, with Marshallese the primary language of exchange.

With an estimated 2007 median age of 19.2, as reported in the RMI Demographic Health Survey 2007 (DHS 2007), the RMI has the second

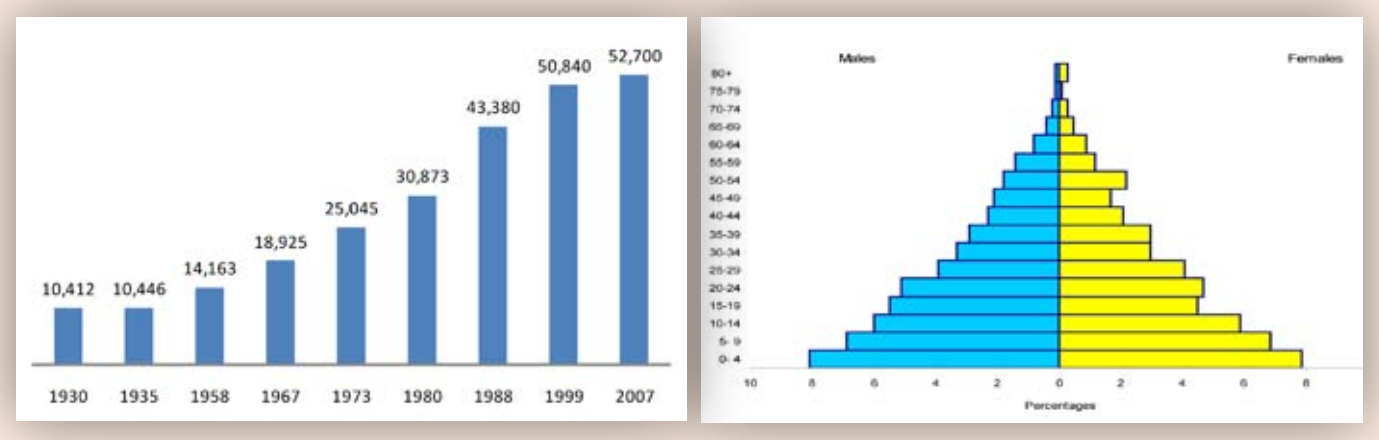
youngest population in the Pacific. The young age structure has built-in momentum for growth of the population, meaning that when young people eventually reach reproductive age, the result will be a high population growth rate for some years to come.

Emigration to the US has become a major demographic phenomenon, particularly since the late 1980s (the Compact of Free Association between the RMI and the US, first entered into in 1986, allows for relatively free access for RMI citizens into the US).

Government

The government is modeled after the British Westminster parliamentary system with a bi-cameral legislature composed of two houses; the Council of Iroij (Chiefs) and the Nitijela (Parliament). The Council of Iroij

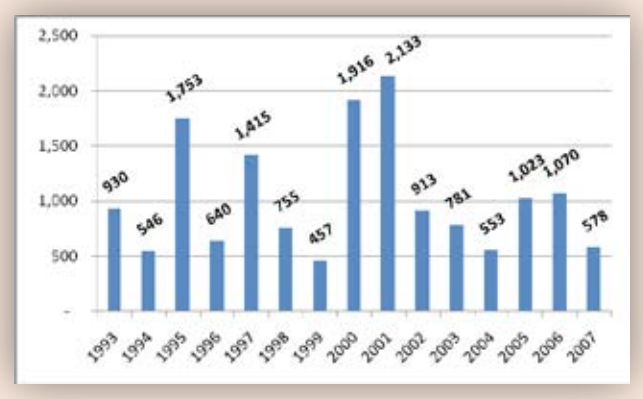
Population of the Marshall Islands; Population Pyramid, 2007



Source: RMI Censuses, 2007 estimate by SPC and EPPSO, RMI Demographic Health Survey 2007, EPPSO

The RMI is also very heavily urbanized, with the two urban centers Majuro Island (on Majuro Atoll) and Ebeye Island (on Kwajalein Atoll) now home to nearly 75 percent of the population. This translates into crowded houses: the average urban household has 7.6 members (compared to 6.6 in the rural areas). Large household sizes and limited land have resulted in very dense and challenging living conditions, with one quarter of all households using only one room for sleeping.

Net Embarkations from Majuro and Kwajalein Airports



Source: US Department of Transportation TranStats database, author calculations.

does not have legislative or executive power, but can make comments on bills in reference to customary law and other traditional practices. Executive power is exercised by the President, the Cabinet, the Attorney General, and the Chief Secretary. The President is elected from within the Nitijela, which is composed of 33 senators popularly elected from their respective electoral districts. At the municipal level, each atoll has a local government composed of an elected Mayor and Council.

Since the end of World War II, the RMI has retained close economic and political ties with the US. Since 1986, this relationship has been formalized in the form of the Compact of Free Association.

In addition to the Millennium Declaration, the RMI government has committed to a wide range of international conventions and treaties, including the Convention on the Rights of the Child and the Convention on the Elimination of All Forms of Discrimination Against Women.

Economy

Like other Pacific Island nations, the RMI is remote from major markets, has a narrow production and export base, is vulnerable to external shocks and is relatively dependent on official transfers. Funding from the Compact of Free Association provides well over half of the RMI's annual budgetary resources.

Remittances are not a major contributor to incomes in the RMI. The RMI Community Survey 2006 found that on Majuro, only 12 percent of households reported to have received any sort of remittance income from abroad. Recent Balance of Payments estimates by the International Monetary Fund show that annual remittances coming into the RMI (current private transfers) are averaging only around $500,000.

The public sector continues to play a dominant role in terms of contribution to GDP and employment. The government sector (including state-owned enterprises) accounts for approximately 40 percent of GDP and 41 percent of formal employment.

The primary commercial industries include wholesale/retail trade, general business services (covering a wide range of business types), commercial fisheries, construction, tourism, and light manufacturing. The primary export products include frozen fish (tuna), tropical fish, ornamental clams and corals, coconut oil, copra cake, and crafts. Annual export values have doubled to nearly $20 million since 2001 (according to EPPSO revised Balance of Payments data for 2008), driven largely by increasing exports of tuna by locally based fishing operations. Nevertheless, the RMI continues to rely heavily on imports and ran a trade deficit of around $60 million in FY2008.

Executive Summary

The following color-coded table presents the key findings of this report.

Millennium Development Goals	Status as of 2009
Goal 1: Eradicate Extreme Poverty and Hunger	Mixed progress. While the RMI is not on track to meeting the three targets under MDG1, the evidence suggest that the RMI does not yet have abject or extreme poverty, so the outcome remains mixed. Nevertheless, indicators related to income, employment, hunger, and related issues do suggest that general levels of poverty and hunger may be on the rise.
Goal 2: Achieve Universal Primary Education	It is likely that the RMI will achieve this goal.
Goal 3: Promote Gender Equality and Empower Women	Mixed progress. The RMI is making decent progress in advancing female education, employment, and other economic characteristics, but there remains much room for improvement, including in the sphere of female political representation.
Goal 4: Reduce Child Mortality	The RMI is on track to meeting this goal.
Goal 5: Improve Maternal Health	The RMI is on track to meeting this goal.
Goal 6: Combat HIV/AIDS, Malaria and Other Diseases	The RMI is not on track to meeting this goal.
Goal 7: Ensure Environmental Sustainability	Mixed progress. The RMI is making mixed progress towards this goal, with severe threats emerging from climate change and sea-level rise and other serious challenges such as improving sanitation and water quality.
Goal 8: Develop a Global Partnership for Development	Mixed progress. The RMI faces considerable economic, fiscal and development challenges; there is room for improvement.

RED = not on track, unlikely to meet goal

LIGHT BLUE = mixed or decent progress, with room for improvement

WHITE = on track, likely to meet goal

Goal 1: Eradicate Extreme Poverty and Hunger

While the RMI is not on track to meeting the three targets under MDG1, the evidence suggest that the RMI does not yet have abject or extreme poverty, so the status of MDG1 remains mixed (but concerning). Indicators related to income, employment, hunger, and related issues do suggest that general levels of poverty and hunger may be on the rise.

Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day. The RMI is not on track to meeting this target. While the specific $1/day PPP indicator is only available for one year (preventing direct trend analysis), other income and related data suggest (altogether) that the proportion of people living on less than $1 a day is not likely to be falling and that financial hardship is becoming a harsh reality for many individuals and families.

Target 1.B: Achieve full and productive employment and decent work for all, including women and young people. The RMI is not on track to achieving this target. While there has been some job growth in recent years, this has mostly been fueled by the government. The growth rates of the working age population and the labor force are simply outpacing jobs growth, leaving the RMI with a large unemployed population (with unemployment particularly high among young persons and females).

Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger. The RMI is not on track to meeting this target. While extreme hunger and poverty do not yet exist, indicators and a growing consensus suggest that an increasing number of people (including children) are experiencing food and hunger related hardship, particularly with the rise in food prices and greater financial hardship.

Goal 2: Achieve Universal Primary Education

It is likely that the RMI can achieve universal primary education by 2015.

Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling. The RMI is likely to meet this target. Primary enrolment trends have rebounded after dipping from the late 1980s to the late 1990s. With expanding classrooms and a slowly falling fertility rate, it is likely that all children will be able to complete a full course of primary schooling by 2015. To do this, much more effort must be put towards the persistent drop-out problem. Moreover, while this 'quantity' challenge is likely to be met, the 'quality' challenge of improving educational performance and outcomes must also be addressed.

Goal 3: Promote Gender Equality and Empower Women

The RMI is making decent progress in advancing female education, employment, and other economic characteristics, but there remains much room for improvement, including in the sphere of female political representation.

Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015. Female-to-male enrollment data show some room for improvement at the primary level and a slight deterioration at the secondary level. There is parity (on-average) at the tertiary level. Females have made great progress over the past several decades in improving primary and secondary educational attainment and in participation in wage labor. While the number of females running for national and local government seats has steadily grown, and while the majority of people feel that more females should be represented in government, the proportion of seats held by females in the Nitijela remains unchanged (at only 1 in 33) and is growing very slowly at the local level. Violence against women and girls is also a major problem.

Goal 4: Reduce Child Mortality

The RMI is on track to meeting this goal.

Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate. The under-five mortality rate has been reduced by more than half since 1988 and is currently estimated to be in the low 20s to low 40s range (based on Ministry of Health administrative data and the DHS 2007, respectively). While these rates are still relatively high (compared to other Pacific nations), they do suggest that the RMI has made significant progress in reducing child mortality and is on the way to meeting MDG4. There is a clear need for more in-depth analyses of a host of child related issues and their combined effects on child health and welfare.

Goal 5: Improve Maternal Health

The RMI is likely to meet this goal.

Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio. In most years the RMI registers between zero to three maternal deaths (out of 1,500 to 1,600 births per year).

Target 5.B: Achieve, by 2015, universal access to reproductive health. The RMI is set to meet this target, with nearly all mothers having access to basic services. The DHS estimated that some 94 percent of births in 2007 were attended by skilled health personnel and that antenatal care coverage has improved. However, teen fertility remains a pervasive challenge and much more needs to be done to reduce the prevalence of STIs. Moreover, young mothers and low-income mothers have relatively high unmet need for family planning.

Goal 6: Combat HIV/AIDS, Malaria and Other Diseases

The RMI is not on track to meeting this goal.

Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/

AIDS. A total of 11 HIV cases were detected between 2003 and 2008, bringing the cumulative number of cases to 17. While these incidence rates are low, the overall STI data suggest that the RMI is not making any significant progress in reducing the spread of sexually transmitted diseases. Low condom use (especially among younger persons) and early initiation of sex are major factors in the persistently high teen fertility and STI rates. The RMI has not made any clear progress with these problems.

Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it. The RMI has met this target, with all HIV positive patients having access to treatment.

Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases. The RMI continues to face severe challenges in reducing the incidence of diabetes, tuberculosis and other major diseases.

Goal 7: Ensure Environmental Sustainability

The RMI is making mixed progress towards this goal, with some clear forward movement (in areas such as conservation) but also with severe threats emerging from climate change and sea-level rise and other serious challenges such as improving sanitation and water quality.

Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources. The RMI faces serious environmental challenges, both endogenous and exogenous, but is making steady (albeit somewhat slow) progress in mainstreaming sustainable development principles and practices into its planning and development processes. Major threats remain, including the most dangerous environmental threat of all to the RMI: climate change and sea-level rise.

Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss. Recent biodiversity assessments identify a number of species that are threatened. The RMI has taken great steps forward through the Micronesian Challenge, the Reimanlok Plan, and other initiatives to promote conservation and halt the loss of environmental resources and biodiversity, but these programs are relatively new and have yet to be fully implemented.

Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation. The RMI has made decent progress towards meeting the safe drinking water target and slightly less impressive progress towards meeting the basic sanitation target. While the percentage of households with safe drinking water sources is already in the 90s, recent water quality tests have shown a serious problem with contamination. Moreover, the percentage of households without

any sanitation facility remains high. Some assistance must be provided to low-income households for sanitation facility improvements.

Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers. Population densities on Majuro and especially Ebeye are growing sharply and certain urban villages are taking on slum-like characteristics, with harsh physical as well as socio-economic living conditions for their residents (as documented in the Jenrok Village survey).

Goal 8: Develop a Global Partnership for Development

The RMI faces considerable economic, fiscal and development challenges; there is room for improvement.

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). There is room for improvement in the RMI in terms of developing an open and predictable trading and financial system and in terms of commitment towards good governance and poverty reduction.

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] and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction). The RMI receives relatively high levels of development assistance, although these resources are decrementing and there is growing concern over fiscal sustainability and stability.

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. The RMI has very high debt ratios and is experiencing increasing fiscal distress. Efforts are underway to initiate a program of reform.

Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries. Most residents have good access to affordable, essential drugs.

Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications. While the use of cellular phone technology has rapidly grown, internet use remains relatively low.

MDG Progress Scorecard: 2005 versus 2009

MDGs	General Assessment in 2005	General Assessment in 2009
Goal 1: Eradicate Extreme Poverty and Hunger	OFF TRACK	MIXED
Goal 2: Achieve Universal Primary Education	OFF TRACK	ON TRACK
Goal 3: Promote Gender Equality and Empower Women	MIXED	MIXED
Goal 4: Reduce Child Mortality	MIXED	ON TRACK
Goal 5: Improve Maternal Health	ON TRACK	ON TRACK
Goal 6: Combat HIV/AIDS, Malaria and Other Diseases	OFF TRACK	OFF TRACK
Goal 7: Ensure Environmental Sustainability	OFF TRACK	MIXED
Goal 8: Develop a Global Partnership for Development	MIXED	MIXED

This page is intentionally left blank

Goal 1: Eradicate Extreme Poverty and Hunger

Summary

While the RMI is not on track to meeting the three targets under MDG1, the evidence suggest that the RMI does not yet have abject or extreme poverty, so the status of MDG1 remains mixed (but concerning). Indicators related to income, employment, hunger, and related issues do suggest that general levels of poverty and hunger may be on the rise.

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

The RMI is not on track to meeting this target. While the specific $1/day PPP indicator is only available for one year (preventing direct trend analysis), other income and related data suggest (altogether) that the proportion of people living on less than $1 a day is not likely to be falling and that financial hardship is becoming a harsh reality for many individuals and families.

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

The RMI is not on track to achieving this target. While there has been some job growth in recent years, this has mostly been fueled by the government. The growth rates of the working age population and the labor force are simply outpacing jobs growth, leaving the RMI with a large unemployed population (with unemployment particularly high among young persons and females).

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

The RMI is not on track to meeting this target. While extreme hunger and poverty do not yet exist, indicators and a growing consensus suggest that an increasing number of people (including children) are experiencing food and hunger related hardship, particularly with the rise in food prices and greater financial hardship.

Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day
1.1 Proportion of population below $1 (PPP) per day
1.2 Poverty gap ratio
1.3 Share of poorest quintile in national consumption

Income Growth, Distribution, and Sources

A number of recent studies[1], macro- and micro-economic data and anecdotal evidence all suggest that income poverty has become a major issue in the RMI. Many families are feeling increasing financial distress and household balance sheets are becoming increasingly unhealthy. The double-digit inflation experienced in 2008 (stemming from the sharp rise in global fuel and food prices) only exacerbated the problem. With now nearly three-fourths of the population living in the urban centers of Majuro and Ebeye, subsistence is no longer an option for the vast majority of Marshallese. This means that most people in the RMI today require employment and wage incomes in order to survive.

1 Including poverty assessments by ADB, the 2005 Social and Economic Report (Juumemmej), and the 2004 Jenrok study (see references).

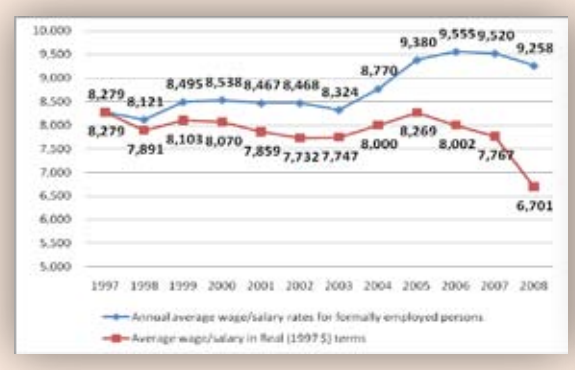
While official indicators for MDG Target 1.A are somewhat limited (with indicator 1.2 not available), the broader set of data does allow for some fairly concrete conclusions to be made with respect to income trends. Salary and wage data from the Marshall Islands Social Security Administration (MISSA) show that average annual earnings of all formally employed persons rose from $8,279 in 1997 to $9,258 in 2008 (in nominal terms), an increase of 11.8 percent. This rise was largely driven by wage growth in government agencies, the national government, banks and public enterprises. Meanwhile, private sector earnings fell during this period from $5,754 to $5,051, a 12.2% decrease.

While average earnings have grown in nominal terms, in real terms (adjusting for inflation) they have fallen over time, from $8,279 to $6,701 (in 1997 dollars) from 1997 to 2008. As illustrated in figure G1.1, real earnings have fallen particularly sharply since 2005. High Consumer Price Index (CPI)[2] inflation in 2008 (amounting to 12.7 percent between the first and fourth quarters) had a significant impact on real incomes. Because wages have not kept up with inflation, the purchasing power of wage earners has fallen dramatically over the years. As shown in Figure G1.2, which compares the CPI and the annual average earnings index (with 1997 set as the base year), consumer prices have grown by 38.1 percent while average annual earning have only grown by 11.8 percent. Meanwhile, consumer debt has exploded by 81.3 percent over the same period (see G1.2).

The rapid rise in consumer debt (much of which is high-interest, short-

2 The CPI excludes wages

G1.1 Average Earnings (Nominal/Real)



G1.2 Price, Earnings, and Debt Indexes (1997 = 100)

Source: author calculations based on EPPSO data

term borrowing for consumption) is a major problem that warrants much more attention.

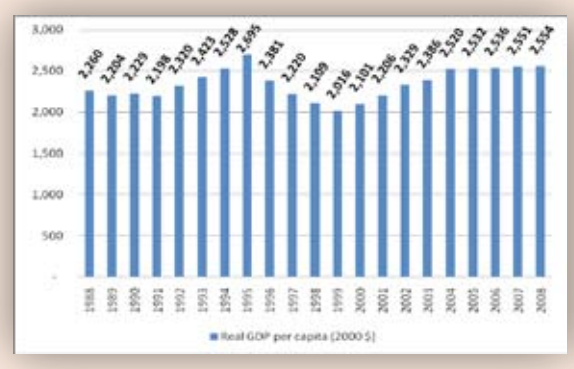
Gross Domestic Product (GDP) per capita provides another way to measure income, albeit at a higher aggregate level. Per capita GDP growth (in real terms) averaged 0.9 percent in the two decades between 1988 and 2008. Real per capita GDP (in constant 2000 dollars) peaked in 1995 at just under $2,700 and is averaging just over $2,500 in recent years, as illustrated in figure G1.3.

While the RMI has seen growth in real GDP in the past two decades (in absolute terms), this growth has been erratic and fueled largely by the public sector. Moreover, high population growth (particularly in the 1980s and 1990s) has dampened any significant per capita GDP growth.

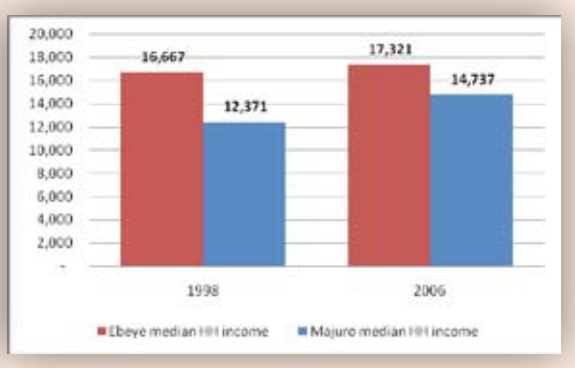
Median household incomes (in nominal terms) rose on Ebeye and Majuro from $16,667 to $17,321 and from $12,371 to $14,737, respectively, between 1998 to 2006. For Ebeye this was a 3.9 percent increase, for Majuro a 19.1 percent increase. Consumer prices during this eight year span rose by 16 percent, so under inflation adjusted terms Ebeye households have seen a deterioration in their household spending power while Majuro households have kept up.

Taken altogether, the income growth data suggest that while incomes have grown in nominal terms, in real (inflation adjusted) terms they have fallen sharply. In 2004, MISSA data indicated that roughly two-thirds

G1.3 Real GDP per capita (2000 $)

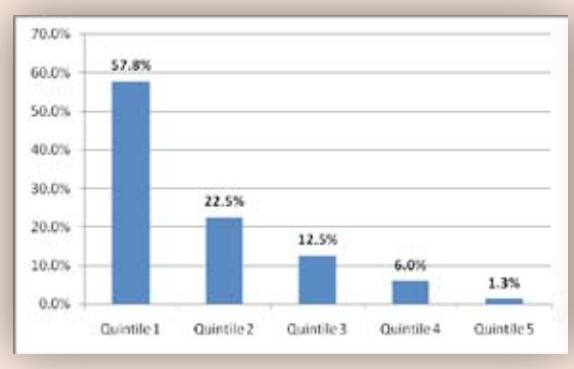


G1.4 Median Household Income Majuro and Ebeye

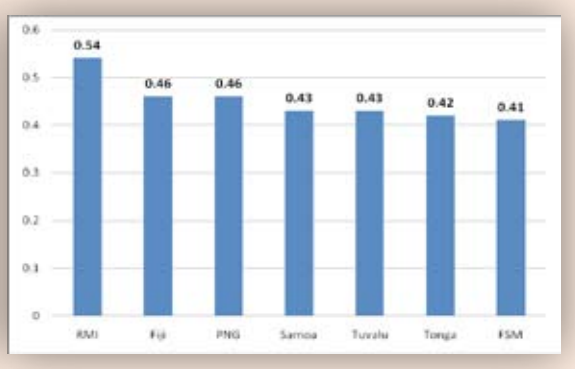


Source: EPPSO, RMI Pre-census Survey 1998 and RMI Community Survey 2006

G1.5 Distribution of Household Income 1999;



G1.6 Gini Coefficients 1999-2000



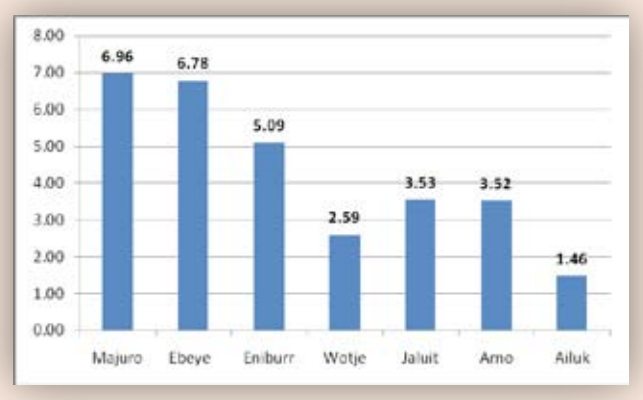
Source: RMI 1999 Census and ADB 2005 "Hardship and Poverty in the Pacific". Manila.

of all formally employed persons earned less than $10,000 a year. For 2008 the estimated distribution is the same.

Data on income distribution remains somewhat limited. In 1999 an estimated 20 percent of persons had an income of below $1 (PPP) per day, based on census data for that year. While more recent estimates of this specific indicator are not currently available, the broader set of income distribution data (combined with income growth trends) do not suggest that the RMI is making notable progress in raising the incomes of those at the lowest levels of the income ladder.

Estimates on the share of the poorest quintile in national consumption was 1.3 percent and 3.3 percent in 1999 and 2002 respectively (with data from 2002 taken from the Household Income and Expenditure Survey, a sample survey). Income data from the RMI Community Survey 2006 (also a sample survey) show that for Majuro Atoll the poorest quintile's share of total income in that year was 2.8 percent.

G1.7 Daily Per Capita Income 2006



Note: Daily per capita income = annual household income divided by household members divided by 365 days

Source: RMI Community Survey 2006

Figure G1.5 shows the distribution of household income in 1999, illustrating a highly uneven distribution with the poorest quintile's share at just 1.3 percent and the richest quintile's share at 57.8 percent. The 1999 income distribution data and the sample data from subsequent surveys are generally consistent and suggest that income distribution is skewed heavily towards the highest quintile.

The RMIs' Gini Coefficient (based on the 1999 census) was 0.54, relatively higher than that of most other Pacific nations (figure G1.6), suggesting that income inequality may be more pronounced in the RMI than in these other countries.

Incomes are, expectedly, much higher in the more urbanized areas of the RMI. An analysis of daily

household income per capita (as measured in the RMI Community Survey 2006) illustrates this strong urban-rural difference. As shown in figure G1.7, Majuro and Ebeye residents lived on nearly $7 per day in 2006 while Eniburr residents lived on over $5 per day. Jaluit and Arno residents lived on around $3.50 per day, Wotje residents on $2.59 and Ailuk residents on $1.46 (all in nominal terms).

An ADB discussion paper on poverty and hardship in the RMI (2002) highlighted high levels of inequality between rural and urban incomes, including between individual rural, outer-islands. It stated that "[t]he average annual per capita income for the outer islands was $418 or $1.15 per day in 1999. This compared with the national average per capita income of $3.87. The median per capita annual income showed that half of the outer island population was actually earning only $0.62/ day. Both measures of per capita income indicate that almost two-thirds of the outer island population had per capita incomes below the UNDP standard poverty threshold of $1.00/day (1993 PPP)…." In addition, the report stated that "the national level data indicate that the first three quartiles (75%) of households receive only about 35% of the total income. Taking the urban and compensation islands alone indicates the first 75% of households receive about 43% of the income… indicating the dominance of urban and compensation incomes in the overall national household income distribution. [Further]…there is also a very high level of inequality in the outer islands where the data indicates that the first 75% of households receive only about 30% of the income. Indeed, the data suggests that the lowest 40% of outer island households receive only 7% of the income. This effectively confirms the likely high level of income poverty experienced in the outer islands."

It is worth noting, nevertheless, that while the data show high income inequality across the RMI, house-to-house transfers of money and other resources (both within and between atolls and islands) remains a very common practice. This is underpinned by the extended family system and the importance placed on caring for one another. This traditional safety net system is one reason why extreme poverty has not emerged (although many believe this safety net system is eroding quickly).

Households draw on a variety of income sources, with earnings and salaries (derived from some form of employment) the most common source of income in Majuro, Ebeye, Eniburr, Wotje and Jaluit (the more urbanized areas covered in the 2006 survey). A considerable percentage of households in Arno and Ailuk also had earnings and salaries incomes (65 percent and 41 percent respectively), but in these more rural areas income from copra, fishing, and handicrafts, was significantly more prominent than in the urban areas. Copra and handicrafts income was also notable in Wotje and Jaluit. On Ebeye and Eniburr (in Kwajalein Atoll), land rental income was quite prominent, while on Majuro social security and retirement income was significant. Remittances are not a major source of income for most households.

HOUSEHOLD INCOME SOURCES	Majuro	Ebeye	Eniburr	Wotje	Jaluit	Arno	Ailuk
% with earnings and salaries	85%	91%	82%	60%	79%	65%	41%
% with copra income	1%	0%	0%	35%	16%	79%	70%
% with fishing income	6%	2%	0%	5%	5%	31%	17%
% with handicrafts income	6%	2%	3%	58%	21%	59%	83%
% with land rental/lease income	9%	35%	25%	0%	0%	4%	2%
% with interest, dividends, rental income	4%	3%	0%	0%	5%	4%	0%
% with social security/retirement income	26%	14%	12%	7%	21%	10%	5%
% with nuclear related income	19%	11%	10%	5%	11%	33%	11%
% with remittances income	12%	3%	7%	2%	5%	14%	0%
% with other type of income	20%	6%	7%	5%	14%	10%	2%

Note: totals for each area add up to more than 100 percent because of multiple income sources.

Source: RMI Community Survey 2006

The Pacific Human Poverty Index

Rather than measure poverty by income, the Pacific Human Poverty Index (HPI) uses a set of indicators on the most basic dimensions of deprivation: a short life, lack of basic education and lack of access to public and private resources. The Pacific HPI, estimated by the UNDP Pacific Centre (Suva, Fiji), takes into account four dimensions to calculate the index:

•	% of people expected not to survive to age 40
•	% of adults who are illiterate
•	% of people without access to safe water
•	% of children < 5 yrs who are under-weight

As shown in G1.8, the RMI's HPI score fell from 1998 to 2008, from 19.5 to 12.4, indicating a general improvement. The RMI's ranking out of the 13 Pacific countries in the reference group improved from 11th in 1998 to 8th in 2008, suggesting again a general relative improvement.

Target 1.B: Achieve full and productive employment and decent work for all, including women and young people
1.4 Growth rate of GDP per person employed
1.5 Employment-to-population ratio
1.6 Proportion of employed people living below $1 (PPP) per day
1.7 Proportion of own-account and contributing family workers in total employment

Employment Trends

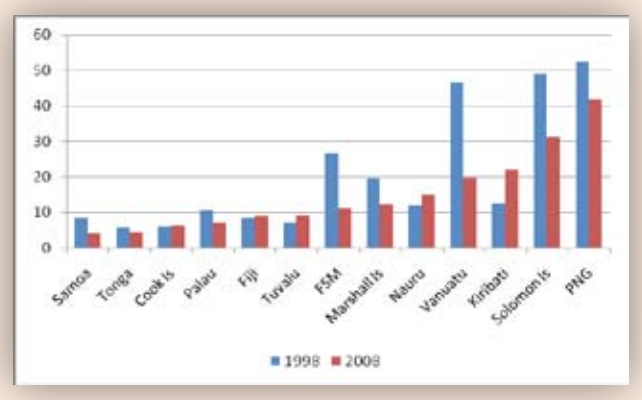
The RMI's growth rate of GDP per person employed[3] (a crude measure of productivity) has been highly volatile since the late 1990s, as shown in figure G1.9. The 1998 to 2008 annual average growth rate of GDP per person employed was -0.3 percent. GDP per person employed in 2008 ($13,272) was just slightly higher than its level in 1998 and was actually lower than the 1997 level ($13,765). This suggests that productivity (as measured by output per unit of labor input) has not grown over time.

The RMI had a total of 10,205 formally registered employees in 2008 (according to data from MISSA and EPPSO). The number of formal employed persons registered in the MISSA database has grown at an annual average of 2.4 percent in the 2004 to 2008 period, with most of the growth seen in the public sector. During these recent five years, employment has grown by a net of 118 (from 10,086 to 10,205). Meanwhile, the RMI's estimated working age population in 2008 reached 29,168 (based on recent population estimates by EPPSO and SPC). While a net of 118 new jobs have been created in the recent five years, the working age population has grown by an estimated 1,229 persons (a 10-to-1 ratio of new working age persons to new jobs). As figure G1.10 shows, the gap between the working age population and formal employment remains wide, with nearly 9,000 more working age persons than formal jobs as of 2008. Some of the growth in employment seen over the late 1990s to early 2000s is in part due to better coverage of the social security system (and not entirely a result of true growth).

The official unemployment rate in 1999 (based on the census that year) was 30.9 percent. With these data taken into consideration, it is safe to assume that unemployment will not have dramatically changed since 1999. More recent estimates based on sample survey data support this.

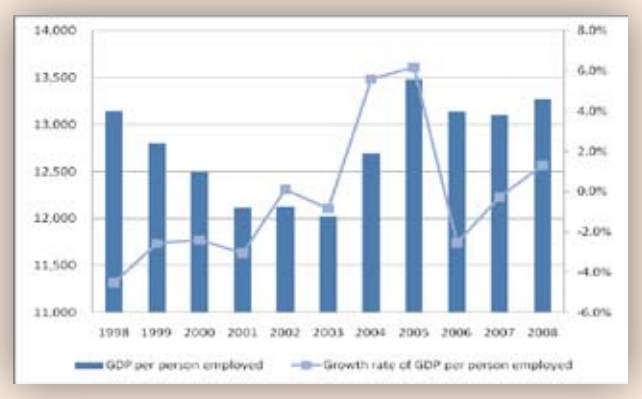
3 "Employed" in this context includes those who are registered in the national Social Security employment database (only formally employed persons). Non-formally employed workers are excluded.

G1.8. Pacific Human Poverty Index (HPI)



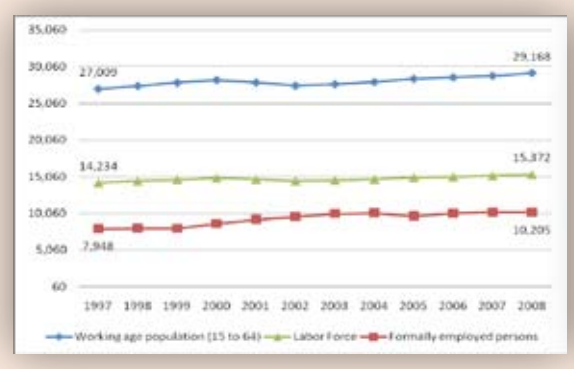
Source: UNDP Pacific Center (D.Abbott)

G1.9 GDP per Person Employed

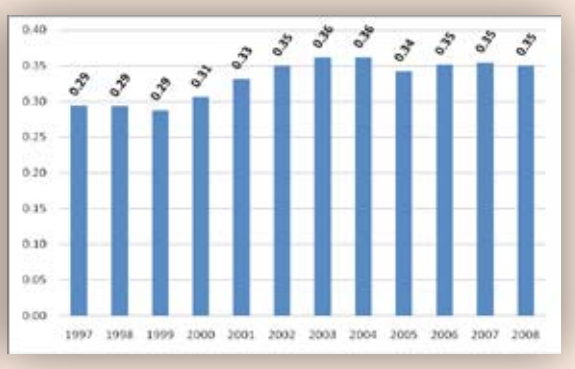


Source: EPPSO

G1.10 Working Age Population, Labor Force, Formally Employed Persons;



G1.11 Employment to Population Ratio



Note: Working age population and labor force data are actual for 1999 and imputed for all other years. Labor force data estimates based on a Labor Force Participation Rate of .527, an average of the 1988 and 1999 rates (census years). Note also that part of the growth in formal employment between 1997 and the early 2000s was due to increased coverage of the social security system (more employees registered) and not entirely organic growth in employment.

Source: 1988 and 1999 censuses, EPPSO, author estimates

The employment to population ratio (defined as the proportion of an economy's working-age population that is employed) has improved generally over the past decade from .29 to .35 in 2008 (again, with part of the growth in the late 1990s to early 2000s attributable to better coverage of the Social Security system, meaning more companies and employees registered). This ratio has not improved, however, in the most recent five years, as shown in figure G1.11.

Youth unemployment is a particularly worrisome issue in the RMI. Every year, there are an estimated 1,200 new entrants into the working age population (estimate based on EPPSO and SPC population estimate for 2008.) While a large proportion of these youth are not technically in the labor force (e.g. some are still in school), many of them are able and willing to work, but unfortunately most of them are not able to find employment. Moreover, the scale and scope of technical/vocational education and training (TVET) opportunities for young people are

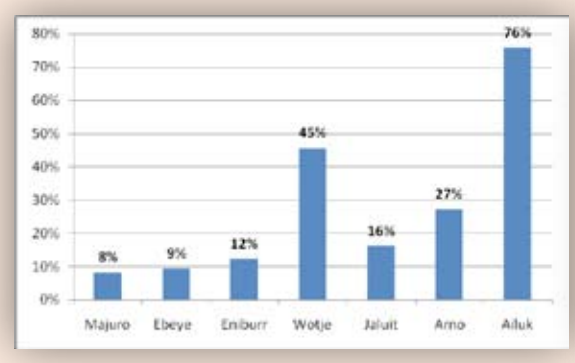
extremely limited. The RMI's TVET "index of opportunity"[4] is likely to be around 13 percent, a very low rate. Estimates for youth unemployment (ages 18 to 24) in the Pacific for the 1999-2000 period placed the RMI at the top, with nearly two-thirds (63 percent) of youth out of work, with female youth unemployment registering at 67 percent. A number of social problems have been attributed to the high youth unemployment problem and this issue requires more attention and better strategies and programs.

economy. The RMI's proportion of own-account and contributing family workers in total employment was .32 in 1988 and .29 in 1999 (according to census data from those years). More recent data from the RMI Community Survey 2006 show that the proportion of vulnerable employment is much higher (as would be expected) in the rural areas, as illustrated in figure G1.12.

Female participation in the formal labor market has grown over the past four decades. While fewer than 20 percent of females ever participated in formal employment through 1980, by 1988 and 1999, one-in-three females was participating[5]. While progress has been made in female participation in formal employment, the current estimate of one-in-three women employed formally remains relatively low and the male-female gap remains substantial. More recent estimates are not available.

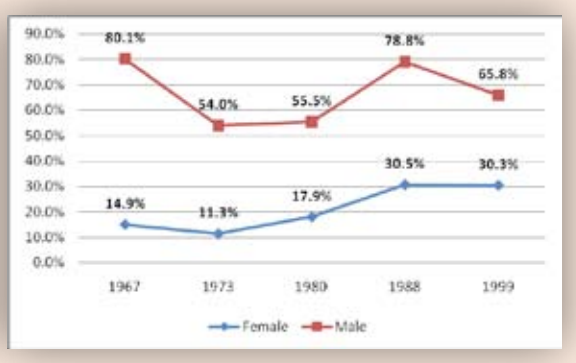
The 2006 survey captured data on families headed by females with no husband. In Majuro, Eniburr, and Jaluit, 16 to 17 percent of all families fell into this category. Of these families, on Majuro, Ebeye, Eniburr, Wotje and Jaluit, two-thirds or more of the female householders were not formally employed in the year prior to the survey.

G1.12 Own-Account and Family Workers in Total Employment: 2006



Source: RMI Community Survey 2006

G1.13 Participation in Formal Employment: 1967 to 1999



Note: includes those in the working age and in the labor force

Source: RMI Community Survey 2006

Workers classified as own-account (or self-employed) and family workers are often described as being in "vulnerable employment." The proportion of own-account and contributing family workers in total employment measures the relative size of vulnerable employment in the

4 Defined as the new enrollment in TVET per year as a percentage of the annual number of school leavers (graduates, dropouts, push-outs). There are roughly 150 new entrants into existing TVET programs out of a total of 1,200 or so school leavers.

5 Formal employment includes any form of employment that leads to wage or salary remuneration, including part-time, seasonal, and temporary work.

FEMALE HEADED HOUSEHOLDS	Majuro	Ebeye	Eniburr	Wotje	Jaluit	Arno	Ailuk
% of families with female head, no husband	16%	10%	16%	8%	17%	8%	10%
% of which females not formally employed in 2005	68%	83%	67%	67%	67%	33%	17%

Source: RMI Community Survey 2006

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

1.8 Prevalence of underweight children under-five years of age

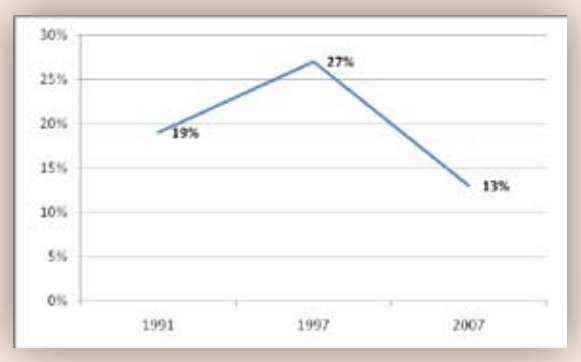
1.9 Proportion of population below minimum level of dietary energy consumption

Hunger and under-nutrition

While the RMI has not seen the same level of extreme hunger and hardship as in other parts of the Asia-Pacific region, recent surveys and socio-economic indicators suggest that hunger (in particular under-nutrition in children) and hardship (of various types), may be rising among certain population groups.

Estimates on the prevalence of underweight children under-five years of age have been few and far between. The earliest known estimate from 1991 was 19 percent, with a second estimate of 27 percent in 1999 (based on information gathered by SPC). The most recent estimate, drawing on the DHS 2007, was much lower than the previous two estimates, but still relatively high at 13 percent (figure G1.14). The data suggest that the prevalence of underweight children under-five has fallen over time, but given the other quantitative and qualitative indicators related to nutrition, further investigation will be required to affirm this trend.

G1.14 Prevalence of underweight children under-five



Source: SPC and RMI DHS 2007

No estimates are available on the proportion of the population below the minimum level of dietary energy consumption (as such a threshold has yet to be officially developed). Nevertheless, a number of data sources suggest that under-nutrition (particularly among children) is becoming an increasingly serious problem.

"Severe malnutrition" is regularly listed as leading cause of child deaths in Ministry of Health annual reports (although no exact numbers are available, a problem that must be addressed). Three school-based nutrition surveys conducted in 1991, 1999 and 2006 show that under-nutrition (based on weight-for-age and height-for-age measurements) is a persistent problem, particularly among public school children. In the 1991 survey, 40 percent of school-age children were identified as malnourished (showing signs of either under-nutrition or over-nutrition).

In 1999, the CMI Land Cooperative Research and Extension Land Grant Program conducted a nutritional survey at seven public elementary schools on Majuro Atoll. The findings indicated that a significant majority of public elementary students were undernourished. Delap Elementary School had the highest percentage of undernourished students at 68.5 percent. The second highest was Uliga Elementary School with 61.4 percent, followed by Laura Elementary School at 57.7 percent, Rita at 53.0, Ajeltake at 51.9, Rairok at 38.1, and Woja at 28.1. The survey concluded that the majority of Majuro public primary school students were not receiving sufficient and nutritious sustenance on a daily basis.

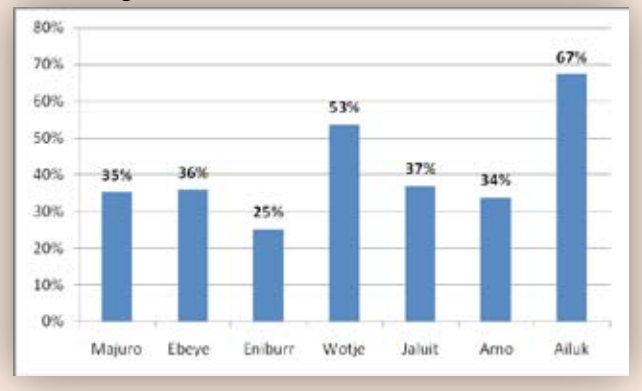
A follow-on nutrition survey in 2006 (funded under an ADB Social Protection Study) replicated the approach used in the 1999 survey and covered seven primary schools in Majuro, but this time covering both public and primary schools. The survey covered a sample of 205 fourth graders, or roughly 30 percent of all fourth graders on Majuro in that year. The survey found that more than two-thirds (68 percent) of the public school children in the sample had either moderate, mild or severe levels of under-nutrition in the height-for-age criterion, with nearly one-third of these students (29 percent) showing moderate or severe levels of under-nutrition. Fifty-three percent of public students had some level of under-nutrition in the weight-for-age criterion, with just over a quarter of them (27 percent) having moderate or severe under-nutrition. Among the private school students, 36 percent had mild or moderate height-for-age under-nutrition (with none of them having severe levels) and 26 percent had mild weight for age under-nutrition (with none having moderate or severe weight-for-age under-nutrition).

The conclusion from the 2006 study: "This survey suggests strongly that malnutrition remains a serious issue in the RMI, particularly among public school children. Moreover, the findings of this survey are generally consistent with earlier surveys on malnutrition, including one conducted in 1999, which show that half or more of public school students have some form of under-nutrition. This suggests that under-nutrition among public school children is now a long-standing phenomenon in the RMI." Moreover, nutritional interviews with school children conducted during these surveys (and on other occasions by health officials) show evidence of very poor diets among the children, with many arriving at school without having eaten any breakfast at all. Such persistent undernourishment (and malnourishment) have severe developmental impacts and are likely contributors to the longstanding poor academic performance of students in the RMI, particularly in public schools. This issue warrants immediate policy attention and action.

The 2006 RMI Community survey attempted to capture (for the first time in RMI) "self-reported" hunger among families. Household heads in each of the 1,205 households surveyed were asked "At mealtimes does your family get: A) Enough to eat; B) Sometimes not enough to eat; C) Often not enough to eat. As shown in figure G1.15, about one-third of households in Majuro, Ebeye, Eniburr, Jaluit and Arno claimed that sometimes or often they did not have enough to eat at mealtimes. Wotje and Ailuk had more than half of their households claiming sometimes or often not having enough to eat.

Subsistence activity (for own consumption) remains an important part of survival in the rural areas. In Wotje, Jaluit, Arno and Ailuk, a total of 12, 16, 26 and 27 percent of working age persons regularly engaged in some type of subsistence activity in 2006. Moreover, the 2006 survey found that (with the exception of Ebeye) animal raising (mostly chickens and pigs) remains a very common household practice.

G1.15 Percent of Households Claiming Sometimes/Often Not Enough to Eat: 2006



Source: RMI Community Survey 2006

SUBSISTENCE ACTIVITIES	Majuro	Ebeye	Eniburr	Wotje	Jaluit	Arno	Ailuk
% of working age doing any subsistence	6%	1%	5%	12%	16%	26%	27%
% of working age fishing	3%	1%	3%	2%	10%	17%	11%
% of working age farming	2%	0%	0%	10%	2%	6%	18%
% of working age raising animals	3%	0%	2%	1%	6%	19%	3%
% households with chickens	25%	4%	13%	44%	72%	91%	83%
% households with pigs	26%	3%	28%	65%	56%	80%	81%

Source: RMI Community Survey 2006

Hardship and quality-of-life issues in general

Drawing on recent studies and indicators (both quantitative and qualitative), some broad conclusions can be made with respect to hardship, vulnerability, and the general quality of life in the RMI.

In 2002, the ADB conducted a Participatory Poverty Assessment (PPA), targeting multiple stakeholders in both rural and urban communities. The overall findings indicated that a majority of people believed that hardship and poverty were on the rise, with poverty largely being defined in terms of poverty of opportunity. Key issues raised by participants surveyed were: 1) lack of employment and other income-generating opportunities, particularly in the outer-islands, 2) poor quality of schools and education outcomes resulting in low confidence in the effectiveness of the education system, 3) lack of outer-island transport and reduction of global copra prices, making copra production a less viable means of income-generation, 4) rise in social problems such as domestic and alcohol abuse, teenage pregnancy, suicide and gang violence, impacting the quality of life of communities. The 2006 survey asked respondents to list the top four or five problems facing their communities and the results were strikingly similar to the 2002 PPA, but with issues specific to each area highlighted (e.g. crowding and poor water supply on Ebeye and poor transportation services and lack of cash-earning opportunities in the remote atolls like Ailuk).

In the 2002 PPA nearly all participants in the rural and urban areas identified themselves as experiencing hardship in some manner. In particular, women stakeholders indicated that women were experiencing increased hardship. With many of their husbands unemployed, many women were becoming the primary breadwinners of their families, turning to handicraft production as their main source of income. Many women indicated that as handicraft production was very time consuming, they increasingly had little time to spend with their children. Many noted that income generated from handicrafts was only sufficient to purchase basic goods needed for survival, but insufficient to afford education and healthcare services[6].

A 2004 study of Jenrok Village in Majuro Atoll documented tough living conditions for many residents of this densely populated urban neighborhood. With funding from the International Waters Programme of the Pacific Islands, the socio-economic survey (covering 194 households) was conducted to provide baseline information for the development of an urban recycling and sanitation program. A number of key findings of the survey provided concrete evidence of rising poverty and hardship:

- The average household size was 9.5 persons, but the average house had only 2.2 rooms
- The unemployment rate was estimated at 47 percent, much higher than the national rate
- The average hourly wage for those employed was $2.57
- More than half (53 percent) of households had outstanding loans, which they used to finance (in decreasing order of priority) basic needs, funerals, house improvements, education and kemems (a Marshallese celebrationof an infant's survival to age one).
- Another 23 percent of the households had outstanding store credit at various local stores
- Some 65 percent of workers had allotment schemes arranged

6 Note that handicraft production is not registered as formal employment here.

with their employers to pay debts direct to creditors, resulting in very little take-home pay for many workers

- The average household debt obligation was approximately $325 per month
- Some 48 percent of all households in the area were recently disconnected by the water and sewer company due to non-payment, and of the remaining 109 remaining customers, two-thirds were more than 60 days overdue on their bill payments
- Of 178 metered customers in the Jenrok area, 58 (33 percent) were recently disconnected due to non-payment, with an additional two-thirds more than 60 days overdue on bill payments
- The diet of Jenrok residents consisted mostly of five main items: white rice (un-enriched), white flour, chicken quarter legs, packaged ramen noodles, and canned meats

Discussions on poverty and hardship in the RMI often involve the issue of "quality of life." But like poverty and hardship, quality of life is not clearly defined and is therefore difficult to measure. One simple approach that has been used (as more of a qualitative approach) is to simply ask respondents how they think their overall quality of life (in their own estimation) has fared in recent years. The 2006 survey included such a question, asking respondents "All things considered, how would you compare the quality of life for your immediate family today compared to 3 years ago?"

Half or more of respondents on Majuro, Ebeye, Eniburr, Jaluit and Arno responded positively, saying that overall the quality of life for their families was "much better" or "better" in the three years leading up to 2006. Only 40 percent of Wotje residents and a mere 6 percent of Ailuk residents felt that things had gotten better. Altogether, about one-third of all 1,205 households surveyed felt that quality of life had gotten "much worse" or "worse."

QUALITY OF LIFE COMPARED TO 3 YEARS AGO	Majuro	Ebeye	Eniburr	Wotje	Jaluit	Arno	Ailuk
% much better or better	55%	67%	83%	40%	75%	51%	6%
% about the same	11%	13%	12%	49%	11%	11%	13%
% worse or much worse	30%	18%	3%	12%	12%	35%	81%
% don't know	3%	2%	2%	0%	2%	3%	0%

Source: RMI Community Survey 2006

Text Box A. The MIJ on the MDGs

An excerpt from a Marshall Islands Journal editorial (3 April, 2009 issue)

1. Eradicate extreme poverty and hunger. With unemployment at 33 percent, most of those who have a job earning minimum wages, and high inflation in the past two years, putting food on the table has become harder and harder for many families. While one motto of our culture is 'jake jobol eo,' meaning that no person will go hungry through sharing, the reality for many in urban centers is starkly different.

2. Achieve universal primary education. Travel around any part of Majuro or Ebeye on a week day during school hours and you will see dozens, if not hundreds, of elementary-aged children simply hanging out. Meanwhile, if every child were to attend school, it is doubtful that there would be enough desks, classrooms, or teachers to cope with the numbers.

3. Promote gender equality and empower women. We have one female senator in the Nitijela, who is also the only female minister in Cabinet. The majority of government secretaries are male. A smaller percentage, but still a majority of business owners are male.

4. Reduce child mortality. According to the Demographic and Health Survey (DHS) 2007, which covers 2003-2007, almost four out of every 100 babies will not survive to their fifth birthday (37 deaths per 1,000 live births). In the period 1993 to 1997, a time of lesser medical knowledge, equipment and services, the statistics show that less than three out of every 100 babies survived (26 deaths per 1,000 live births). It may be that the data back from the 1990s is faulty, but infant mortality, particularly on outer islands, remains high.

5. Improve maternal health. This area appears to be a bright spot on an otherwise gloomy picture, with, according to the DHS, 95 percent of Marshallese women make use of a skilled provider, and 77 percent make the recommended four or more visits to that provider during their pregnancy.

6. Combat HIV/AIDS, malaria, and other diseases. The DHS of 2007 does not give data for the number of people who have HIV or AIDS. This does not mean it doesn't exist in RMI. The DHS was a household survey, and it's not surprising that no-one announced to surveyors that they have the disease. Research by the Ministry of Health and the Journal shows that while Marshallese are aware of HIV and AIDS, few people, especially youth, use condoms. We also know that sexually transmitted infections (STIs) are rife, adding greatly to the risk of contracting HIV, which can lead to AIDS.

7. Ensure environmental sustainability. Recent studies show that by the end of the century sea levels will rise by three to five feet. With our low-lying atolls, sustainability doesn't appear to be an option. And it won't take even a small percentage of that rise for our fresh drinking water supplies to be severely affected.

8. Develop a global partnership for development. Big on this agenda are good governance, dealing with debt, and making available the benefits of new technologies, especially information and communications. To this we point out that our economy is mostly built on donations of one sort or another or the selling of our shrinking fish stocks, that we owe such organizations as the Asian Development Bank serious amounts of money, and NTA offers one of the most expensive communication systems in the Pacific.

Goal 2: Achieve Universal Primary Education

Summary

It is likely that the RMI can achieve universal primary education by 2015.

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

The RMI is likely to meet this target. Primary enrolment trends have rebounded after dipping from the late 1980s to the late 1990s. With expanding classrooms and a slowly falling fertility rate, it is likely that all able children will be able to complete a full course of primary schooling by 2015. To do this, much more effort must be put towards addressing the persistent drop-out problem. Moreover, while this 'quantity' challenge is likely to be met, the 'quality' challenge of improving educational performance and outcomes must also be addressed.

Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling
2.1 Net enrolment ratio in primary education
2.2 Proportion of pupils starting grade 1 who reach last grade of primary
2.3 Literacy rate of 15-24 year-olds, women and men

Primary Enrolment Trends

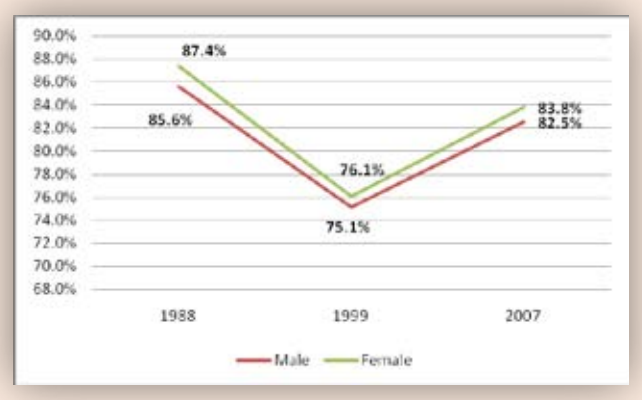
The RMI's estimated net enrolment ratio in primary education fell from 86.5 to 75.6 percent from 1988 to 1999 (based on single-year enrolment calculations from the 1988 and 1999 censuses). This sharp decline in net enrolment was the result of both a drop-out effect as well as a push-out effect. The push-out phenomenon has resulted from an insufficient number of seats in primary schools, particularly in the congested urban areas of Majuro and Ebeye. This problem persists until today, although a program of new classroom construction at the primary, middle, and secondary school level is underway and should begin to alleviate the push-out problem soon.

While net enrollment overall fell between 1988 and 1999, in both years female enrolment rates were slightly higher than male rates (as shown in figure G2.1). Meanwhile, at the secondary level, data from both census years show a reversal, with female net enrolment slightly lower than male enrolment (perhaps due to teen pregnancy and other factors).

More recent (and reliable) estimates of net enrolment ratios are not currently available. Nevertheless, a "simple school attendance rate" can be reviewed alongside the net enrolment data. This is the percentage of all 6 to 14 year olds currently attending school (at any grade). In 1988, 89.1 percent of all 6 to 14 year olds had attended school, while in 1999 the rate was lower at 84.1 percent. For Majuro, the simple school attendance rates for 1988, 1999 and 2006 (based on a sample of 544 households in the RMI Community Survey 2006) were: 87.0, 83.0, and 87.1 percent, suggesting a recovery in attendance since the 1999 census. For Ebeye, the rates for 1999 and 2006 (with 2006 based on a sample of 357 households) were: 82.4 and 84.7 percent, again suggesting an improvement in recent years over the 1999 rate. For the rural areas covered in the 2006 survey, the data suggest the same trend (a general improvement in attendance between the 1999 rates and the 2006 rates).

Educational attainment data from censuses and surveys provide yet another viewpoint on the question of whether the goal of achieving universal primary education is being met. In 1999, 87.9 percent of all adults (age 25 and older) on Majuro had completed their primary education or higher. In 2006 the estimate was about the same, at 87.6 percent. For Ebeye, 86.0 percent of

G2.1 Net Enrolment Ratio in Primary Education



Source: 1988 and 1999 censuses and DHS 2007

adults had completed primary school or higher in 1999 and for 2006 the estimate was 83.9 percent. Data for the rural areas covered by the 2006 survey show that adult educational attainment has improved slightly since 1999.

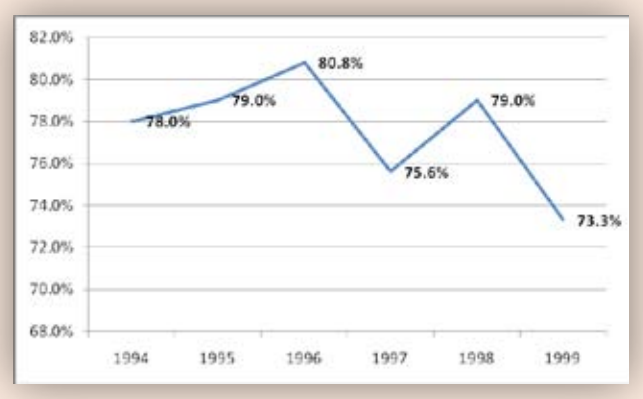
In summary, the net enrolment data show that between 1988 and 1999 net enrolment dropped notably. The simple school attendance data for 1988 and 1999 indicate the same negative trend, but more recent estimates based on the 2006 survey show a recovery in school attendance between 1999 and 2006. The adult educational attainment data show mixed results: no major change in Majuro, a slight deterioration on Ebeye, and slight improvements in the rural areas. While the RMI has made significant progress over the past several decades in increasing primary school completion, in the more recent decade it remains unclear whether this progress has been sustained. New estimates from the next census (set for 2010) will clarify this question. Nevertheless, it is important that Government shows that it is progressively working towards fulfilling its obligations to provide universal and free primary education for all, in line with its commitment under the Convention on the Rights of the Child and its own laws.

Primary School Completion

Reliable estimates for MDG indicator 2.2 (the proportion of pupils starting grade 1 who reach last grade of primary) are not available. Nevertheless, a World Bank country study in 2004 concluded (after analysis of existing enrollment data at that time) that, "Only 80 percent of Grade 1 students complete elementary school, with the drop-out rate persisting stubbornly at around 20 percent in recent years."[7] Anecdotal evidence, and analysis of existing (albeit limited) data suggest that the drop-out and push-out effects are still quite strong at the primary level, even though recent expansion in classrooms should begin to address the push-out issue.

A very crude way to measure retention over the primary school years (and which is commonly used in the RMI) is to calculate the ratio of Grade 8 enrollment in a given year to Grade 1 enrollment eight years prior. Doing this, we find the results shown in figure G2.2.

G2.2 Percent of Grade 1 students (in 1994 - 1999) who reached Grade 8 (in 2002-2007)



Source: Ministry of Education annual enrollment data

Taking the 1994 Grade 1 cohort as an example, we see that according to the data, 78 percent of Grade 1 students in 1994 made it to Grade 8 in 2001. This suggests that this cohort "shrunk" by about 20 percent over its eight years from Grades 1 to 8. The general trend in this indicator between 1994 and 1999 was negative. Again, this is an imprecise measurement of primary retention (since the size of each cohort is affected by such factors as emigration, immigration, drop-outs, push outs, and mortality). Nevertheless, it does suggest that the magnitude of the primary drop-out and push-out problem is serious and needs more attention if universal primary education is to be achieved.

Literacy

Literacy data were captured for the first time in the 1999 census. Adult literacy was defined as the ability to read and write a simple message in any language. The results for 15 to 24 year old literacy among males and females were 97.8 and 98.8 percent respectively (showing slightly higher literacy among women than among men). Some skepticism has been expressed, however, over the accuracy of the 1999 census in testing literacy. Some argue that adult educational attainment (at, say,

7 *Ganicott, Ken and Krech, Robert. 2004. (UNPUBLISHED) World Bank Human Development Review of the Pacific Islands, Country Case Study: Educational Performance in the Republic of the Marshall Islands. Human Development Unit, East Asia and the Pacific Department. Washington, DC.*

the 8th grade level) would be a more realistic measurement of literacy. If 8th grade completion were used as a proxy measurement of literacy, then 87 percent of males and 82 percent of female adults (ages 25 and older) would be considered literate.

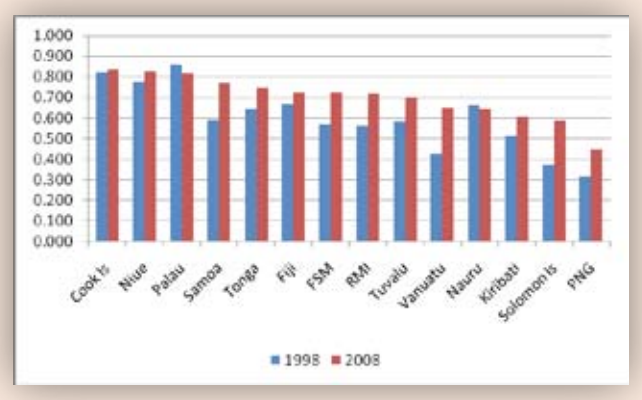
Pacific Human Development Index

The Human Development Index (HDI) is a summary composite index that measures a country's average achievements in three basic aspects of human development: health, knowledge, and a decent standard of living. Health is measured by life expectancy at birth. Knowledge is measured by a combination of the adult literacy rate and the combined primary, secondary, and tertiary gross enrolment ratios. Standard of living is measured by GDP per capita. The official HDI methodology calls for the use of GDP per capita in US$ purchasing power parity (PPP) terms, but for the Pacific current price GDP is used as there are no comparable GDP PPP estimates. As shown in the chart below, the RMI's score on the HDI increased from 1998 to 2008 from 0.563 to 0.716, a general improvement over the period.

In 1991 the RMI HDI score ranked it 5th in the Pacific and in 1998 it slipped to 10th. By 2008, however, it appears that the RMI's ranking improved slightly to 8th.

While the RMI has a good chance of meeting the target of universal primary education (the "quantity" part of the challenge), test scores and other performance indicators at the primary, secondary and tertiary levels suggest that the "quality" issue needs much more attention.

G2.3 Pacific Human Development Index (HDI)



Source: UNDP Pacific Center (D.Abbott)

Goal 3: Promote Gender Equality and Empower Women

Summary

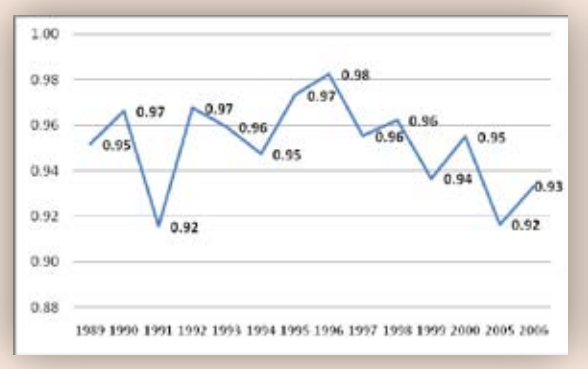
The RMI is making decent progress in advancing female education, employment, and other economic characteristics, but there remains much room for improvement, including in the sphere of female political representation.

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

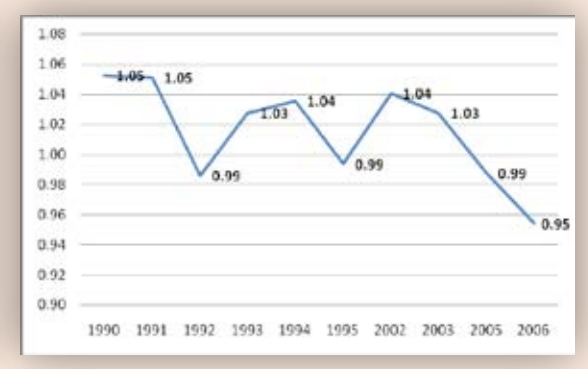
Female-to-male enrollment data show some room for improvement at the primary level and a slight deterioration at the secondary level. There is parity (on-average) at the tertiary level. Females have made great progress over the past several decades in improving primary and secondary educational attainment and in participation in wage labor. While the number of females running for national and local government seats has steadily grown, and while the majority of people feel that more females should be represented in government, the proportion of seats held by females in the Nitijela remains unchanged (at only 1 in 33) and is growing very slowly at the local level. Violence against women and girls is also a major problem.

Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015
3.1 Ratios of girls to boys in primary, secondary and tertiary education
3.2 Share of women in wage employment in the non-agricultural sector
3.3 Proportion of seats held by women in national parliament

G3.1Ratio of girls to boys in primary education;



G3.2 Ratio of girls to boys in secondary education



Source: MOE annual enrollment data

Female-to-male Enrollment

The female-to-male primary enrollment ratio has fluctuated between the low and high 90s (see figure G3.1) but appears to be on an overall downward trajectory, a very worrying trend (especially considering the fact that in most other countries the opposite trend is seen). The only year in which parity was almost reached was in 1996, when the ratio reached .98. The most recent years for which data are available (2005 and 2006) show relatively lower ratios at .92 and .93. The long-run average primary enrollment ratio is .95; there is much room for improvement. At the secondary level (figure G3.2) the ratio has ranged between .95 to 1.05, and again the most recent four years show a steady decline. The .95 ratio seen in 2006 was the lowest since 1990.

At the tertiary level (figure G3.3), data from the University of the South Pacific (USP, preliminary and foundation courses only), the College of the Marshall Islands, and the Marshall Islands Scholarship, Grant and Loan Board (MISGLB, which provides scholarships to Marshallese attending colleges and universities abroad) show that the female to male enrolment ratio from the late 1990s to 2008 has ranged between .78 to 1.03. The long-run average (between 1996 and 2008) for tertiary female-

to-male enrolment has been .89, suggesting that females have yet to catch up to males in terms of college attendance.

Female-to-male Educational Attainment

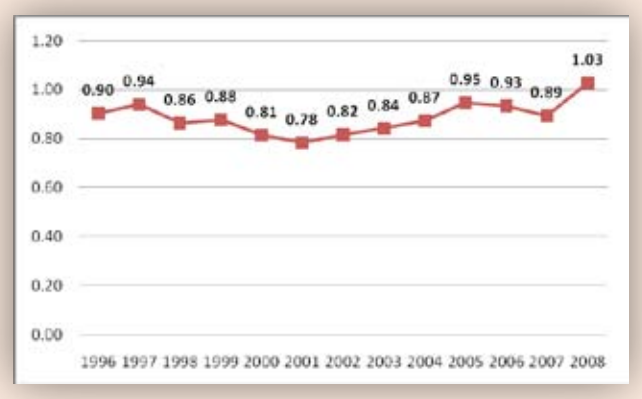
Data on long-run adult educational attainment show positive trends for females (see G3.4 and G3.5). In 1967, only 15.6 percent of female adults had completed at least primary school, compared to 28.2 percent of males. By 1999, female primary completion had jumped to 82.0 percent, a more than five-fold increase in three decades. The trend at the secondary level is similar; in 1967 only 5.0 percent of female adults had completed high school and by 1999 the rate had increased more than six-fold to 33.2 percent. While positive, these figures are still quite low and will affect the skills base for future productive activities in the country. Male adult educational attainment has also improved over time, but the male-female gap is closing.

Vocational training programs in the RMI are highly skewed towards males, with very few TVET opportunities for females. Formally established training programs such as the Waan Aelon in Majol (WAM) canoe program and the Fisheries Nautical Training Center cater almost exclusively to males (although in recent years WAM has increased its number of female trainees).

Female Participation in Wage Labor

As highlighted under MDG 1, female participation in wage labor has also increased over time (see G3.6). In 1967 only 14.9 percent of females in the labor force were actively

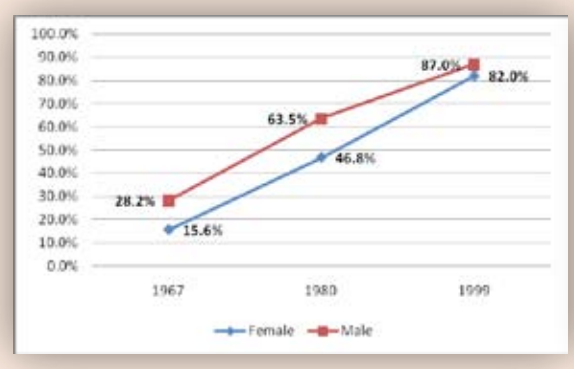
G3.3 Ratio of girls to boys in tertiary education

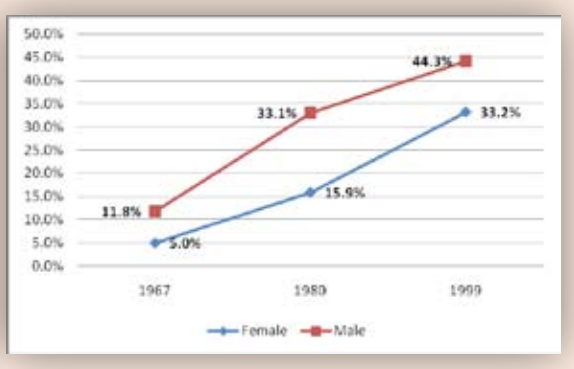


Note: data for 1996 to 2004 includes CMI (enrollment by academic year), USP (preliminary and foundation enrollment only), and MISGLB. Data for 2004 to 2008 only includes CMI and USP enrollments.

Source: CMI, MISGLB and USP programs

G3.4 Adult (25+) primary completion (or higher); G3.5 Adult (25+) secondary completion (or higher)





Source: 1967, 1980, and 1999 censuses

participating in some type of formal, wage labor. This rate essentially doubled by 1988 and 1999, reaching 30.5 and 30.3 percent in those years, respectively. While the trend is encouraging, between 1988 and 1999 there did not appear to be any growth at all. More recent and reliable estimates are not available.

The share of women in wage employment in the non-agricultural sector was 33.2 percent in 1988 and grew slightly to 35.9 by 1999 (figure G3.7).

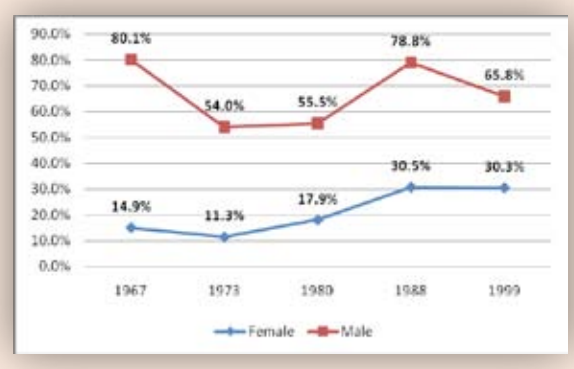
greater proportion of lower-skilled, lower-paying positions are held by females.

Parliament Seats Held by Females

The proportion of seats held by females in the national parliament, Nitijela, has remained virtually unchanged since the beginning of Constitutional independence (in 1979). Only 1 in 33 seats (3 percent) has been occupied by a female, except in the 1996-1999 term when there were

female candidates running for local and national office, and despite widespread public support (at least self-reported support) for more females in office, the percentage of seats held by females remains unchanged in Nitijela and has grown very slowly at the local level.

G3.6 Participation in wage labor;



G3.7 Women in non-agricultural employment

Source: 1967, 1973, 1980, 1988 and 1999 censuses

Mean annual wages for full-time, year-round employed females in 2002 (based on the Household Income and Expenditure Survey) was $7,595 compared to males at $10,772; females earned 70 cents for every one dollar earned by males. Detailed occupational analysis of the 1999 census shows that only 36 percent of "professional and technical" positions were occupied by females, while 61 percent of "clerical and related" positions were occuped by females. Occupational data from more recent surveys confirm that a

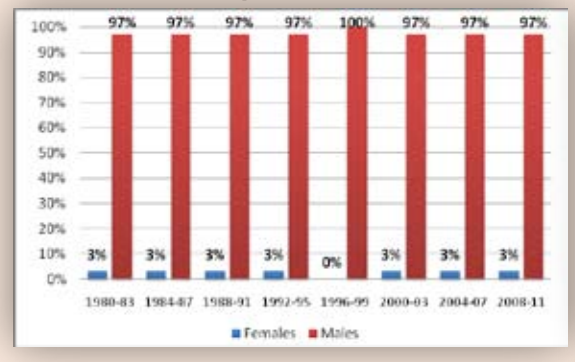
no females at all in Nitijela (figure G3.8). Recent elections (in 1999, 2003, and 2007) have seen steady increases in the numbers of female candidates running for national and local level seats, but overall female representation in political leadership remains extremely low.

Moreover, in the RMI Community Survey 2006, the vast majority of respondents (89 percent) responded "Yes (Aet)" to the question, "Do you feel that more females should be represented in local councils and the Nitijela?" Despite more

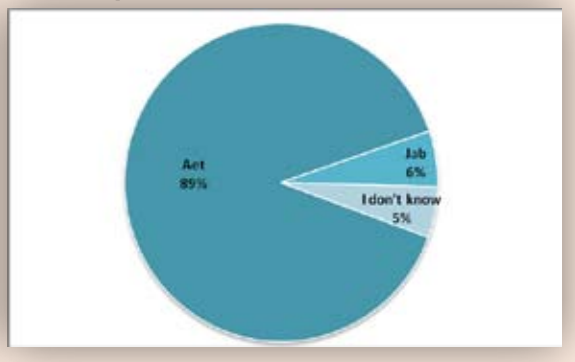
Gender-related Development Index

The Gender-related Development Index (GDI) measures achievement in the same basic capabilities as the HDI does, but takes into account inequality in achievement between women and men. In other words, the GDI is simply the HDI discounted (or adjusted downwards) for gender inequality. As shown in figure G3.10, the RMI's GDI score in 2008 was 0.708, giving the RMI an 8th place ranking out of the 14 countries in the reference group.

G3.8 Proportion of seats held by men and women in national parliament;

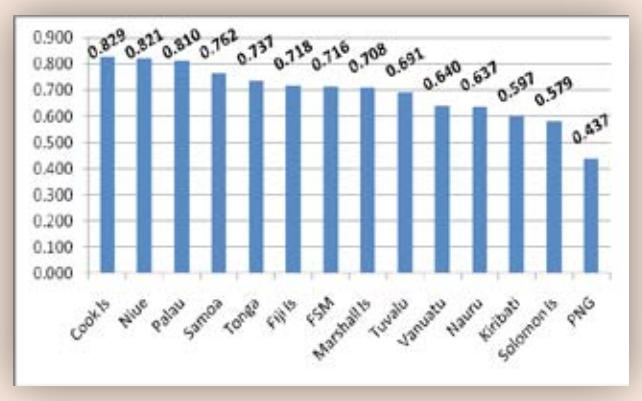


G3.9 Response rates on female elected leadership: 2006



Source: Ministry of Internal Affairs, RMI Community Survey 2006

G3.10 Gender-related Development Index (GDI) 2008



Source: UNDP Pacific Center (D.Abbott)

Violence Against Women and Girls

In recent years, groups like the Women United Together Marshall Islands (WUTMI) have voiced increasing concern about domestic violence and physical abuse against women and girls. The DHS 2007 was the first survey in the RMI to have collected comprehensive information about violence against women and girls. The DHS found that one in three women have suffered some form of physical violence since the age of 15, with more than half of them experiencing physical violence within the past 12 months. Among women who had experienced physical violence since age 15, 72 percent reported that a current husband or partner was the perpetrator.

Over half of all women and men surveyed (56 and 58 percent, respectively) agreed that violence against women was justified under specific circumstances. Among women respondents, the four most accepted reasons for violence against women were: neglecting the children, arguing with the husband, going out without telling the husband, and refusing to have sexual intercourse.

Ten percent of women that experienced physical or sexual violence by their husband reported suffering deep wounds, broken bones, broken teeth, or other serious injuries. Seven percent of women experienced physical violence while pregnant. Eight percent of women aged 15 to 29 reported that their first experience of sexual intercourse occurred against their will and in total almost one in five women has experienced sexual violence.

The likelihood of experiencing sexual violence was correlated negatively with educational attainment. Nearly one in four women with no education or only primary level completion experienced sexual violence. Among women who had completed secondary schooling, the rate was slightly lower at 20 percent. For those who had completed more than secondary level, the rate was under 10 percent.

Goal 4: Reduce Child Mortality

Summary

The RMI is on track to meeting this goal.

Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

The under-five mortality rate has been reduced by more than half since 1988 and is currently estimated to be in the low 20s to low 40s range (based on Ministry of Health administrative data and the DHS 2007, respectively). While these rates are still relatively high (compared to other Pacific nations), they do suggest that the RMI has made significant progress in reducing child mortality and is on the way to meeting MDG4. There is a clear need for more in-depth analyses of a host of child related issues and their combined effects on child health and welfare.

Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate
4.1 Under-five mortality rate
4.2 Infant mortality rate
4.3 Proportion of 1 year-old children immunised against measles

Under-five and Infant Mortality

The RMI has made strong progress in reducing under-five and infant mortality rates (figures G4.1 and G4.2). In 1988 the under-five mortality rate was 93 (per 1,000 live births) and by the early 2000s it ranged in the low to mid 20s. The most recent estimate (DHS 2007) suggests a higher rate of 46 which, while still relatively high, represents half the rate in 1988. There are obvious discrepancies between the administrative data (from MOH) and the 2007 survey data which the RMI should investigate. Nonetheless, the overall trend suggests that the RMI has a good chance of meeting MDG4 by 2015 if the trend continues.

There remains a notable difference between urban and rural child mortality; the DHS showed an urban under-five mortality rate of 44 compared to the rural rate of 49.

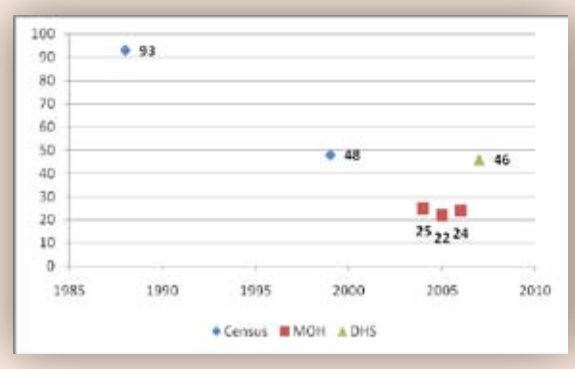
A similar trend is seen with infant mortality, where the rate has fallen from 63 (per 1,000 live births) in 1988 to the 20s to 30s range today. The DHS again shows a (slightly higher) discrepancy relative to the administrative data, suggesting a rate of 33 compared to the recent MOH estimates of 32 and 31. But this is still half the rate in 1988. The urban infant mortality rate (30) was notably lower than the rural rate (37).

Immunization

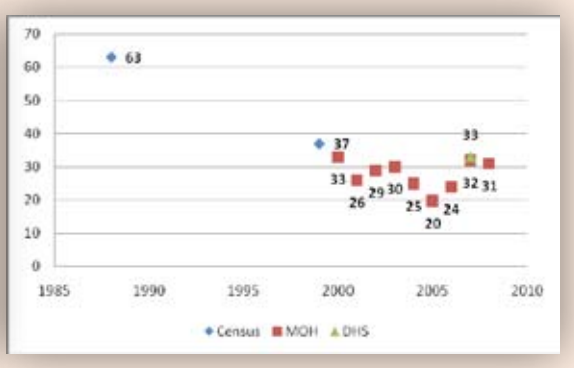
The proportion of one year-olds immunized against measles was 70 percent in 1998, 80 percent in 2001, and 54 percent in 2007 (figure G4.3). Like the estimates for infant and under-five mortality, the estimates for immunization coverage also show major discrepancies between administrative data (MOH) and survey data. This generally weakens the ability to draw any concrete conclusions on the effectiveness of the RMI's public vaccination programs. Nonetheless, all estimates point to the fact that there remains much room for improvement in immunization coverage in the RMI.

There is a clear need for more in-depth analyses of a host of child related issues, such as the prevalence of low birth weight babies, prevalence of underweight children, under-nutrition issues, and immunization coverage and their combined effects on child health and welfare. The RMI should also begin tracking the correlation between child health (as measured by these indicators) and school performance.

G4.1 Under-five Mortality Rates (per 1,000 live births);

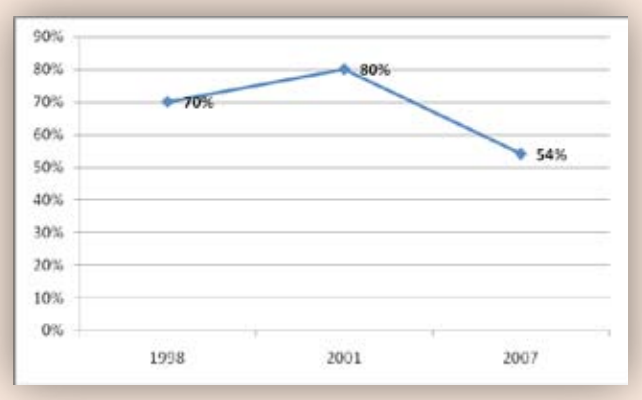


G4.2 Infant Mortality Rates (per 1,000 live births)



Sources: 1988 and 1999 censuses, MOH administrative data, DHS 2007

G4.3 Proportion of 1 year-old children immunized against measles



Sources: SPC and DHS 2007

Goal 5: Improve Maternal Health

Summary

The RMI is likely to meet this goal.

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

In most years the RMI registers between zero to three maternal deaths (out of 1,500 to 1,600 births per year).

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

The RMI is set to meet this target, with nearly all mothers having access to basic services. The DHS estimated that some 94 percent of births in 2007 were attended by skilled health personnel and that antenatal care coverage has improved. However, teen fertility remains a pervasive challenge and much more needs to be done to reduce the prevalence of STIs, particularly because it creates an opportunistic vulnerability to HIV infection. Moreover, young mothers and low-income mothers have relatively high unmet need for family planning.

Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio
5.1 Maternal mortality ratio
5.2 Proportion of births attended by skilled health personnel

Maternal Mortality

MOH data show that the number of registered maternal deaths in the recent decade has ranged between 0 to 3, with most years registering zero (although it is commonly known that birth and death registrations have much room for improvement). Annual births range between 1,500 to 1,600, with approximately 90 percent taking place in Majuro and Ebeye.

The 2005 draft MDG progress report stated that maternal mortality rates have decreased over time due to a range of factors: the increase in trained midwives and maternal health staff at the hospitals on Majuro and Ebeye; the increase in trained Health Assistants in the outer islands who are able to identify potentially risky pregnancies (which are then referred to the hospital on Majuro or Ebeye); strengthening of pre- and post-natal programs; hiring of qualified expatriate medical staff; purchasing of modern monitoring equipment; and improvement of the off-island medical referral system.

While the RMI's ability to detect potentially high risk maternal cases has improved, it is also known that many maternal deaths arise from "normal" cases with no apparent risk factors. This stresses the importance of ensuring that every delivery is conducted under the supervision of a skilled birth attendant.

Births Attended by Skilled Health Personnel

With around 90 percent of all births taking place in the Majuro and Ebeye hospitals, the MOH estimates that the vast majority of births are attended by skilled health personnel (doctors, nurses, or midwives). Recent MOH estimates on the proportion of births attended by skilled health personnel are above 90 percent, and the DHS 2007 estimate was 94.1 percent.

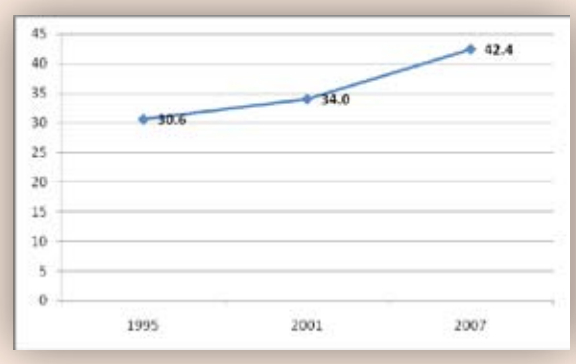
Target 5.B: Achieve, by 2015, universal access to reproductive health
5.3 Contraceptive prevalence rate
5.4 Adolescent birth rate
5.5 Antenatal care coverage (at least one visit and at least four visits)
5.6 Unmet need for family planning

Contraceptive Prevalence Rate

The contraceptive prevalence rate is the percentage of women who are practicing (or whose sexual partners are practicing) any form of contraception and it is usually reported for women ages 15 to 49 in marital or consensual unions. The contraceptive prevalence rate (for all methods) has grown from an estimated 30.6 in 1995 to 44.6 in 2007. The contraceptive prevalence rate for modern methods in 2007 was 42.4 percent.

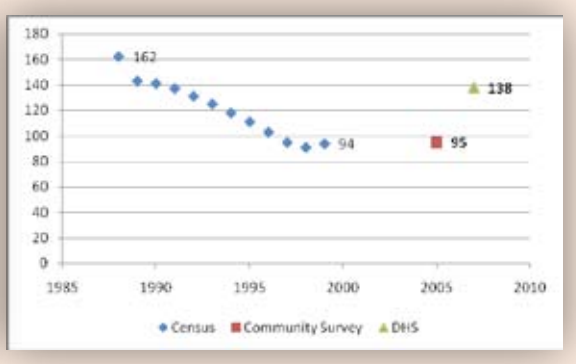
According to the MOH Annual Report FY2004, the most popular form of contraceptive was DepoProvera with 39.6 percent of female clients using this method. The next most popular method was contraceptive pills at 23.2 percent. Condoms and bilateral tubal ligations were 15.2 and 13.4 percent, respectively. There is low condom usage in RMI as reflected in family planning records, STIs incidence and in the DHS.

G5.1 Contraceptive Prevalence Rate (all methods)



Sources: SPC and DHS 2007

G5.2 Age-specific Fertility Rate (15 to 19 years)



Note: DHS data for the three years preceding the survey

Sources: 1988 and 1999 censuses, RMI Community Survey 2006, DHS 2007

Adolescent Births

The RMI has long been known to have one of the highest adolescent (teen) birth rates in the Pacific. As shown in figure G5.2, the rate stood at 162 in 1988, but has been steadily declining and was below 100 by 1999 and the early 2000s. The most recent estimate from the DHS 2007 pegged the rate at 138 (for the three years preceding the survey). The relatively high DHS estimate warrants further investigation, as this may reflect the physical maturation of the youthful population (i.e. more births among 18 and 19 year olds) or it may reflect a rise in births among the very young (a more worrying possibility). Even with the overall downward trend, the RMI still has a relatively high teen fertility rate and more effective awareness, advocacy and prevention programs must be undertaken.

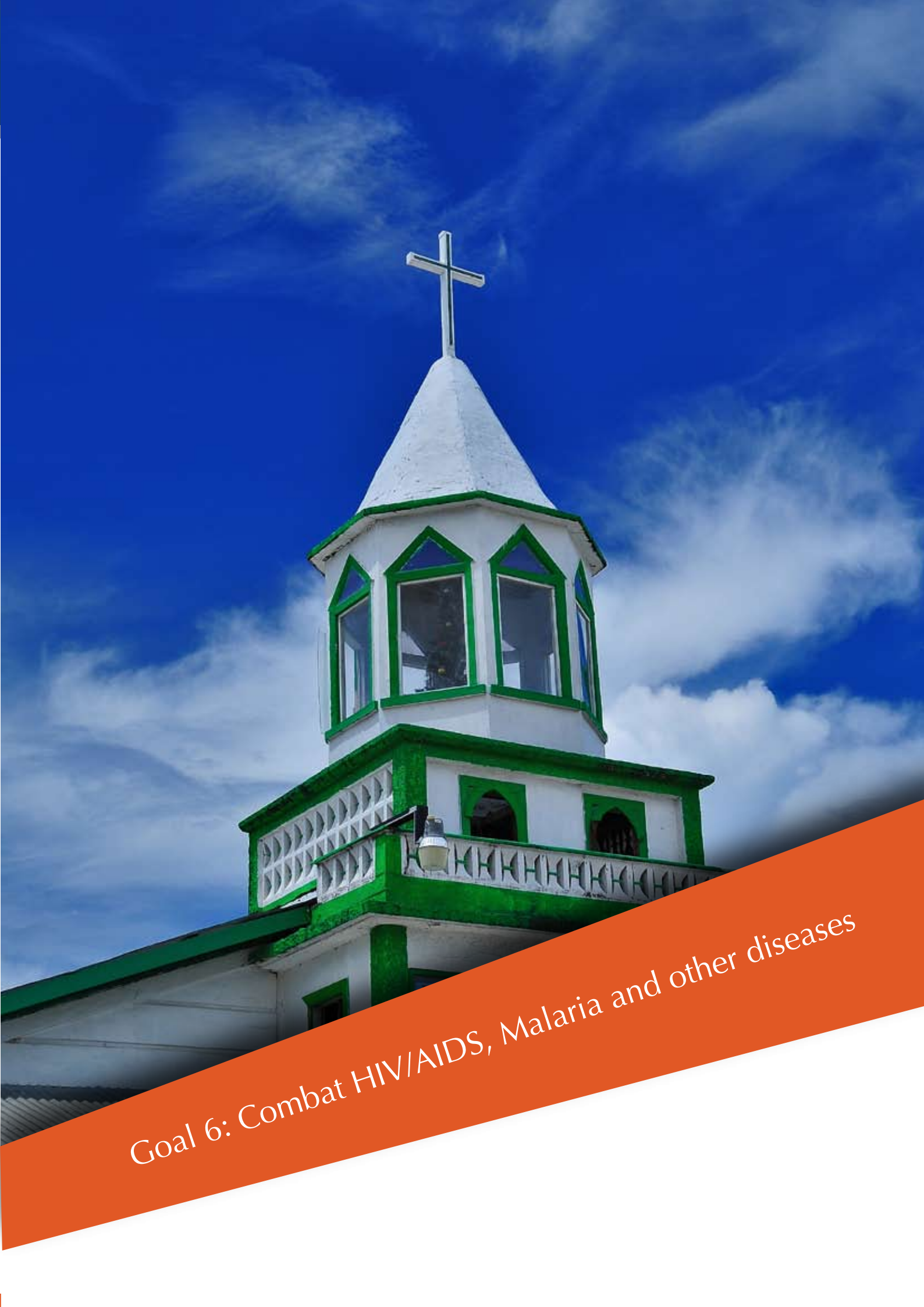
Antenatal Care

An estimated 94.8 percent of women (aged 15 to 49 with a live birth) received antenatal care provided by skilled health personnel (doctors, nurses, or midwives) at least once during their pregnancy, based on the DHS 2007. An estimated 77 percent of women received antenatal care at least four times during their pregnancy. These rates suggest that antenatal care coverage is relatively high in the RMI.

Unmet Need for Family Planning

Women with unmet need for family planning (for limiting births) are those who are fecund and sexually active but are not using any method of contraception, and report not wanting any more children. The concept of unmet need points to the gap between women's reproductive intentions and their contraceptive behavior. For MDG monitoring, unmet need for family planning is expressed as a percentage based on women who are married or in a consensual union.

The estimated unmet need for family planning was 8.1 percent in 2007. Although this unmet need for family planning may appear low, the 15 to 19 year old group had a very high unmet need for family planning of 33 percent and the lowest wealth quintile had a relatively high unmet need for family planning at 14.1 percent. Family planning information services should more effectively target these vulnerable groups if universal access to reproductive health (including family planning) services is to be achieved in the RMI.



Goal 6: Combat HIV/AIDS, Malaria and other diseases

Summary

The RMI is not on track to meeting this goal.

Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS

A total of 11 HIV cases were detected between 2003 and 2008, bringing the cumulative number of cases to 17. While these incidence rates are low, the overall STI data suggest that the RMI is not making any significant progress in reducing the spread of sexually transmitted diseases. Low condom use (especially among younger persons) and early initiation of sex are major factors in the persistently high teen fertility and STI rates. The RMI has not made any clear progress on these problems.

Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it

The RMI has met this target, with all HIV positive patients having access to treatment.

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

The RMI continues to face severe challenges in reducing the incidence of diabetes, tuberculosis and other major diseases.

Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS
6.1 HIV prevalence among population aged 15-24 years
6.2 Condom use at last high-risk sex
6.3 Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS
6.4 Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years

HIV and Other STIs

HIV testing in the RMI has increased over the years, with 2006 and 2007 recording nearly 6,000 tests (2008 was an uncharacteristically low year for HIV testing). Between 2003 and 2008 a total of 11 confirmed HIV cases were detected, bringing the total accumulated positive cases to 17 (although estimates of cumulative numbers are not consistent). While fewer than 1 percent of all those tested for HIV have had positive results, this does not reflect the total population prevalence. These tests are conducted almost exclusively among students, food handlers and others who are not considered among the most high-risk groups. Population surveys will need to be conducted to estimate true population prevalence of HIV.

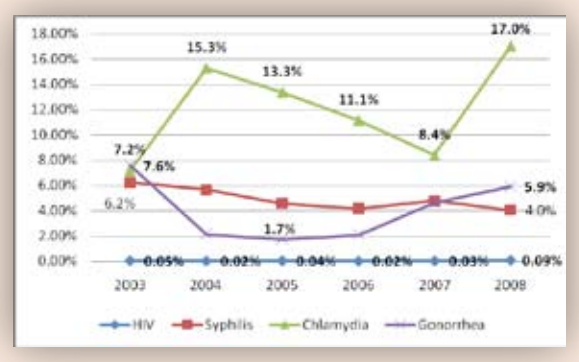
While HIV screening has shown very low rates, testing for other STIs show more alarming results. Syphilis tests in recent years have consistently resulted in 4 to 6 percent positive cases (although the trend looks negative). For Chlamydia, the results have been between 7 to 15 percent and for Gonorrhea between 2 to 7 percent. The high prevalence of these other STIs, particularly among younger people (many of whom continue to practice high-risk sexual behavior), show the RMI's continued vulnerability to a major HIV epidemic. It is quite possible that while incidence rates of HIV are low (meaning newly detected cases every year are low) the population-wide prevalence rate may be high.

The majority of detected cases of sexually transmitted diseases are during pre-natal visits. This means that a greater proportion of the general population is not being tested. Discussions with health providers indicate that many people do not

TESTS/RESULTS	2003	2004	2005	2006	2007	2008
HIV tests	4,335	5,026	5,340	5,896	5,822	3,462
Positive cases	2	1	2	1	2	3
Syphilis tests	3,313	5,979	6,959	6,209	6,063	7,457
Positive cases	206	336	318	259	289	302
Chlamydia tests	712	1,054	1,409	1,052	323	394
Positive cases	51	161	188	117	27	67
Gonorrhea tests	965	1,401	1,915	1,533	777	458
Positive cases	73	30	33	32	36	27

Sources: MOH

G6.1 Percent of tests positive for HIV, Syphilis, Chlamydia, Gonorrhea



Sources: MOH

get tested until the later stages of the diseases when symptoms are more noticeable (and in some instances, at a point where it is no longer treatable); or in the case of chlamydia, women find that they are infertile and/or have severe abdominal pain and infections (often leading to a hysterectomy). It also means that there is a greater proportion of males who are not being tested and treated, possibly leading to additional cases of new infections that are not currently being detected.

According to the DHS 2007, over one-third of females (39 percent) and males (37 percent) had been tested for HIV. Of those tested for STIs, 10 percent of women and 3 percent of men reported they had tested positive for an STI or had symptoms of an STI in the 12 months preceding the survey. Of these, 46 percent of women and 85 percent of men sought treatment.

Knowledge of HIV/AIDS

The proportion of the population aged 15 to 24 with comprehensive correct knowledge of AIDS was 26.6 for females and 39.4 for males, suggesting that the majority of younger people do not have sufficient and/or correct knowledge about HIV and AIDS. Meanwhile, knowledge of a condom source is very high, with 82.3 percent of females and 90.8 percent of males knowledgeable about where condoms can be attained.

Condom Use

Condom use during last higher-risk sex is the percentage of young men and women ages 15 to 24 who had more than one partner in the past 12 months reporting the use of a condom during their last sexual intercourse. The DHS 2007 was the first formal survey to gather data on condom use. The results show that condom use during last higher-risk sex was 8.9 percent for women and 21.7 percent for men – very low. There is thus a strong need for more effective condom programming in the RMI.

Age of First Sexual Intercourse

The DHS results showed that the initiation of sexual intercourse occurs at relatively young ages in the RMI. More than half of young had initiated sex before they turned 18 (about 60 percent of young women and 73 percent of young men). By age 15, about 14 percent of young women and 27 percent of young men had initiated sex.

Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it
6.5 Proportion of population with advanced HIV infection with access to antiretroviral drugs

HIV Antiretroviral Drugs

The Ministry of Health closely monitors and works with HIV positive patients and reports that 100 percent of those with advanced HIV infection have access to antiretroviral drugs. According to MOH, HIV positive cases are receiving antiretroviral therapy according to standard treatment protocols.

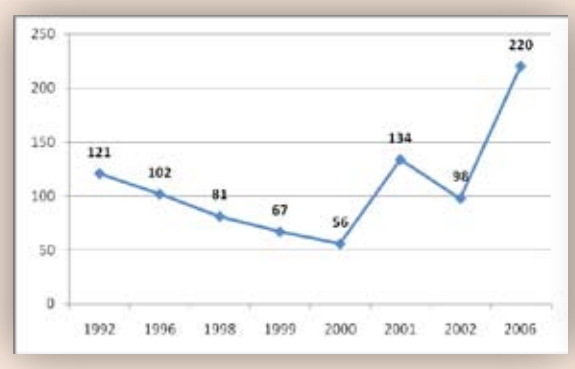
Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases
6.6 Incidence and death rates associated with malaria
6.7 Proportion of children under 5 sleeping under insecticide-treated bednets
6.8 Proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs
6.9 Incidence, prevalence and death rates associated with tuberculosis
6.10 Proportion of tuberculosis cases detected and cured under directly observed treatment short course

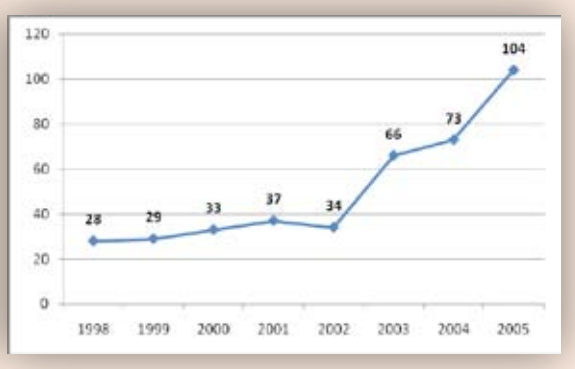
Malaria is not a major health hazard in the coral atolls and islands of the RMI.

Tuberculosis

The issue of TB is of major concern.

G6.2 Tuberculosis Incidence Rate (per 100,000); G6.3 Active TB cases at Year-end





Sources: SPC 2004 MDG tables and MOH 2007 tables

According to SPC and EPPSO statistics, in 1992 the TB incidence rate was 121 per 100,000 persons. The incidence steadily declined through the 1990s, reaching 56 in 2000 (the lowest incidence seen in recent history). But since 2000 the incidence has grown again, peaking at 220 in 2006. The number of new TB cases in recent years remains high, with a TB warning issued in late 2004 due to a steep rise in newly detected cases. Anecdotal evidence suggests that the true number of TB cases is higher than what is reported, with many TB carriers and patients unwilling to get tested and/or treated due to the negative social stigma associated with the disease. The number of active cases at year end has steadily risen to over 100 by 2005 (figure G6.2).

The estimated TB prevalence rate for 2006 to 2008 was in the range of 270 to 330 (per 100,000) and the estimated TB mortality rate was 10 (per 100,000) in 2002 and 28 in 2006.

There has been improvement in the detection and treatment of new cases, largely due to the use of the Direct Observation Therapy (DOT) treatment method. In 2004 and 2005, an estimated 38.3 and 88.0 percent of tuberculosis cases were cured under the directly observed treatment short course.

One major determinant is the environmental conditions within which communities reside. In Ebeye, where a majority of the new cases of TB are being detected, concern has been raised about the overly crowded and poor sanitation conditions as a factor in the rise in TB cases. The same concern has been raised for the Darrit-Uliga-Delap area of Majuro Atoll which is similarly densely populated. In both areas, a significant number of households do not have access to clean water and sanitation, potentially encouraging the rapid spread of air/water-borne and other communicable diseases. Treating these types of infectious diseases would be difficult to address until the conditions/environment within which people are living are addressed as well.

High rates of TB are also a concern for HIV, with the higher risk of TB illness for those who are infected with HIV.

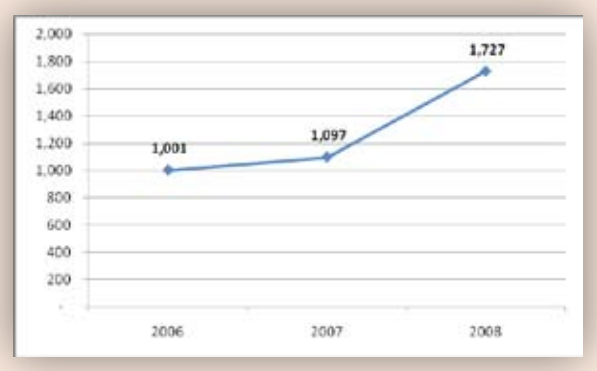
Other Major Diseases

Other communicable disease such as influenza and conjunctivitis are also raising concern. In addition, the steeply rising numbers of infantile diarrhea and gastroenteritis cases need to be examined further, and may indicate a potential public health crisis with regards to the prevention and treatment of communicable diseases.

What is of particular concern is the rise in non-communicable, lifestyle-related diseases such as Type II diabetes. Throughout the RMI an increasing number of diabetes cases are seen in hospitals (figure G6.3). From 2006 to 2008, the number of cases rose from 1,001 to 1,727, yielding a diabetes prevalence rates (per 10,000) of 192, 208 and 324. Today, an estimated 28 percent of individuals over the age of 15 have Type II diabetes and for those older than 35, the figure is nearly 50 percent (see text box below).

Type II diabetes is currently one of the major contributing factors of adult morbidity in the RMI, and is a major financial burden on the

G6.4 Registered Diabetes Cases



Sources: MOH

healthcare system. At the later stages of the disease, many patients have to be referred for medical treatment in Hawaii or the Philippines at major expense to both patient and the MOH Medical Referral Program. The number of new cases of Type II diabetes is still rising and poses major concerns as to the ability of the healthcare system to adequately address the treatment needs of patients given available and limited resources.

The incidence of leprosy also remains a major concern, given that this condition has been largely eradicated throughout most of the world. From 2004 through 2006 there were 60, 56, and 44 newly detected cases of leprosy in the RMI.

Text Box B. A Diet Ripe for Diabetes?

Excerpt from "Defeating Diabetes: Lessons from the Marshall Islands" by Brenda Davis, RD

Today's Dietitian, Vol. 10 No. 8 P. 24, August 2008

It would be difficult to design a diet that could more efficiently induce type 2 diabetes than the one the Marshallese people have adopted. Not surprisingly, the rates of type 2 diabetes in this population are among the highest in the world. An estimated 28% of individuals over the age of 15 have type 2 diabetes. For those older than 35, the figure is nearly 50%. Close to 75% of women and more than 50% of men are overweight or obese. Approximately one half of all surgeries performed on the island are amputations due to complications from diabetes. There are no facilities for renal dialysis.

Sixty years ago, diabetes was virtually unheard of in the Marshall Islands. People were slim and physically active and lived off the land. Their diet consisted of fish, seafood, and edible plants such as coconut, breadfruit, taro, pandanas, and leafy greens. Breadfruit is a starchy fruit that grows on trees and is generally roasted on an open fire. Nutritionally, it is similar to white potatoes. Pandanas is a huge, extremely fibrous fruit that is chewed and sucked on to extract the carotenoid-rich, juicy orange pulp.

Today, with considerable overpopulation in Majuro, approximately 80% to 90% of all food calories are supplied by imported foods. The most costly imported foods are fresh fruits and vegetables and other perishables, which arrive by ship every 28 days and by air every two weeks. In most of the outer islands, indigenous foods supply 50% to 75% of food calories. While health authorities promote local foods in urban centers, the supply of local plants on these small islands is insufficient to sustain the entire population. Many locals believe that when it comes to nutrition, the only thing that really matters is having a full stomach. The value of fresh fruits and vegetables is largely unappreciated.

Local food is generally more expensive per calorie than imported food and less abundant since it's dependent on the season and weather conditions. The cheapest source of calories in these centers is white rice. Many healthcare workers believe that white rice is responsible for the diabetes epidemic in the Marshall Islands. Some suggest that if the Marshallese replaced white rice with brown rice, the diabetes epidemic would be resolved.

Unfortunately, it is not that simple. Some of the world's lowest rates of diabetes occur in areas where white rice is a staple food. In populations where white rice is consumed with vegetables, tofu, and/or beans and the intake of processed foods is minimized, diabetes rates are remarkably low. On the other hand, where white rice is consumed with canned or fatty meat, salty snacks, sweet beverages, and other heavily processed foods, diabetes rates are consistently high.

It is rather startling to learn that the glycemic index of the most commonly consumed rice in the Marshall Islands—Calrose white rice—is 83, higher than that of white table sugar, which has a glycemic index of about 68. However, it is even more startling to learn that the glycemic index of Calrose brown rice is 87. While brown rice is a better source of fiber, vitamins, and minerals, the glycemic index of rice depends more on the relative amounts of two main types of starch, amylose and amylopectin, than on the fiber or nutrient content. Low-amylose rice has a high glycemic index. Calrose brown rice has a slightly lower amylose content than Calrose white rice.

While this does not make the white rice a more healthful choice than the brown rice, it does suggest that blood sugar control may not be favorably affected by merely exchanging Calrose white rice for Calrose brown rice. Replacing Calrose white rice with a high-amylose brown rice would seem a more promising option, although hardly a panacea.

Goal 7: Ensure Environmental Sustainability

Summary

The RMI is making mixed progress towards this goal, with some clear forward movement (in areas such as conservation) but also with severe threats emerging from climate change and sea-level rise and other serious challenges such as improving sanitation and water quality.

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

The RMI faces serious environmental challenges, both endogenous and exogenous, but is making steady (albeit somewhat slow) progress in mainstreaming sustainable development principles and practices into its planning and development processes. Major threats remain, including the most dangerous environmental threat of all to the RMI: climate change and sea-level rise.

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

Recent biodiversity assessments identify a number of species that are threatened. The RMI has taken great steps forward through the Micronesian Challenge, the Reimanlok Plan, and other initiatives to promote conservation and halt the loss of environmental resources and biodiversity, but these programs are relatively new and have yet to be fully implemented.

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

The RMI has made decent progress towards meeting the safe drinking water target and slightly less impressive progress towards meeting the basic sanitation target. While the percentage of households with safe drinking water sources is already in the 90s, recent water quality tests have shown a serious problem with contamination. Moreover, the percentage of households without any sanitation facility whatsoever remains too high. Some assistance must be provided to low-income households for sanitation facility improvements.

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

Population densities on Majuro and especially Ebeye are growing sharply and certain urban villages are taking on slum-like characteristics, with harsh physical as well as socio-economic living conditions for their residents (as documented in the Jenrok Village survey).

Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources
7.1 Proportion of land area covered by forest
7.2 CO2 emissions, total, per capita and per $1 GDP (PPP)
7.3 Consumption of ozone-depleting substances
7.4 Proportion of fish stocks within safe biological limits

Integrating Sustainable Development

While the RMI continues to face serious environmental challenges, both endogenous and exogenous, sustainable development principles and practices are steadily being mainstreamed into planning and development processes.

A number of ongoing and new programs, projects and initiatives (all under the banner of sustainable development) are taking place with organizations such as the EPA, OEPPC, MIMRA, WUTMI, Ministry of R&D and the recently established Marshall Islands Conservation Society (MICS). In recent years, these entities have formed tighter working relationships with traditional leaders, local governments, and other stakeholders to ensure that environmental resources are sustainably managed.

While the overall effort to mainstream sustainable development has been stepped up, the consensus holds that the RMI must do much more to address its environmental challenges, including the loss of environmental resources.

The Micronesian Challenge and Reimanlok

The RMI and its Micronesian neighbors adopted the Micronesian Challenge in 2005, a multi-country climate change and conservation initiative that challenges each member (RMI, FSM, Palau, Guam, and the CNMI) to conserve at least 30 percent of near-shore and 20 percent of terrestrial resources by the year 2020.

In 2007 the RMI developed Reimaanlok, a National Conservation Area Plan for the Marshall Islands. This plan interprets the commitment of the Micronesia Challenge and lays out a roadmap for the achievement of the goals of the Micronesia Challenge. The focus of Reimanlok is to identify the species and areas of greatest bio-

logical value, and to develop community-based management plans for each atoll. These plans identify areas to be managed for conservation, and also establish rules for harvesting of species across the entire atoll.

Forested Land Area

The total land surface area of the RMI is approximately 70 square miles (or 182 square kilometers) and the EPA estimates that roughly 55 percent of this is covered by natural forests consisting of coconut and other local trees, and of this some 10 percent consists of mangrove forests. The Micronesian Challenge and the Reimanlok Plan call for the conservation of 20 percent of all terrestrial resources by 2020.

Emissions

The RMI's emissions of greenhouse gases (GHG) are negligible, even on a per capita basis. However, the RMI is still intent on reducing its emission footprint and is currently working on collaborative opportunities within the context of the UN Framework Convention on Climate Change (UNFCCC) and the national socioeconomic needs of its people. In 1998 to 2000, the RMI participated in its first capacity building exercise to produce its First National Communications report which contained an overview of the country's GHG emissions. The report contained data gaps but was able to estimate total emissions attributed to petroleum, amounting to 0.0025 million tons of carbon, which is equivalent to 0.0092 million tons of CO2, very low on a global scale. The next GHG Emissions Report (targeted for end 2009) is expected to gain improved quality reporting under the Second National Communications to the UNFCCC.

Ozone-depleting Substances

According to the EPA, the total consumption (importation) of ozone-depleting substances into the country was 2.27 and 4.99 metric tons in 2006 and 2007. Since 2005, the RMI has banned the importation, sale and use of R12 refrigerant and all other chlorofluorocarbons (CFCs). RMI is now phasing out the use of R22, while R134 and other environmentally friendly products, aerosols, and carbon tetrachloride as solvents are allowed as substitutes for R22 and other banned products.

Dredging

The RMI EPA's National Coastal Management Plan was recently approved by the Cabinet and aims to ban dragline dredging in the lagoon, with the exception of suction dredging for sand in waters deeper than 10 meters. This ban will be effective within three years (by 2011). The plan will also require the importation of aggregate (sand and gravel) for all foreign aid funded projects. All projects with significant impact on the environment require Environmental Impact Assessments before permits are issued.

Fish Stocks

While estimates on the proportion of fish stocks that are within safe biological limits are not available, it is known that a number of inshore and pelagic fish species are threatened with overfishing. Among inshore species, certain species in urban areas, including Rabbit fish, are considered potentially threatened (although more studies are required to document this). Among pelagic species, there is increasing concern over the potential over harvesting of Big-eye and Yellowfin tuna stocks.

Climate Change and Sea-level Rise

One of the greatest challenges to sustainable development – and the very existence – of the RMI in the 21st century is climate change and sea-level rise. The RMI supports the findings of the Intergovernmental Panel on Climate Change that unless drastic action is taken, global temperatures will continue to rise and extreme events will become more frequent and intense. In this regard, the RMI agrees that even though fossil fuels will remain the mainstay of energy production well into the 21st century, countries (particularly the Annex I countries) should make every effort to reduce the production of greenhouse gases.

As a Party to the UNFCCC and its Kyoto Protocol, the RMI collaborates with a number of international and regional partners to implement its commitments under the convention. Current efforts to mitigate climate change include:

Development of a new National Energy Policy that emphasizes renewable energy and energy efficiency
Development of a Vulnerability and Adaptation Study
Development of a GHG Emissions Report
Assessment for a Climate Change Policy
Support for community conservation activities as a means of adaptation to climate change
Active participation in the UNFCCC negotiations for global mitigation of GHG

Support for coral reef monitoring activities
Support for activities of community assistance in the enforcement of environmental regulations
Support for integrated waste management
Support for coastal management activities and programs
Exploring further linkages to sustainable fisheries programs

Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss
7.5 Proportion of total water resources used
7.6 Proportion of terrestrial and marine areas protected
7.7 Proportion of species threatened with extinction

Water Resources

As a country entirely made up of low-lying coral atolls and islands, fresh water resources are extremely limited in the RMI. In 2007 an Integrated Water Resource Management (IWRM) diagnostic study was carried out by the RMI EPA and the Pacific Islands Applied Geoscience Commission (SOPAC), providing the following summary of freshwater resources on facing page:

The IWRM study found that while water resources are finite and fragile, they are under increasing pressure from population growth, urbanization, economic development and other forces. Water (and wastewater) issues are perennial concerns for the RMI. However, the IWRM study found that water resource management is not as integrated as it should be. While there is some cooperation among water related agencies, overall collective management remains weak.

All atolls and islands, urban or rural, face both water quantity and quality challenges. The two main water utilities (on Majuro and Ebeye) continue to face financial and operational challenges and conservation and demand management practices remain weak. Water resource assessments and monitoring remain limited but are improving.

The IWRM study suggests that a more integrated water resource management system can be built if a number of measures are taken. Overall coordination and collaboration must improve and be institutionalized. Better education campaigns focusing on behavior change can help. Traditional leaders and women should be better utilized and included in decisions and dialogue. More public-private partnerships should be considered.

Protected Terrestrial and Marine Areas

As stated, the Reimanlok Plan aims to conserve at least 30 percent of near-shore and 20 percent of terrestrial resources by the year 2020. More specifically, the plan breaks down how these targets will be achieved by type of area, as summarized in the following table. For example, for ocean reef areas, an estimated 17 percent is already under protection or is in the process of being conserved (by existing or planned conservation programs) and by 2020 the target is 50 percent. For land, some 16 percent of total terrestrial areas are currently or in the process of being

TARGET AREAS	Total area (km^2)	Existing or Planned Conservation (km^2)	Existing or Planned Conservation Areas (% of total)	Goal
Ocean Reef (Windward and Leeward)	627.3	108.4	17%	50%
Lagoon Slope	1,120.4	258.8	23%	50%
Ref pass and channel	646.7	133.9	21%	80%
Lagoon pinnacles	77.8	9.6	12%	40%
Deep lagoon	10,239.7	1,727.2	18%	30%
Total Nearshore Marine	14,066.6	2,554.7	16%	30%
Land	181.9	28.9	16%	20%

Source: RMI Reimanlok Plan

conserved while the ultimate target is 20 percent.

The atolls and islands with existing protected terrestrial and marine areas include Bikini, Ailinginae, Rongelap, Rongerik, Jaluit, Majuro. OEPPC estimates that currently some 41 percent of bird islands, 25 percent of mangrove areas, and 27 percent of turtle nesting beaches are under conservation.

Threatened Species and Biodiversity

In 2000, the RMI produced its National Biodiversity Strategy and Action Plan following a three year preparatory phase (as part of enabling activities under the UN Convention on Biological Diversity). The first National Biodiversity Report was also published as part of this process, entitled "Living Atolls Amidst a Living Sea." This process presented key outputs which continue to guide the work of government in conservation

	Rainwater	Groundwater	Desalination	Importation
Majuro	• Annual average rainfall 131 inches per year (95% confidence interval of 125 to 137 inches per year based on 1959 to 2006 data) • Municipal water supply (RWH airport catchment and reservoirs with 36.5 million gallons storage, supplemented by Laura wells). 1,100 households on water line (about one-third). Household RWH also heavy, 71% of households have catchments in 2006	• Laura wells currently contributing about 100,000 gallons daily to the public water system • Small percentage of households still rely on groundwater wells for drinking (35 households or 1% of Majuro households in 1999 census)	• Occasional use of desalination units for public water (during droughts and emergencies) • Commercial use of desalination (for bottled water and other purposes) by private companies	• Increasing imports and sale of bottled drinking water
Ebeye	• Annual average rainfall 100 inches per year • Household RWH (22% of households have catchments in 2006)	• Very few households still rely on groundwater wells for drinking (1 in 1999 census and 1 in 2006 survey)	• Municipal water system uses desalination system with a maximum production capacity of 200,000 gallons per day (or roughly 200 gallons per households)	• Many households reliant on public water stands on US base at Kwajalein for drinking water • Increasing imports and sale of bottled drinking water
Outer Islands	• Rainfall gradient: southern atolls annual average rainfall over 100 inches and northern atolls as little as half this amount • Household RWH heavily used	• Household wells heavily used, especially in dry periods	• n/a	• Some imports of bottled drinking water from urban centers

RMI Integrated Water Resources Management (IWRM) Report 2006 (SOPAC)

and sustainable use of biological resources, including;

- A national vision on biodiversity
- Goals identified through priority setting
- Strategic themes developed for action and responsible entities identified
- Baseline information on known biological resources in the RMI
- Identification of major threats to Biodiversity in the RMI

Moreover, the Endangered Species Act legislates the protection of endangered and threatened species and subspecies, including:

- Blue Whale (Balaenoptera musculus)
- Sperm Whale (Physeter macrocephalus)
- Ratak Micronesian Pigeon (Ducula oceanica ratakensis)
- Hawksbill Turtle (Eretmochelys imbricate)
- Leatherback Turtle (Dermochelys coriacea)

In addition to these protected species, in recent years a number of species have been added to the 'threatened' list, including:

- Napoloen wrasse. This species has come under threat especially with the rise in the live fish trade. This fish is very important to control the population of Crown of Thorns (which kill/eat coral).
- Giant Clams. Species like Tridacna gigas (Kabor), Tradacna squomosa (Tetwod), Drimuj (Tridacna Hippopus) and possibly Maxima (Mejenwod) are under threat.
- Green Mangrove Crab. This species is no longer in existence in the mangrove forests of Jaluit Atoll and is considered threatened.
- Trochus
- Blacklip pearl
- Some species of sea cucumber
- Some species of corals
- Reef sharks (gray and white tip)

The Reimanlok Plan provides a comprehensive listing of all threatened species.

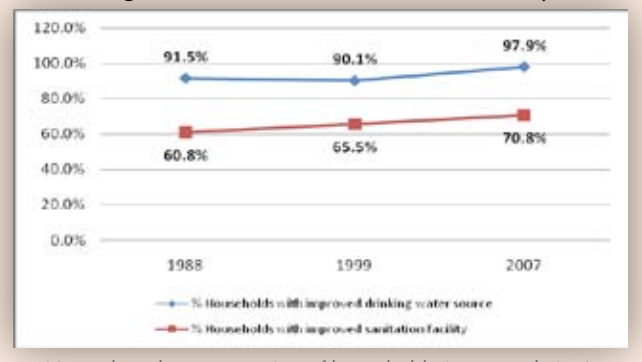
Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation
7.8 Proportion of population using an improved drinking water source
7.9 Proportion of population using an improved sanitation facility

Improved Water & Sanitation

The proportion of households using an improved drinking water source is high and growing, reaching around 98 percent in 2007. The RMI is set to meet Target 7C.

However, recent studies (including the 2004 Jenrok Study and an ongoing water survey conducted by SOPAC and EPPSO) along with EPA water testing data show that there remain some serious quantity and quality problems related to household drinking water. Between 1999 and 2003, the EPA tested a sampling of various water sources on Majuro Atoll and found a significant percentage of contamination (e.g. in 2001 nearly 85 percent of the household catchments

G7.1 Proportion of households with improved drinking water source and sanitation facility



Note: data show proportion of households (not population)
Source: 1988 and 1999 censuses, DHS 2007

tested were contaminated). During the same period, similar tests were conducted on a small sampling of water sources on eight rural atolls (Arno, Jaluit, Kili, Likiep, Mili, Wotje, Lae and Namdrik). A similar pattern was observed, where a significant proportion of samples tested were found to be contaminated. Of the 698 water catchments tested, 41 percent were contaminated. Testing of groundwater wells, particularly in densely populated urban areas, show similar results. These findings suggest that a significant proportion of water sources throughout the RMI are probably unsafe for human consumption.

The proportion of households with improved sanitation facilities has grown steadily from around 61 percent in 1988 to around 71 percent in 2007. This suggests that the RMI has a good chance of meeting the target of cutting in half the proportion of the population without access to improved sanitation. While this is an encouraging trend, there remain serious concerns over sanitation, in particular: 1) the percentage of households with no sanitation facilities whatsoever; and 2) the sanitation situation in the densely populated urban areas.

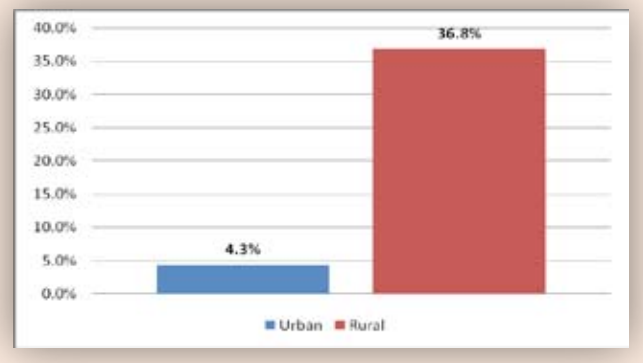
The RMI Community Survey 2006 found that an estimated 3.8 percent of households on Majuro and Ebeye (urban) and 33.9 percent of households in the rural areas did not have any sort of toilet facility whatsoever. The DHS 2007 confirmed these estimates, showing that 4.3 percent of all urban households and 36.8 percent of rural households had no toilet facility. These results suggest that between 1,500 to 2,000 urban residents and upwards of 5,000 rural residents are still using traditional methods (beaches, bushes, etc.).

The availability of improved household sanitation facilities is highly sensitive to income, suggesting that some financial assistance may be required to help lower income households upgrade their sanitation facilities (or build facilities in those cases where there are none to begin with).

Perhaps the most compelling sign that water and sanitation issues remain a major problem can be seen in the incidence of gastroenteritis in the RMI. The number of new gastroenteritis outpatient cases has skyrocketed in recent years, reaching an estimated 3,720 cases in 2006. EPPSO estimates that each gastroenteritis outpatient visitor costs the RMI health system (in direct and indirect costs) around $119. This means the 3,720 outpatient cases in 2006 cost the system nearly half a million dollars to treat. Gastroenteritis incidence trends on Ebeye are similar to those on Majuro.

Solid waste management is another major challenge in the atoll environments of the RMI, both in the urban centers and (increasingly) in the rural areas. Majuro Atoll, now home to probably over 30,000 residents, continues to use a reef-landfill type of disposal system that presents serious environmental and public health risks, including to water resources. Outer islands are experiencing increased challenges in properly collecting and disposing of waste. Much more attention and resources need to be put towards effective waste management systems.

G7.2 Percent of urban and rural households with no toilet whatsoever, 2007



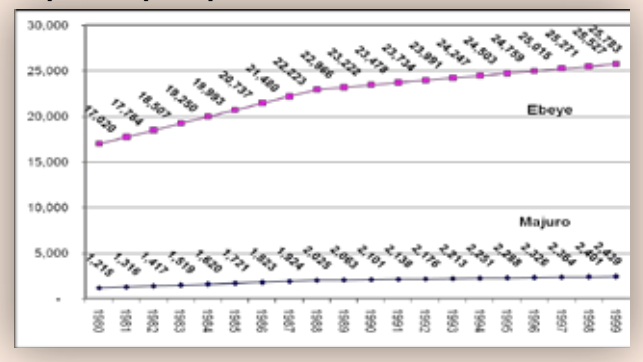
Source: DHS 2007

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

7.10 Proportion of urban population living in slums

Data on the proportion of urban dwellers living in slums are not currently available. However, what is clear is that densely populated villages in Majuro and Ebeye are now a common phenomenon. Census and survey data show that urban migration continues to be a major demographic phenomenon in the RMI, with Majuro receiving hundreds of new migrants from the rural areas every year. All of Ebeye and certain patches of Majuro now have extremely high urban densities.

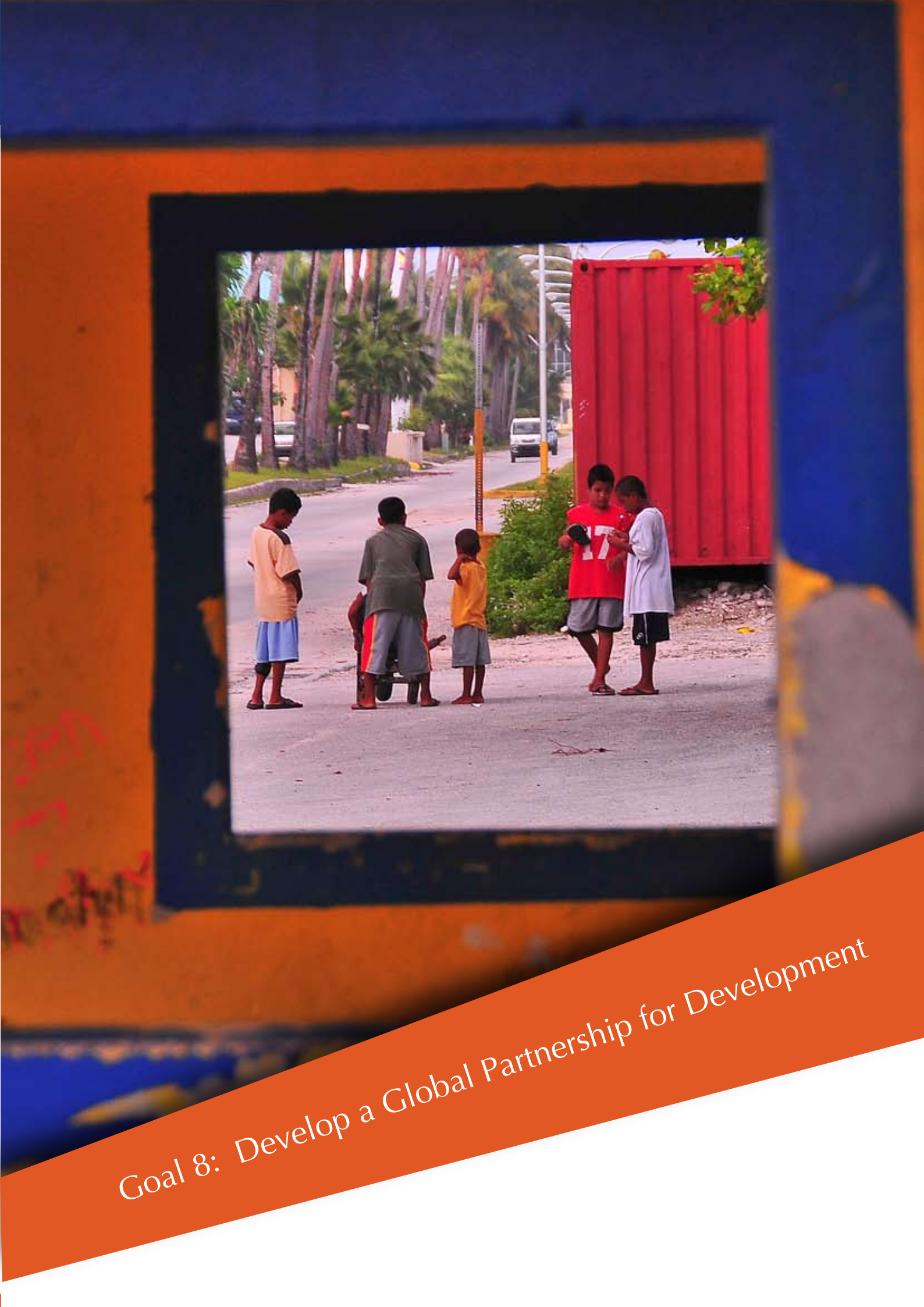
G7.3 Population densities on Majuro and Ebeye (persons per square km)



Source: EPPSO, RMI censuses

G7.4 EPPSO Satellite image of Jenrok Village's 257 households: 2009

Source: EPPSO/SOPAC 2009 Household Water Survey



Goal 8: Develop a Global Partnership for Development

Summary

The RMI faces considerable economic, fiscal and development challenges; there is room for improvement.

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)

There is room for improvement in the RMI in terms of developing an open and predictable trading and financial system and in terms of commitment towards good governance and poverty reduction.

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] and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction)

The RMI receives relatively high levels of development assistance, although these resources are decrementing and there is growing concern over fiscal sustainability and stability.

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

The RMI has very high debt ratios and is experiencing increasing fiscal distress. Efforts are underway to initiate a program of reform.

Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries

Most residents have good access to affordable, essential drugs.

Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications

While the use of cellular phone technology has rapidly grown, internet use remains relatively low.

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] and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction)
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
Official development assistance (ODA)
8.1 Net ODA, total and to the least developed countries, as percentage of OECD/DAC donors' gross national income
8.2 Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation)
8.3 Proportion of bilateral official development assistance of OECD/DAC donors that is untied
8.4 ODA received in landlocked developing countries as a proportion of their gross national incomes
8.5 ODA received in small island developing states as a proportion of their gross national incomes
Market access
8.6 Proportion of total developed country imports (by value and excluding arms) from developing countries and least developed countries, admitted free of duty

8.7 Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries
8.8 Agricultural support estimate for OECD countries as a percentage of their gross domestic product
8.9 Proportion of ODA provided to help build trade capacity
Debt sustainability
8.10 Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative)
8.11 Debt relief committed under HIPC and MDRI Initiatives
8.12 Debt service as a percentage of exports of goods and services

Official Development Assistance

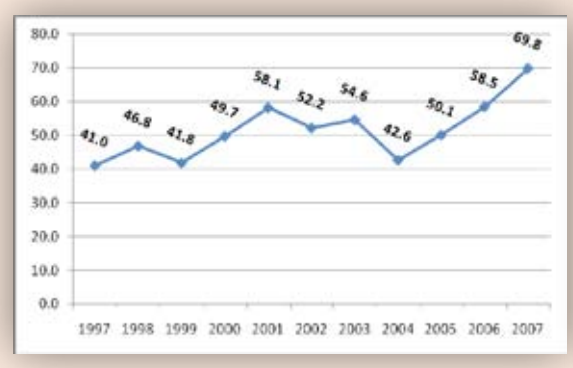
The RMI is relatively well-off in terms of official development assistance. Grants, the bulk of which are received from the US (through the Compact) and Taiwan, have been steadily growing and reached nearly $70 million in 2007 (figure G8.1). Grants represent between 40 to 50 percent of GDP (figure G8.2) and about two-thirds of the national budget.

Compact grants are decrementing, however, at a rate of $500,000 per year and within the near term this will begin to present serious challenges to the budget and current programs and projects.

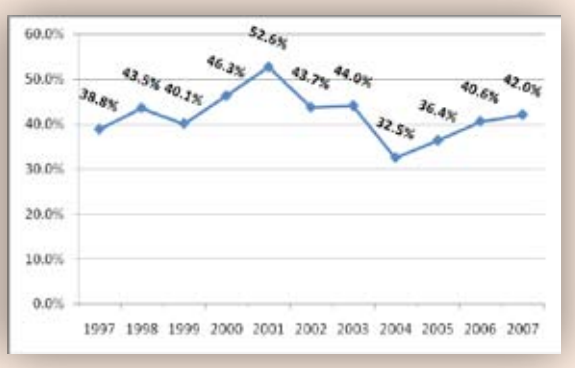
Debt Sustainability

In the mid to late 1990s, the RMI faced some of the highest debt service ratios in the world (precipitated by the issuance of Compact-backed bonds beginning in the late 1980s). By the early 2000s, bond debt obligations had been paid off, but the RMI had (in the meantime) borrowed heavily from the ADB and had by the early 2000s accumulated around $70 million in debt. ADB debt constitutes the bulk of RMI outstanding debt, and although the RMI's debt servicing burden is far lower today than in the 1990s, it is now struggling to keep up with debt servicing payments and is experiencing increasing fiscal stress. As shown below, debt service as a percentage of exports and as a percentage of General Fund revenues is around 32 percent. There is increasing concern over the country's fiscal and economic situation, particularly in light of slow (or no) growth in the economy, stagnant domestic tax revenues,

G8.1 Grants received by the RMI;

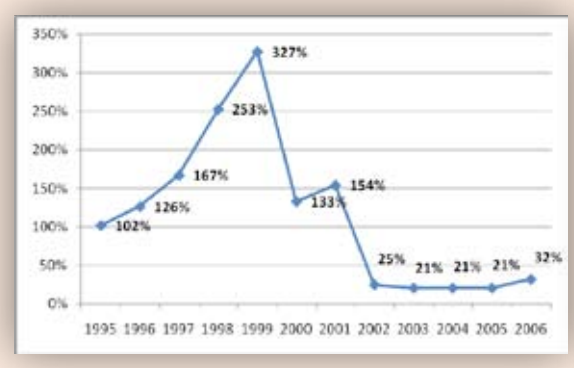


G8.2 Grants as % of GDP

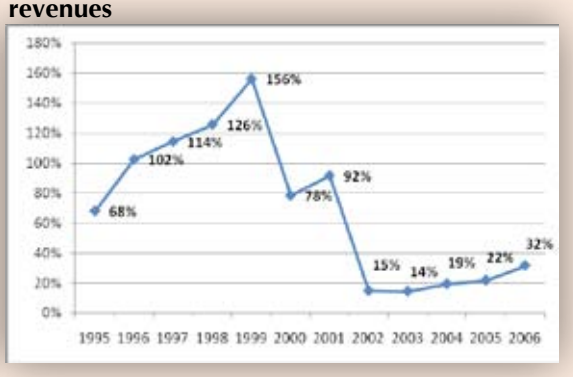


Source: EPPSO FY2007 Economic Statistics Tables

G8.3 Debt service as % of exports;



G8.4 Debt service as % of General Fund revenues



Source: EPPSO FY2007 Economic Statistics Tables

decrementing Compact transfers, increasing debt servicing payments, and other pressures on the budget. A number of major reports, including recent IMF Article IV reports and the 2005 Social and Economic Report, have stressed the need for reform. The IMF 2008 Article IV report states that "Given the decline in external grants under the amended Compact (and set to expire in 2023) and increases in debt service payments, maintaining the current size of government is not sustainable over the longer term. Fiscal consolidation and structural reforms are therefore needed, to ensure long-term fiscal sustainability and to boost private sector development." In April 2009, the Cabinet took the first steps in this direction with the establishment of a high-level Advisory Group that is tasked to develop and propose a comprehensive fiscal adjustment program.

Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries
8.13 Proportion of population with access to affordable essential drugs on a sustainable basis

Access to Essential Drugs

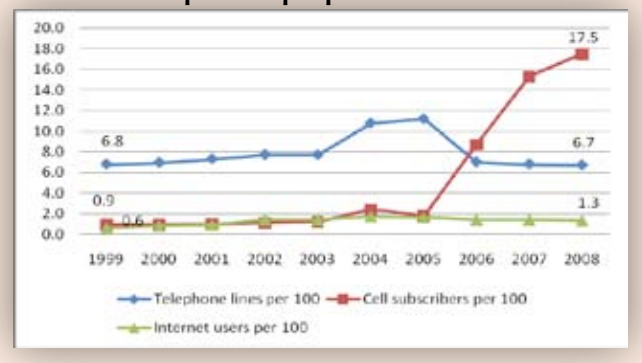
While no exact estimates are available with respect to the proportion of the population with access to a minimum of 20 most essential drugs, it is safe to say that most Marshallese in both the urban and rural areas have relatively cheap and easy access to most of the essential drugs, most of the time. Shortages of certain essential drugs do occur from time to time, but throughout most of the year the availability and accessibility of basic drugs is adequate.

Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications
8.14 Telephone lines per 100 population
8.15 Cellular subscribers per 100 population
8.16 Internet users per 100 population

Telephone, Cellular, and Internet Use

The RMI has seen virtually no growth in telephone line usage, with the estimated ratio of telephone lines per 100 population estimated at 6.8 in 1999 and 6.7 in 2008. Meanwhile, cellular phone use remained below 1.0 (subscribers per 100 population) up through 2000, ranged between 1.0 and 2.0 subscribers between 2001 and 2005, and then exploded to 17.5 by 2008. Internet use has grown over time, but more slowly than anticipated. In 1999, just a few years after internet service was introduced into the RMI, less than 1 in 100 people used the internet. By 2001-2002, 1 in 100 people were on the internet and by 2008 about 1.3 in 100 are online.

G8.5 Telephone lines, cell subscribers, and internet users per 100 people



Source: EPPSO and SPC

Text Box C. Progress and Problems: Some Perspectives from the Development Banks

Excerpts from the World Bank 2004 Pacific Human Development Review

There is a remarkable unity of opinion… favorable on the evident achievements of the Ministry of Health in lowering infant and child mortality … and the recent efforts to improve governance and accountability within the management of revenues and expenditure in RMI.

RMI is also a strong performer on transparency: social sector data that is restricted or withheld in many PICs, are freely available in RMI. Such ease of access also permits a close look at underperformance.

Observers are worried about the rise in lifestyle diseases, particularly diabetes and hypertension, and the looming threat of an HIV epidemic… They all recognize that youth in RMI seem to be an intersection point for several social problems, such as malnutrition in childhood, STD prevalence, high rates of teenage pregnancy, worrisome rates of suicides among young men…

Excerpts from the ADB Country Information Page (www.adb.org, accessed April 3, 2009)

Extended family ties and close relationships within the small population have kept pervasive poverty from being a major problem. There does however exist considerable inequity and hardship.

Declining social conditions and weakening social organization are evident in expanding urban areas. Women continue to lag behind men in all areas in spite of the predominantly matrilineal society. With high fertility and birth rates, the health of women is of concern to the Government. In addition to high prevalence of diabetes, there are other more modern diseases and sexually transmitted diseases (STDs). The population growth rate is still relatively high despite out migration to the US.

The shortage of skills at all levels is a major barrier to sustainable economic growth. Major impediments to the development of skilled manpower are the low level of educational attainment of the labor force. This is attributable to weak public sector management resulting in low quality of education and very high dropout rates.

MDG Progress Scorecard: 2005 versus 2009

The RMI is fortunate to now have two separate MDG progress reports: the draft 2005 progress report and this 2009 report. This allows for some broad comparisons and trend analyses to take place for each MDG. How have the assessments on progress changed since 2005? The following scorecard attempts to answer this.

MDGs	General Assessment in 2005	General Assessment in 2009
Goal 1: Eradicate Extreme Poverty and Hunger	**OFF TRACK.** The 2005 report gave a bleak assessment for MDG1, stating that "the evidence strongly suggests that poverty and hardship in the RMI are on the rise, and are being compounded by the lack of appropriate development and implementation of effective and relevant health, education and economic policies and initiatives."	**MIXED.** While the RMI is not on track to meeting the three targets under MDG1, the evidence suggest that the RMI does not yet have abject or extreme poverty, so the outcome remains mixed. Nevertheless, indicators related to income, employment, hunger, and related issues do suggest that general levels of poverty and hunger may be on the rise.
Goal 2: Achieve Universal Primary Education	**OFF TRACK.** The general assessment in 2005 was off track. The report cited many concerns, including low primary attendance, push-outs and drop-outs, literacy and numeracy.	**ON TRACK.** This report cites the same reasons as those in 2005, but concludes that the RMI is likely to meet this target. Primary enrolment trends have rebounded after dipping from the late 1980s to the late 1990s and with expanding classrooms and a slowly falling fertility rate, it is possible that all children will be able to complete a full course of primary schooling by 2015.
Goal 3: Promote Gender Equality and Empower Women	**MIXED.** The report gave a mixed review of progress on MDG3, with relatively positive assessments of gross enrollment ratios and female wage employment participation and relatively negative assessments of female political representation, earnings and overall prioritization of gender issues.	**MIXED.** RMI is making decent progress in advancing female education, employment, and other economic characteristics, but there remains much room for improvement, including in the sphere of female political representation – these are generally the same conclusions drawn in 2005.
Goal 4: Reduce Child Mortality	**MIXED.** The reported was generally positive on the reductions in infant and child mortality but cited concerns with preventable illnesses affecting infants and immunization challenges.	**ON TRACK.** The under-five mortality rate has been reduced by more than half since 1988 and is currently estimated to be in the low 20s to low 40s range. While these rates are still relatively high, they do suggest that significant progress has been made and that MDG4 is achievable by 2015.
Goal 5: Improve Maternal Health	**ON TRACK.** The report stated that since 2001 only one maternal death had been recorded and that pre-natal care and services had improved dramatically over the past four years.	**ON TRACK.** In most years the RMI registers between zero to three maternal deaths out of 1,500 to 1,600 births per year. Nearly all mothers have access to basic services and an estimated 94 percent of births in 2007 were attended by skilled health personnel. However, teen fertility remains a pervasive challenge and much more needs to be done to reduce the prevalence of STIs.

MDGs	General Assessment in 2005	General Assessment in 2009
Goal 6: Combat HIV/ AIDS, Malaria and Other Diseases	**OFF TRACK.** The report stated that HIV/AIDS infection rates are likely to rise over time and expressed grave concern over other STIs and other major diseases.	**OFF TRACK.** The RMI is not making any clear progress in reducing the spread of sexually transmitted diseases and HIV/AIDS remains a major threat. Low condom use and early initiation of sex are major factors in the persistently high teen fertility and STI rates. RMI faces severe challenges in reducing the incidence of diabetes, tuberculosis and other major diseases.
Goal 7: Ensure Environmental Sustainability	**OFFTRACK.** The report states that overall, sustainable environmental development has not been adequately addressed in the RMI. Human and financial resource constraints continue to inhibit the ability of the relevant agencies to meet their mandates. RMI allocations to environmental programs and activities are insignificant compared to allocations to other sectors. Despite the establishment of the RMIEPA and affiliated offices, environmental indicators continue to raise concerns.	**MIXED.** The RMI is making mixed progress towards this goal, with some clear forward movement (in areas such as conservation) but also with severe threats emerging from climate change and sea-level rise and other serious challenges such as improving sanitation and water quality.
Goal 8: Develop a Global Partnership for Development	**MIXED.** The report cites that aid continues to be received in the RMI, but there remains a high dependence on this aid, development is "distorted", and there are difficulties in aid coordination.	**MIXED.** The RMI faces considerable economic, fiscal and development challenges; there is room for improvement.

Moving Forward

The primary focus of this report is to diagnose the RMI's progress on the MDGs as of 2009, building on the earlier draft progress report produced in 2005. The next step should be for the RMI (and its development partners) to use the findings of these reports to inform policies and decisions moving forward. Appropriate strategies must be adopted to address the goals and targets that are not being met and to sustain or make further progress in those areas where progress has been made.

The MDG workgroup must play a critical role in moving the MDG agenda forward. The workgroup's marching orders are clear. Its job is to serve as the champion for the MDGs in the RMI (in general) and to specifically: ensure that the RMI fully meets its MDG commitments; collect, analyze, and publicly report on MDG related data, information, and progress; and conduct outreach and awareness activities.

One major challenge (and thus a priority) for the workgroup will be to strengthen the RMI's capacity to collect quality MDG data, to process and analyze the data, and to report on the trends and developments depicted by the data. As this and previous reports have highlighted, while data quantity and quality have generally improved over time, there remain serious gaps and discrepancies that must be addressed and reconciled.

Another major challenge will be to integrate the MDGs into existing planning, management, monitoring and other development processes. Effectively integrating the MDGs into development processes has not been easy for many countries. But to some extent this is already happening in the RMI. A number of ministries and agencies have begun incorporating performance based budgeting systems, and a few of these entities have integrated MDG targets within these systems. This movement within the public sector must be supported, alongside efforts to raise awareness on and commitment to the MDGs in the private and other sectors.

Nitijela (parliament) members and committees (in particular the Public Accounts Committee), Cabinet members, the media, traditional leaders, religious leaders, students, NGOs and community groups – these are all examples of stakeholders that the MDG workgroup should engage with on the MDGs. A range of communication and engagement vehicles are available: educational campaigns, public policy forums, summits, media pieces, and public advertisements and displays, and so on.

In 2005, the lack of targeted strategies and programs was identified as a key weakness in the RMI's overall MDG progress. MDG-specific strategies should be developed to effectively focus attention and resources towards these worthy goals and targets. This constitutes another major responsibility for the MDG workgroup.

Future analyses (including progress reports) should perhaps also focus on some of the more normative aspects and the overall spirit of the Millennium Declaration. Social justice, equality, freedom from violence and fear, good governance, respect for human rights – these are some overarching issues that can be analyzed in addition to the hard data and trends.

In ratifying the Millennium Declaration, the RMI pledged to its citizens (and the world) that it would pursue these development goals to reduce poverty and raise the quality of life for its people. Let us keep that promise.

Appendix 1. RMI National MDG Indicators Database

As part of the preparation for this report, a new RMI MDG Indicators Database was also developed. This is a comprehensive database that consists of a series of spreadsheets that inventory all available official MDG indicators, beginning in the year 1988 (a census year) and running through 2008. In addition to the official MDG indicators, a series of supplemental indicators are also provided under each target. This database should be updated every year as a key part of the ongoing MDG monitoring activities.

(This MDG database will be published as a separate but accompanying output to this main report)

Appendix 2. The RMI National MDG Workgroup

The RMI National MDG Workgroup was established by President Litokwa Tomeing and Cabinet on December 31, 2008 via Cabinet minute 221(2008).

The responsibilities of the MDG Workgroup are to:

a) Ensure that RMI fully meets, as best it can and within available resources, its commitments and obligations under the United Nations Millennium Declaration of 2000;
b) Ensure, in particular, that the RMI fully acknowledges its obligations to meeting the eight (8) major Millennium Development Goals and that the RMI puts forth a genuine national effort towards meeting these MDGs;
c) Collect, analyze, publicly report on MDG related data, information, and progress on a consistent basis, including outreach and awareness activities;
d) Provide ongoing monitoring of MDG progress; and
e) Serve as a champion for the MDGs in the RMI

The Office of the Chief Secretary is designated to organize and lead the MDG Workgroup, with membership of the MDG Workgroup consisting of:

a) All Ministerial Secretaries
b) Representatives from the private sector
c) NGO representatives
d) Representatives from the higher learning institutions
e) General Manager of EPA (or designee)
f) Director of EPPSO (or designee)
g) UN Joint Presence Office Country Manager (or designee)
h) Director of OEPPC (or designee)
i) President of MIMA (or designee)
j) Director of Youth to Youth in Health (or designee)

Appendix 3. References

Asian Development Bank. 2002a. Participatory Poverty Assessment Final Report, ADB TA 6002-RE. Asian Development Bank. Manila.

Asian Development Bank. 2002b. Discussion Paper on Assessment of Poverty and Hardship and Strategies for Equitable Growth and Hardship Alleviation, ADB TA 6002-RE. Asian Development Bank. Manila.

Asian Development Bank. 2006. Marshall Islands Social and Economic Report 2005: Juumemmej. Asian Development Bank. Manila.

Davis, Brenda. 2008. Defeating Diabetes: Lessons from the Marshall Islands. Today's Dietitian, Vol. 10 No 8.

Economic Policy, Planning and Statistics Office. 2003. Household Income and Expenditure Survey. Majuro.

Economic Policy, Planning and Statistics Office and United Nations Development Program. 2005. Draft RMI National MDG Progress Report 2005. Majuro.

Economic Policy, Planning and Statistics Office. 2006. RMI Community Survey 2006 Final Reports. Majuro.

Economic Policy, Planning and Statistics Office and Secretariat of the Pacific Community. 2007. RMI Population Projections and Estimates. Majuro.

Economic Policy, Planning and Statistics Office. 2008. FY2007 Economic Statistics Tables. Majuro.

Economic Policy, Planning and Statistics Office. 2009. Demographic Health Survey 2007 Final Tables. Majuro.

Foster, Todd. 2006. Under-nutrition in Majuro Schools: Summary Analysis Based on a 2006 Sample Survey of Seven Majuro Primary Schools. Majuro.

Ganicott, Ken and Krech, Robert. 2004. World Bank Human Development Review of the Pacific Islands, Country Case Study: Educational Performance in the Republic of the Marshall Islands. Washington, DC.

Graham, Benjamin and Economic Policy, Planning and Statistics Office. 2009. RMI National MDG Indicators Database. Majuro.

Intergrated Water Resource Management Report (Author Ben Graham). Majuro

International Monetary Fund. 2008. IMF Article IV Report: Marshall Islands 2008. Washington, DC.

International Waters Programme of the Pacific Islands. 2004. Social and Economic Baseline Survey: Jenrok Village. Majuro.

Kuniyuki, Andrew and College of the Marshall Islands. 1999. Majuro Nutrition Survey Summary Elementary Schools. College of the Marshall Islands Land Grant and Cooperative Research Extension Program. Majuro.

Marshall Islands Journal. 2009. The Millennium Development Goals (article). 3 April 2009. Majuro.

Ministry of Health, Republic of the Marshall Islands. FY2004 Annual Report. Majuro.

Office of Planning and Statistics. 1988. Census of Population and Housing 1988: Final Report. Majuro.

Office of Planning and Statistics. 1998. Pre-Census Survey 1998. Majuro.

Office of Planning and Statistics. 1999. Census of Population and Housing 1999: Final Report. Majuro.

Republic of the Marshall Islands. 2007. Reimanlok: A National Conservation Area Plan for the Marshall Islands Majuro.

RMI Environmental Protection Authority (EPA)

Secretariat of the Pacific Community. 2004. RMI MDG Tables 2004. Noumea.

Secretariat of the Pacific Community. 2009. RMI MDG Tables 2008, from DHS 2007. Noumea.

South Pacific Applied Geoscience Commission (SOPAC) and RMI Environmental Protection Authority (EPA). 2006. Integrated Water Resources Management Report (Author Ben Graham). Majuro

United Nations. 2003. INDICATORS for Monitoring the Millennium Development Goals. New York.

US Department of Transportation. 2009. TranStats Database Online. Accessed in January 2009. Washington, DC.

World Bank. 2004. Human Development Review of the Pacific Islands: Marshall Islands "Overcoming Dependence." Washington, DC.

Appendix 4. MDG Indicators Definitions

Sources: INDICATORS for Monitoring the Millennium Development Goals, published by the United Nations (2003) and online United Nations sources.

Goal 1: Eradicate extreme poverty and hunger

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

1.1 Proportion of population below $1 (PPP) per day

Proportion of population below $1 per day is the percentage of the population living on less than $1.08 a day at 1993 international prices. The one dollar a day poverty line is compared to consumption or income per person and includes consumption from own production and income in kind. This poverty line has fixed purchasing power across countries or areas and is often called an "absolute poverty line" or measure of extreme poverty.

1.2 Poverty gap ratio

Poverty gap ratio is the mean distance separating the population from the poverty line (with the non-poor being given a distance of zero), expressed as a percentage of the poverty line.

1.3 Share of poorest quintile in national consumption

Share of the poorest quintile in national consumption is the income that accrues to the poorest fifth of the population.

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

1.4 Growth rate of GDP per person employed

The growth rate of GDP per person employed or labour productivity is defined as the growth rate of output per unit of labour input. Output is measured as "value added", which is the total production value minus the value of intermediate inputs, such as raw materials, semi-finished products, services purchased and energy inputs. Value added, called "gross domestic product" (GDP) in the national accounts, represents the compensation for input of services from capital (including depreciation) and labour directly engaged in the production. Labour input is defined as persons employed.

1.5 Employment-to-population ratio

The employment-to-population ratio is defined as the proportion of an economy's working-age population that is employed.

1.6 Proportion of employed people living below $1 (PPP) per day

The proportion of employed persons living below $1 (PPP) per day, or working poor, is the share of individuals who are employed, but nonetheless live in a household whose members are estimated to be living below the international poverty line of $1 (PPP) per day.

1.7 Proportion of own-account and contributing family workers in total employment

Vulnerable employment is defined as the sum of the employment status groups of own-account workers and contributing family workers. Own-account workers are those workers who, working on their own account or with one or more partners, hold the type of jobs defined as a self-employment jobs (i.e. remuneration is directly dependent upon the profits derived from the goods and services produced), and have not engaged on a continuous basis any employees to work for them during the reference period. Contributing family workers, also known as unpaid family workers, are those workers who are self-employed, as own-account workers in a market-oriented establishment operated by a related person living in the same household.

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

1.8 Prevalence of underweight children under-five years of age

Prevalence of (moderately or severely) underweight children is the percentage of children under five years old whose weight for age is less than minus two standard deviations from the median for the international reference population ages 0–59 months. The international reference population was formulated by the National Center for Health Statistics (NCHS)

as a reference for the United States and later adopted by the World Health Organization (WHO) for international use (often referred to as the NCHS/WHO reference population).

1.9 Proportion of population below minimum level of dietary energy consumption

Proportion of the population below the minimum level of dietary energy consumption is the percentage of the population whose food intake falls below the minimum level of dietary energy requirements. This is also referred to as the prevalence of under-nourishment, which is the percentage of the population that is undernourished.

Goal 2: Achieve universal primary education

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

2.1 Net enrolment ratio in primary education

Net primary enrolment ratio is the ratio of the number of children of official school age (as defined by the national education system) who are enrolled in primary school to the total population of children of official school age. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art and music.

2.2 Proportion of pupils starting grade 1 who reach last grade of primary

Primary completion rate is the ratio of the total number of students successfully completing (or graduating from) the last year of primary school (grade 8 in the Marshall Islands) in a given year to the total number of children of official graduation age in the population.

2.3 Literacy rate of 15-24 year-olds, women and men

Literacy rate of 15–24 year-olds, or the youth literacy rate, is the percentage of the population 15–24 years old who can both read and write with understanding a short simple statement on everyday life. The definition of literacy sometimes extends to basic arithmetic and other life skills.

Goal 3: Promote gender equality and empower women

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

3.1 Ratios of girls to boys in primary education

Ratio of girls to boys in primary education is the ratio of the number of female students enrolled at primary levels in public and private schools to the number of male students.

3.1 Ratios of girls to boys in secondary education

Ratio of girls to boys in secondary education is the ratio of the number of female students enrolled at secondary levels in public and private schools to the number of male students.

3.1 Ratios of girls to boys in tertiary education

Ratio of girls to boys in tertiary education is the ratio of the number of female students enrolled at tertiary levels in public and private schools to the number of male students.

3.2 Share of women in wage employment in the non-agricultural sector

The share of women in wage employment in the non-agricultural sector is the share of female workers in the non-agricultural sector expressed as a percentage of total employment in the sector.

3.3 Proportion of seats held by women in national parliament

The proportion of seats held by women in national parliaments is the number of seats held by women expressed as a percentage of all occupied seats.

Goal 4: Reduce child mortality

Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

4.1 Under-five mortality rate

The under-five mortality rate is the probability (expressed as a 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.

4.2 Infant mortality rate

The infant mortality rate is typically defined as the number of infants dying before reaching the age of one year per 1,000 live births in a given year.

4.3 Proportion of 1 year-old children immunised against measles

The proportion of 1-year-old children immunized against measles is the percentage of children under one year of age who have received at least one dose of measles vaccine.

Goal 5: Improve maternal health

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

5.1 Maternal mortality ratio

The maternal mortality ratio is the number of women who die 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 of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births. The 10th revision of the International Classification of Diseases makes provision for including late maternal deaths occurring between six weeks and one year after childbirth.

5.2 Proportion of births attended by skilled health personnel

The proportion of births attended by skilled health personnel is the percentage of deliveries attended by personnel trained to give the necessary supervision, care and advice to women during pregnancy, labour and the post-partum period; to conduct deliveries on their own; and to care for newborns.

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

5.3 Contraceptive prevalence rate

The contraceptive prevalence rate is the percentage of women who are practising, or whose sexual partners are practising, any form of contraception. It is usually reported for women ages 15–49 in marital or consensual unions.

5.4 Adolescent birth rate

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

5.5 Antenatal care coverage (at least one visit and at least four visits)

Antenatal care coverage (at least one visit) is the percentage of women aged 15-49 with a live birth in a given time period that received antenatal care provided by skilled health personnel (doctors, nurses, or midwives) at least once during pregnancy, as a percentage of women age 15-49 years with a live birth in a given time period. Antenatal care coverage (at least four visits) is the percentage of women aged 15-49 with a live birth in a given time period that received antenatal care four or more times with ANY provider (whether skilled or unskilled), as a percentage of women age 15-49 years with a live birth in a given time period. A skilled health worker/attendant is an accredited health professional - such as a midwife, doctor or nurse - who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns. Both trained and untrained traditional birth attendants (TBA) are excluded. The antenatal period presents opportunities for reaching pregnant women with interventions that may be vital

to their health and wellbeing and that of their infants. WHO recommends a minimum of four antenatal visits based on a review of the effectiveness of different models of antenatal care. WHO guidelines are specific on the content of antenatal care visits, which should include: blood pressure measurement; urine testing for bacteriuria & proteinuria; blood testing to detect syphilis & severe anemia; and weight/height measurement (optional).

5.6 Unmet need for family planning

Women with unmet need for family planning for limiting births are those who are fecund and sexually active but are not using any method of contraception, and report not wanting any more children. This is a subcategory of total unmet need for family planning, which also includes unmet need for spacing births. The concept of unmet need points to the gap between women's reproductive intentions and their contraceptive behaviour. For MDG monitoring, unmet need is expressed as a percentage based on women who are married or in a consensual union.

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

Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS

6.1 HIV prevalence among population aged 15-24 years

HIV prevalence rate among population aged 15-24 years, is the percentage of persons aged 15-24 living with HIV, as measured in national based surveys. Human Immunodeficiency Virus (HIV) is a virus that weakens the immune system, ultimately leading to AIDS, the acquired immunodeficiency syndrome HIV destroys the body's ability to fight off infection and disease, which can ultimately lead to death.

6.2 Condom use at last high-risk sex

Condom use during last higher-risk sex is the percentage of young men and women ages 15–24 who had more than one partner in the past 12 months reporting the use of a condom during their last sexual intercourse.

6.3 Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS

Percentage of population aged 15–24 years with comprehensive correct knowledge of HIV/AIDS is the share of women and men aged 15–24 years who correctly identify the two major ways of preventing the sexual transmission of HIV (using condoms and limiting sex to one faithful, uninfected partner), who reject the two most common local misconceptions about HIV transmission and who know that a healthy-looking person can transmit HIV.

6.4 Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years

Strictly defined, the number of children orphaned by HIV/AIDS is the estimated number of children who have lost their mother, father or both parents to AIDS before age 15. In practice, the impact of the AIDS epidemic on orphans is measured through the ratio of orphans to non-orphans who are in school.

Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it

6.5 Proportion of population with advanced HIV infection with access to antiretroviral drugs

The percentage of adults and children with advanced HIV infection currently receiving antiretroviral therapy according to nationally approved treatment protocols (or WHO/Joint UN Programme on HIV and AIDS standards) among the estimated number of people with advanced HIV infection. The numerator (the number of people receiving antiretroviral therapy) is derived from national programme reporting systems, aggregated from health facilities or other service delivery sites. The denominator (the total number of people who need antiretroviral therapy) is generated using a standardized statistical modelling approach. The human immunodeficiency virus (HIV) is a virus that weakens the immune system, ultimately leading to acquired immunodeficiency syndrome (AIDS). The number of adults with advanced HIV infection who should start treatment is estimated based on the assumption that the average time from HIV seroconversion to eligibility for antiretroviral therapy is eight years and, without antiretroviral therapy, the average time from eligibility to death is about three years. These parameters were revised in 2007: the previous estimates were based on the assumption of seven years from seroconversion to eligibility and two years from eligibility to death in the absence of treatment.

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

6.6 Incidence and death rates associated with malaria

Incidence of malaria is the number of cases of malaria per 100,000 people. Death rates associated with malaria are number of deaths caused by malaria per 100,000 people.

6.7 Proportion of children under 5 sleeping under insecticide-treated bed nets

Percentage of children aged 0-59 months that sleeps under an insecticide treated bed net.

6.8 Proportion of children under 5 with fever who are treated with appropriate anti malarial drugs

Percentage of children aged 0-59 months with fever in the two weeks prior to the survey who received any anti-malarial medicine.

6.9 Incidence, prevalence and death rates associated with tuberculosis

The tuberculosis death rate indicator refers to the estimated number of deaths due to tuberculosis (TB) in a given time period. In this database, the indicator reflects the number of deaths per 100,000 population per year. Deaths from all forms of TB are included. Deaths from TB in people with HIV are included. TB is an infectious bacterial disease caused by Mycobacterium tuberculosis, which most commonly affects the lungs. It is transmitted from person to person via droplets from the throat and lungs of people with the active respiratory disease. In healthy people, infection with Mycobacterium tuberculosis often causes no symptoms, since the person's immune system acts to "wall off" the bacteria. The symptoms of active TB of the lung are coughing, sometimes with sputum or blood, chest pains, weakness, weight loss, fever and night sweats. Tuberculosis is treatable with a six-month course of antibiotics. Human Immunodeficiency Virus (HIV) is a virus that weakens the immune system, ultimately leading to AIDS, the acquired immunodeficiency syndrome. HIV destroys the body's ability to fight off infection and disease, which can ultimately lead to death.

6.10 Proportion of tuberculosis cases detected and cured under directly observed treatment short course

The proportion of new smear-positive TB cases registered under DOTS in a given year that successfully completed treatment, whether with or without bacteriologic evidence of success ("cured") or without ("treatment completed"). At the end of treatment, each patient is assigned one of the following six mutually exclusive treatment outcomes: cured; completed; died; failed; defaulted; and transferred out with outcome unknown. The proportions of cases assigned to these outcomes, plus any additional cases registered for treatment but not assigned to an outcome, add up to 100% of cases registered. Tuberculosis, or TB, is an infectious bacterial disease caused by Mycobacterium tuberculosis, which most commonly affects the lungs. It is transmitted from person to person via droplets from the throat and lungs of people with the active respiratory disease. In healthy people, infection with Mycobacterium tuberculosis often causes no symptoms, since the person's immune system acts to "wall off" the bacteria. The symptoms of active TB of the lung are coughing, sometimes with sputum or blood, chest pains, weakness, weight loss, fever and night sweats. Tuberculosis is treatable with a six-month course of antibiotics. Smear-positive is defined as a case of TB where Mycobacterium tuberculosis bacilli are visible in the patient's sputum when examined under the microscope. A new case of TB is defined as a patient who has never received treatment for TB, or who has taken anti-TB drugs for less than 1 month. 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. In countries that have adopted the DOTS strategy, it may be implemented in all or some parts of the country, and by all or some health-care providers. Only those TB patients notified by health-care facilities providing DOTS services are included in this indicator.

Goal 7: Ensure environmental sustainability

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

7.1 Proportion of land area covered by forest

The Proportion of land area covered by forest is the forest areas as a share of total land area, where land area is the total surface area of the country less the area covered by inland waters, such as major rivers and lakes. As defined by the Food and Agriculture Organization of the United Nations in Global Forest Resources Assessment, 2000, forest includes both natural forests and forest plantations. It refers to land with an existing or expected tree canopy of more than 10 percent and an area of more than 0.5 hectare where the trees should be able to reach a minimum height of five metres. Forests are identified by both the presence of trees and the absence of other land uses. Land from which forest has been cleared but that will be reforested in the foreseeable future is included. Excluded are stands of trees established primarily for agricultural production, such as fruit tree plantations.

7.2 CO2 emissions, total, per capita and per $1 GDP (PPP)

Total CO2 emissions - estimates of total carbon dioxide (CO2) emissions include anthropogenic emissions, less removal by sinks, of carbon dioxide (CO2). The term "total" implies that emissions from all national activities are considered. The typical sectors for which CO2 emissions/removals are estimated are energy, industrial processes, agriculture, waste, and the sector of land use, land-use change and forestry (LULUCF). National reporting to the United Nations Framework Convention on Climate Change that follows the Intergovernmental Panel on Climate Change guidelines is based on national emission inventories and covers all sources of anthropogenic carbon dioxide emissions as well as carbon sinks (such as forests). CO2 emissions/removals by land use, land-use change and forestry are often known with much less certainty than emissions from the other sectors, or emissions/removals estimates for LULUCF may not be available at all. In such cases, "total" emissions can be calculated as the sum of emissions for the sectors of energy, industrial processes, agriculture, and waste.

CO2 emissions per capita - carbon emissions per capita are 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.

CO2 emissions per $1 GDP (PPP) - total CO2 emissions divided by the total value of the gross domestic product (GDP) expressed in purchasing power parities (PPPs).

7.3 Consumption of ozone-depleting substances

This indicator is used to monitor the reduction in the usage of Ozone Depleting Substances (ODSs) as a result of the Montreal Protocol. Therefore only ODSs controlled under the Montreal Protocol are covered by the indicator. Reducing consumption ultimately leads to reductions in emissions since most uses of ODSs finally lead to the substances being emitted into the atmosphere. The Units of Measurement are metric tons of ODS weighted by their Ozone Depletion Potential (ODP), otherwise referred to as ODP tons. This indicator signifies the progress made towards meeting the commitments to phase out the use of ODSs of the countries which have ratified the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer and its Amendments of London (1990), Copenhagen (1992), Montreal (1997) and Beijing (1999). Ozone depleting substance (ODS) is any substance containing chlorine or bromine, which destroys the stratospheric ozone layer that absorbs most of the biologically damaging ultraviolet radiation. The phasing out of ozone depleting substances, and their substitution by less harmful substances or new processes, are aimed at the recovery of the ozone layer. Substances controlled by the Montreal Protocol are categorised into annexes, with different groups in each annex. These include chlorofluorocarbons (CFCs) (Annex A, group I), halons (Annex A, group I), methyl bromide (Annex E, group I) among others. Controlled substance means a substance in Annex A, Annex B, Annex C or Annex E of the Montreal Protocol, whether existing alone or in a mixture. It includes the isomers of any such substance, except as specified in the relevant Annex, but excludes any controlled substance or mixture that is in a manufactured product other than a container used for the transportation or storage of that substance. Therefore trade in finished

products would not fall under the control of the protocol. Ozone depleting potential (ODP) refers to the amount of ozone depletion caused by a substance. It is the ratio of the impact on ozone of a chemical substance compared to the impact of a similar mass of CFC-11. The ODP of CFC-11 is defined to be 1. CFCs have ODPs that range from 0.6 to 1 while hydrochlorofluorocarbons (HCFCs) have ODPs that range from 0.001 to 0.52. The halons have ODPs of up to 10 while methyl bromide has an ODP of 0.6.

7.4 Proportion of fish stocks within safe biological limits

The percentage of fish stocks exploited within their level of maximum biological productivity.

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

7.5 Proportion of total water resources used

Proportion of total renewable water resources withdrawn is the total volume of groundwater and surface water withdrawn from their sources for human use (in the agricultural, domestic and industrial sectors), 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.

7.6 Proportion of terrestrial and marine areas protected

The indicator is expressed as percentage protected of the total territorial area of a country. According to the International Union for Conservation of Nature (IUCN), a protected area is "an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means". A Marine Protected Areas (MPA) is defined as "as any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment". Only protected areas that are "nationally designated" are included in this indicator. The status "designated" is attributed to a protected area: when the authority that corresponds, according to national legislation or common practice (e.g. by means of an executive decree or the like), officially endorses a document of designation. The designation must be for conservation of biodiversity, not single species and not fortuitous de facto protection arising because of some other activity (e.g. military). Hence, a number of United States Marine Managed Areas and permanent fisheries closures are excluded.

7.7 Proportion of species threatened with extinction

The proportion of all species in a country that are considered to be under threat of extinction.

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

7.8 Proportion of population using an improved drinking water source

The proportion of the population with sustainable access to an improved water source, urban and rural, is the percentage of the population who use any of the following types of water supply for drinking: piped water, public tap, borehole or pump, protected well, protected spring or rainwater. Improved water sources do not include vendor-provided water, bottled water, tanker trucks or unprotected wells and springs.

7.9 Proportion of population using an improved sanitation facility

Proportion of the urban and rural population with access to improved sanitation refers to the percentage of the population with access to facilities that hygienically separate human excreta from human, animal and insect contact. Facilities such as sewers or septic tanks, poor-flush latrines and simple pit or ventilated improved pit latrines are assumed to be adequate, provided that they are not public, according to the World Health Organization and United Nations Children's Fund's Global Water Supply and Sanitation Assessment 2000 Report. To be effective, facilities must be correctly constructed and properly maintained.

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

7.10 Proportion of urban population living in slums

The Proportion of urban population living in slums is the proportion of urban population living in slum households. A slum household is defined as a group of individuals living under the same roof lacking one or more1 of the following

conditions: Access to improved water; Access to improved sanitation; Sufficient-living area; Durability of housing; Security of tenure. However, since information on secure tenure is not available for most of the countries, only the first four indicators are used to define slum household, and then to estimate the proportion of urban population living in slums. Access to improved water: Improved drinking water technologies are more likely to provide safe drinking water than those characterized as unimproved. A household is considered to have access to an improved water supply if it uses improved drinking water sources or delivery points (listed below). Improved drinking water sources include: piped water into dwelling, plot or yard; public tap/standpipe; tube well/borehole; protected dug well; protected spring; and rainwater collection. Unimproved drinking water sources include: unprotected dug well; unprotected spring; cart with small tank/ drum; bottled water; tanker-truck; and surface water (river, dam, lake, pond, stream, canal, irrigation channels). Access to improved sanitation: Improved sanitation facilities are more likely to prevent human contact with human excreta than unimproved facilities. A household is considered to have access to improved sanitation if it uses improved sanitation facilities. Improved sanitation facilities include: flush or pour-flush to piped sewer system, septic tank or pit latrine; ventilated improved pit latrine; pit latrine with slab; and composting toilet. Unimproved sanitation facilities include: flush or pour–flush to elsewhere4 ; pit latrine without slab or open pit; bucket; hanging toilet or hanging latrine; no facilities or bush or field. Durability of housing: A house is considered "durable" if it is built on 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. Sufficient living area: A house is considered to provide a sufficient living area for the household members if not more than three people share the same habitable (minimum of four square meters) room. Secure tenure: Secure tenure is the right of all individuals and groups to effective protection by the State against arbitrary unlawful evictions. People have secure tenure when there is evidence of documentation that can be used as proof of secure tenure status or when there is either de facto or perceived protection against forced evictions.

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) and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction.

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.

Official development assistance (ODA)

8.1 Net ODA, total and to the least developed countries, as percentage of OECD/DAC donors' gross national income

Official development assistance comprises grants or loans to developing countries and territories on the Organisation for Economic Cooperation and Development/Development Assistance Committee (OECD/DAC) list of aid recipients that are undertaken by the official sector with promotion of economic development and welfare as the main objective and at concessional financial terms (if a loan, having a grant element of at least 25 per cent). Technical cooperation is included. Grants, loans and credits for military purposes are excluded. Also excluded is aid to more advanced developing and transition countries as determined by DAC. Donors' gross national income (GNI) at market prices is the sum of gross primary incomes receivable by resident institutional units and sectors. GNI at market prices was called gross national product (GNP) in the 1953 System of National Accounts. In contrast to gross domestic product (GDP), GNI is a concept of income (primary income) rather than value added. The General Assembly, on the recommendation of the Committee for Development Policy, through the Economic and Social Council, decides on the countries to be included in the list of least developed countries (LDCs). As of January 2004, the list included the following countries, by region: Africa: Angola, Benin, Burkina Faso, Burundi, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Lesotho, Liberia, Madagascar,

Malawi, Mali, Mauritania, Mozambique, the Niger, Rwanda, Saõ Tomé and Principe, Senegal, Sierra Leone, Somalia, the Sudan, Togo, Uganda, the United Republic of Tanzania and Zambia; Asia and the Pacific: Afghanistan, Bangladesh, Bhutan, Cambodia,Kiribati, the Lao People's Democratic Republic, Maldives, Myanmar, Nepal, Samoa, Solomon Islands, Timor Leste, Tuvalu, Vanuatu and Yemen; Latin America and the Caribbean: Haiti.

8.2 Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation)

Official development assistance comprises grants or loans to developing countries and territories on the OECD Development Assistance Committee list of aid recipients that are undertaken by the official sector with promotion of economic development and welfare as the main objective and at concessional financial terms (if a loan, having a grant element of at least 25 percent). Technical cooperation is included. Grants, loans and credits for military purposes are excluded. Also excluded is aid to more advanced developing and transition countries as determined by DAC. Bilateral official development assistance is from one country to another. Basic education comprises primary education, basic life skills for youth and adults and early childhood education. Primary health care includes basic health care, basic health infra- structure, basic nutrition, infectious disease control, health education and health personnel development.

8.3 Proportion of bilateral official development assistance of OECD/DAC donors that is untied

Official development assistance (ODA) comprises grants or loans to developing countries and territories on the OECD Development Assistance Committee list of aid recipients that are undertaken by the official sector with promotion of economic development and welfare as the main objective and at concessional financial terms (if a loan, having a grant element of at least 25 per cent). Technical cooperation is included. Grants, loans and credits for military purposes are excluded. Also excluded is aid to more advanced developing and transition countries as determined by the Committee. Bilateral official development assistance is from one country to another. Untied bilateral official development assistance is assistance from country to country for which the associated goods and services may be fully and freely procured in substantially all countries.

8.4 ODA received in landlocked developing countries as a proportion of their gross national incomes

Official development assistance comprises grants or loans to developing countries and territories on the OECD Development Assistance Committee list of aid recipients that are undertaken by the official sector with promotion of economic development and welfare as the main objective and at concessional financial terms (if a loan, having a grant element of at least 25 per cent). Technical cooperation is included. Grants, loans and credits for military purposes are excluded. Also excluded is aid to more advanced developing and transition countries as determined by DAC. Recipient countries' gross national income (GNI) at market prices is the sum of gross primary incomes receivable by resident institutional units and sectors. GNI at market prices was called gross national product (GNP) in the 1953 System of National Accounts. In contrast to gross domestic product (GDP), GNI is a concept of income (primary income) rather than value added. The land-locked developing countries are, by region: Africa: Botswana, Burkina Faso, Burundi, the Central African Republic, Chad, Ethiopia, Lesotho, Malawi, Mali, Niger, Rwanda, Swaziland, Uganda, Zambia and Zimbabwe; Asia and the Pacific: Afghanistan, Azerbaijan, Bhutan, Kazakhstan, Kyrgyzstan, the Lao People's Democratic Republic, Mongolia, Nepal, Tajikistan, Turkmenistan and Uzbekistan; Europe: The former Yugoslav Republic of Macedonia and the Republic of Moldova (expected from 2003); Latin America and the Caribbean: Bolivia and Paraguay.

8.5 ODA received in small island developing States as a proportion of their gross national incomes

Official development assistance comprises grants or loans to developing countries and territories on the OECD Development Assistance Committee list of aid recipients that are undertaken by the official sector with promotion of economic development and welfare as the main objective and at concessional financial terms (if a loan, having a grant element of at least 25 per cent). Technical cooperation is included. Grants, loans and credits for military purposes are excluded. Also excluded is aid to more advanced developing and transition countries as determined by DAC. Recipient countries' gross national income at market prices is the sum of gross primary incomes receivable by resident institutional units and sectors. GNI at market prices was called gross national product in the 1953 System of National Accounts. In contrast to gross domestic product, GNI is a concept of income (primary income) rather than value added. The small island developing States are by region: Africa: Cape Verde, Comoros, Guinea-Bissau, Mauritius, Saõ Tomé and Principe, and Seychelles; Asia and the Pacific: Bahrain, Cook Islands, Fiji, Kiribati, Maldives, Marshall Islands, Micronesia (Federated States of), Nauru, Niue, Palau, Papua New Guinea, Samoa, Singapore, Solomon Islands, Timor Leste, Tokelau, Tonga, Tuvalu and Vanuatu; Europe: Cyprus and Malta; Latin America and the Caribbean: Antigua and

Barbuda, Aruba, the Bahamas, Barbados, Belize, Cuba,

Dominica, the Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Netherlands Antilles, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, and the U.S. Virgin Islands.

Market access

8.6 Proportion of total developed country imports (by value and excluding arms) from developing countries and least developed countries, admitted free of duty

Imports and imported value of goods (merchandise) are goods that add to the stock of material resources of a country by entering its economic territory. Goods simply being transported through a country (goods in transit) or temporarily admitted (except for goods for inward processing) do not add to the stock of material resources of a country and are not included in international merchandise trade statistics. In many cases, a country's economic territory largely coincides with its customs territory, which is the territory in which the customs laws of a country apply in full. Goods admitted free of duties are exports of goods (excluding arms) received from developing countries and admitted without tariffs to developed countries. There is no established convention for the designation of developed and developing countries or areas in the United Nations system. In common practice, Japan in Asia, Canada and the United States in North America, Australia and New Zealand in Oceania and Europe are considered "developed" regions or areas. In international trade statistics, the Southern African Customs Union is also treated as a developed region, and Israel is treated as a developed country; countries emerging from the former Yugoslavia are treated as developing countries; and countries of eastern Europe and European countries of the former Soviet Union are not included under either developed or developing regions. The General Assembly, on the recommendation of the Committee for Development Policy, through the Economic and Social Council decides on the countries to be included in the list of least developed countries (LDCs). As of January 2004, the list included the following countries, by region: Africa: Angola, Benin, Burkina Faso, Burundi, Cape Verde, the Central African Republic, Chad, Comoros, the Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, the Gambia, Guinea, Guinea-Bissau, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Saõ Tomé and Principe, Senegal, Sierra Leone, Somalia, the Sudan, Togo, Uganda, the United Republic of Tanzania and Zambia; Asia and the Pacific: Afghanistan, Bangladesh, Bhutan, Cambodia, Kiribati, the Lao People's Democratic Republic., Maldives, Myanmar, Nepal, Samoa, Solomon Islands, Timor Leste, Tuvalu, Vanuatu and Yemen; Latin America and the Caribbean: Haiti.

8.7 Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries

Average tariffs are the simple average of all applied ad valorem tariffs (tariffs based on the value of the import) applicable to the bilateral imports of developed countries. Agricultural products comprise plant and animal products, including tree crops but excluding timber and fish products. Clothing and textiles include natural and synthetic fibers and fabrics and articles of clothing made from them.

8.8 Agricultural support estimate for OECD countries as a percentage of their gross domestic product

Agricultural support is the annual monetary value of all gross transfers from taxpayers and consumers, both domestic and foreign (in the form of subsidies arising from policy measures that support agriculture), net of the associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or consumption of farm products. For agricultural products, the total support estimate represents the overall taxpayer and consumer costs of agricultural policies. When expressed as a percentage of GDP, the total support estimate is an indicator of the cost to the economy as a whole.

8.9 Proportion of ODA provided to help build trade capacity

Official development assistance comprises grants or loans to developing countries and territories on the OECD Development Assistance Committee list of aid recipients that are undertaken by the official sector with promotion of economic development and welfare as the main objective and at concessional financial terms (if a loan, having a grant element of at least 25 per cent). Technical cooperation is included. Grants, loans and credits for military purposes are excluded. Also excluded is aid to more advanced developing and transition countries as determined by DAC. Activities to help build trade capacity enhance the ability of the recipient country: To formulate and implement a trade development strategy and create an enabling environment for increasing the volume and value-added of exports, diversifying export products and markets and increasing foreign investment to generate jobs and trade; To stimulate

trade by domestic firms and encourage investment in trade-oriented industries; To participate in the benefit from the institutions, negotiations and processes that shape national trade policy and the rules and practices of international commerce. Those activities are further classified by the First Joint WTO/OECD Report on Trade-Related Technical Assistance and Capacity-Building (2002) under two main categories, trade policy and regulations (divided into nineteen subcategories) and trade development (divided into six subcategories).

Debt sustainability

8.10 Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative)

The HIPC decision point is the date at which a heavily indebted poor country with an established track record of good performance under adjustment programmes supported by the International Monetary Fund (IMF) and the World Bank commits to undertake additional reforms and to develop and implement a poverty reduction strategy. The HIPC completion point is the date at which the country successfully completes the key structural reforms agreed at the decision point, including the development and implementation of its poverty reduction strategy. The country then receives the bulk of debt relief under the HIPC Initiative without any further policy conditions.

8.11 Debt relief committed under HIPC and MDRI Initiatives

Debt relief committed under HIPC Initiative (in United States dollars) as a component of official development assistance has been recorded in different ways over time. Up through 1992, forgiveness of non-official development assistance debt that met the tests of official development assistance was reportable as ODA. During 1990–1992 it remained reportable as part of a country's ODA, but was excluded from the Development Assistance Committee total. Since 1993, forgiveness of debt originally intended for military purposes has been reportable as "other official flows", while forgiveness of other non-ODA loans (mainly export credits) recorded as ODA has been included in both country data and total Committee ODA, as it was until 1989.

8.12 Debt service as a percentage of exports of goods and services

External debt service refers to principal repayments and interest payments made to nonresidents in foreign currency, goods or services. Long-term refers to debt that has an original or extended maturity of more than one year. Exports of goods and services comprise sales, barter or gifts or grants of goods and services from residents to non-residents. Where exports of goods are valued f.o.b., the costs of transportation and insurance up to the border of the exporting country are included in exports of goods. Other transactions involving a mixture of goods and services, such as expenditures by foreign travelers in the domestic market, may all have to be recorded under services in the rest of the world account. Export receipts along with worker remittances received from abroad provide the foreign exchange proceeds for meeting external debt service obligations.

Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries

8.13 Proportion of population with access to affordable essential drugs on a sustainable basis

The proportion of population with access to affordable essential drugs on a sustainable basis is the percentage of the population that has access to a minimum of 20 most essential drugs. Access is defined as having drugs continuously available and affordable at public or private health facilities or drug outlets that are within one hour's walk of the population. Essential drugs are drugs that satisfy the health care needs of the majority of the population. The World Health Organization has developed the Model List of Essential Drugs, which is regularly updated through widespread consultations with member States and other partners. Progress in access to essential medicines is thus the result of combined effort by governments, strategic partners such as United Nations agencies, public-private partnerships, non-governmental organizations and professional associations (WHO Expert Committee on Essential Drugs, November 1999).

Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications

8.14 Telephone lines per 100 population

Telephone lines refer to the number of telephone lines connecting subscribers' terminal equipment to the public switched network and that have a dedicated port in the telephone exchange equipment. The estimated number of telephone lines divided by the country's population and multiplied by 100.

8.15 Cellular subscribers per 100 population

Cellular subscribers refers to users of cellular telephones who subscribe to an automatic public mobile telephone service that provides access to the public switched telephone network using cellular technology. The estimated number of cellular subscribers divided by the country's population and multiplied by 100.

8.16 Internet users per 100 population

The Internet is a linked global network of computers in which users at one computer, if they have permission, can get information from other computers in the network. The estimated number of internet users divided by the country's population and multiplied by 100.