A person wearing a traditional Kiribati headdress and a white wrap, standing under a thatched roof. The image is overlaid with a semi-transparent olive-green filter.

REPUBLIC OF KIRIBATI

**MILLENNIUM DEVELOPMENT GOALS**

The word 'REPORT' is written in large, bold, white capital letters. The letters are filled with a photograph of a tropical beach scene, showing palm trees and a person walking on the sand. The text is framed by white wavy lines that resemble waves.

REPORT

2007

# Preface

I am honored in presenting the first Kiribati Millennium Development Goal (MDG) Report. The report provides an update on how Kiribati has achieved the targets under the 8 goals of MDG Declaration since its adoption in the World Summit in 2000.

The report serves as a useful tool in identifying strengths and gaps in our overall development efforts as a nation in collaboration with our development partners, to achieve the ultimate MDG objective of improving livelihood of our people or likewise halving world poverty by 2015. At the same time, the report also reflects how Kiribati has progressed in meeting the MDG goals and the efforts required to meet targets by 2015.

I am pleased to mention that, based on the report, Kiribati is likely to achieve Goal 3 within 2015, and Goal 4, 5 and 8 will potentially be met. However the report also indicates that Kiribati has not been doing well in Goal 1, 3 and 6. The lessons learnt from the MDG report provide an important message on where to concentrate our efforts and resources to improve the way forward. Such lessons have been taken on board when preparing the Kiribati Development Plan 2008-11.

It is noted during the writing up of the report that data in almost all sectors are miserably lacking especially on poverty indicators. This obliged us to improve the quality, reliability, availability and timeliness of data relevant to the Kiribati context. Training and upskilling of statistical compilers and enabling users to understand the importance of data quality is still an ongoing challenge and for this we welcome all efforts both locally and internationally to assist us in our quest to meet the related MDG goals.

Lastly, I wish to acknowledge the dedication and hardwork of our national consultants including the staff of the National Economic Planning Office; the contribution of members of the national MDG Task Force and the support of UNDP.

Kam rabwa.

Hon. Natan Tewee  
Minister of Finance and Economic Planning



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# Kiribati



# Abbreviations and acronyms

ACP	African Caribbean and Pacific	MMR	Maternal Mortality Ratio
BTC	Betio Town Council	NAPA	National Adaptation Program of Action
CBD	Convention on Biological Diversity	NCD	Non-communicable Diseases
CCUF	Christmas Island Clean-Up Foundation	NER	Net Enrolment Ratio
CDR	Case Detection Rate	NTP	National TB Control Program
CEDAW	Convention on Elimination of all forms of Discriminations Against Women	ODA	Official Development Assistance
CI	Conservation International	OECD/DAC	Organization for Economic Cooperation and Development/Development Assistance Committee
CPR	Contraceptive Prevalence Rate	PACER	Pacific Agreement on Closer Economic Relations
CRC	Convention on the Rights of the Child	PACFAW	Pacific Foundation for Advancement of Women
CROP	Council of Regional Organization in the Pacific	PAHP	Pacific Action for Health Project
DOTS	Directly Observed Treatment Short-course	PCV	Peace Corps Volunteers
EFA	Education for All	PIC	Pacific Island countries
ENSO	El Nino Southern Oscillation episodes	PICTA	Pacific Island Countries Trade Agreement
EU	European Union	PIPA	Phoenix Islands Protected Area
FCTC	Framework Convention on Tobacco Control	PLWHA	People living with HIV/AIDS
GEF	Global Environment Facilities	POP	Persistent Organic Pollutants
GER	Gross Enrolment Ratio	PRC	People's Republic of China
HAG	Honorable Attorney General	RCM	Regional Committee Meeting
HIES	Household income and expenditure survey	SIDS	Small Islands Developing States
HMFED	Honorable Minister for Finance and Economic Development	SOPAC	South Pacific Applied Geo-science Commission
HMHMS	Honorable Minister for Health and Medical Services	SPC	Secretariat of the Pacific Community
ICPD	International Conference of Population and Development	TAK	Telecommunication Authority of Kiribati
ILO	International Labor Organization	TBA	Traditional Births Attendants
IMF	International Monetary Fund	TFR	Total Fertility Rate
IMR	Infant Mortality Rate	TTI	Tarawa Technical Institute
JSS	Junior Secondary Schools	TUC	Teinainano Urban Council
KANGO	Kiribati Association of Non-Government Organization	UNDAF	United Nations Development Assistance Framework
KAP	Kiribati Adaptation Program	UNEP	United Nations Environment Program
K-NBSAP	Kiribati National Biodiversity Strategies and Action Plans	UNFCC	United Nations Framework Convention on Climate
MCTTD	Ministry of Communication, Transport and Tourism Development	UNFPA	United Nations Population Fund
MDR-TB	Multi-drug Resistance Tuberculosis	UNICEF	United Nations Children Fund
MEYS	Ministry of Education Youth and Sports	UNIFEM	United Nations Development Fund for Women
MFED	Ministry of Finance and Economic Development	WB	The World Bank
MHMS	Ministry of Health and Medical Services	WHO	World Health Organization
MISA	Ministry of Internal and Social Affairs	WHO/WPRO	WHO/Western Pacific Regional Office

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# Introduction

During the World Summit in September 2000 in New York, world leaders from 189 countries, while taking note of other internationally agreed commitments, endorsed the Millennium Declaration that covers issues of peace, security, and development, including the environment, protection of vulnerable groups, human rights and governance. The Declaration has been translated into inter-related development goals and a global agenda designated as the Millennium Development Goals or MDGs, a set of eight (8) priority development goals and eighteen (18) targets aimed at eradicating extreme poverty and hunger, and sustaining development. Forty eight (48) appropriate and quantifiable indicators have been selected to monitor the progress towards these goals.

This National Millennium Development Goals (MDGs) Report was compiled in line with the need by the Government of the Republic of Kiribati to assess how far it has gone in attempting to achieve targets identified in the MDGs. The aim is to produce a progress report that will allow Government to identify strengths and gaps in its overall development effort as a nation and in collaboration with its development partners, to improve the livelihood of its people in line with the goals and targets set out in the MDGs.

This report will make an important contribution into the review of Kiribati National Development Strategy 2004-2007, which is expected to take place in late 2007, thus becoming both a complement and input to the next Government development strategic directions. This is Kiribati's first National MDG Report.

The report was prepared between May to August 2007 and involved desk review, consultations with a number of important stakeholders, and a participatory workshop to finalise the main findings. As in many other countries, the paucity of good data in Kiribati is pervasive, thus giving the writers little option other than making use of the limited regional and locally available official data. These data sources are appropriately referred to where applicable. Where good data is available, the year 1990 is used as baseline year to show trends in line with MDGs requirement. The report is not meant to be an in-depth analysis and specific policy prescriptions. The main purpose of this MDG Report is to provide an update on MDGs progress for public information and social mobilization. It is an advocacy tool that describes progress towards the MDGs, and is not a complex analytical review of policy reforms, institutional changes and resource allocations.

The MDGs represent a global partnership that has grown from the commitments and targets established at a number of international conferences and world summits of the 1990s. These include the United Nations Conference on Environment and Development, Rio de Janeiro, 1992; International Conference on Population and Development (ICPD), Cairo, 1994; the Fourth World Conference on Women, Beijing 1995; and the Global Conference on the Sustainable Development of Small Islands Development States (SIDS), New York, 1999. The ICPD, for example, lends strong supports to and contributes to all MDGs. Under the umbrella of reproductive health (RH), Box 1 below gives details of the close and inseparable link between the MDGs (in red) and the ICPD Platform of Action (ICPD-POA) (in blue), (UNFPA, 2005). Continuing from the 1994 ICPD, the ICPD+10<sup>1</sup>, highlighted three main findings: i) reaffirmation of the ICPD-POA and Key Actions, ii) universal

recognition that effective implementations requires a commitment of increased financial resources, and iii) acknowledging that full implementation of the ICPD agenda is essential to the attainment of the MDGs. It should be emphasized however that number of other international framework have similarly strong link with the MDGs.

## Box 1: Links between MDGs (in red) and ICPD-POA (in blue)

- (1) Eradicate extreme poverty & hunger:  
Smaller families & longer intervals allow greater investment in each child's nutrition & health
- (2) Achieve Universal Primary Education  
Fewer children means more investment in each child's education  
If girls have access to contraceptives, they are less likely than those who do not to become pregnant & drop out of school
- (3) Promote gender equality & empower women  
Women who can plan their timing & number of children also have opportunities for work, education & social participation
- (4) Reduce child mortality:  
ANC & avoiding high risk pregnancies prevent infant/child deaths
- (5) Improve maternal health  
Preventing unplanned & high risk pregnancies & providing care in pregnancy, childbirth & postpartum saves women's lives
- (6) Combat HIV/AIDS, TB, malaria & other communicable diseases  
SRH includes preventing & treating STIs including HIV/AIDS
- (7) Ensure environmental sustainability  
Avoiding unwanted births can lead to smaller populations, slow urban migration & balance natural resources use & environment.
- (8) Develop a global partnership for development  
Affordable prices to treat HIV/AIDS or other diseases e.g. TB (Global Fund with Drug Suppliers) & secure supply of contraceptives (UNFPA with Drug suppliers) would greatly enhance RH programmes

Source: UNFPA, 2005

1. Progress review of ICPD-POA in 2004 after 10 years of implementation.

2. This compares rates calculated from census figures from 1990 to 2005.

3. Kiribati 2005 Census, Volume 2: Analytical report

4. ADB, 2002 cited in The World Bank 2005. Opportunities to improve social services: Human development in the Pacific Islands. Human Development Sector Unit, East Asia and Pacific Region. The World Bank, page 48.

5. The Kiribati Population and Development Policy was approved in principles by Cabinet in 2004

6. The National Development Strategies (NDS) 2004-2007: Enhancing and ensuring the equitable distribution of development benefits to the people of Kiribati according to the principles of good governance, page 11.

7. This refers to the draft Kiribati Development Plan, 2008-2011

8. Statistics Division, Ministry of Finance and Economic Development, 2006, as presented during consultative workshop on the formulation of the next National Development Strategies (2008-2011) to NGOs, Otintai Hotel, 19 July 2007.

9. Statement by IMF Staff Mission to Kiribati, March 2007. In: <http://www.imf.org/external/np/sec/pr/2007>

10. A paper prepared by I. Rouatu, Planning and Statistics Office Ministry of Finance and Economic Development for the Joint International Labor Organization and UN Economic and Social Commission for Asia and the Pacific Expert Group Meeting in Labor Markets in the Pacific SIDS.

11. Even the Ministry of Labor and Human Resource Development is not sure on the unemployment rate and which definition to use.

# Annex 1: Status at a Glance

## SUMMARY OF PROGRESS TOWARDS THE MILLENNIUM DEVELOPMENT GOALS: KIRIBATI

Goals/Targets	Will the Goal/target be met?	State of National Support
<b>Goal 1: Eradicate extreme poverty and hunger</b> Halve the proportion of people living below the national poverty line and the proportion of people who suffer from hunger by 2015	Unlikely – lack of data	Good
<b>Goal 2: Achieve Universal Primary education</b> Ensure that by 2015 children everywhere, boys and girls will be able to complete full course of primary education	Likely	Strong
<b>Goal 3: Promote gender equality and empowerment of women</b>	Unlikely	Weak but improving
<b>Goal 4: Reduce Child Mortality</b> Reduce by 2/3 between 1990 and 2015 the under five mortality rate	Potentially	Good
<b>Goal 5: Improve maternal health</b> Reduce by 3/4 between 1990 and 2015 the maternal mortality ratio	Potentially	Good
<b>Goal 6: Combat HIV/AIDS and TB</b> Halt and reverse the spread of HIV/AIDS and TB Potentially for TB	Unlikely for HIV/AIDS Strong	
<b>Goal 7: Ensure environmental sustainability</b> Integrate the principles of sustainable development into national policies and reverse the loss of environmental resources	Unlikely	Strong
<b>Goal 8: Develop a global partnership for development</b> Develop an open, rule based, predictable, non-discriminatory trading and financial system, commitment to good governance, development and poverty reduction nationally and internationally	Potentially	Good

## Annex 2: Statistics at a Glance

Indicators and Data source responsible	Latest year & institution	Periodicity	Coverage	Data disaggregation (sex, region etc)	Use of data in policy making	Quality of data
<b>Poverty</b>	1996 MFED/ADB 2006 MFED		National	District, urban and rural	fair	fair
<b>Hunger</b>	1990 MHMS 2000 Regional MDG report	On-going Hospital database  Undefined		Urban/rural	poor	poor
<b>Education</b>	MEYS 2007	Annual	National	Sex, urban, rural	good	good
<b>Gender Equality</b>	MEYS 2007 Parliamentary Journals 2007 Regional Papers	Annual On-going	National National	Sex, urban , rural Sex	fair fair	poor poor
<b>Child Mortality</b>	MHMS with WHO and SPC  Census	Ongoing Hospital database  Every 5 years	National	Urban rural	Poor to fair	poor
<b>Maternal Mortality</b>	MHMS with WHO and SPC  Census	Undefined		none	Poor to fair	poor
<b>HIV/AIDS</b>	MHMS 2006 WHO, SPC	Undefined	National		fair	fair
<b>Tuberculosis</b>	NTP 2007	Regular	National	Urban/rural	fair	fair
<b>Environmental Resources</b>	MFED census 2005	Every 5 years	National		Poor to fair	Poor to fair
<b>Drinking water and sanitation</b>	MFED census 2005	Every 5 years	National		Poor to fair	Poor to fair
<b>Partnership for development</b>	MFED 2007	Undefined	National		fair	fair

# Development context: National development policy thrusts

## Background

Kiribati sits astride both the equator and the International Date Line and consists of 33 low lying coral atolls scattered over 4 million sq km of the Pacific Ocean. The 2005 census showed the population of 92,533 with more females (46,921) than males (45,612) and a young population with 37% under the age of 15 years. Increasing urban drift continues with Betio isle having a population density of 8,000 per sq km, one of the highest in the world. Kiribati is ranked as a Least Development Country (LDC).

Life expectancy at birth is 63.1yrs for females and 58.9 for males with those on outer island living longer (62yrs vs 60yrs). Likewise urban IMR is higher at 50 per 1,000 while for outer islands 41. Both indicators show a reversal of pattern during previous census implying that living conditions on South Tarawa are now worse than outer islands<sup>2</sup>.

## Social services

Medical services is provided free by Government and consists of 85 health centers/clinics on outer islands staffed by medical assistants and/or nurses, and one referral hospital service on the capital island of Tarawa. Communicable diseases like acute respiratory infections and diarrhoea are common. Tuberculosis and HIV/AIDS are on the rise becoming a cause for concern for Government. In the midst of all these, non-communicable diseases (NCD) like diabetes, high blood pressure and heart disease are also on the increase. There is a very high prevalence of smoking in Kiribati with more adult males smokers (70%) than adult females smokers (<50%), while the proportion of household with at least one smoker ranges from 60% to 90%<sup>3</sup>.

The demographic transition from high fertility and mortality to low fertility and mortality has only just begun in Kiribati as in other Pacific Island countries of comparable development levels. In the midst of that transition there is now increasing incidences of NCD, and the Government is hard pressed with a double burden of improving services in the face of increasing population especially in urban areas, receding communicable diseases and increasing NCD. The World Bank<sup>4</sup> identifies Kiribati rate of population growth as the "most important factor under domestic control that will influence future levels of income and welfare per head".

The Government has embarked on the development of the Kiribati National Population and Development Policy<sup>5</sup> of which a number of components such as family planning, universal primary education, housing, outer island growth centers and increasing employment opportunities including overseas employment and emigration to Pacific rim countries especially New Zealand and Australia are being implemented. MDGs are therefore well incorporated into Kiribati national development strategies (NDS) and Population Policy.

Gross and Net Primary School Enrolment Ratio are high at 96 and 88 respectively with correspondingly high adult literacy rate at 98% in 1990 and 1995, and 92% in 2000 and 2005. The youth literacy rate reflects the outcome of primary education over the previous 10 to 15 years. It therefore can be taken as measure of the effectiveness of the primary education system. Literacy rate of 15-24 year olds reached 98% in 1990 and 1995 with a two percent decline in the latter two years, 2000 and 2005 (Kiribati 2000 and 2006).

## Development policies

A major policy thrust of the 1996-1999 National Development Strategies was to make government more responsive to the changes needed to support economic growth and development emphasizing economic reforms consisting of: i) restructuring the economy in favor of both community-led activities and business-led activities, ii) rationalizing the role of government, and iii) adopting performance measures and assessment of "value for money". Most MDGs are captured in this economic reform process.

The National Development Strategies (NDS) 2000-2003 with Government policy statement of "working together for peace and prosperity" envisioned Kiribati to have achieved by 2005, significant increase in real per capita income and steady growth in employment, while within the region, Kiribati will gain improvements in education, health, environment protection and social indicators. Public sector reforms will address productivity, customer services and management accountability while structural reforms will provide an enabling environment for economic growth especially in the private sector. The policy statement is underpinned by six Strategic Outcomes which are: i) sound macroeconomic framework, ii) stronger linkage between public and private sectors, iii) private sector development and employment creation, iv) a more competitive and diversified export base, v) human resource development, and vi) stronger linkage with international community. While MDG was a relatively new concept during this planning period, this NDS 2000-2003 and MDG share very similar if not the same vision in areas highlighted here.

The National Development Strategies (NDS) 2004-2007, with Government policy statement of "enhancing and ensuring the equitable distribution of development benefits to the people of Kiribati according to the principles of good governance", recognizes the need for peace and a law-abiding environment as essential in achieving growth and sustainable development. This is underpinned by six Key Policy Areas (KPA): i) economic growth, ii) equitable distribution, iii) public sector performance, iv) equipping people to manage change, v) sustainable use of physical resources, and vi) protecting and using financial reserves. Issues in each of the six KPA are operationalized by strategies and activities that, like its predecessor, cover issues echoed

in the MDG. This NDS “is consistent with the commitment of Kiribati to the UN-adopted Millennium Development Goals”<sup>6</sup>.

### Economic Profile

Gross Domestic Product (GDP) is measure of the value of all goods and services produced in a country and is a good indicator of economic performance of a country. GDP per capita is often used as an indicator of average standard of living of individuals in that country. Because the national income (and expenditure) of Kiribati is determined more by earnings from abroad than domestic production of goods and services, it is argued (Republic of Kiribati, 2004), that GNI, which covers income from abroad (RERF, Fishing license fees, green passport, remittances of Kiribati seamen, etc.) is a more useful indicator of economic performance

than GDP. Others however (Republic of Kiribati, 2000) opted for GDP as a better indicator of economic performance given the relatively high population growth rate in Kiribati.

Since the early 1990s Kiribati economic growth, as measured by GDP growth rate (Figure 1), GDP trends (Figure 2) and GDP per capita (Figure 3), has gone through changes that shows a not so good economic performance for the period leading up to 1997, followed by very positive economic growth up to 2002-2003, and finally, a decline in growth from 2003 to 2006. The Kiribati National Sustainable Development Plan, 2008-2011<sup>7</sup>, describes these positive and negative growths as ‘boom’ and ‘recession’ periods respectively, with boom periods above, and recession periods below the regression line, or expected GDP levels for that period, (see Figure 2).

Figure 1: GDP growth rate, 1992-2006

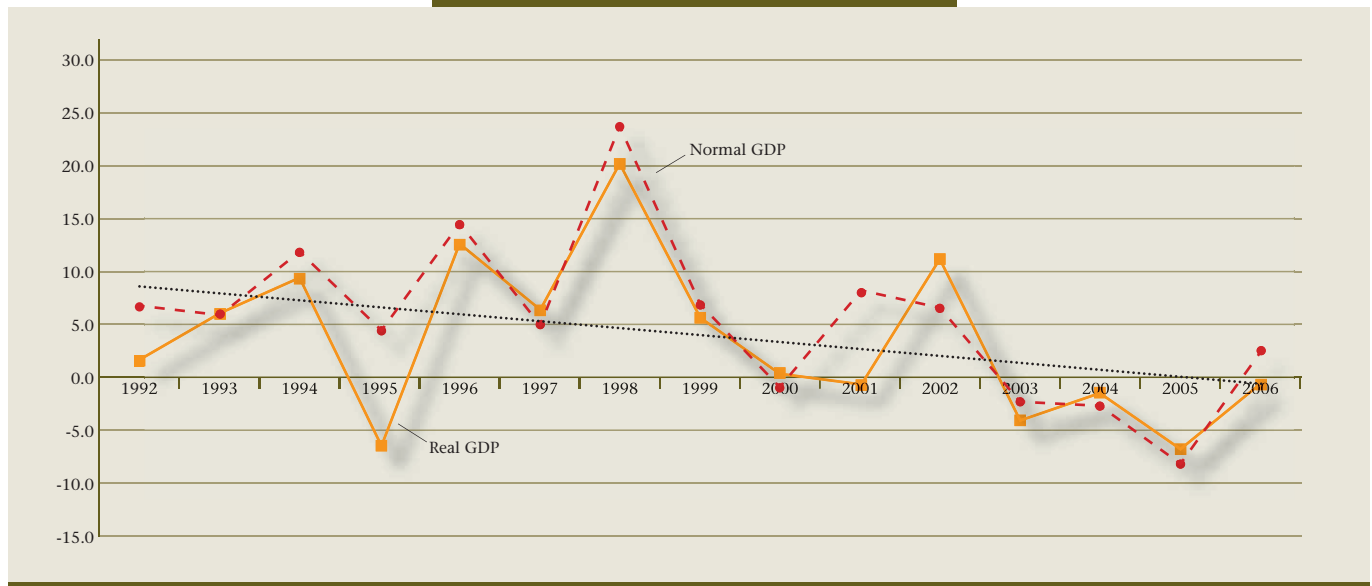
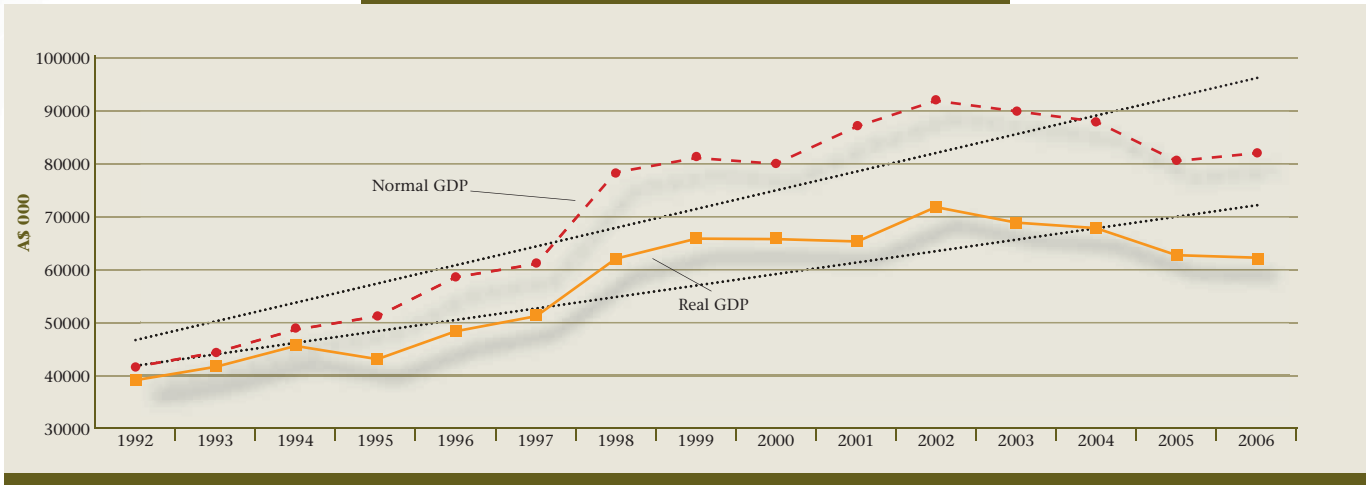


Figure 1 shows that GDP growth rate is quite unstable—in some years the growth rate is high and in other years it would be quite low, even plunging down to negative growth. In 2001 real GDP growth rate was 11.5% but in 2003 the growth rate went down by minus 4%, and this negative growth rate continued to 2006. The very high growth rate of 1998 is due to very high returns mostly from fishing license fees.

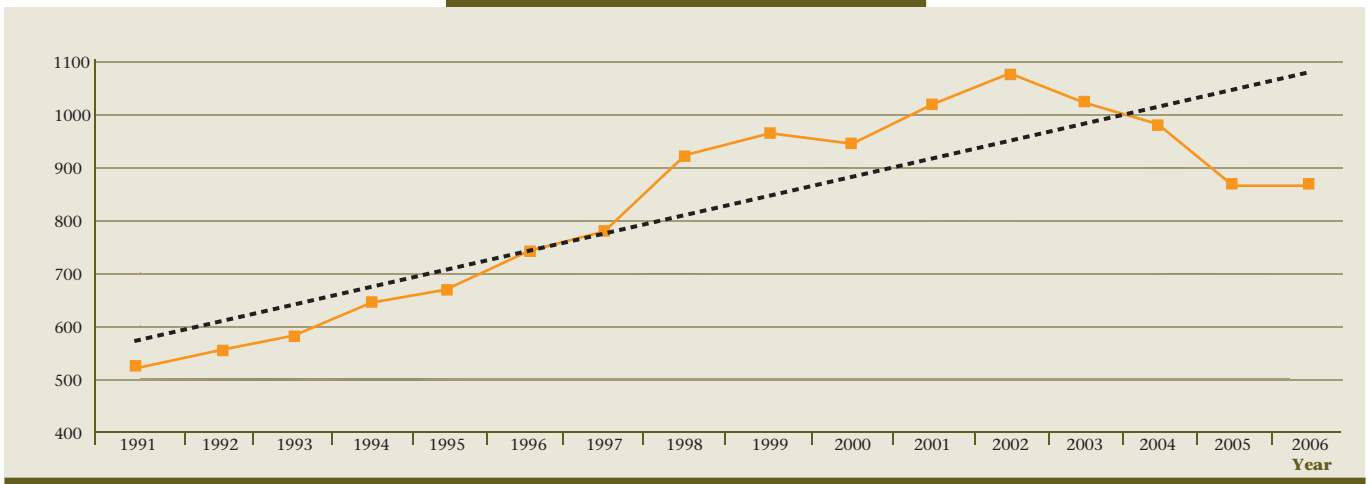
The stable economic growths and stability from the late 1990s to early 2000s was due to a number of factors: buoyant global economic situation, the use of Australian dollar as domestic currency, increases in fishing license fees, increases in the value of reserves (RERF), increase in passport sales, increased accessibility to external assistance from development partners, and Kiribati’s generally prudent fiscal policy (Republic of Kiribati, 2004).

Figure 2: Nominal and Real GDP trends, 1992-2006



The GDP per capita for Kiribati as shown in Figure 3, was about \$500 in 1991 but by 2001 it has reached more than \$1,000 and in 2005 it went down to below \$900. This pattern is similar to GDP trends shown in Figure 2.

Figure 3 GDP per Capita, 1992 - 2006



From the early 2000s there was some down turns in economic growth brought about mostly by the reverse of external factors that contributed to positive growth in the late 1990s including increases in international terrorism e.g. the 11 September 2001 World

Trade Center bombing and war in Iraq. Other contributing factors included the devaluation of US dollar, a dramatic rise in world fuel prices from US\$20 per barrel in 2001 to US\$70 per barrel in 2005, and high fluctuations in world copra prize. Export of copra, fish and seaweed fell each year from \$14 million in 1999 to \$7 million in 2002. The early 2000s saw export earning running at \$6 million while

import at \$80 million indicating widening export to import ratio or trade deficit. The deficit of \$74 million had to be offset by factor income from abroad of about \$60-80 million made up of RERF (\$20 million), seamen's remittances (\$10-15 million) and fishing license (\$20-40 million).

All along the RERF plays an important role in balancing the budget. The role of global economy and global weather on the inflow of these factor incomes, in particular RERF and fishing license fees, reflects Kiribati vulnerability to external shocks and reinforces the need for reforms and strengthening of the economy.

Figure 4 Government Revenue and Expenditure 1985 - 2006

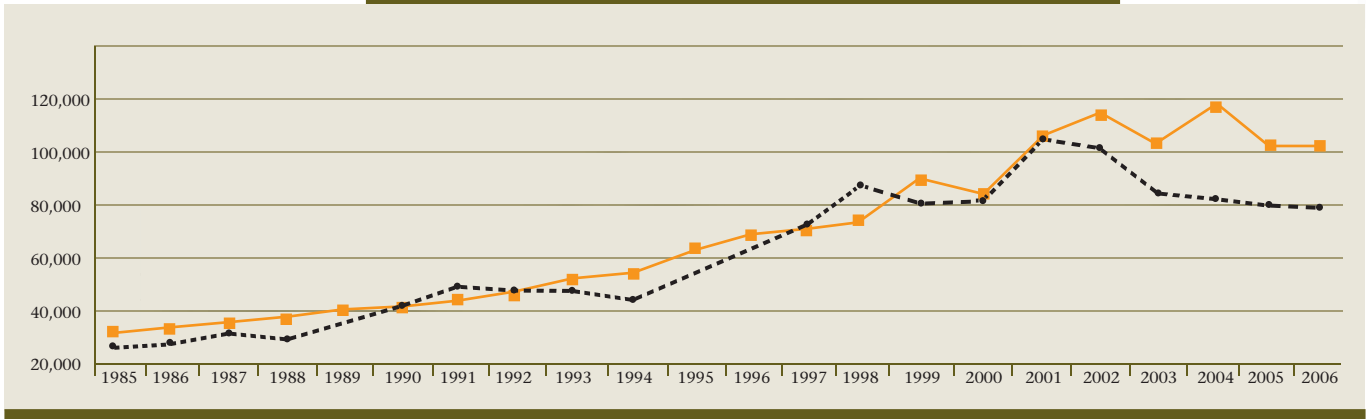
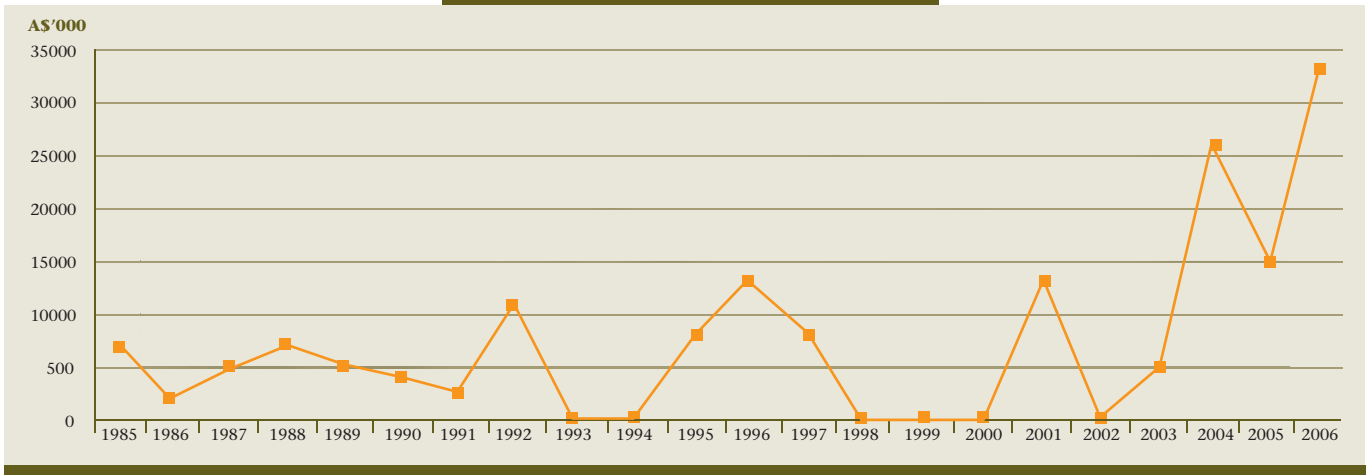


Figure 5: RERF Drawdown 1985 - 2006



Government budget deficit has been growing within the last few years (see Figure 4) resulting in corresponding increasing levels of drawdown from the Reserve Fund<sup>8</sup> (see Figure 5). The two charts are placed one on top of another on the same year scale to appreciate the yearly trends in revenue/expenditure and corresponding RERF drawdown.

As mentioned earlier, there are a number of external and internal factors which could help explain the decline in national output in recent years. The draft Kiribati Sustainable Development Plan (2008-2011) points to dramatic rise in world price of fuel, high fluctuation in copra prices and volatility of fishing license as some of the main causes of this downturn. The IMF<sup>9</sup> also indicates that Kiribati fiscal deficit have averaged 20-25% of GDP in the last three years resulting in large withdrawals from the RERF, which in turn had caused the reduction in RERF per capita value. Other contributing factors include an expanding population, Kiribati's remote geographical location, the impacts of global climate changes, and continued infrastructure problems. Additionally, prospects for continued economic

growth are also constrained in Kiribati because the economy is dominated by government and/or government owned companies. The IMF proposes stronger efforts to reduce the fiscal deficits through increasing revenues from domestic sources, rationalizing spending, cutting down losses at public enterprises, preservation (at the 1996 benchmark) of the real per capita value of RERF for the benefit of current and future generations, and creating conducive environment for private sector development. All these moves will help safeguard the resources of the RERF.

### Employment

According to the 2000 census, total formal employment or cash work category (employers, employees and self-employed) was about 9,440, and this represented about 18% of the adult working population (15-60 years). Of this 18%, more than 75% including those in Government owned enterprises, were by definition, in Government employment (Republic of Kiribati 2004). The 2005 census however shows total formal employment at about 13,130



representing 22% of the adult working population. There is therefore an improvement in the employment rate of the adult population of about 4.3% over the period 2000 to 2005 which represents 39% increase from 2000 figure. Rouatu (2007) compared changes in the number of employees between 1990 and 2005 and found minimal increase of about 10% (or 1% a year) from 1999 to 2000, but quite marked increases of about of 33% (or about 7% a year) from 2000 to 2005. The reasons for these increases include increases in private sector especially in the areas of private bus businesses, Chinese shops and restaurants. The return of I-Kiribati from Nauru and their entering into privately owned businesses may also have contributed to this increase<sup>10</sup>. In fact the increasing number of employer category may be attributed to this.

**Table 1: Unemployment rate using population censuses**

	1990	1995	2000	2005
Unemployed	914	67	644	2,254
Total labor force	32,627	38,407	40,556	36,969
Unemployment rate	2.8%	0.0%	1.6%	6.1%

The concept and definition of unemployment as advocated by ILO which is 'people not employed but actively seeking work' is at times difficult to apply in Kiribati mostly because of the dominant subsistence and informal sectors. Moreover in developed countries the 'unemployed' live on social welfare benefits in the midst of relatively open employment opportunities as evidenced by easy accessibility to employment agencies or career centers, while unemployed I-Kiribati would be doing subsistence activities in order to survive and thus would be more correctly labeled self employed or 'village worker'. Having said that, Table 1 provides unemployment figures based on population censuses.

The above may lead one to think that there is no unemployment problem in Kiribati, but this is not true. There are many unemployed and unsatisfied people out there looking for work. The answer lies in the ILO definitions as alluded to earlier. If all unemployed and self employed were treated as unemployed the picture would be different as shown in Table 2.

**Table 2: Unemployment rate (taking unemployed including village workers, and self-employed person)**

	1990	1995	2000	2005
Unemployed	24,361	30,528	31,680	24,570
Total labor force	32,627	38,407	40,556	36,969
Unemployment rate	74.7%	79.5%	78.1%	66.5%

While the previous figures in Table 1 are too low, figures in Table 2 on the other hand are far too high. To address that, a question was inserted in the 2005 census instrument (questionnaire) asking respondents whether or not they are seeking paid job, to satisfy the ILO category. The resulting unemployment figure arrived at was around 35%. This looks more acceptable but still open to argument purely because Government has not come up with a national formal unemployment rate<sup>11</sup>.

# Goal 1: Eradicate Extreme Poverty

Goal 1: Eradicate Extreme Poverty	
Targets	Indicators
1. Halve between 1990 and 2015 the proportion of people whose income is less than \$1.00 a day	1. Proportion of population below \$1.00 a day.
2. Halve between 1990 and 2015 the proportion of people who suffer from hunger	2. Poverty Gap Ratio (incidence and depth of poverty) 3. Share of poorest quintile in national consumption 4. Prevalence of underweight children (U5 years of age) 5. Proportion of population below minimum level of dietary consumption

## 1A. Proportion of population below \$1.00 per day

There is no general or officially accepted definition of poverty. Poverty means different things to different people across time and place. Local relevance is therefore important; it may also mean different things in different parts of the world. Proportion of population below \$1.00 per day is the percentage of the population living on less than \$1.08 a day at 1993 international prices. This \$1.00 a day poverty line often called "**absolute poverty line**" or **complete material destitution** is matched against consumption or income per person that includes consumption from own production and income in kind. Relative poverty on the other hand means living in considerable worse way than others in the same society, (United Nations, 2003).

### Poverty in the Pacific context

Poverty in the Pacific is rarely as visible or as extreme as in some of the harshest parts of the world such as in Sub-Saharan Africa. However despite the scarcity of poverty-related data, available evidence clearly points to an increasing incidence of poverty in some Pacific Island countries (PIC), (Pacific Regional MDG Report, 2004)

### Poverty in the Kiribati context

In the Kiribati context poverty is best defined as one's lack of access to opportunities and hardship, the so called 'Poverty of Opportunity'. According to the study carried out by the Pacific Regional Department<sup>12</sup> there was general agreement that while poverty does not exist in Kiribati, hardship does with its most widespread definition of 'lack of access to opportunities'. This means lacking access to better educational and economic opportunities, social services, formal employment etc. Those facing the greatest difficulties include the unemployed, people with limited education, large families, elderly people who live apart from their families and those living in crowded conditions, (SPC/ADB, 2004).

First of all, poverty in Kiribati is not an openly discussed matter because there is a belief that people cannot be poor if they maintain subsistence living by going out fishing and obtaining their basic needs from their lands. Second, poverty to some Kiribati people may be referred to as lacking anything to eat without considering the nutritional values of what goes on the plate and other non-food expenses. Third, social support networks such as borrowing money from employed family members had on some occasions been used to fill up the gaps of family needs. While it is the case in some sectors of the community, it is increasingly being realized that these are slowly eroding in a monetized economy. Resources allowing for subsistence production in rural areas are also becoming scarce.

In more recent years more financial problems are experienced such as families' inability to make payment of school fees on due dates, delayed cash payment for copra cutters and a growing demand for jobs by many people. Along with these are, noted rising rural to urban drift, families making purchases on credit from retailers and families' inability to make choices of which to entertain from a list of cultural, familial, community and church obligations in their daily lives.

## 1B. Poverty headcount ratio

Poverty headcount ratio is the proportion of the population whose incomes are below the National Basic Needs (official threshold) Poverty Line (PL) or the proportion of population whose level of income is sufficient for food, PLUS other basic necessities for survival. In its simplest definitions National Basic Needs Poverty Line or simply called Poverty Line (PL) is 'the minimum income (or expenditure) required, firstly, to provide minimum dietary needs, (measured in terms of minimum daily caloric requirements as internationally benchmarked at 2,200 Cal/day), often termed the Food Poverty Line (FPL), PLUS costs of basic non-food items'.

### Status and trends

Based on the 1996 Household Income and Expenditure Surveys (HIES), (Table 3), Kiribati has the highest proportion (50.0%) of households with Per Capita Incomes below the National Basic Needs Poverty Line<sup>13</sup> amongst its Pacific Island neighbors whose HIES undertakings were covered before, during and after 1996, (Figure 6). This figure is consistent with the 2001 SAPHE<sup>14</sup> community survey of South Tarawa which reported that 52% of all households interviewed experienced regular shortage of cash with which to meet daily basic needs.

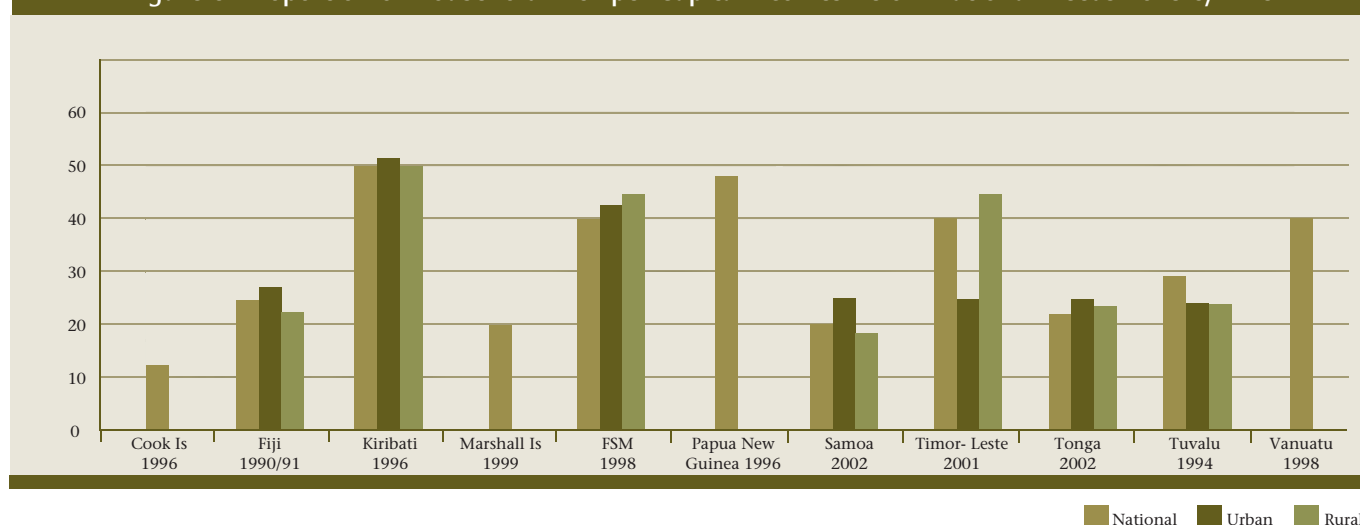
Table 3: National Poverty Incidence Based on HIES  
1996-2006

Rural 1996	Urban 1996	National 1996	Rural 2006	Urban 2006	National 2006
49.0%	51.0%	50%			

Source : ADB 2002

Of this proportion (50%) of households with per capita income below the national basic needs Poverty Line (PL), 49.0% are in rural while 51.0% in urban areas. This figure does not include values for consumption of own-production. This does not also mean that 50% of households were going hungry or experiencing absolute poverty, but rather that they were regularly faced with demands for cash to satisfy their basic needs. This value, if converted by UNDP's standard per capita income level poverty line of US\$1 per day in 1993 PPP<sup>15</sup> terms, and factoring in values for consumption of own-production, would give a somewhat less, 38%, of households below the national poverty line, (ADB, 2002).

Figure 6: Proportion of Household with per Capita Incomes Below National Needs Poverty Line



Other studies (UNDP, 1999) shows that the 1999 Pacific Human Development Report (PHDR) ranks Kiribati 9<sup>th</sup> (down from 8<sup>th</sup> in 1994) amongst the Pacific Development Member Country (of the ADB) (PDMC), with Human Development Index (HDI) of 0.515. This was calculated from a composite measure of life expectancy at birth of 61.6 years, an adult literacy rate of 92%, gross enrolment ratio of 68% and real GDP per capita of US\$702.

The same study also shows that with Human Poverty Index (HPI) of 12.7, Kiribati ranks 7<sup>th</sup> in terms of poverty among the 12 PDMC, indicating that:

- 16% of the population will not live to the age of 40 years
- 8% of the adult population are illiterate
- 13% of children under 5 years are underweight, and
- 24% of the population are without access to safe water

### Progress

A Household Income and Expenditure Survey (HIES) conducted in 2006 shows that total expenditure of households exceeded total household income by \$9,669,418.00 indicating more is spent than earned by households, (see Table 4). This would support the findings in Table 3 that a proportion of households require cash to meet basic needs. The survey also informed that Per Capita Annual Income is highest in the Line Group, second is Central Kiribati, third is South Tarawa, fourth is Northern Kiribati and finally the Southern Kiribati, (see Table 5). In the Line group, there are more income generating opportunities which enable people to make cash earning through sales of handicraft products, seaweed farming and copra cutting. In addition to these better extra earning opportunities, people have free access to large state owned lands for subsistence living.

What is more interesting is that only the Central and Southern Groups would appear to have made some savings on their income while the rest of the groups are spending more that they earn with per capita annual income deficit ranging from \$26 in the Linnix to \$225 on South Tarawa.

Table 4: Household Income/ Expenditure Ratio

	S Tarawa	Northern	Central	Southern	Linnix	Total
Total Income	60,127,768	20,068,657	11,097,368	14,500,491	16,629,053	122,423,338
Total Exp	68,967,626	23,177,364	9,834,318	13,267,464	16,845,984	132,092,756
Net Income	-8,839,858	-3,108,707	1,263,050	1,233,028	-216,931	-9,669,418

Source : Kiribati MFED HIES 2006 (Unpublished Report)

Table 5: Per Capita Annual Income and Expenditure by Island Group

	S Tarawa	Northern	Central	Southern	Linnix	Total
Total Income	1,531	1,114	1,616	1,053	1,981	1,418
Total Exp	1,756	1,287	1,432	964	2,007	1,530
Net per capita income	-225	-173	184	90	-26	-112

Source : Kiribati MFED HIES 2006 (Unpublished Report)

### Challenges and opportunities

The discourse on the definition of poverty will always raise issues of national concern and sensitivity to Kiribati technocrats. But whether we like it or not one must go by some standardized threshold or criteria to allow for comparability across countries with similar developmental levels. The message is clear - using these internationally recognized standard criteria and definitions of poverty, as clearly discussed above under Status and Trends and in Figure 6, Kiribati is not doing very well at all compared with other PIC, and that is an issue for consideration. It would also appear from Table 5 that the majority of those that live in more disadvantaged situations or 'living in considerable worse way than others in the same society' are on South Tarawa. It would be helpful at this stage to quote what was mentioned earlier at the beginning of this report under Development Context: "Life expectancy at birth is 63.1 yrs for females and 58.9 for males with those on outer island living longer (62yrs vs 60yrs). Likewise IMR for South Tarawa is higher at 50 per 1,000 while for outer islands 41. Both indicators show a reversal of pattern during previous census implying that living conditions on South Tarawa are now worse than outer islands".

While disaggregation of the 2006 HIES showed urban vs rural as well as by district or island group levels, further disaggregated on gender basis may be interesting to determine the level of incomes in households headed by women both at the urban and rural settings. Moreover in order for progress to be monitored, this survey should also come up with some figures on the proportion of the population whose income is below the national poverty line to compare with the 1996 national figure of 50% or UNDP figure of 38%.

To use Kiribati definition of poverty as "lack of access to opportunities or hardship" and to target the most vulnerable as "people that are unemployed including youth, people with limited education, large families, elderly people who live apart from their families and those living in crowded conditions", it could be suggested at this stage that people's priorities in this area would include:

- Education and training including establishment of training centers for skills development in carpentry, automotive repair, sewing, home economics and gardening
- Creation of economic opportunities through continued subsidization of copra prices<sup>16</sup>
- Establishment of links to markets especially handicrafts, fish, 'te tuae'<sup>17</sup>, coconut oil products and other home made products

- Improvement of services and infrastructures particularly water and sanitation, roads, transport and communications including internet services on outer islands
- Better price control on basic commodities
- Establishment of centers for the elderly peoples who live apart from their families<sup>18</sup>
- Implementation of the national Population Policy and its family planning components, and
- Improvement in town planning and strengthening of building code

It is acknowledged that data that are presented in this report are quite outdated. However they are still within the timeframe of the MDG which covers the period 1990 to 2015. Until new information is available it would not be possible to accurately monitor the progress. However the next MDG report would certainly be in a much better position to do so taking into considerations data that is available now.

### 4. Prevalence of underweight children (U5 years of age)

#### Status and trends

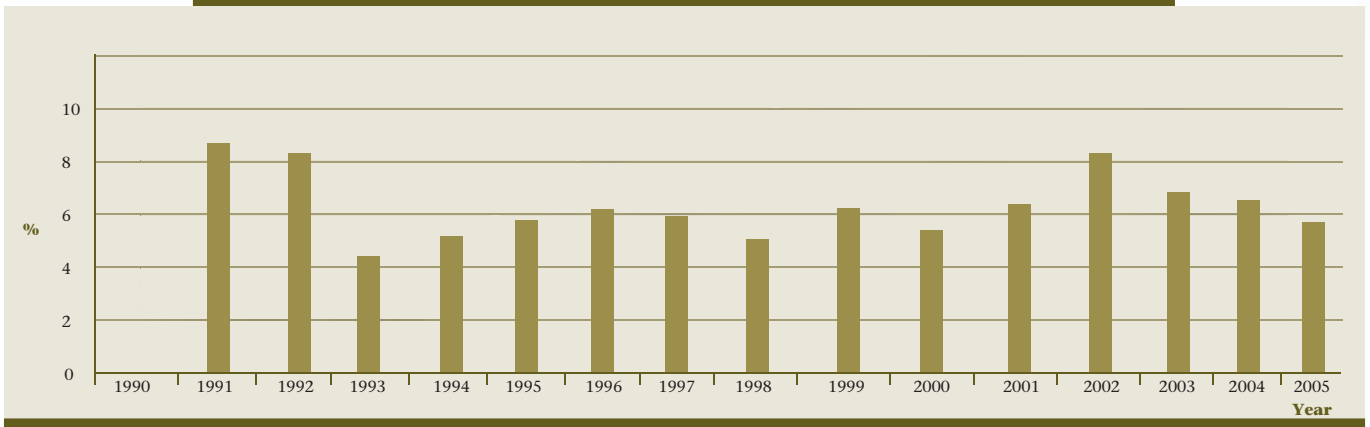
Child malnutrition is reflected as underweight for age or having a weight of more than two standard deviations below a standard weight for height of a reference population. Child malnutrition is associated with poor living conditions, low level of education and poor access to health services. These factors would, when appropriately dealt with, pave the way for improving the health of children. Apart from the on-going Under-5 Nurses card completion study, there are no household, nutritional or demographic health surveys that could provide good data on underweight children in Kiribati.

#### Progress

A recent small study (L. Entelberg, 2007)<sup>19</sup> on the feeding pattern and feeding practices of children aged less than 2 years showed a malnutrition rate in that age group of about 18%. Further findings from the study showed a high rate of improper feeding practices including non-adherence to the six months exclusive breast feeding policy, early weaning and inappropriate choice of feedings. The 1999 MHMS data shows a figure of 13% for children under 5 years of age.

Although this should not be taken as a proxy for under-5 malnutrition, Figure 7 shows the percentage of children born underweight, that is with less than 2.5 kg weight at birth. A good proportion of the underweight children would be assumed to have come from this cohort. This is a very rough estimate in the absence of data.

Figure 7: Proportion of total birth of underweight infant at birth, 1990 - 2005



**Challenges and opportunities**

There is definitely a need to get good data on child malnutrition in Kiribati. As of now there are no reliable data to use. The MHMS through its Nutrition Unit should consider this. It goes without saying that the health of a child is dependent on the health of the mother, thus the need for good antenatal and postnatal care. Healthy nutrition is of paramount importance to women during pregnancy and postnatal period to allow children to start life with optimal physical and mental developmental status. A lot of effort is needed to successfully implement the national breastfeeding policy, especially at the hospital settings, thus giving support to the Baby Friendly Hospital Initiatives<sup>20</sup>.

**5. Proportion of population below minimum level of dietary consumption**

**Trends, status**

No data is available on this indicator

**Progress**

No data is available on this indicator

**Challenges and opportunities**

Household surveys should be able to come up with information on this indicator. It is an important measure of food security of the population, with lack of basic food requirements, malnutrition, and hunger being contributory factors to poverty. Alleviating hunger is a prerequisite for sustainable poverty reduction since under nourishment seriously affects labor productivity and earning capacity. Although there are no official data on this indicator, there are reasons to believe that a close correlation exists between this indicator and Indicator 4. In order to work, poverty reduction strategies must address food access, availability and safety. For this reason, it would be in the best interest of Government and corresponding ministries to improve data collection on this indicator, considering that it has such a fundamental and basic role in achieving the other MDG targets.

12 A joint program of the Secretariat of the Pacific Community and Asian Development Bank (ADB) that carried out in 2004, a participatory Assessment of Hardship and Poverty in Kiribati involving village areas on Tarawa (Betio, Buota and Tearinibai), Kiritimati (London, Tabwakea and Poland), Butaritari,

**Tracking Progress: Goal 1. Eradicate Extreme Poverty**

Monitoring and evaluation components	Assessment		
Data collection capacity			Weak
Quality of recent survey information			Weak
Statistical tracking capacity		Fair	
Statistical analysis capacity		Fair	
Capacity to incorporate statistical analysis into policy, planning and resource allocation mechanisms	Good		
Monitoring and evaluation mechanism		Fair	

Abemama and Tamana. The program later came out with a working definition of poverty and hardship in Kiribati - "Poverty of Opportunity".

13 National Basic Needs Poverty Line (PL) is indicative of proportion of households that report they have insufficient income to meet minimum dietary needs (Food Poverty Line) PLUS basic non-food necessities for survival. The figures were derived at from the 1996 HIES (South Tarawa, Onotoa and Butaritari) and a model subsistence diet, based on adult minimum dietary requirement (Food Poverty Line (FPL)) of 2,200 Cal/day provided by Nutrition Unit of the Ministry of Health. The result must be treated with caution as this 1996 HIES data is not considered to be very robust or reliable.

14 Sanitation, Public Health and Environment Project; South Tarawa Community Survey, 2001.

15 Purchasing Power Parity of US\$1 per day

16 One should be wary that this is not a very sustainable option in the long term considering the plunging world prices in copra. As such, other income generating alternatives should be explored.

17 Pandanus fruit product

18 The ADP/SPC Pacific Regional Department findings show that amongst those mostly affected by hardships are elderly people who live apart from their families. This has become a reality in many family settings in Kiribati and we cannot turn a blind eye on it.

19 Unpublished findings on the 2007 survey by Entelberg conducted as preliminary studies prior to the introduction of food fortification in Kiribati

20 A UNICEF-supported initiative to promote exclusive breast feeding for the first six months in all hospital settings

## Goal 2: Achieve Universal Primary Education

Target	Indicators
3. Ensure that by 2015 children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	6. Net Enrolment Ratio in Primary Education  7A. Proportion of Pupils starting Grade 1 who reach Grade 5.  8. Literacy rate of 15-24 year-olds.

## 6. NET ENROLMENT RATIO IN PRIMARY EDUCATION

### Status and trends

Kiribati is committed to the UNESCO Education For All (EFA) Framework and is working towards that through the twelve (12) EFA indicators that cover access, quality and efficiency in education service delivery.

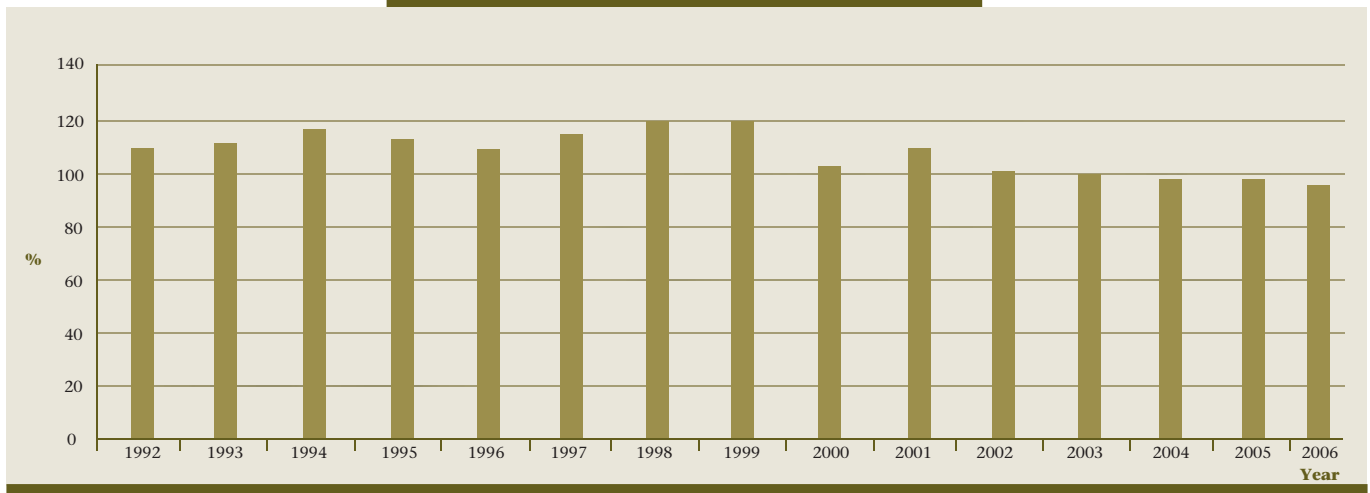
EFA 5 is Gross Enrolment Ratio (GER) and represents the number of pupils enrolled in a given level of education, regardless of age, expressed as a percentage of the population in a relevant official age group (Primary: 6-11 yrs; Junior Secondary: 12-14 yrs; Senior Secondary: 15-18 yrs)

EFA 6 is Net Enrolment Ratio (NER) and represents the

number of pupils in the official age group for a given level of education expressed as a percentage of the total population in that age group. This indicator measures the extent to which children are accessing education at the right age at various levels of the school system.

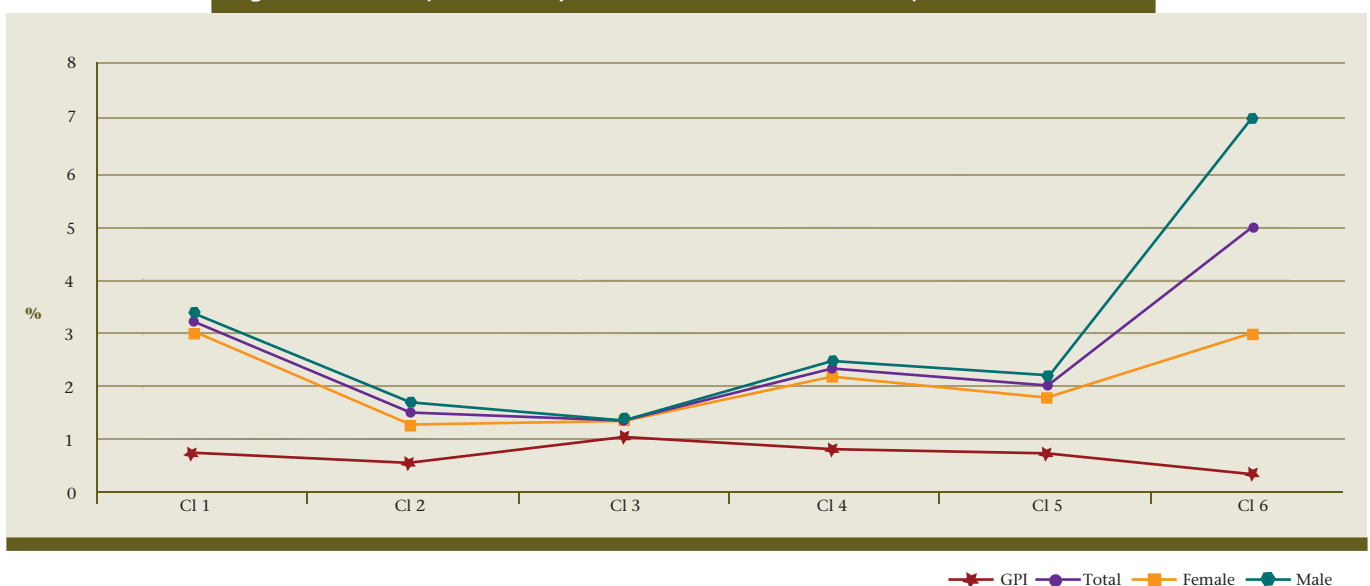
Primary School Enrolment Ratio is above 100% for the years 1990 to the early 2000s as shown in the existing net enrolment data which indicates achievement of universal primary education, (see Figure 8). However we should be cautious that these grossly inflated figures could also be attributed to weak control of entry of pupils of primary school age in the different classes, in which case this figure may thus be referred to as Gross Enrolment Ratio which includes children of any age.

Figure 8: Primary Net Enrolment Ratio By Year



It is also known for a fact that limited places competed for at secondary schools and above has caused many to choose for repetition and forging of age by children by parents and sometimes teachers. The 2005 Digest of Education Statistics shows that for the years 2004 to 2005, repetition rate in primary schools is consistently higher in males throughout the six years of primary education but especially in Class 6, Repetition in Class 1 is high and common to both males and females, (see Figure 9).

Figure 9: Primary School repetition rate (%), total and by sex, 2004 - 2005



The same source also shows that the proportion of primary school teachers that are qualified<sup>21</sup> ranges between 97 to 98% for the years 2002 to 2005. Certified teachers<sup>22</sup> for the

same period however is at the wider range of 68 to 99%. This is a fair achievement.



## Progress

In more recent years, the Ministry of Education has imposed a more stringent control on cases of repetition by those who are above age. Data for 2002 onwards show a decline but only by 3 to 4 percent below 100%. It is therefore encouraging to note that primary education in Kiribati fares well with other countries in the region. There is an increase in the number of primary schools given the higher number of primary age pupil over the years supported annually by the largest budget within the Ministry of Education and free provision to all. Ensuring completion of primary school education by the year 2015 seems possible to achieve. The Digest of Education Statistics 2005 shows that between 2002 to 2005 there were more males than females in primary schools, although the Gender Parity Index (GPI)<sup>23</sup> for the same period is slightly in favor of females in 2002 (1.04) and 2004 (1.03) and equal (1.00) in 2003 and 2005. However at secondary school levels this pattern changes significantly with more females than males and likewise their corresponding GPI. Possible explanation for this trend is appropriately provided under Indicator 9, dealing with gender issues.

## Challenges and opportunities

An improvement of school facilities in rural areas is essential to enable equal access to educational opportunities as

the twelve years out of fourteen between 1992 and 2006, (see Figure 10). It may be noted however, that in most years figures including those of census periods indicate a difference in the number of 11 year olds of official age as compared to those collected from the Digest of Educational Statistics. Thus in this case, figures used could be assumed to be gross figures (includes above age repeaters). Current existing figures, therefore, indicate that drop out rate is not an issue given the system's permissible approach to continued acceptance of those who seek repetition in other different schools.

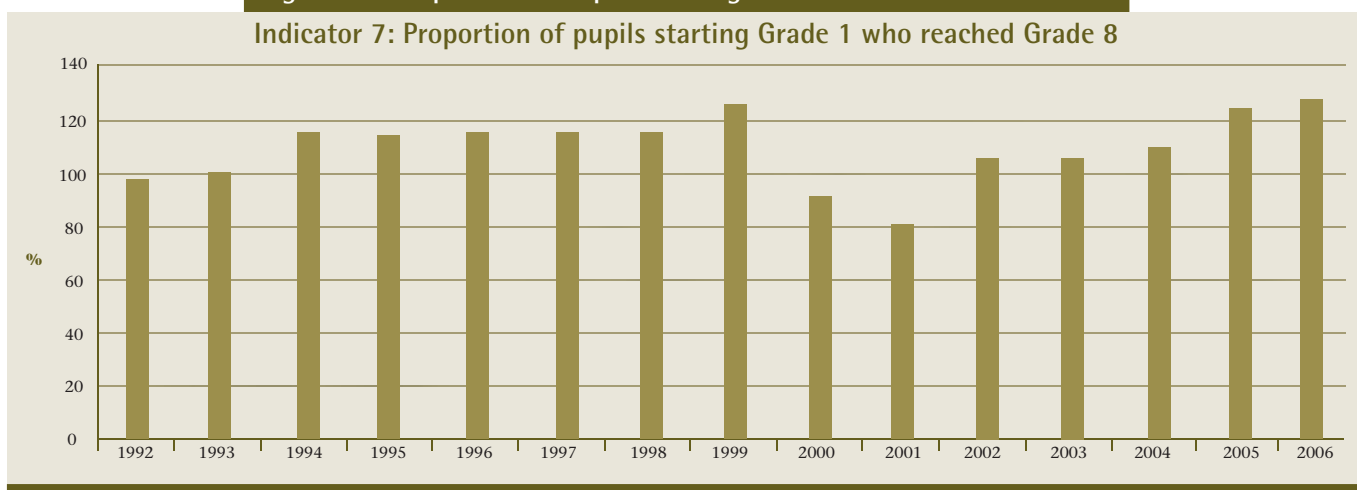
## Progress

Universal coverage of all children at primary school is already achieved but good control of entry of pupils of primary school age in the different classes should be strengthened. Achievement of this indicator is also in line with the Education for All Indicator 2 (EFA 2)<sup>24</sup> provisions and the Convention of the Rights of the Child (CRC)<sup>25</sup>.

## Challenges and opportunities

There is still further need to strengthen returns on school data and for the introduction of more stringent rules and school policies regarding the provision of correct ages. This would allow for provisions of a good database that would, in turn, generate evidence-based information. Entrance

Figure 10: Proportion of Pupils Starting Grade 1 who reached Grade 6



enjoyed by those in the urban areas. Other general areas to improve include stringent control on cases of repetition by those who are above age, strengthening of staffing qualification, teacher to pupil ratio and provision of better water and sanitation facilities in schools as prerequisites to good hygiene and good health in schools.

## 7. PROPORTION OF PUPILS STARTING GRADE 1 WHO REACHED GRADE 6.

### Status and trends

Currently formal education starts in Primary Schools at Class One for children aged six. Primary education in Kiribati continues for six years to Class 6. The proportion of pupils starting Grade 1 who reached Grade 6 has been very encouraging as shown by a steady figure of above 100% in

into secondary schools is through Junior Secondary Schools where students automatically continue free from Primary Schools.

## 8. Literacy Rate of 15–24 year old

### Status and trends

The youth literacy rate reflects the outcome of primary education over the previous 10 to 15 years. It therefore can be taken as measure of the effectiveness of the primary education system. Literacy rate of 15-24 year olds reached 98% in 1990 and 1995 with some two percent decline in the latter two years, 2000 and 2005 (Kiribati 2000 and 2006). We can say, based on the statement at the start of this section, that perhaps primary education during the

1980s was probably better than in 1990s but this is rather difficult to accept considering that education should improve over time. On the other hand, the 2% decline could be considered not significant because the proportion of pupils starting grade 1 who reached grade 6 during that period, was actually very high.

### Progress

This high rate indicates there had been better access to basic education, especially up to completion of primary education, which tallies well with very high proportion of pupils starting grade 1 who reached grade 6 as shown in Figure 8 above.

### Challenges and opportunities

Despite this high literacy rate however, what requires attention is that of the total literacy rate, more than 85% are without jobs as shown in Table 6<sup>26</sup>. This may be acceptable considering the basic definition of literacy which is the ability to read, write and understand simple statement. Nevertheless this high unemployment rate among youth is still a concern, and will be addressed in more details under Indicator 45: *Unemployment rate of 15-24 years old, each sex and total*

Table 6: Employed 15-24 year old literates during Census Years

Year	No. Literate of 15 to 24 yr (at school and out of school)	No. of Literate Youths in Cash Sector	% of Literate Youth in Cash Sector	% Literate Youth not in cash sector " = unemployed "
1990	13454	2082	15%	85%
1995	12873	1038	8%	92%
2000	15181	1411	9%	91%
2005	18679	2016	11%	89%

### Tracking Progress: Goal 2. Achieve Universal Primary Education

#### Monitoring and evaluation components

#### Assessment

Data collection capacity	Fair
Quality of recent survey information	Fair
Statistical tracking capacity	Fair
Statistical analysis capacity	Fair
Capacity to incorporate statistical analysis into policy, planning and resource allocation mechanisms	Good
Monitoring and evaluation mechanism	Fair

<sup>21</sup> Qualified teachers in Kiribati Education System are Form 5 for Primary YEachers and Form 7 for Junior and Secondary Teachers

<sup>22</sup> Certified teachers in Kiribati are those that have completed at a two year teaching certificate program

<sup>23</sup> Gender Parity Index (GPI) is the ratio of the values of females over the value for males. A GPI of 1 indicates equal value. GPI of less than 1 indicates that the value of females is less than the value of males

<sup>24</sup> EFA 2: Percentage of new entrants into Primary School who have attended Early Childhood Education Program

<sup>25</sup> Kiribati ratified the CRC in 1995

<sup>26</sup> A word of caution: This MEYS data shows 85% unemployment rate among youth while I.Rouatu (2007) talks about 90%, that is divided into those attending schools (37%) and those that are truly unemployed (53%) which, in absolute numbers, is about 10,000 unemployed youth every year.

# GOAL 3: Promote Gender Equality and Empower Women

Target	Indicators
4. Eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education by 2015	9. Ratio of girls to boys in primary and secondary education  10. Ratio of literate females to males of 15-24 years old  11. Share of women in wage employment in the non-agricultural sector  12. Proportion of seats held by women in the national Parliament

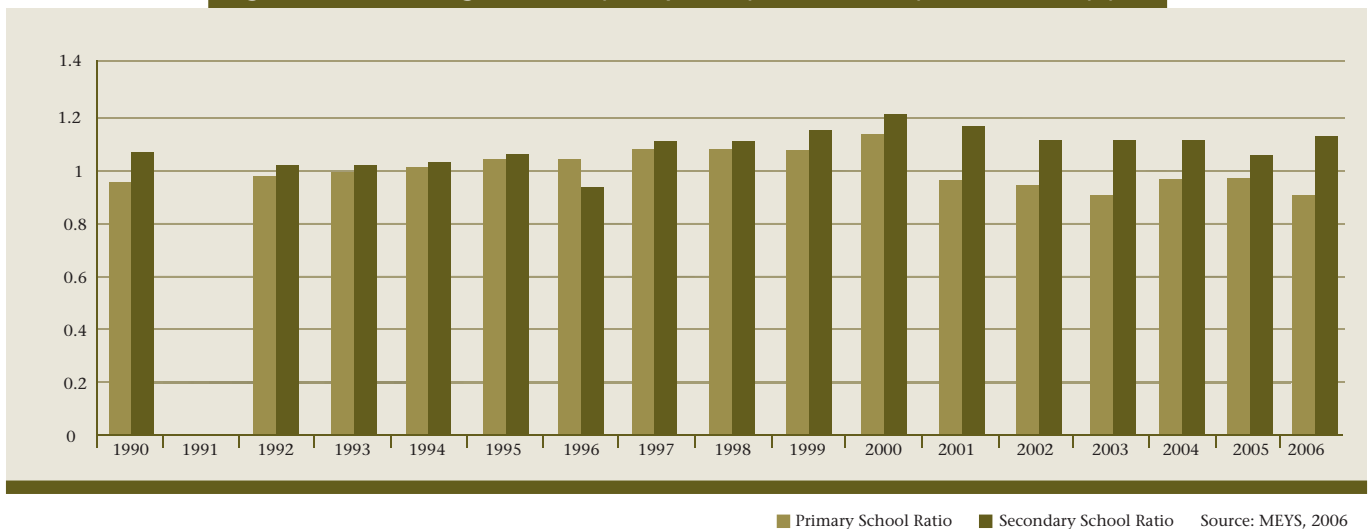
Worldwide 70% of those living in “extreme poverty” are women and children. One third of all women and girls experience physical and sexual violence and girls are twice as likely as boys to die from malnutrition and preventable diseases. Across the Pacific region women remain severely under-represented in Parliament and continue to be disadvantaged in terms of employment and working conditions. Women access to health and education systems continues to be limited resulting in high teenage pregnancy and maternal mortality rates.

Gender equality is a human right. Gender equality is not only a woman’s issue but should concern and fully engage men and boys who can and do contribute to promoting gender equality. Women are often the invisible driving force that lifts families out of poverty. In short, empowering women will reduce poverty.

*“Study after study has taught us that there is no tool for development more effective than the empowerment of women”*

Kofi Annan, UN Scretary general, Commission on the Status of omen, Beijing +10 Review, 2005

Figure 11: Ratio of girls to booyis in primary and secondry education, by year



## 9. RATIO OF FEMALES TO MALES AT PRIMARY AND SECONDARY SCHOOLS

### Status and trends

At primary school level (Figure 11, blue bars) females exceeded the number of males by 7 years, had lower ratio for 8 years and equal males in one year over the sixteen year period. At secondary school level (red bars), female to male ratio remained high for a fifteen year period indicating very high female participation and low participation of male students. It would seem that the practice of giving preference to boys when they reach primary school age may still exist. On reaching secondary education, boys would get into more trouble with a higher tendency to drop out. Meanwhile, parents are realizing the economic importance of sending girls to school for secondary education, and so this shows a positive trend. The fact that parents usually accompany or drop off and collect their children when they are attending primary schools, and leave them more or less to fend for themselves at secondary school levels probably contribute to this trend where male drop out at secondary school levels is high.

### Progress

Achievement of gender equality based on this indicator appears to vary considering that female to male ratio at primary school level has been below 1 from 2001 to 2006, while it has been above 1 in the previous 8 years. Moreover at secondary school level, females are over represented for most of the 1990 to 2006 years period, (see figure 11). What are the reasons this trends? Attempts have been made to explain this pattern in the above section under Status and Trends. Further explanation is also provided below under Challenges and Opportunities.

### Challenges and opportunities

Although this indicator of equal educational opportunity has been somewhat achieved with some variations in female to male representations at primary and secondary levels, there is a need to consider remedies for low participation of females at primary school level and a high male drop out rate at secondary school level. A number of children especially girls on South Tarawa and Betio are still being seen calling at various homes, public places including bars selling items to make money during school days. It is also a common knowledge that because of their young age, a lot

*“The human race is a two-winged bird – one wing is female, the other is male. Unless both wings are equally developed the human race will not be able to fly”*

Abdu'l-Baha, sections from the writings of Abdu'l-Baha, sec 227

of parents actually drop off their children at schools and collect them after school at primary levels. However, at secondary school levels, most parents do not follow up on whether or not their children are actually attending schools and boys in particular would be seen roaming around in villages doing other things and on a number of occasions seen indulging in alcoholic drinks. An effective monitoring system or parent/teacher network could be set up where each party are in regular contact with each other by phone or weekly written notification on the attendance of a child while attending school. A number of primary schools in South Tarawa have taken it further by reporting to authorities on parents whose children are not attending schools. This is a very responsible option.

### 10. RATIO OF LITERATE FEMALES TO MALES OF 15-24 YEARS OLD

#### Status and trends

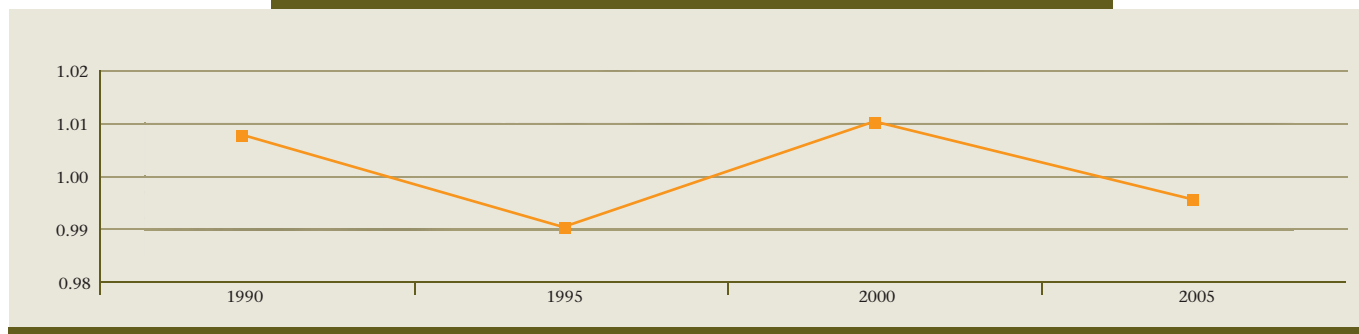
Literacy is an important tool to equip and empower women to take control of their lives, to gain access to economic

opportunities and to the wider world of learning (United Nations, 2003). The ratio of literate females to males within the ages 15 to 24 year olds has been very promising and has implications that female education has been given equal importance when compared to boy's education over the last fifteen years: 1990=1.01, 1995=0.99, 2000=1.01 and, 2005=1.00, (see Figure 12). Moreover a number of girls are taking up traditionally male subjects and we are witnessing female carpenters and pilots in the national workforce.

#### Progress

Gender Equality in this area has already been achieved given the gender balance policy is maintained in entry to higher secondary schooling. Figures are not readily available for tertiary education. However the School of Nursing is witnessing increasing number of male recruitment while the Kiribati Teachers College is generally well gender balanced.

Figure 12: Ratio of literate females to males of 15 to 24



#### Challenges and opportunities

For a start, the onus is on Government to ensure that universal primary education (Goal 2) is maintained while parents on their parts should pay equal attention to boys and girls attending primary education. Having done that, getting to this indicator would not be that difficult because the quality and gender-balanced primary educational system would be reflected in this indicator.

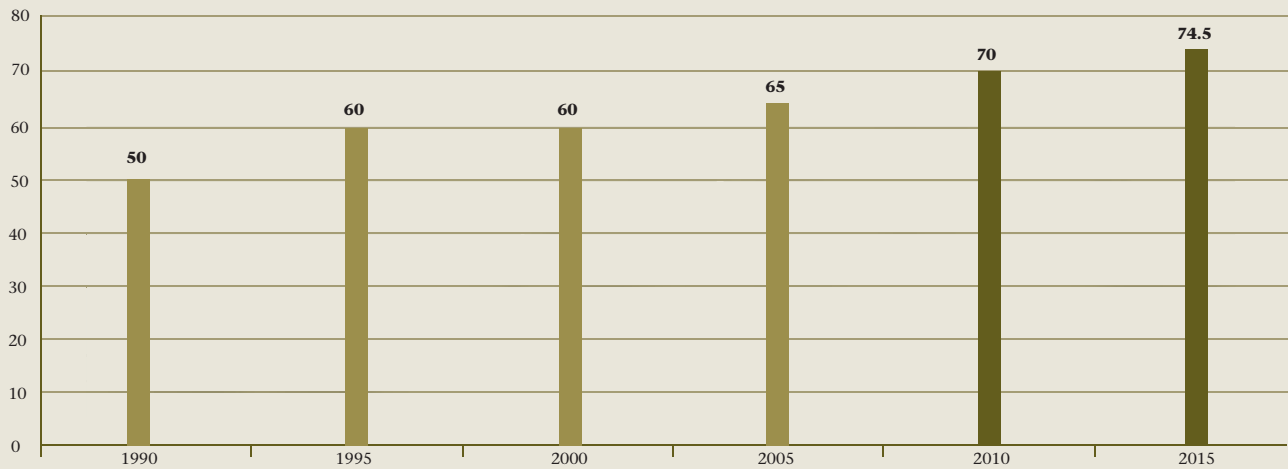
### 11. SHARE OF WOMEN IN WAGE EMPLOYMENT IN THE NON-AGRICULTURAL SECTOR

#### Status and trends

Kiribati is not an agricultural country and as such women

participation in that sector is already limited, at least in the urban areas. Taking that point of view, non-agricultural sector in the context of Kiribati means both formal and non-formal employment. The participation of women in both sectors is quite significant as shown in Figure 13. Women are also equally or perhaps more involved in retail trade and community and social services and as personal food and handicraft sellers. The share of women in wage employment in the non-agricultural sector has maintained good gradual growth. In 1990 it reached 51%, and increased by 9% in 1995 reaching 60%. In 2000 it remained steady at the same figure and rose by 5% in 2005 making the total share of waged employment at 65%<sup>27</sup>. There is no steady figure between census periods, however, a total of 14% increase has been experienced over the last 15 years.

Figure 13: Share of women in Wage Employment in the Non- Agricultural Sector projected into 2010 and 2015



### Progress

Based on this percentage increase over the past fifteen year span, a share of women in waged employment could increase further. Applying regression analysis we could project future values of women's share of employment to be around 70% for 2010 and 74.5% for 2015, see dark blue bars in Figure 13. This is an encouraging picture.

### Challenges and opportunities

Women participation in non-agricultural sector that includes both formal and non-formal employment is increasing. Through open markets and stalls, more opportunities would be provided for women to sell their products under non-formal sectors which is also increasing. But the crux of this indicator is to give more opportunities to women in public sector, private sector and other industry and services sectors to ensure equal employment opportunities. Women are often tied down at home to look after their many children. This has been a tradition in most cultures. However the education system has slowly but effectively broken down this traditional barrier and more women, based on their level of education, are now entering the workforce. Education for girls or elimination of gender disparities in access to education at all levels will broaden and strengthen the opportunities of women and girls to participate fully in the national development and enhance poverty reduction.

## 12. PROPORTION OF SEATS HELD BY WOMEN IN NATIONAL PARLIAMENT

### Status and trends

Women's participation in politics is a good indicator of women's participation in public affairs and their empowerment. The proportion of seats held by women has been zero for seven over the eighteen year period from 1990 to 2006. Despite silent years between 1993 and 1998 the seats for women in national parliament have been occupied by women from 1999 to 2001 at a percentage below 5%, which rose to a steady, 5%, from 2002 to 2005.

*"Forget China, India and the internet: Economic growth is driven by women"*

The Economist, 15 April 2007

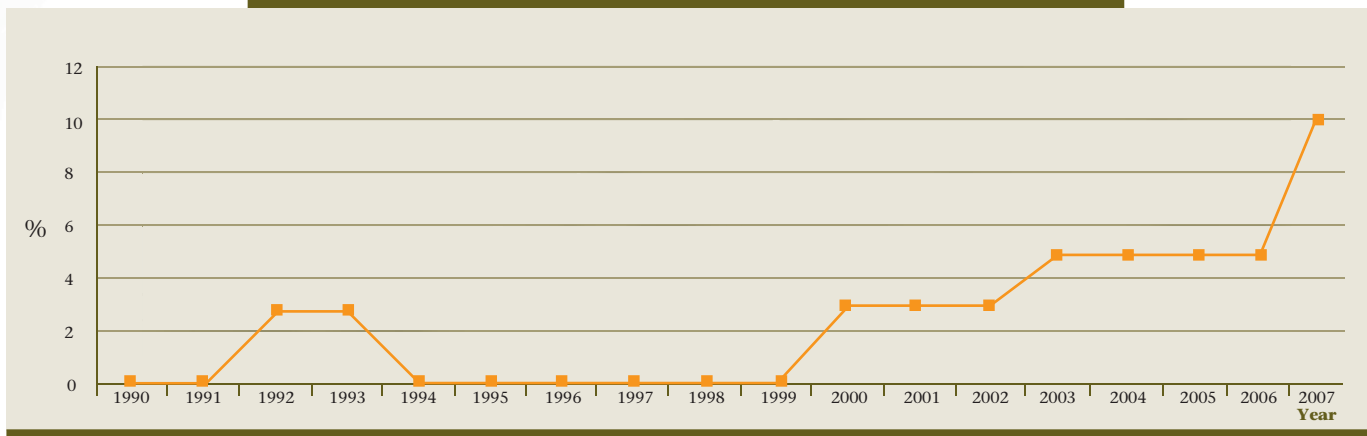
### Progress

From 2006 to date there has been a very encouraging increase in women's participation in national parliament reaching 10% in 2007, (see Figure 14), and there is evidence based on the increase in number of women candidates that this trend is likely to increase further. Moreover, although this indicator is for seats held by women in national parliaments, depending on contexts, an increasing number of women are holding top Government positions including secretaries to ministries and CEO to statutory bodies and in other decision-making bodies where women's voices can be heard.

### Challenges and opportunities

While it is realized that there are no gender mainstreaming policies and written affirmative actions in place to support more women representation in national parliament, women are eligible and accepted by the community when they choose to contest in this male domain arena. By Pacific regional comparison, however, Kiribati has the largest proportion of seats held by women. Interestingly, despite strong involvement of government and women NGOs in the Beijing Conference of 1995<sup>28</sup> no immediate returns in the political arena were felt in the mid 1990s, as follow-up to the Beijing Platform of Action to further gender equality and women empowerment. Five female contestants did appear but unfortunately did not obtain the highest votes indicating that strong tradition and culture still prevail not only among men but also among women.

Figure 14: Proportion of Seats held by Women in National Parliament



The empowering of women in the political arena, therefore, has limited potential mainly because on most occasions successful women have been widows of former MPs most of whom were elected thorough emotive and public sympathy. However those that have retained their seats in subsequent elections have won the heart of their people through their proven ability as good politicians. Women NGOs on the other hand have not really known how to exercise their roles in using their organizations to support their women candidates as in the case of some countries. Apart from women NGOs success in CEDAW<sup>29</sup> ratification and amendments to the Evidence Act<sup>30</sup> lobbied to the benefit of women in the early 2000s. However, there is still more to be exercised in advocating policies and legal changes to further women empowerment.

Tracking Progress: GOAL 3. Promote Gender Equality and Empower Women

Monitoring and evaluation components	Assessment		
Data collection capacity			Poor
Quality of recent survey information			Poor
Statistical tracking capacity		Fair	
Statistical analysis capacity		Fair	
Capacity to incorporate statistical analysis into policy, planning and resource allocation mechanisms		Fair	
Monitoring and evaluation mechanism		Fair	

27 This figure should be treated with caution because the definition of non-agricultural sector, formal and informal employments need to be clarified first.

28 Fourth World Conference on Women, Beijing China 1995 which came up with the platform for Action that addressed women's issue and employment.

29 CEDAW - Convention on the Elimination of all forms of Discrimination Against Women, adopted by the UN General Assembly in 1979 and ratified by Kiribati in 2004, is often described as the international bill rights for women.

30 An act to protect people from harm. This is especially in relation to protect women against violence and promoting their rights.

## Goal 4: Reduce Child Mortality

Target	Indicators
5. Reduce by two thirds between 1990 and 2015 the under-five mortality rate.	13. Under-five mortality rate. 14. Infant mortality rate 15. Proportion of one year old children immunized against measles



### 13. UNDER 5 (U5) MORTALITY RATES.

#### Status and trends

This indicator links directly with the target and goal and is a good measure of child survival including the social, environmental, health and economic condition under which the child grows up. Data is obtained mostly from the World Health Organization (WHO) and the United Nations Population Fund (UNFPA).

#### Progress

As shown in Figure 15, the percentage reduction in the U5 mortality from the 1990 level of 88 deaths per 1,000 to the 2004 value of 66 is 25%. A reduction by 2/3 means reduction to about 30 deaths per 1,000 by 2015 (green line). At the rate Kiribati is going and in line with current trends Kiribati will only be able to reduce its U5 mortality to 60 per 1,000 live births by 2015 (red line) by 2015. This is equivalent to 32% or a 1/3 reduction ( $88-60/88 \times 100 = 32\%$ ). The availability of only three mortality figures for the 17 year period from 1990 to 2007 is an indication of poor database management. We do need to improve our database in this area as in many other indicators. Moreover the infant mortality rate (IMR), although improving, is also contribution to slow progress in U5 mortality reduction, a further need to address these inter-related mortality indicators in a more focused and holistic manner. Based on the 2005 census draft report, mortality is higher in males than females at both infant and under-five age groups, (see Tables 7 and 8).

#### Challenges and opportunities

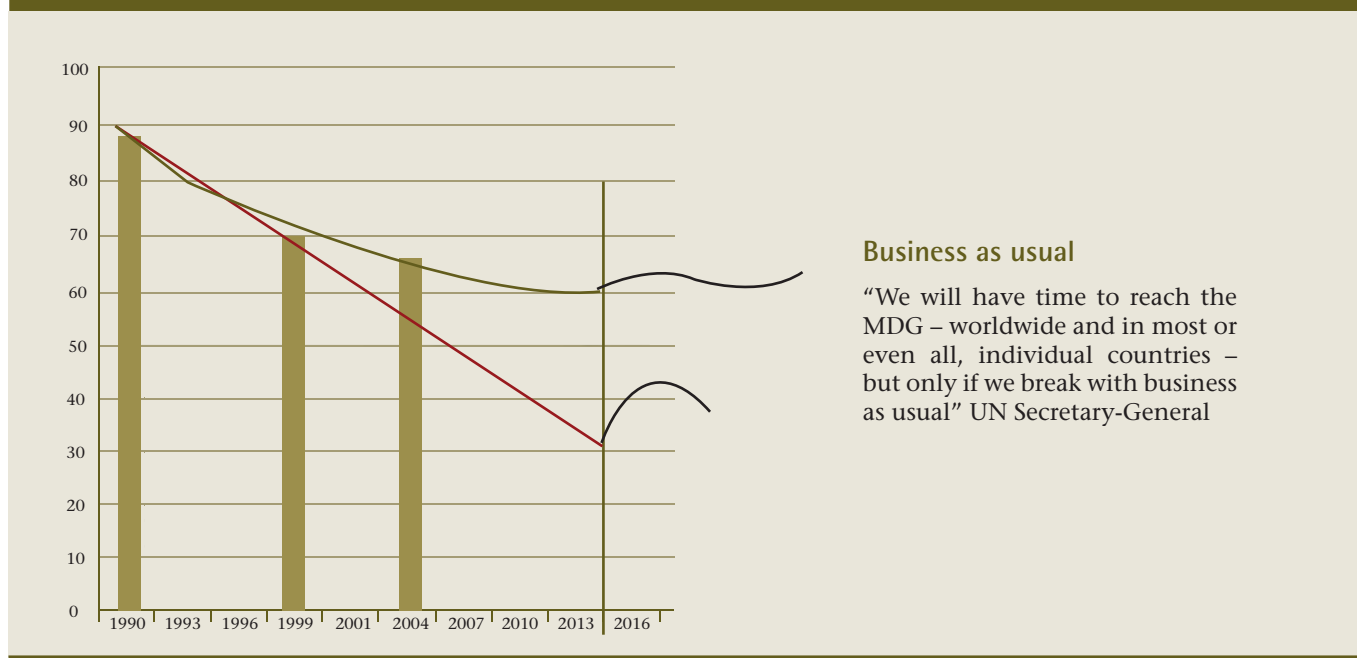
While child survival rates have improved considerably in PICs over the past decades, a high rate of U5 mortality - among the highest rates in the Pacific - still exists in Kiribati. According the UN Secretary-General every country will have time to reach the MDG world wide and even in most or even all individual countries – but only if they break with business as usual...<sup>31</sup>. Business as usual means doing nothing new and therefore Kiribati needs to depart from that and get straight into: i) Strengthening infant and child health program (ANC, PNC, Immunization, Breastfeeding, Family Planning, IMCI), ii) Improving water and sanitations, and iii) Strengthening, implementing and enforcing existing policies and laws especially those related to child welfare, sustainable environment, overcrowding, communicable disease control and water and sanitation. The probable causes of a higher U5 male mortality should be explored using the above strategies.

### 14. INFANT MORTALITY RATE

#### Status and trends

The infant mortality rate (IMR) represents an important component of under-five mortality and therefore has its place in monitoring this target. Like the under-five mortality it is a good measure of child survival and reflects social, economic and environmental conditions under which children live. The data are obtained from national censuses.

Figure 15: U5 Mortality, Kiribati 1990, 1999 and 2004, Projected to 2015



Source: WHO, 2000

Table 7: Under 5 Mortality Rate, total and disaggregated, 2005

Total	69
Male	71
Female	67

Source: UNFPA, based on draft 2005 census report

Table 8: Infant Mortality Rate, total and disaggregated, 2005

Total	52
Male	53
Female	51

Source: UNFPA, based on draft 2005 census report

## Progress

As shown in Figure 16, there is a definite decline in IMR as observed from the following census years: 87 per 1,000 live births in 1973/78; 82 in 1978/85; 65 in 1985/90; 67 in 1990/95, 43 in 1995/00, and 52 in 00/05<sup>32</sup>. Although, this progress should give significant support to national efforts in reducing the U5 mortality, there are causes for concern at the rise in IMR during the 2000/2005 period. Steps should be taken to look into this picture that apparently put Kiribati back several years if not more. However further support to this generally positive trend is given by the steady increase in number of birth deliveries attended by skilled health personnel (see Figure 21) which has been proven to give rise to reduction in both MMR and IMR, (see Figure 22).

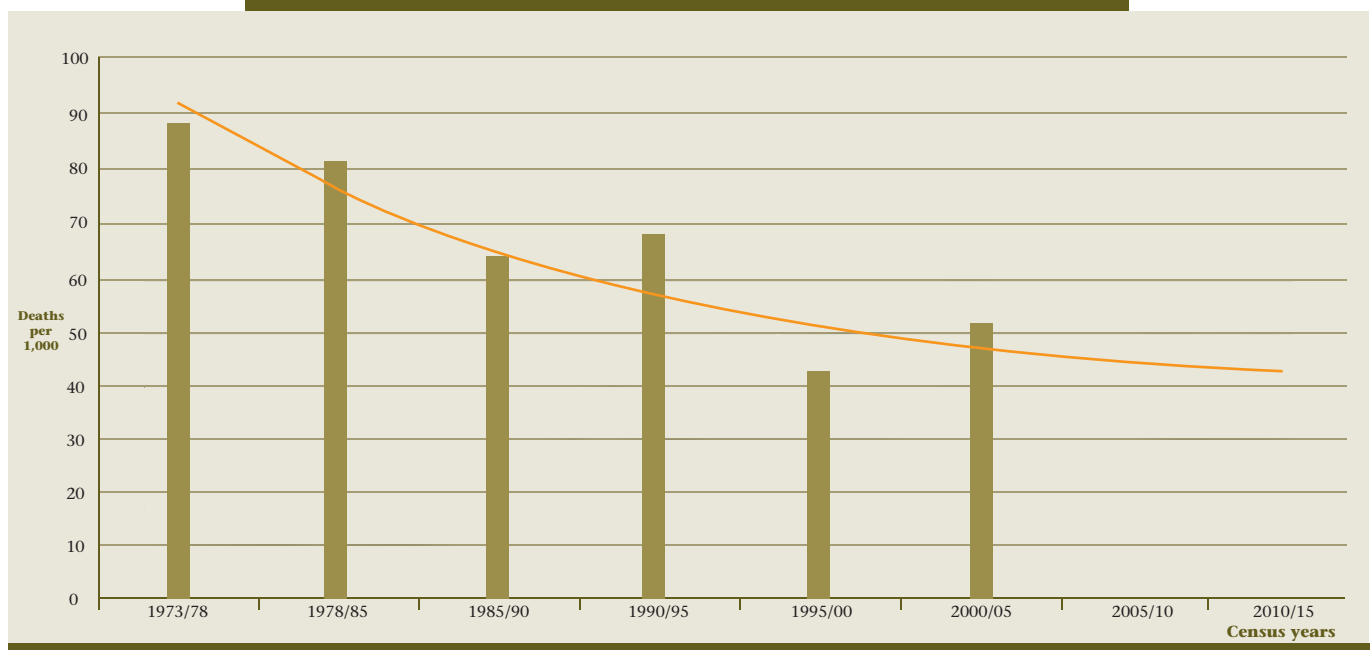
sanitation at home and in schools, access to health services and affordable family sizes. Child mortality remains an issue of concern because of under-reporting of infant deaths as well. This is an issue that requires attention.

## 15. PROPORTION OF ONE YEAR OLD IMMUNIZED AGAINST MEASLES.

### Status and trends

Measles is selected as an indicator because it is one of the most commonly supported childhood preventable disease as part of the basic health care package. Moreover it is also one of the leading causes of child mortality. This makes measles coverage a good measure of child health care in a country. Based on the MHMS Health Information Unit

Figure 16: Infant Mortality Rates, census years and projected to 2010/15



## Challenges and recommendations

IMR is the most frequently used indicator of broad socioeconomic well being, and stands as a basic measure of how well Government meets the needs of its people. Kiribati has one of the highest IMR in the Pacific and considering its heavy reflection on social, economic, health and environmental situation, it should be a matter of concern to Government to address these broad based needs, including addressing the discrepancies that exists between male and female IMR, (see Table 8). The 2005 census saw a significant rise in IMR from the 1995/2000 figure of 43 to 52 deaths per 1,000. This should raise a lot of concern for Government and the Ministry of Health. The causes of IMR are similar to under-five (U-5) mortality. This includes deficiencies in maternal and child health care programs that traditionally encompass antenatal care, post natal care and family planning, now currently addressed under safe motherhood program, (see Figure 19). Although these needs are made available, children are not optimally provided for in terms of healthy foods, quality education that would later give rise to good employment, good water and

national coverage has been running at about 80% over the last few years, (Kiribati MDG Task Force, 2005). Due to transport problems to outer islands that contributes to both supplies and logistics, e.g. transport of vaccines and maintenance of the cold chain system, coverage on outer islands are lower than in urban areas

### Progress

The recent Supplementary Immunization Activity (SIA) conducted in March 2006 showed that the coverage for that period was about 95%, (Alan Ruben, 2006). Kiribati needs to maintain this high coverage rate in order to avoid measles outbreaks from pockets of un-immunized children, a situation that has been witnessed in some Pacific Island countries. Strengthening the national immunization program through supplies and logistics are prerequisites to the reduction of IMR that would in turn give rise to the reduction in child mortality. Integrated management of childhood illnesses (IMCI) is a simple set of affordable, effective interventions that addresses the main killers plus developmental needs of a child. Under the Kiribati/EU

Project, series of multi-disciplinary training workshops consisting of IMCI, Reproductive Health, Immunization, etc, has been able to provide training in these areas to more than 100 health staff especially those on outer islands. The Kiribati/EU target is to train all outer island health staff in IMCI. Those that will be posted out from Tungaru Central Hospital will receive IMCI training before they are posted out.

### Challenges and recommendations

There is a need to maintain to a minimum, by annual supplementary immunization activities (SIA), pockets of un-immunized children to avoid measles outbreaks. It should be apparent that immunization requires strengthening and sustaining the cold chain system and maintaining vaccine supplies through Global Vaccine Initiative. All these efforts should not be in isolation and must be addressed through collaboration in the interest of the nation. For example the success of the March 2006 SIA was the result of the collaborative work between the UNICEF, MHMS, MEYS, MISA through its Island Councils, BPA and the community. This is an example of collaboration and partnership approach at its best. Challenges and opportunities with respect to Under-5 mortality and infant mortality are also applicable to this indicator.

### Tracking Progress: Goal 4. Reduce child mortality

Monitoring and evaluation components	Assessment		
	Good	Fair	Poor
Data collection capacity	Good		
Quality of recent survey information		Fair	
Statistical tracking capacity		Fair	
Statistical analysis capacity		Fair	
Capacity to incorporate statistical analysis into policy, planning and resource allocation mechanisms			Poor
Monitoring and evaluation mechanism		Fair	

31. "We will have time to reach the Millennium Development Goals – worldwide and in most, or even all, individual countries – but only if we break with business as usual. We cannot win overnight. Success will require sustained action across the entire decade between now and the deadline. It takes time to train the teachers, nurses and engineers; to build the roads, schools and hospitals...Nothing less will help to achieve the Goals". United Nations Secretary-General

32. Figures obtained from census years 1973 to 2005 as shown in Figure 14

## Goal 5: Improve maternal health

Target	Indicators
6. Reduce by $\frac{3}{4}$ between 1990 and 2015 the maternal mortality ratio (MMR).	16. Maternal Mortality Ratio
6/5B. Achieve by 2015 universal access to reproductive health*	17. Proportion of births attended by skilled health personnel 17/5B/5.3 Contraceptive Prevalence rate* 17/5B/5.4 Adolescent Birth Rate* 17/5B/5.6 Unmet needs for family planning*

*\*At the 2007 UN General Assembly, a new MDG Framework was approved. Under this new framework, the new target: 5.B Achieve by 2015 universal access to reproductive health, with its corresponding new indicators (5.3 Contraceptive Prevalence Rate (CPR), 5.4 Adolescent Birth Rate, 5.5 Antenatal care coverage, and 5.6 Unmet need for family planning), were endorsed. This happened when this report was nearly completed. As such, only three indicators: 5.3, 5.4 and 5.6, under the new framework, for which limited data is available, will be briefly discussed under this goal with the understanding that subsequent reports will address them in more details. For the purpose of this report, the numbers reflect both the original MDG framework (numbers before first slash) and the recently approved framework (numbers following the first slash).*

## 16. MATERNAL MORTALITY RATIO

### Status and trends

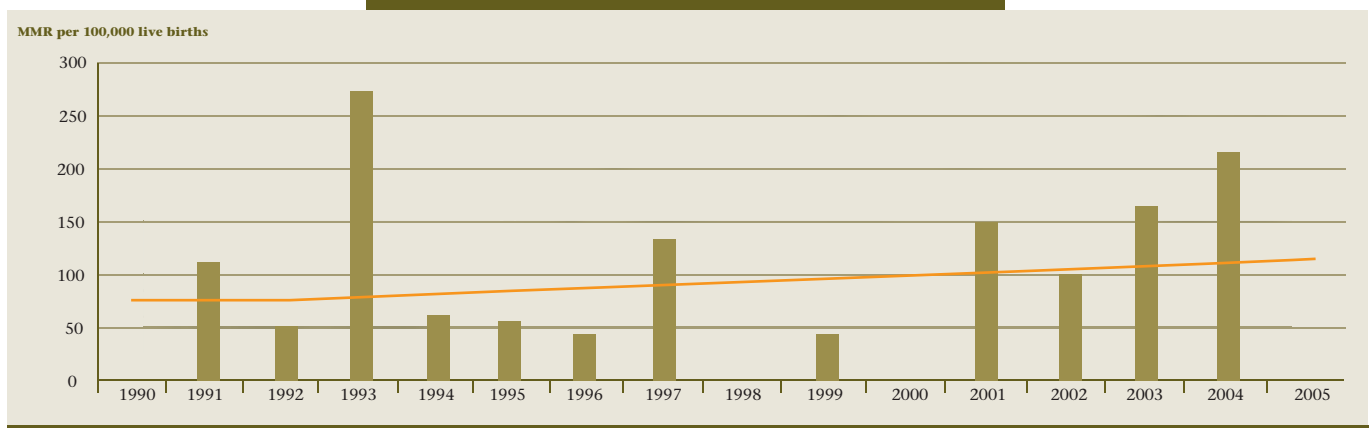
The most common causes of maternal deaths in Kiribati are prolonged labor and bleeding. A good proportion of the former cause is related to delay in arrival at the health facilities either due to initial delay in seeking medical care or to lack of transport, with the former, being usually associated with a delay in giving birth under the hands of a traditional birth attendant. On arrival at the health facilities, staff incompetence and lack of essential medical supplies are the main causes of maternal deaths. The trends in MMR for the period 1990 to 2005 does not show any emerging pattern and therefore it is difficult to determine how MMR has been performing over that period of time, (see Figure 17). We can attribute this to poor reporting of events of births to the national health information unit. However with the trend line fitted, Figure 17 also shows that from around 2000 to 2005, MMR has been increasing. This is further supported in Figure 18 where a “smoothing of data” using a three year ‘moving averages’ is used to allow for easy identification of trends. Figure 18 indicates that maternal death is high in numbers and should be a continuing concern for the nation.

### Progress

To take 100 per 100,000 deaths<sup>33</sup> as a nationally accepted official average figure based on trends means that Kiribati needs to reach a MMR of 25 between now and 2015. That would mean a 75% reduction over the next seven to eight years. But our MMR has been increasing as shown in the trends in Figures 17 and 18, which means that “reducing by  $\frac{3}{4}$  between 1990 and 2015 the maternal mortality ratio (MMR)” may not be possible at all.

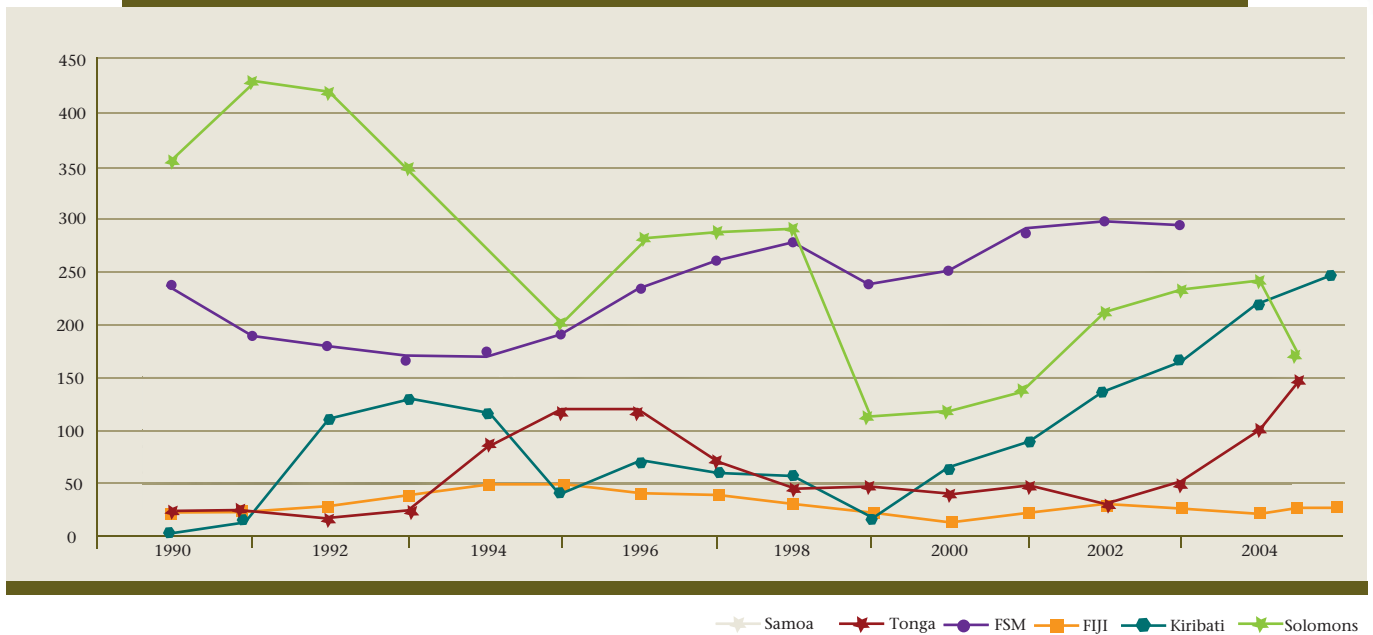
We need to work hard to address the contributory factors. In addressing this deficiency, in-country training in RH services currently conducted by the Kiribati/EU project has just recently been completed giving rise to the graduation in August 2007, of fifteen health staff with a Fiji School of Medicine (FSMed)-recognized certificate in RH. Short workshop trainings on RH services to other health staff and nurse aides are also on-going. Plans are in place within the Kiribati/EU Project to train all medical assistants in RH technology and services.

Figure 17: Maternal Mortality Ratio by year, Kiribati



Source: MMS, 2006

Figure 18: Maternal Mortal Ratios (3 years moving average) for selected PICs, 1990-2005



### Challenges and recommendations

First and foremost, significant improvement in data collection is required in order that good data is collected for evidence-based information and policy decision matters. The current MMR figures leave much room for speculations as well. To compound the matter, maternal mortalities are very rare outcomes and as such very large samples are needed for reliable results. Depending on average household size, this may involve visiting 200,000 households, which is very large in any settings and totally unrealistic in small countries like Kiribati with a population of only about 93,000. Still a good monthly return from most, if not all, health centers and clinics should provide fairly basic and reliable data.

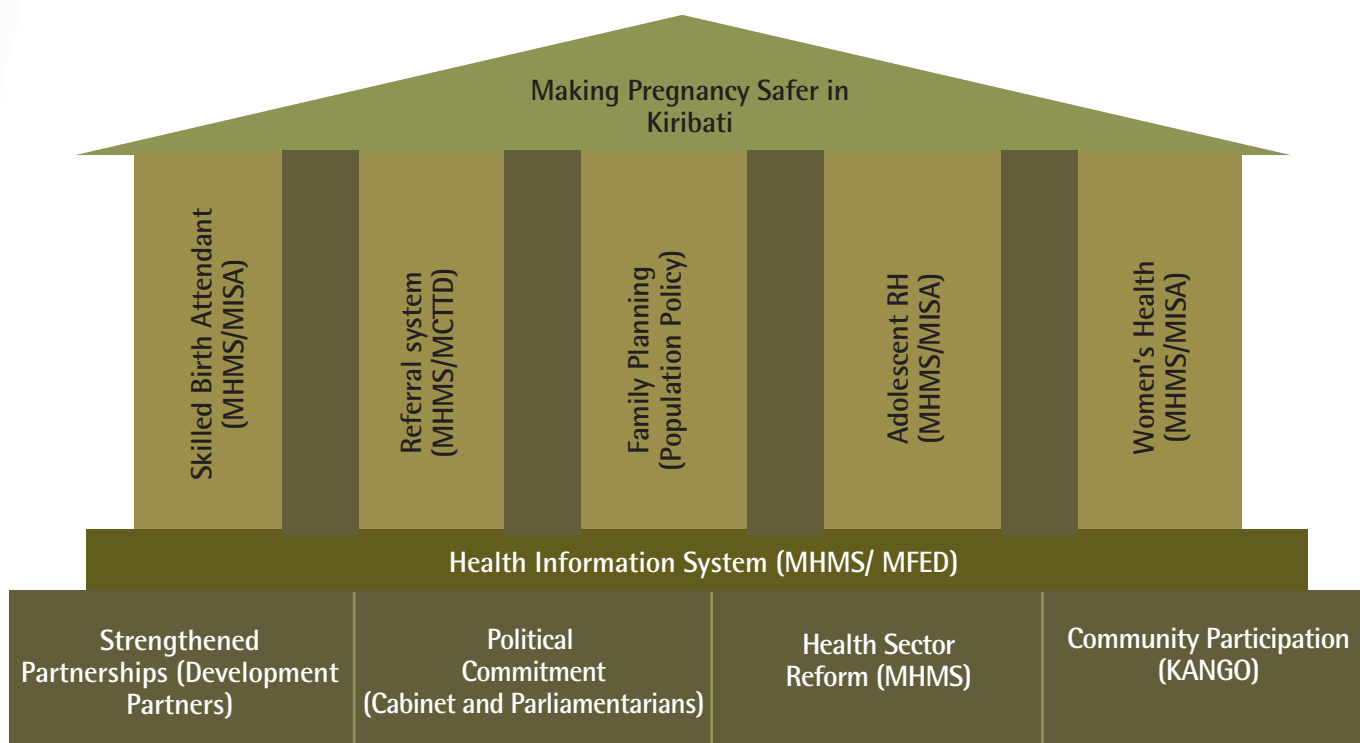
Safe Motherhood programs, a comprehensive approach to making pregnancy safer, with its five components made up of women's health, adolescent health, family planning, ensuring comprehensive emergency obstetric care and training of skilled birth attendants for all deliveries including referral system, should be strengthened, (see Figure 19). Equally important is to strengthen factors that underpin safe motherhood, which are health information, political commitments, partnership and community participation.

The population of Kiribati is predominantly (55%) Catholics, (Kiribati 2005 Census). As in other developing countries with similar demographic picture, family planning has always been an issue. Most Catholics would prefer the traditional rhythm or ovulation or Billings Method,

although a number of other family planning options are also available, although, as discussed under the indicator: "Unmet needs for family planning", they are not widely accessible. The Billing Method requires that both husband and wife have equal roles in ensuring that pregnancy does take place or not at all. There is usually high failure rate in this method because it often requires considerable time, commitment, learning and recognition of changes in individual women's reproductive and physiological changes. It is not the intention of this report to dwell into the religious doctrine or moral issue of family planning.

Gender is a factor in all MDGs and features specifically in four of them including this one. Empowerment of women has been and will continue to be one of the key steps in tackling many of the gender related problems. We have also often heard the phrase: "Education is one of the most effective family planning methods". Life skills education conducted to youth groups and high schools, and covering topics on decision making, communication skills, interpersonal relationships, self awareness, problem solving, creative and critical thinking, coping with stress etc, is now one of the main focus of activity of the Kiribati Adolescent Health and Development Center (AHD) and the Kiribati Family Health Association (KIFHA). Teenage pregnancy is becoming a problem. Regional data (UNFPA, 2006)<sup>34</sup> show that between 1990 to 2005 teenage deliveries as percentage of total deliveries ranged from 4 to 6% and increasing. These figures are comparable to that of Vanuatu and Federated States of Micronesia.

Figure 19: Making Pregnancy Safer in Kiribati



17. PROPORTION OF BIRTHS ATTENDED BY SKILLED HEALTH PERSONNEL

Status and trends

There is convincing evidence that despite the relatively constant number of deliveries reported between 1990 and 2005, (see Figure 20), there is a steady decline in the number of births attended by traditional birth attendants (TBA) from about 20-25% in 1990 to about 10% in 2005, (see Figure 21). Put another way for the same period, the number of deliveries attended by skilled health personnel has increased from around 70% to 90%.

Figure 20: Total number of deliveries reported by year, Kiribati

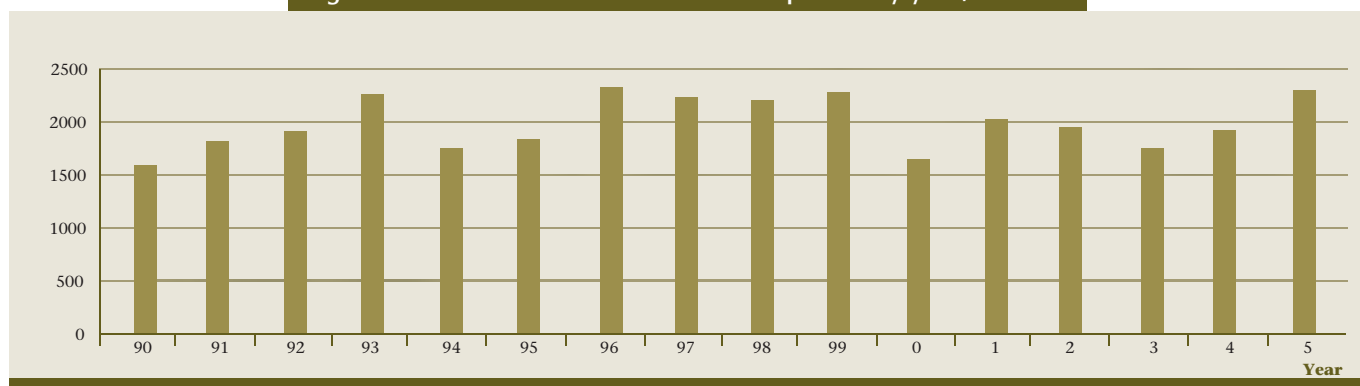
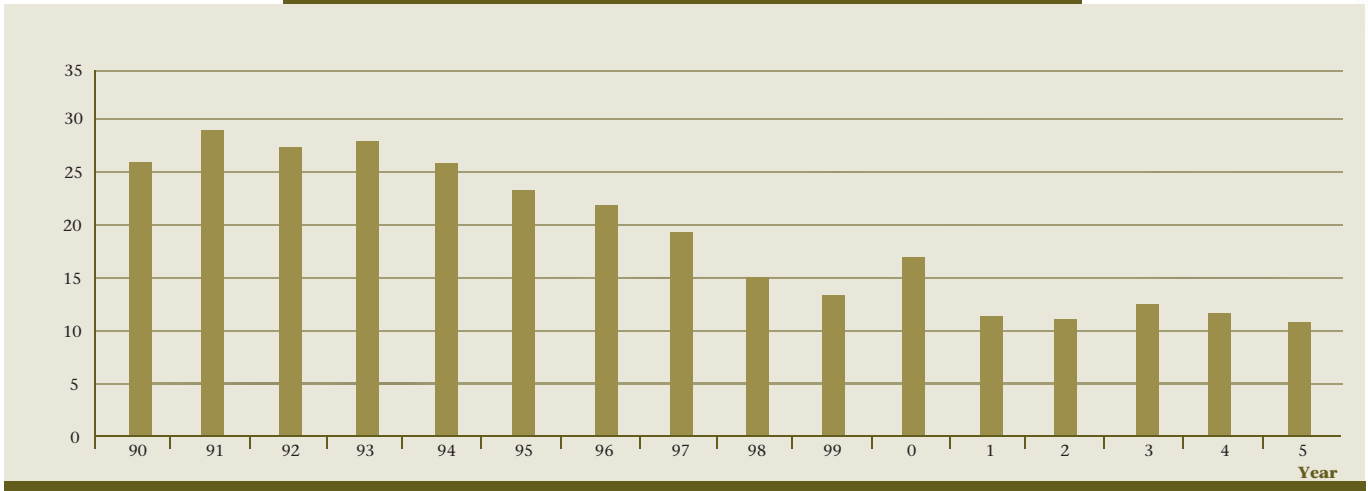


Figure 21: Deliveries by TBA as % of total by year, Kiribati



### Progress

There is definite and steady decrease in the number of births attended by TBAs. This has a lot of implications on maternal health. It is now well recognized that the Higher the Proportion of Deliveries Attended by Skilled Attendant in a Country, the Lower the Country's Maternal Mortality Ratio and Infant Mortality, (WHO, 1998), (see Figure 22). This positive trend is the result of widespread public education on RH services including the UNFPA and Kiribati/EU-supported training if increasing number of health staff in RH technology. Another important component to addressing health priorities include improvement of infrastructure on outer islands especially in terms of health clinics constructions, equipments, transport to and from isolated islets, and communication. These are all currently being addressed by the Kiribati/EU Outer Islands Health Project.

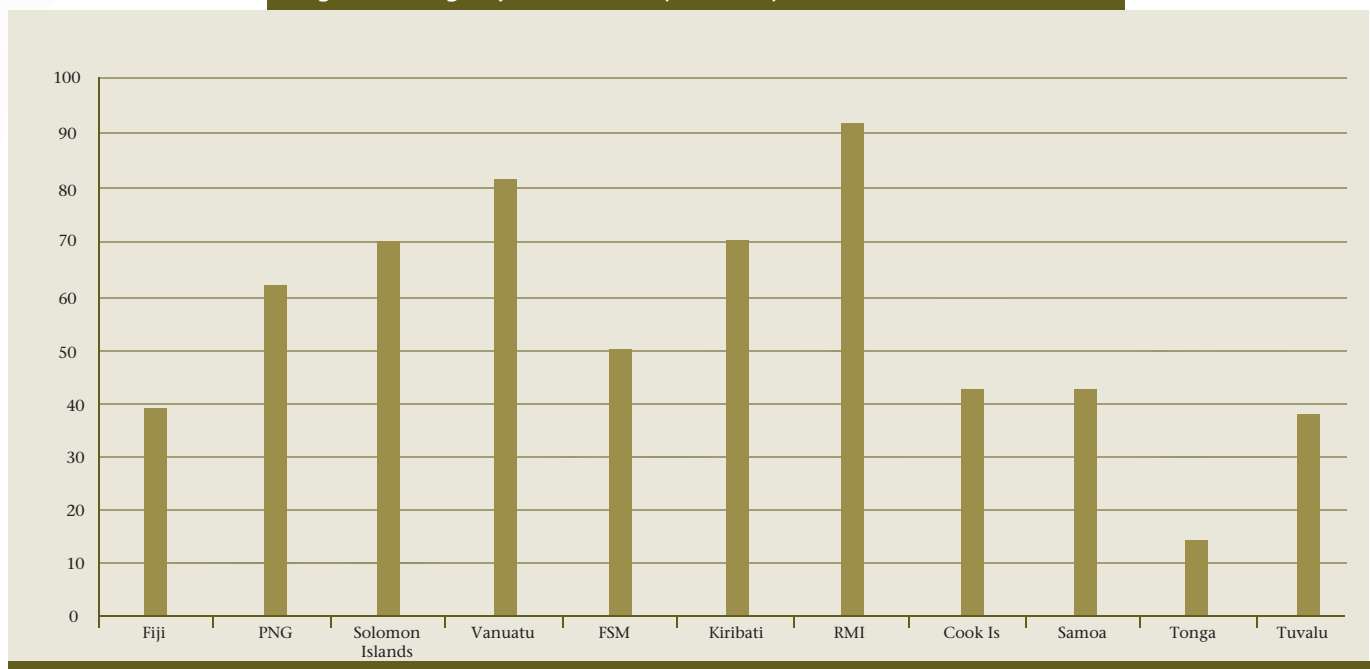
Figure 22: Relationship between MMR and births attended by skilled health personnel



% attended by skilled health attendets Source: WHO, 1998 & 2005



Figure 23: Age Specific fertility (15-19yrs) in selected PICs, 2004



It is well recognized (WHO, 1998, 2005), that the higher the proportion of deliveries attended by Skilled Health Attendant the lower the Maternal Mortality Ratio and Infant Mortality, (see Figure 22).

### Challenges and opportunities

The role of TBA in service deliveries should be recognized as one with limitations and the MHMS must operate in close collaboration with TBAs along those well defined lines. Failure to recognize TBA limitations almost always ends in disaster. On their parts, TBAs must know when to refer the case to the nearest health facility. To avoid indiscriminate recruitment of TBA into the health service, systems must be set up that would allow the MHMS to register TBAs through appropriate and well recognized certification procedures. This is now being addressed by the MHMS in close consultation with Maurin Kiribati<sup>35</sup>.

#### 17/5B/5.3 Contraceptive Prevalence Rate (CPR)<sup>36</sup>

The MHMS data shows that from 1990 to 2004 the CPR ranged between 18.5 to 22%, (see Figure 25), with regional data, (see Figure 26), giving a higher average rate of 28%, (UNFPA, 2005). The CPR as an indicator assists in tracking progress towards health and poverty goals through measuring access to reproductive health (RH) services including family planning, adolescent health, maternal and child health and HIV/AIDS. This relatively low CPR indicates correspondingly low access to RH services in Kiribati and this is true, especially on outer islands where good contraceptives mix, including surgical or permanent contraceptive methods, are lacking. The most common family planning methods used are oral contraceptives and injectables.

#### 17/5B/5.4 Adolescent Birth Rate

Adolescence is an important period of transition in life. In addition to physiological/physical and psychological

changes, learning and adaptation at the social and moral level are also taking place. During their adolescent years, women are likely to terminate their training; leave home; and begin conjugal life including childbearing and adult life, (National Academy, 1993). The WHO defines adolescent as those aged between 10 to 19 years. In Kiribati this represents about 20% of the total population which is equivalent to about 18,000 people. Teenage pregnancy is becoming a problem. Regional data (UNFPA, 2006)<sup>37</sup> show that between 1990 to 2005 teenage deliveries as percentage of total deliveries ranged from 4 to 6% and increasing. These figures are comparable to that of Vanuatu and Federated States of Micronesia.

Figure 23 clearly shows that apart from PNG; Solomon Islands, Vanuatu, Kiribati and the Marshal Islands have the highest teenage fertility rates in the Pacific. Robertson (2007), compares these rates with other countries in East Asia and shows that the four PICs referred to here have among the highest teenage fertility rates in the world, although adolescents in Sub-Saharan Africa do have the highest rates of fertility for their age group in the world, (National Academy, 1993). This high adolescent birth rate correlates well with Kiribati's relatively high total fertility rate (TFR). By virtue of their inadequate knowledge; lack of correct information; physical and psychological immaturity including small stature; and poor access to reproductive health services including family planning services, antenatal care and sexually transmitted infections, teenage girls face higher risk of pregnancy-related morbidity and mortality, delivery complications, premature births and low birth weight babies. As such, high adolescent birth rate leads to higher child and maternal mortality which are embodied in Goals 4 and 5 respectively. Additionally, high adolescent birth rate will also lead to higher population growth rate. It is easy to observe that these are true challenges to the Government of Kiribati.

### 17/5B/5.6 Unmet needs for family planning

The need for family planning is growing fast even in developing countries. It is an integral component of reproductive health services. It is estimated that this 'unmet need' will grow by 40% during the next fifteen years. Although it is an economically sound investment, family planning has been losing grounds as an international development priority. The lack of political commitment, coupled with decreasing funding in the face of competition for other "priorities", have contributed to the failure to recognize universal access to reproductive health services including family planning as an important strategy for poverty reduction, (UNFPA<sup>38</sup>). A good contraceptives mix, including surgical or permanent contraceptive methods, are lacking especially on outer islands. The most common family planning methods used are oral contraceptives and injectables. A female condom has recently been introduced in Kiribati, but the extent of its use, appropriateness and acceptability to Kiribati couples has not been documented. There is paucity of data on "unmet needs" for family planning in Kiribati, let alone the development of measurement criteria for this indicator. This is in part due to the lack of survey data, most notably the Demographic Health Surveys (DHS) which, traditionally, has never been conducted in most Pacific Island countries including Kiribati, (Robertson, 2007)<sup>39</sup>. In the absence of such data CPR can be taken as a proxy which, as already discussed, is about 28% indicating relatively poor access to reproductive health services in Kiribati including family planning services. To use this indicator in a more meaningful way, a DHS is required.

### Challenges and opportunities

The RH services are essential in meeting the MDGs. This is because they also influence and lend support to other MDG indicators such as maternal mortality, family planning, and HIV/AIDS, (see Box 1). RH services in the context of commitments to the International Conference on Population and Development (ICPD) should form an integral part of MHMS on-going public health programs. Training in family planning technology to health staff is undergoing through the assistance of UNFPA and EU but emphasis should be made on other relatively less invasive and simple surgical procedures e.g. vasectomy and loop insertion, that are clearly lacking on outer islands.

Furthermore, although other family planning methods are fairly readily available and accessible on outer islands, culture, tradition and some religious groups are still strongly opposed to their use. This trend is improving on South Tarawa where women are more educated, liberal, and engaged in formal employment and other economic activities. It thus goes without saying that education for women is an effective family planning method and a stimulus to poverty reduction.

### Tracking Progress: Goal 5. Improve maternal health

Monitoring and evaluation components	Assessment		
Data collection capacity			Poor
Quality of recent survey information			Poor
Statistical tracking capacity		Fair	
Statistical analysis capacity		Fair	
Capacity to incorporate statistical analysis into policy, planning and resource allocation mechanisms		Fair	
Monitoring and evaluation mechanism		Fair	

33. UNFPA has an average MMR for Kiribati of 220 per 100,000 for the year 2003-2005, in which case a lot more work is required to achieve the target and get to the goal.

34. UNFPA Regional Workshop on Reproductive Health, June 2006, Suva Fiji.

35. A Traditional Healers Association that is looking at the issues on registration and recognition by the MHMS through formally recognized certification processes. The MHMS encounters issues in recognizing traditional healers based on less than convincing professional and clinical evidence.

36. The CPR in this original MDG framework is discussed in relation to HIV/AIDS under Goal 6 (figures 26 and 27) as it assists in tracking progress towards health and poverty goals through measuring access to reproductive health (RH) services including family planning, adolescent health, maternal and child health and HIV/AIDS. For the purpose of this report it will remain as such until opportunities for further updates are available.

37. UNFPA Regional Workshop on Reproductive Health, June 2006, Suva Fiji.

38. <http://www.unfpa.org/rh/planning.htm>

39. Only three PICs have conducted a DHS: Solomon Islands, the Marshal Islands, and Tuvalu.

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

Target	Indicators
7. Have halted by 2015 and begun to reverse the spread of HIV/AIDS years.	18. HIV prevalence among pregnant women aged 15-24 19A. Condom use at last high-risk sex 19B. Percentage of population aged 15-24 with comprehensive knowledge of HIV/AIDS. 19C. Contraceptive Prevalence Rate (CPR)
8. Have halted by 2015 and begun to reverse the incidence of tuberculosis	23. Prevalence and deaths rates associated with tuberculosis 24. Proportion of TB cases detected and cured under Directly Observed Treatment Short Course (DOTS).

### Overall status and trends in HIV/AIDS

It should be noted that HIV is a development issue and not just a health problem. As such, it requires a multi-sectoral response from almost all Government Ministries, as well as NGOs, faith-based organizations, people living with HIV/AIDS (PLWHA) networks, young people, etc. This collaborative approach will be discussed under the relevant sections.

The first case of HIV was diagnosed in 1991. Since then the number has steadily increased such that Kiribati now has one of the highest HIV/AIDS infection rate per capita in the Pacific. As of end of 2006 there were 50 cases (see Figure 23) giving a prevalence rate of 54 per 100,000, (see Figure 24). The 50 cases comprise of 32 males and 18 females with 23 having died from AIDS. The main mode of transmission is through heterosexual sex.

The Kiribati National STI, HIV/AIDS Strategic Plan 2005-2008, a continuation of the previous plans, recognizes five priority areas: i) treatment, care and support for people living with HIV/AIDS (PLWHA) and their families, ii) reducing the vulnerability of specific groups, iii) prevention and control of sexually transmitted infections (STI), iv) safe blood supply and occupational safety, and v) strengthening and coordination of the national multi-sectoral response to STI, HIV and AIDS.

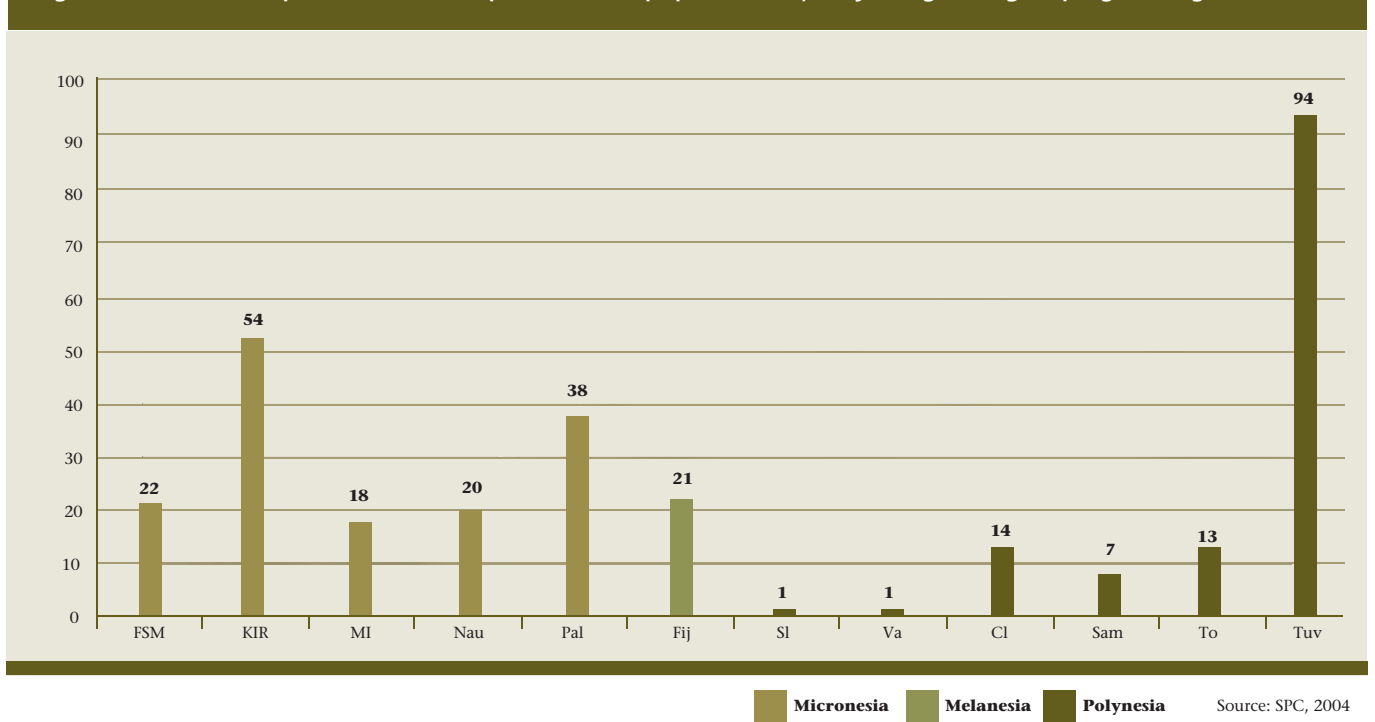
In 2004 one HIV positive person voluntarily announced his status to the public, finally giving HIV a human face and paving the way for others to follow suit, with the hope that there would be a rapid acceptance of HIV positive people by the public and a significant breakdown of the stigma and discrimination associated with this illness. A total of five HIV/AIDS patients are currently on treatment which represents about 18% of people living with HIV/AIDS (PLWHA).

Figure 24: Cumulative Number of HIV Infections Reported in Kiribati (1991-August 2006)



August

Figure 25: HIV/AIDS prevalence rates per 100,000 population by major regional grouping among PICs, 2004



Micronesia
  Melanesia
  Polynesia

Source: SPC, 2004

## 18. HIV PREVALENCE AMONG PREGNANT WOMEN AGED 15-24 YEARS.

### Status and trends

Women are chosen in this indicator because in most developing countries their low social status and lack of opportunities places them at higher risks of contracting HIV, coupled with the fact that their physiology makes them more vulnerable to HIV infection. As such, in generalized epidemics (with a prevalence of >1% among pregnant women), the infection rate among pregnant women is similar to the overall adult rate. This indicator is therefore a good measure of the general spread of HIV infection in a general population, (United Nations 2003). In Kiribati, pregnant women are not routinely tested for HIV when they attend ANC clinics.

### Progress

There is lack of country specific data on STIs including HIV – this is common to a number of other Pacific Islands countries. However, some surveillance data can be obtained from WHO or SPC. A prevalence survey conducted in 2005, (WHO, 2006) showed zero prevalence of HIV/AIDS in pregnant women aged 15-24 years. It is difficult to know whether the situation has changed since.

### Challenges and Opportunities

The above survey (WHO, 2006) showed that there is generally an increasing incidence of both STIs and HIV in Kiribati. STI is a co-factor in HIV infection meaning those with STI are more susceptible to HIV infection. Although no gonorrhoea was detected among pregnant women surveyed, chlamydia is endemic among both pregnant women (13%) and seafarers (9.3%). Moreover, despite the survey showing low prevalence of HIV, the population remains highly vulnerable to HIV with biological, behavioral and sexual indicators of risks. High rates of treatable STIs indicate that the diagnosis, treatment and surveillance components of STI and HIV/AIDS programs need strengthening.

## 19. CONDOM USE RATE OF CONTRACEPTIVE PREVALENCE RATE

### Status and trends

The condom use rate of CPR for the years 1990 to 2005 ranged between 5 to 10% (MHMS, 2006). Condom use rate is one of the good indicators of the fight against HIV/AIDS because condoms are the only contraceptive method effective in preventing the spread of HIV. The aim therefore in this report is to look for increasing condom use rate as a positive step against the prevention of the spread of HIV.

### Progress

Figures are not available to assess in measurable terms condom distribution programs but condom distribution programs are carried out quite effectively from a number of service delivery points namely all health centers and dispensaries, the Health Promotion Unit of the MHMS, the Adolescent Health Program (Adolescent Health and Development Program (AHD) of the MHMS and the Kiribati Family Health Association (KIFHA). This does not however indicate that women especially teenage girls are well prepared to use condom for this purpose nor are they in any good position to negotiate for safe sex.

### Challenges and opportunities

Evaluation to determine the trend in condom distribution programs is required in order to know the progress. Condom distribution is one thing, while proper condom use is another. For example, it is not uncommon to see children playing with condom balloons. Condoms are effective both as a contraceptive and in preventing the spread of STIs, including HIV. Condom promotion and distribution should continue to be strengthened, along with the promotion of abstinence, and faithfulness. NGO involvement is important in reaching out into the community. Strategic but discreet and customer-friendly locations for condom outlets should be explored. Health staff and others involved in the distribution should refrain from being judgmental. People, especially young people, who seek advice in condom use should not be stigmatized for being promiscuous but rather seen as acting responsibly.

## 19A: CONDOM USE AT LAST HIGH-RISK SEX ENCOUNTER

### Status and trends

There is lack of country specific data on STIs, which is common to a number of other Pacific Islands countries. A prevalence survey conducted in 2005, (WHO, 2006) showed that 33-38% of respondents (seafarers) use condom during high-risk sex encounters. Over one in five participants reported having sex with a commercial sex worker in the last 12 months. Consistent condom use with sex workers is low. Condom promotion programs therefore, including proper use of condom need to be addressed and strengthened.

### Progress

As indicated earlier, an evaluation to determine the trend in condom distribution programs is required in order to know whether progress is being made. Condom distribution does not necessarily equal proper condom use, as seen through the example of children playing with condom balloons. Condom distribution programs are carried out quite effectively from a number of service delivery points, as mentioned under indicator 19. Like Indicator 19, a rise in this indicator is a powerful tool to assess whether condom promotion campaigns are having the desired effects on the target population which, in most instances, are those with high risk taking behavior, including young people.

### Challenges and opportunities

See Indicator 19 under the same sub-heading.

## 19B: PERCENTAGE OF POPULATION AGED 15-24 WITH CORRECT COMPREHENSIVE KNOWLEDGE OF HIV/AIDS.

### Status and trends

A prevalence survey conducted in 2005 (WHO, 2006) showed that only 26.5% of seafarers aged 20-54 years have comprehensive correct knowledge of HIV/AIDS. If this age group was confined to 15-24 years strictly, according to this indicator, this percentage would be reduced further, indicating a significant need to strengthen behavioral change through public awareness programs and communication strategies.

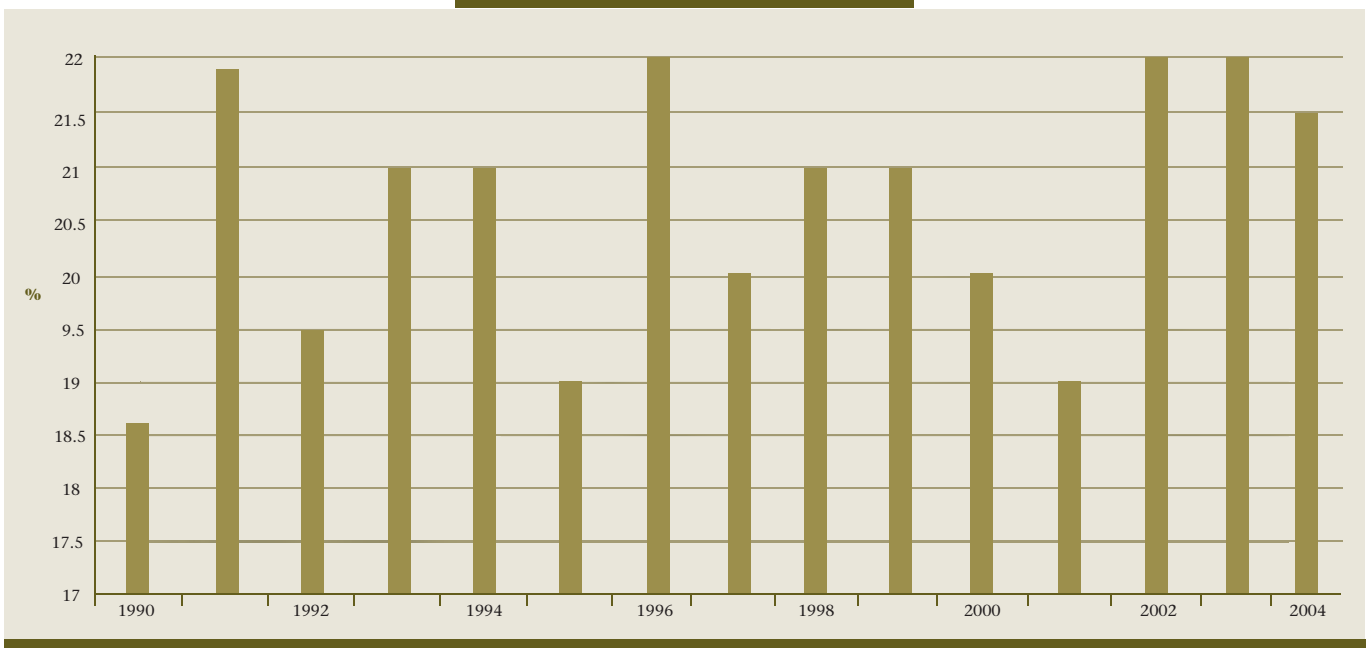
### Progress

In line with two of the five priorities of the Kiribati National STI, HIV/AIDS Strategic Plan 2005-2008 of: “reducing the vulnerability of specific groups” and “prevention and control of sexually transmitted infections”, public awareness programs are continuing and targeted to high risk groups. But as mentioned earlier, more effective public awareness strategies need to be developed to bring about desired changes. Of particular importance are the youth population, seafarers and women boarding Korean fishing boats (Ainen Mataawa)<sup>40</sup> at Betio port.

### Challenges and opportunities

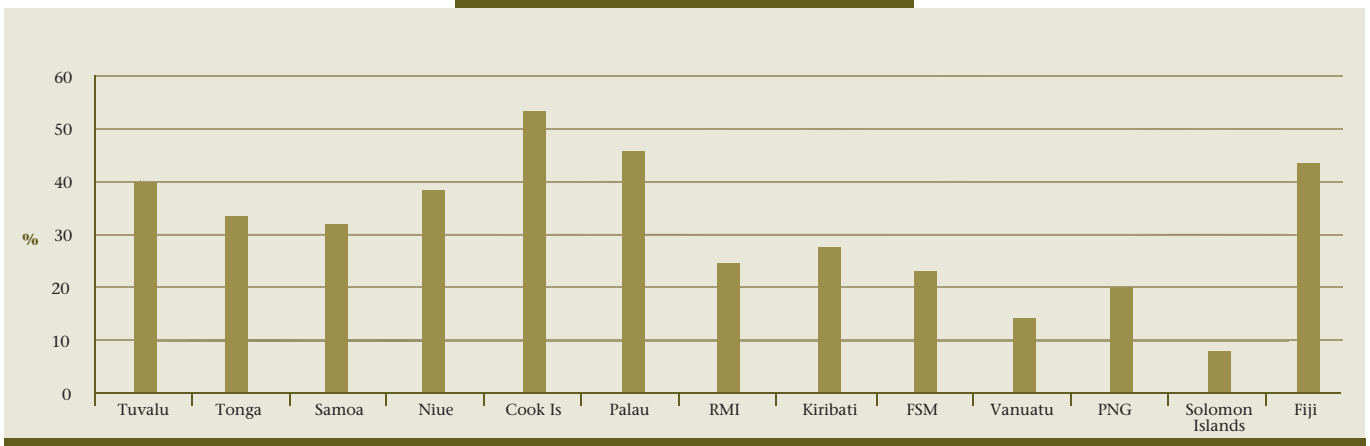
The Kiribati population remains highly vulnerable to HIV with biological, behavioral and sexual indicators of risks. Although there were no HIV cases reported among seafarers in the survey referred to above, a previous prevalence survey conducted in 2003 (WHO, 2005) showed a HIV prevalence of 0.3% among seafarers, together with high prevalence of sexually transmitted infections (STI), chlamydia at 9.3%. STI is a co-factor in HIV infection, meaning those with STI are more susceptible to HIV infection. High rates of treatable STIs indicates that the diagnosis, treatment and surveillance components of STI and HIV/AIDS programs need strengthening.

Figure 26: CPR, Kiribati 1990-2004



Source: MHMS, 2006

Figure 27: CPR, Kiribati in PICs



Source: UNFPA, 2005

Although awareness programs have been conducted for quite sometimes, the fact that a very high proportion of this high risk population still lacks comprehensive correct knowledge of HIV/AIDS, clearly indicates the need to revisit these awareness programs with consideration on adopting new and more effective prevention strategies to bring about the desired attitude and behavioral changes. While political commitment has been one of the key strategies in HIV/AIDS prevention, the Parliamentary Select Committee on HIV/AIDS that was set up in 2003 has not been very active in advocating for HIV/AIDS at the political level. It needs reviving. Moreover, with 20% new members of Parliament elected for the period 2008 to 2011, orientation seminars on HIV/AIDS to Parliamentarians must be considered as early as possible.

As mentioned in the opening statement of this section HIV/AIDS is a development issue and not just a health problem and as such, it requires a multi-sectoral response from almost all Government Ministries, as well as NGOs, faith-based organizations, people living with HIV/AIDS (PLWHA) networks, young people, etc.

### 19C. CONTRACEPTIVE PREVALENCE RATE (CPR)41

#### Status and trends

The Ministry of Health and Medical Services data shows that from 1990 to 2004 the CPR ranged between 18.5 to 22%, (see Figure 26), with regional data, (see Figure 27), giving a higher average rate of 28%, (UNFPA, 2005). By comparison with other Pacific Island Countries (PICs), Kiribati is in the middle quartile indicating the need to improve on this indicator. The CPR as an indicator assists in tracking progress towards health and poverty goals through measuring access to reproductive health (RH) services including family planning, adolescent health, maternal and child health and HIV/AIDS.

#### Progress

The relatively low CPR indicates corresponding low access to RH services in Kiribati and this is true, especially on outer islands where good contraceptives mix, including surgical or permanent contraceptive methods, are lacking. Data (MHMS, 2006) shows that the most common family planning methods used are oral contraceptives and injectables.

#### Challenges and opportunities

The RH services are essential in meeting the MDGs. This is because they also influence and lend support to other MDG indicators such as maternal mortality, family planning, and HIV/AIDS, (see Box 1). RH services in the context of commitments to the International Conference on Population and Development (ICPD) should form an integral part of MHMS on-going public health programs. Training in family planning technology to health staff is undergoing through the assistance of UNFPA and EU but emphasis should be made on other relatively less invasive and simple surgical procedures e.g. vasectomy and loop insertion, that are clearly lacking on outer islands. Furthermore, although other family planning methods are

fairly readily available and accessible on outer islands, culture, tradition and some religious groups are still strongly opposed to their use. This trend is improving on South Tarawa where women are more educated, liberal, and engaged in formal employment and other economic activities. It thus goes without saying that education for women is an effective family planning method and a stimulus to poverty reduction.

### 23. PREVALENCE AND DEATHS RATES ASSOCIATED WITH TUBERCULOSIS

#### Status and trends

As in many other disease conditions, data on TB in Kiribati are limited, with the main sources being the Health Information Unit and the National TB Control Program (NTP). This report tends to rely more on NTP data as being more reliable since the advent of DOTS in 1998. Although limited, the Secretariat of the Pacific Community (SPC) and WHO have traditionally used these data sources to calculate meaningful rates.

Based on mathematical modeling, the annual rate of decline in TB prevalence and mortality in the Western Pacific Region would have to fall further by more than twice the current level over the next five years to reach the target by 2010. To do this, the Case Detection Rate (CDR) must be increased to a least 80% from 2006 onwards and with that level the TB prevalence and mortality would be reduced by more than 50% by 2010, thus contributing to MDG achievement. Achieving high cure rates under an environment of high CDR causes: i) reduction in TB transmission, ii) reduction in mortality, and iii) prevents MDR-TB.

The Western Pacific Regional Office 2005 target of "70/85/" is only an intermediate step towards achieving the regional goal set by the Regional Committee Meeting (RCM) to get to the 2010 goal: "Reduce prevalence and mortality from all forms of TB by half by 2010 relative to 2000". For Kiribati the "70/85" target has essentially been achieved.

The association between TB and poverty is well established. TB infection is transmitted more readily in environmental conditions characteristic of poverty: overcrowding, inadequate ventilation, and malnutrition, (WHO 2006). For Kiribati, the conditions of overcrowding and inadequate ventilation in makeshift and improvised homes in urban areas are contributing to the spread of tuberculosis. This is why Betio, with a population of 12,500 and a population density of around 8,000 per sq km (2005 census) has the highest number of cases contributing to 40% of total, with Teinainano Urban Council (TUC) area, with a population of 27,800 contributing to 30% of total.

The politically driven practice of having caretakers accompanying patients, including TB patients, into the wards has been one of the most negative step Kiribati has ever taken since it gained independence in 1979. In addition to contributing to ward disarray, uncleanness, water and toilet misuse and hindrance to ward functions, it has also, through ward overcrowding, contributed to the rapid spread of TB in Kiribati.

## Progress

TB prevalence rate or the number of TB cases per 100,000 people in Kiribati ran at 403 per 100,000 for the year 2006. This is compared to the prevalence rate of 392 in 1990 (WHO Report 2005), showing an increase over that period. Kiribati's TB prevalence rate is the highest in the Western Pacific Region, higher than the traditional high burden countries in WPRO like Cambodia, Philippines and Mongolia.

Despite increasing incidence and prevalence rate of TB, death rates per 100,000 appear to be declining in Kiribati for the period 1991 to 2005, (see Figure 27). The period starting from 1998 to 1999 shows significant and sustained reduction in death rates. This coincides with the introduction of the DOTS strategy to Kiribati in 1998 and the corresponding increase in detection and cure rate. As mentioned earlier, achieving high cure rates under an environment of high CDR causes: i) reduction in TB transmission, ii) reduction in mortality, and iii) prevents MDR-TB.

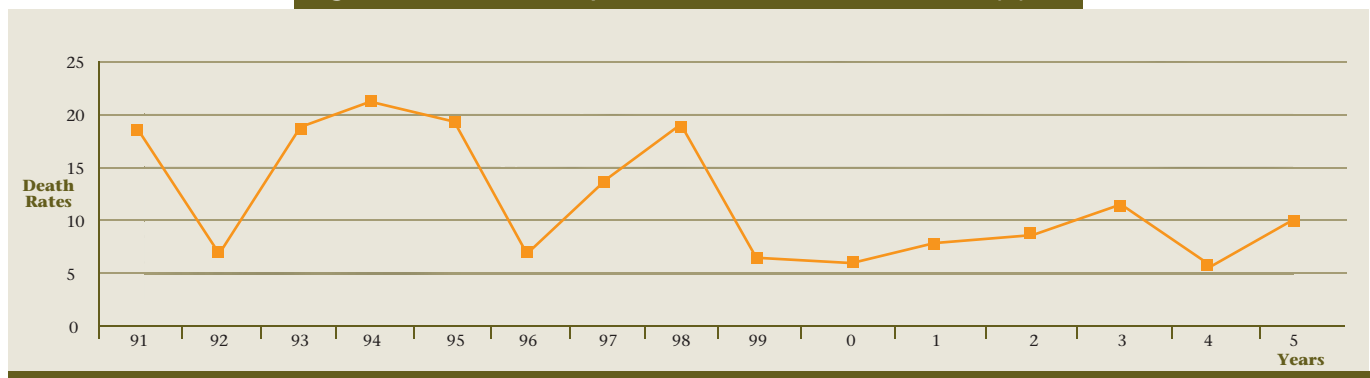
noted with concern that MDR-TB and TB/HIV co-infection have the potential for reversing the gains made in TB control.

## 24. PROPORTION OF TB CASES DETECTED AND CURED UNDER DOTS.

### Status and trends

Case Detection Rate (CDR) is the ratio of new Sputum Smear positive (SS+) cases notified in a given year to estimated number of new SS+ cases in that year. In many developing countries, including Kiribati, there is a margin of error in the denominator of this ratio. The number of cases notified is usually smaller than the estimated incidences because of incomplete coverage, under-diagnosis or deficient recording and reporting. However, the CDR can exceed 100% if case findings have been intense in countries/areas that have a backlog of cases or if there has been over-diagnosis and over-reporting (double counting) or estimates of incidences are too low, (WHO Report 2005).

Figure 28: Death rates per 100,000 associated with TB by year



Source: MHMS 2006

## Challenges and Opportunities

Based on ongoing work with Kiribati Community DOTS workers, the stigma associated with TB is still an issue at various levels within the Kiribati community. Thus, continued efforts at public awareness and advocacy are required. In a number of instances, because there is no one-size-fits-all formula, such awareness programs would require counseling on one-to-one basis. Political commitment as one of the pillars underpinning the DOTS strategy is required to achieve this MDG: Have halted by 2015 and begun to reverse the incidence of tuberculosis. Cabinet has approved a "No caretaker Policy" in TB ward and this should go a long way in our fight against this century-old scourge. Donor support to national TB programs (NTP) should be maximized through proper program management.

There are now two **TB/HIV co-infections** in Kiribati. TB and HIV are closely linked as TB is the leading cause of HIV-related morbidity and mortality, and vice versa i.e. HIV is the most important factor fueling the TB epidemic in population with high HIV prevalence. WHO currently estimates that 30% of HIV mortality is due to TB. Collaboration between TB and HIV/AIDS programs is crucial in supporting national efforts to deliver a full range of TB and HIV prevention and care interventions. It should be

Cure rate is the number of TB cases cured or complete treatment divided by the total number of TB cases on treatment or ratio of new registered SS+ cases that were cured or complete treatment to the total number of new registered cases. Kiribati CDR has been hovering at more than 100%, most likely because of backlog of cases before the introduction of DOTS in 1998 that brought about intense case detection and treatment after long periods of relative inactivity based on conventional long term TB management.

### Progress

The Western Pacific Regional Office 2005 target of "70/85" is only an intermediate step towards achieving the regional goal set by the Regional Committee Meeting (RCM) to get to the 2010 goal: "Reduce prevalence and mortality from all forms of TB by half by 2010 relative to 2000". For Kiribati, this target has essentially been achieved and we are running at around 80/95 level, (see Figure 28).

But, as mentioned earlier, current regional and national strategic plans are only an interim step toward achieving longer and sustainable goals – the MDGs. The AusAID funded TB Epidemic Control Project (TBCEP) with the assistance of the TB component of the Global Fund to fight



HIV/AIDS and TB is doing exactly that: i) to improve the quality and capacity of the Kiribati national TB program to effectively address the TB epidemic including emerging MDR-TB and TB/HIV co-infection, ii) to maintain a high treatment success rate above 90% among TB cases through provisions of quality TB drugs and treatment management, iii) to conduct relevant operations research to better understand the disease dynamic in order to develop more effective interventions, and iv) to maintain good project management, coordination and carry out midterm and completion review.

reversing the gains made in TB control. This calls for the need to increase surveillance system through improved laboratory capacity, including the establishment of TB culture facility. DOTS should be implemented in exactly the way it should be – direct observation of treatment as close to the patient’s home as possible to ensure adherence and compliance.

Figure 29: Proportion of TB patients detected and cured by DOTS by year



Source: MHMF 2006

### Challenges and opportunities

DOTS is a proven strategy to tackle the TB epidemic in Kiribati. DOTS five main components: i) sustained political commitment, ii) access to quality assured TB laboratory support, iii) standardized short-course chemotherapy (SCC) for all cases of TB under proper management conditions including direct observation of treatment, iv) good supply of quality assured drugs, and v) recording and reporting system, must all be fully supported and implemented to achieve maximum benefits and bring Kiribati close to the MDGs, which is quite possible.

Kiribati now needs to go a step further into active case findings and management including expanding efforts to outer islands. Regional training on contact tracing for TB nurses at SPC was recently completed in October 2007. Three Kiribati TB nurse attended that training and active contact tracing on South Tarawa and high burden outer islands will soon start with further support from SPC. Increasing the CDR to over 80% will be the single most important factor to accelerate the rate of decline in TB prevalence and mortality.

The issue of **multi-drug resistance-TB (MDR-TB)** is a case for concern for Kiribati since the discovery of one such case in 2005. MDR-TB is the result of poor TB management, especially in terms of poor patient compliance. That is where DOT comes in. It should be noted with concern that MDR-TB and TB/HIV co-infection has the potential for

### 24B: PREVALENCE AND DEATHS RATES ASSOCIATED WITH NON COMMUNICABLE DISEASE (NCD)

#### Non-Communicable Diseases

Even though MDG6 is about combating HIV/AIDS, malaria and other diseases, Kiribati has chosen to localize MDG6 into combating HIV/AIDS, Tuberculosis and other diseases because there are no cases of malaria in Kiribati, whereas Tuberculosis is a serious concern. Additionally, relevant information on Non-Communicable Diseases (NCD) is also provided here to highlight its importance and the fact that NCD now, as in many other Pacific Island Countries (PIC), is affecting the adult population of Kiribati at an increasingly alarming rate. This nationally important health issue is discussed in this section as a new indicator 24B.

#### Status and trends

Kiribati, together with many Pacific Island Countries (PICs), is facing a double burden of disease. Communicable diseases such as tuberculosis, HIV and dengue fever remain a threat to people’s health while emerging diseases such as SARS and bird’s flu are becoming a cause for concern. At the same time NCDs, such as cardiovascular disease; cancer, respiratory disease and diabetes are rapidly increasing. This is reflected in the MHMS health care expenditure of 12% being related to NCDs.

Data is not available on the prevalence and deaths rates associated with NCD. NCDs are typically chronic conditions requiring life-long treatment and expensive medication. Kiribati 2001 inpatient data shows that NCD accounted for 8% of admissions but was responsible for 12% of all inpatient expenditure with patient admitted for NCD being older by 10 years on average than those presenting with non-NCD conditions, and having longer average hospital stay (13.5 days vs 9.3 days) with correspondingly higher costs (\$1,238 vs \$1,806). It is conservatively projected that the costs related to tobacco and alcohol use alone, will increase from approximately 10% of the NCD treatment budget to 21% by the year 2020, (Doran, 2003).

Most NCDs have common risk factors that include proximal: behavioral (tobacco use, diet, physical activities, and alcohol abuse), environmental (policy, socio-cultural and economic) and non-modifiable risk factors (age, sex and genetic). Obesity is considered an intermediate risk factor.

### Progress

In recognizing this important health issue, delegates at the meeting of Ministers of Health of Pacific Island Countries (Tonga March 2003) agreed to develop national strategies to control NCD. A regional framework for NCD prevention and control was developed based on the WHO-STEPwise<sup>42</sup> approach. The framework, known as the Tonga Commitment, requires countries to report on progress in NCD control at the 2005 meeting of Ministers of Health. The Pacific Action for Health Project (PAHP) under AusAID funding and SPC technical support, was set up to implement NCD Strategies at country level. Kiribati has made significant progress in the implementation of the Tonga Commitment. In summary, at the 2005 meeting of Ministers of Health held in Apia the following progress report was presented:

- a. **Strategy for the control and prevention of NCD in Kiribati 2005-2009.** Cabinet endorsed this National NCD Strategy in December 2004. The Strategy was then launched at the closing of the 8<sup>th</sup> session of the House Parliament in December 2004. The document consists of five main components based on risk factors (integrated NCD activities, smoking, alcohol, diet and physical activities) and has been widely disseminated to Parliamentarians, line ministries and NGOs.
- b. **The Health Promotion Committee** has been formed and assigned the task of overseeing the implementation of the NCD Strategy. Four sub-committees have been formed according to the four main risk factors mentioned earlier, but due to lack of funding, a number of activities have not been implemented.
- c. **NCD survey based on WHO-STEPS.** The STEPS assessment and data collection of NCD risk factors have been completed in South Tarawa and a number of outer islands and data is currently being collected with WHO being tasked to analyze the data.

- d. **Kiribati National Health Promotion Foundation.** A Ministerial delegation for a study tour consisting of the Hon Minister for Health and Medical Services (HMHMS), the Hon Minister of Finance and Economic Development (HMFED), the Hon Attorney General (HAG), Secretary to Cabinet (SC) and the Permanent Secretary for Health (PSH), was undertaken to Vic Health Promotion Foundation in Australia in December 2004. Based on the findings of that study tour, Cabinet has in principles endorsed the establishment of the Kiribati National Health Foundations. Work is being undertaken to explore potentials of sourcing of funds for the Foundation including first, a look at the possibility of removing tobacco from the price control list and then increasing the price of cigarettes.
- e. **Tobacco Control Bill and the Framework Convention on Tobacco Control (FCTC).** A draft Tobacco Bill was approved by Cabinet in 2004, and now awaits the final endorsement from the House of Parliament. This Act is in compliant with the Framework Convention on Tobacco Control (FCTC) which Kiribati signed in New York in April 2004.
- f. **Public education and awareness raising** to control the "smoking epidemic" in Kiribati and to sensitize the public before the introduction of Tobacco Control Bill have been strengthened through outer islands visits.
- g. **Non-Smoking Policy in Government Offices.** While waiting for the endorsement of the Tobacco Control Bill, Government has taken a proactive approach by issuing a directive banning smoking in all offices and enclosed government buildings. A number of privately owned public transport buses have also banned smoking.
- h. **Creation of the Smoking Cessation Officer post under the PAHP.**
- i. **The Traffic Act** has been updated to allow for the use of random breath test. This commenced on trial basis early this year.

The NCD Strategy 2005-2009 is the translation of Kiribati National Development Strategy (NDS) 2004-2007 on one of its main NDS Key Policy Areas: lifestyle diseases. NCDs are a community wide issue and solutions lie in collaboration amongst line ministries, NGOs, church and community groups.

### Challenges and opportunities

Interventions aimed at changing attitude and behavior, and creating supportive environments can reduce the risk of developing NCD both at the individual and community level. The greatest impact is achieved when multiple interventions are implemented simultaneously.

Most key interventions lie outside the MHMS core functions. A truly multi-sectoral approach that reaches out across government ministries and NGOs is therefore essential. For example, smoking is most effectively addressed when health information is combined with high taxation and legislation that restrict advertisement and access to tobacco. The MHMS proposed Tobacco Control Bill, though approved by Cabinet in 2004, has failed to get to the House of Parliament for obvious political reasons. The Bill covers provisions on tobacco taxation, advertisement, smoking in public areas, the selling of tobacco products to minors, etc, in compliance with the FCTC. The onus now is on Government to take a bold stand and have it tabled at the next session of Parliament, and the earlier this is done in the early terms of Government, the better it will be to avoid political backlash common when the election day is near. One cannot ask for a better opportunity than now.

In a similar manner promotion of physical activity must include the establishment of conducive environments, such as sport grounds and sporting equipments, which make it easy and fun to exercise. The school environment influences future generations of I-Kiribati and physical education and nutrition should be compulsory subjects in the national curriculum. Improving people's access to healthy food such as vegetables and fish, is essential for people to be able to adopt advice to reduce their consumption of high fat foods. To enable improvements in health, actions that make the healthy choice the easy choice, are imperative. The government's economic burden for treating NCDs and the national burden of ill health carried by individuals and families will continue to increase unless we make the necessary investments now.

Most PICs are doing away with communicable diseases and are now concentrating their efforts and limited resource on NCDs. This is because of improvement in a combination of factors. Basic services and infrastructure are firmly in place in the form of transport of essential medical supplies including vaccines, improved water and sanitation, and accessibility to health services including reproductive health services and family planning that gives rise to low fertility and reduced child mortality. However, Kiribati is now facing a double burden of diseases: the still high rate of communicable diseases coupled with the emerging NCDs. What does this mean to Kiribati? A double effort and a double budget.

Tracking Progress: Goal 6. Combat HIV/AIDS, Tuberculosis and Non-Communicable Diseases (NCD)			
Monitoring and evaluation components	Assessment		
	Data collection capacity		
Quality of recent survey information			Poor
Statistical tracking capacity		Fair	
Statistical analysis capacity		Fair	
Capacity to incorporate statistical analysis into policy, planning and resource allocation mechanisms	Good		
Monitoring and evaluation mechanism		Fair	

40. Through the request of some Korean academics, the original term "Korekorea", a positive reference to Korean seafarers, has been changed to Ainen Mataawa

41. This indicator is also discussed briefly as indicator 17/5B/5.3 under Goal 5 as part of the recently approved target of 'universal access to RH services' under the new MDG Framework which, later reports will dwell on in more details.

42. WHO-STEPS is a framework developed by the WHO to assist with surveillance of NCDs risk factors. It divides the strategies into three different levels: Population approach: (i) national and ii) community levels) and high risk approach (iii) individual level). At the national level, issues include legislation, taxation and law enforcement. The community level covers health promotion activities. The individual level looks at clinical interventions and management for high risk individuals (high risk approach).

# Goal 7: Ensure environmental sustainability

Target	Indicators
9. Integrate principles of sustainable development into the country's policies and programs and reverse the loss of environmental resources.	25. Proportion of land area covered by forest
	26. Land area protected to maintain biodiversity
	27. GDP per unit of energy use (as proxy for energy efficiency)
	28. Carbon dioxide emission per capita and consumption of ozone-depleting Chlorofluorocarbons (CFC)
10. Halve by 2015 the proportion of people without sustainable access to safe water drinking and basic sanitation	30. Proportion of population with sustainable access to an improved water source urban and rural (piped to house hold or standpipe)
	31. Proportion of population with access to improved sanitation (flush or water sealed latrines)
Target 11: By 2020 to have achieved a significant improvement in the lives of at least 100 million slum dwellers	32. Proportion of households with access to secure tenure

Kiribati is one of the most isolated countries in the world, and one that is most vulnerable to climate change and rising sea levels. Most of the land is on average about two meters above sea level and on average only a few hundred meters wide, making escape from disaster almost impossible. Kiribati relies quite significantly on fishing license fees from 4.5 million sq km of its rich fishing grounds for much of its income<sup>43</sup>. Even though the 33 low-lying atoll islands lie outside the cyclone zone, they are exposed to periodic storm surges and droughts particularly during the La Nina years. Kiribati is already becoming increasingly vulnerable to climate changes due to its high population growth rate and concentration in urban areas, accelerated coastal development, coastal erosion and environmental degradation<sup>44</sup>.

While Kiribati strives to achieve socioeconomic development, the importance of managing waste in an environmentally sound manner cannot be emphasized enough. Improper waste disposal is a world wide problem but more acutely so in atoll countries like Kiribati. Waste management was identified as a strategic issue for the sustainable development of Small Island Developing States (SIDS) at the UN General Assembly Special Session on Sustainable Development of SIDS held in September 1999 in New York and also at the World Summit on Sustainable Development in Johannesburg, September 2000 and the Mauritius Meeting on the Sustainable Development of Small Islands Developing State in 2005. This has led on to regional environment programs under the technical support of SPREP and the development and implementation of waste management programs and projects at the national levels. For Kiribati, this includes SAPHE, International Waters Project, Persistent Organic Pollutants (POP), Sustainable Land Management Initiatives, E-Waste Project, Kaoki Maange Project, Eco-sanitation (composting toilets) and Christmas Island Clean-up Foundation (CCUF). Kiribati can be proud of its position as a leader in the region in a number of these initiatives.

Like most small coral atoll islands states, a number of priority environmental issues have been identified. These include: loss of environmental biodiversity, threats to fresh water resources and marine water quality, degradation and overuse of coastal and marine resources, unsustainable forestry and land use practices, climate changes and rising sea levels, land and sea pollution, degradation of critical habitats and waste management, (Pacific Islands Regional MDG Report, 2004). These are now becoming realities, occurring at increasingly frequent intervals especially in urban areas of South Tarawa and Betio. That could lead to quite a catastrophic situation especially when it is estimated that by 2050, if no adaptation measures were undertaken, up to 25-54% of areas in Bikenibeu, South Tarawa and 55-80% of Buariki in North Tarawa could become submerged, (World Bank, 2000). Forty three more years and the clock is ticking.

## 25. PROPORTION OF LAND AREA COVERED BY FOREST

### Status and trends

The indicator provides a measure of the relative importance of forest so that changes in forest area reflect the competitive demand for land use for other purposes.

Data from the Pacific Islands Regional MDG Report 2004 shows that only 12.5% of land in Kiribati is covered by

forest. Since most of the islands in the Gilbert group including Fanning, Washington and Kanton are covered by coconuts and other trees, the majority of this deficient forestation<sup>45</sup> would be assumed to come from Kiritimati Island whose land area (389 sq km) is about one and half times as much as that of all the islands in the Gilbert group put together (285 sq km).

### Progress

Replanting of coconut trees on Kiritimati Island has been on-going for many years but there is still more work to be done considering the immense size of open and un-forested land. Efforts at planting mangrove trees have also started in selected coastal areas in the Gilbert group.

### Challenges and opportunities

A policy should be developed that would require every head of family settler on Christmas island to plant one to two coconut tree every day with supervision from the Agricultural Division. If this scheme had started 10 years ago Christmas Island would by now be 99% full of coconut trees and the fruits of that easy effort would now be counted not in tens of thousands but in hundreds of thousands of dollars. This small leisurely activity is nothing compared to what people on Christmas Islands reap off the land on daily basis so there should be no complaint.

Cutting of mangrove for construction of small local houses has almost ceased on South Tarawa for obvious reasons – there are not enough mangrove trees for that purpose. However, people from South Tarawa have ventured to North Tarawa as an alternative, and every step must be taken to discourage that.

Planting of mangrove, under the coordination of the Environment Conservation Division, while being relatively new, is a positive step to expand forest at coastal areas. Community awareness programs and community involvement in these sustainable efforts should be further explored.

## 26. LAND AREA PROTECTED TO MAINTAIN BIODIVERSITY

### Trends and status

Kiribati is a party to the Convention on Biological Diversity (CBD)<sup>46</sup> enabling it to draw support from Global Environment Facilities (GEF) to implement the Kiribati National Biodiversity Strategies and Action Plans (K-NBSAP). The CBD also provides the basis for many components of the Action Plan for Managing the Environment in the Pacific region for the period 2005-2009, while the Action Strategy for Nature Conservation in the Pacific Islands Region 2003-2007, provides the coordinating mechanism for the many activities required to effectively conserve biodiversity in the region.

The most widely used and straightforward definition of biodiversity is “variation of life at all levels of biological organization”, (Gaston K., Spicer J., 2004). However the United Nations Convention on Biological Diversity has adopted a definition from the 1992 UN Earth Summit in Rio de Janeiro that defined biodiversity as “the variability among living organisms from all sources, including, ‘inter alia’, terrestrial, marine, and other aquatic ecosystem and

the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystem”.

*Within the environment context of Kiribati as an atoll nation, the biodiversity includes all terrestrial and marine ecosystems, all plants and animal species and varieties found in this ecosystems and the traditional knowledge, uses and beliefs... These knowledge systems have enabled the people to live harmoniously with their environment (on land and sea) and enabled them to survive in this limiting environment for many generations.*

Kiribati NBSAP, 2005, p. 5.

Loss of habitat is the primary cause of loss of biodiversity therefore habitat conservation is an important element in stemming this decline. The number of plants and animal on atolls environment is small mostly because of their relative isolation. This keeps the number of foreign plants and animals to a minimum, a good natural quarantine method. The atoll environment has resulted in the development of a specialized flora – a plant community adapted to thrive in salty, alkaline soil, subject to droughts and salty spray. The majority of natural fauna are animals which could be dispersed over great distance by wind, i.e. birds and flying insects, while rats, spiders, centipedes and other purely land animals must be assumed to have come on floating logs, or ‘uninvited passengers’ in canoes and ships. Animals are mostly domestic types – pigs, cats, dogs and poultry. Most of the birds are seabirds with noddys, reef heron and frigate being the most common especially on Christmas Island. The only land birds are Christmas Island canary.

The natural flora of atolls such as coconuts, pandanus, scaevola or saltbush (te mao), messerschmidia (te ren), guettarda (te uri) and mangrove are adapted to the salinity and alkalinity of the soil. Except for the wet northern islands of the Gilbert group and Fanning and Washington, that lie outside the equatorial belt, the grass grows thin on sandy soil on most islands and are mostly of the crowsfoot grass (te uteute), lepturus repens (te uteute), female grass (te uteute n aine), paspalum vaginatum (te uteute), thuraria involuta, biflora, and sedge (te ritanin ao te uteute ni mwane) varieties.

Fish is plentiful in the lagoons of most atolls, with the reef providing extra marine food sources. However, due to population congestion and its associated terrestrial, coastal and marine resources degradation, this is no longer the case on South Tarawa and Betio.

More than 200 sq km of land on Christmas Island is earmarked for protection by the Conservation Division, (Kiribati MDG Task Force). Additionally other conservations areas and reserves have been designated and administered by the Fisheries Division, Environment and Conservation Division and Wildlife Unit of the Environment and Conservation Division. There are currently 12 marine protected areas that are primarily set up for stock enhancement of marine species that have been targeted for live fish trade (marine export) and confirmed to be declining in numbers, e.g. groper species – ‘te kauu, and wrasse – te karon. These include areas in Butaritari, Marakei, Abaiang, Nonouti and Tabiteuea North in the Gilbert group and Cook Islet on Kiritimati. Other protected areas are designated

as wildlife sanctuaries to protect the abundant and unique birdlife existing in the Line and Phoenix Groups, (NBSAP, 2005).

In addition to birds and fish conservation on Kiritimati Island, the planting of coconut trees, breadfruit and 23 different varieties of pandanus, and the prevention of the spread of wild fires are currently being addressed. Lately, some Church groups notably the Seventh Day Adventist (SDA) Church, have been active in spearheading voluntary coconut planting activities at the community level. Other church groups whose land leases repayment to Government has been slow or overdue, are more than happy to plant coconut as payment for their leases<sup>47</sup>. The target is to plant coconut trees to cover all of Kiritimati except of course, those areas designated as protected areas. Currently, most of the land is covered with shrubs<sup>48</sup> mostly of ‘te mao’ and ‘te ren’ variety.

### Progress

This 200 sq km plus, of terrestrial area that is earmarked for protection, the majority of which is on Kiritimati Island, actually represents about 30% of total land area of Kiribati. This compares well with data provided by the Pacific Islands Regional MDG Report 2004, which shows 33% of total land area being under protection. This is in fact the largest protected area among PIC.

The latest addition to this conservation effort was the declaration by Kiribati, at the 2006 8<sup>th</sup> Conference of Parties (COP 8) to the Convention on Biological Diversity (CBD) held in Brazil, of the creation of the **Phoenix Islands Protected Area (PIPA)**. PIPA, consisting of eight atolls, each with 60 nautical miles protected perimeter and two submerged reef systems, became the largest marine protected area in the Pacific at 184,700 sq km (73,800 sq mile), surpassed in size only by Australia’s Great Barrier Reef and the North Western Hawaiian Islands. Three New England Aquarium research expeditions since 2000 found great marine biodiversity, including more than 120 species of coral and 520 species of fish, some new to science. Nesting seabird population, as well as healthy fish populations and the presence of sea turtles and other species, demonstrated the pristine nature of the area and its importance as a migratory route, (Stone G., 2004). About eight bird species use Phoenix Islands as seasonal transit between north and south<sup>49</sup>. Kiribati and the New England Aquarium developed the Phoenix Islands Project over several years of joint scientific research and consultations, with assistance from the Global Conservation Fund and Conservation International (CI) and more recently, CI’s Pacific Islands Program. PIPA means restricting commercial fishing in the area, resulting in a loss of revenue that Kiribati would normally receive from fishing license. However an innovative plan will compensate Kiribati for these lost revenues, (Cohen T., 2006).

These initiatives are very much in line with the “Micronesian Challenge”<sup>50</sup>, which involves committing at least 30% of nearshore marine and 20% of forest resources across Micronesia to conservation by 2020.

Now, to go back to the case of Kiritimati, as far as active protected area management is concerned, the same report (Pacific Regional MDG Report, 2004), also shows that only about 0.3% of this so called protected land is actually

actively managed. This is not surprising considering widespread evidence of land and marine resources exploitation, and the lack of visibility of logistics and active conservation unit officers on Christmas Island.

### Challenges and opportunities

Government should develop options to discourage urban drift especially to South Tarawa, Betio and Kiritimati Islands. The implementation of outer islands growth centers has not been fully realized and more work need to be done to develop outer islands.

People traveling to Christmas Island and Tabuaeran are increasing with the arrival of every boat. Most people are part of the economic development in the Line and Phoenix groups, which consists of abundant copra on vast state lands on Christmas Islands and Teraina, and tourism on Tabuaeran.

Loss of habitat is the primary cause of loss of biodiversity therefore habitat conservation is an important element in stemming this decline. With only 0.3% of protected area on Kiritimati being actively managed (Pacific Regional MDG Report, 2004), evidence of an increase in the number of people on Christmas Island and the resulting degradation of its environment is already showing:

- Birds and coconut crab population has significantly decreased.
- Indiscriminate fishing in the lagoon, especially with unregulated fishing nets size, has affected bony fish both in number and size.
- There is indiscriminate felling of coconut fruits with green palm leaves and young coconut fruits littering the undergrowth. The use of 'te butika'<sup>51</sup> to drop coconut fruits is an indication that naturally falling coconuts are no longer sufficient to meet the demands.
- The milk fish population is drastically reduced. One can no longer catch a good size and 'tasty'<sup>52</sup> milk fish in any of the open public fish ponds
- Bushfires are common occurrences caused by young boys out to get sweet beehive by 'smoking' the adult bee out of their nest, and
- The uncaring attitude of some Christmas Island settlers to state lands.

People's attitudes to something they do not own is often described as destructive, uncaring and disrespectful. Of course, this does not apply to everyone on Christmas Island but the presence of clear evidence listed above is enough to conclude that this attitude does exist in the population. If it is the work of young boys out to have a picnic in the bush, then parents should provide more responsible advice. There is also evidence<sup>53</sup> to show that those that adopt this uncaring attitude are usually new comers who usually have either no "permanent status" on Christmas Islands, or do not have approved land leases.

A policy should be developed that would require every head of family settler on Christmas island to plant one to two coconut trees every day with supervision from the Agricultural Division. If this scheme had started 10 years ago, Christmas Island would by now be 99% full of coconut

trees and the fruits of that easy effort would now be counted not in tens of thousands but in hundreds of thousands of dollars. This small leisurely activity is nothing compared to what people on Christmas Islands reap off the land on a daily basis. So there should be no complaint.

Strengthening the National Biodiversity Strategies and Action Plans including more effective implementation of the ratified CBD and enforcement of existing legislation e.g. Environment Act 1999, Local Government Bye-Laws, Public Health Ordinance, Penal Code and Public Highway Protection Act 1989, should be explored. Effective policing and enforcement of clearly stated provisions of these laws and regulations are apparently miserably lacking<sup>54</sup>.

Strengthening of the conservation unit in terms of increased mobility (cars, outboard motors and motorbikes), adequate number of trained staff, and powers under the law to impose penalties on the spot is required to reverse this accelerating, and now almost unstoppable, destruction of the environment on Christmas Island. But with one catch – our attitude to our friends through 'te nanoanga'<sup>55</sup> will destroy all the efforts and bring us back to square one.

### 27. ENERGY USE (METRIC TON OIL EQUIVALENT) PER \$1 GDP (PPP)

Briefly this indicator provides a measure of energy intensity i.e. it is the inverse of energy efficiency so that the lower the ratio the better the energy efficiency. Unfortunately, data for this indicator are not available.

### 28. CARBON DIOXIDE EMISSION (PER CAPITA) AND CONSUMPTION OF OZONE-DEPLETING CHLOROFLUOROCARBONS (CFCS)

Global warming is not a new phenomenon. As far back as the 1820s, scientists had already understood, through their keen interest in the prehistoric ice age of thousands of years ago, that gases in the atmosphere cause a "greenhouse effect" - changes in the earth's temperature. One of these "greenhouse gases" is carbon dioxide. During the 1890s, scientists also discovered that human activities, through factories and other industrial sources, were adding carbon dioxide to the atmosphere at a rate roughly comparable to natural geochemical process that emitted or absorbed the gas. By 1896, Svante Arrhenius of Stockholm was able to bring forward his theory that 'carbon dioxide emissions from human activities will cause future global warming that might appear within a few centuries rather than millennia'<sup>56</sup>, (Weart S., 2007). Although this theory faced many criticism from the scientific world, it turned out to be plausible based on a study conducted in 1959 on Mount Mauna Loa in Hawaii, that showed beyond doubt that human activities is contributing quite significantly to increasing carbon dioxide emissions into the atmosphere. So, the issue on global warming has been with us for more than a century.

Carbon dioxide emission per capita is the total amount of carbon dioxide emitted by country as a consequence of human activities (production and consumption) divided by the population of that country.

Ozone layer of the atmosphere protects life on earth from the full force of the sun's cancer-causing ultra violet radiation. CFCs produced from refrigerants, aerosol propellants and solvents, rise up into the stratospheric ozone layer where the ultraviolet radiation of the sun is

strong enough to break them down into chlorine which reacts with ozone molecules converting them into ordinary oxygen, resulting in depleted ozone.

Consumption of ozone-depleting CFCs is the sum of the consumption of the weighted tons (metric tons) of the individual substances in the group multiplied by its ozone-depleting potential.

### Trends and status

The only data that is available on this indicator comes from the Carbon dioxide Information Analysis Center, Oak Ridge National Laboratory in the United States and the United Nations Environment Program (UNEP) Ozone Secretariat.

Carbon dioxide emissions are largely a by-product of energy production and use. Emissions are usually from consumption of solid, liquid and gas fuels which all countries in the world including Kiribati, relies heavily on.

Kiribati, as a party to the Montreal Protocol<sup>57</sup>, is committed to phasing out the use of ozone-depleting substances by the end of 2005. The Regional Framework on Climate Change, Climate Variability and Sea level Rise was endorsed by Forum Leaders in their 2000 Communiqué<sup>58</sup>. This will form the basis for effectively addressing climate change through collaboration among relevant stakeholders.

### Progress

Carbon dioxide emission in PICs, as shown in Table 9, shows relatively low rates of emission. Kiribati has shown a decrease in per capita emission and this trend must be maintained. Table 10 shows that all PICs have either reduced their CFC consumption to zero (Fiji and Kiribati) or maintained their consumption at very low level.

**Table 9: Carbon Dioxide emission (metric tons per capita) in PICs.**

	1990	2000
Cook Islands	2.37	2.84
Fiji	1.52	1.02
Kiribati	0.32	0.28
Nauru	15.53	16.16
Niue	1.57	1.57
Palau	15.00	13.00
Papua New Guinea	0.67	0.48
Samoa	0.81	0.83
Solomon Islands	0.54	0.40
Tonga	0.88	1.30
Vanuatu	0.94	0.42
PIC median	0.94	1.03

Source: Carbon Dioxide Information Analysis Center, Oakland USA.

Climate change is recognized as one of the key issues affecting economic growth in the Kiribati National Development Strategies (NDS) 2004-2007. The Government

of Kiribati has been active on climate change issues since 1995, when it ratified the United Nations Framework Convention on Climate Change (UNFCCC), and through the Pacific Island Climate Change Assistance Program (funded by the Global Environment Facilities), it has developed a National Communications (1999) on vulnerability and adaptation, and Climate Change National Implementation Strategy (2003). It has also produced the National Adaptation Program of Action (NAPA) as part of the preparatory phase I (KAP I)<sup>59</sup> of the Kiribati Adaptation Program (KAP), that started in 2003 under the World Bank and Japanese assistance.

**Table 10: Consumption of ozone-depleting CFCs in some PIC**

	1990	2000
Fiji	38	0
Kiribati	1	0
Marshal Islands	1	1
Palau	2	1
Samoa	4	1
Solomon Islands	2	1
Tonga	2	1

Source: UNEP

### Challenges and opportunities

Kiribati is very vulnerable to climate change. Accurate data on emissions from solid fuels and other non-fuel energy sources are unavailable particularly for rural areas where in most instances, electricity is not available. Like many small developing countries with minimal fossil-dependent factories and other industrial economic activities, Kiribati's contribution to global warming is quite minimal and Kiribati's burning of fossil fuel may be regarded as "fire of survival" as compared to developed countries' "fire of leisure". But it is also fair to say that because of Kiribati's vulnerability to climate change, it would still be in the best interest of Kiribati to play its part through becoming parties to and implementing commitments to international climate change conventions and treaties, as alluded to earlier.

It is estimated that by 2050, if no adaptation measures were undertaken, up to 25-54% of areas in Bikenibeu, South Tarawa and 55-80% of Buariki in North Tarawa could become submerged, (World Bank, 2000). Forty three more years and the clock is ticking. Adaptation measures referred to here could not possibly mean that if Kiribati alone, should commit itself to fulfill these adaptation measures, then Bikenibeu and Buariki will escape inundation by 2050. Rising sea level is a global issue and depending on the accuracy of this finding, we could add 10 years before and 10 years after so that we have a probability range during which this catastrophe is likely to occur, i.e. between 2040 and 2060. Government should have in place now, not only short term adaptation measures and strategies, e.g. KAP, NAPA, K-NBSAP etc, but also very long term vision and strategies in the event that this estimate becomes a reality. Among Pacific Island countries, Tuvalu has been advocating



for relocation of its entire population. Kiribati may wish to consider adopting similar approach through creating partnerships and collaboration. This could either be incorporated into KAP III, or an entirely new UN-led, donor-supported initiative and agreement be entered into. His Excellency Beretitenti Anote Tong, made reference to this issue at the 2005 UN General Assembly Meeting<sup>60</sup>, and this should be earnestly pursued.

### 30. PROPORTION OF POPULATION WITH SUSTAINABLE ACCESS TO AN IMPROVED WATER SOURCE URBAN AND RURAL (PIPED TO HOUSEHOLD OR STANDPIPE)

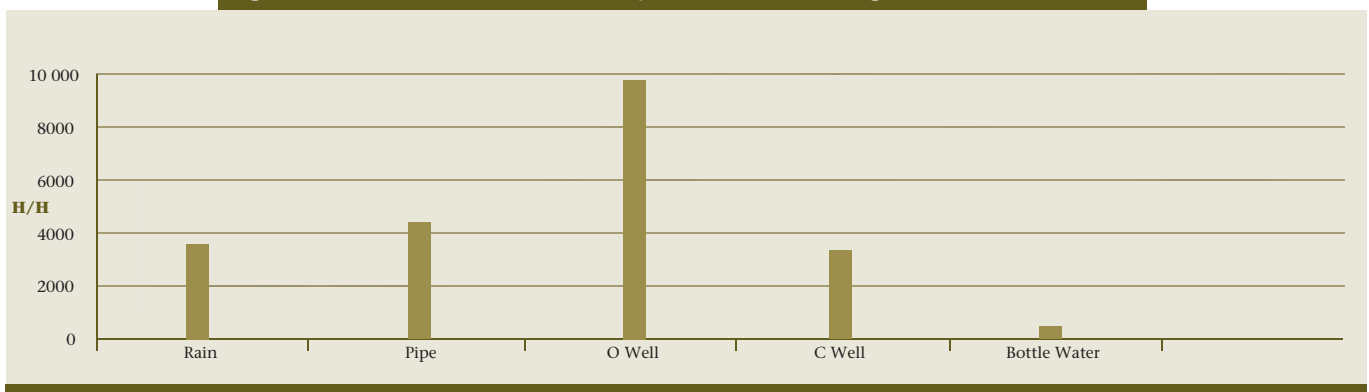
#### Status and trends

Unsafe water is the main cause of water borne diseases in all developing countries. This is particularly so in Kiribati where the rates of diarrhoeal diseases are still high and thus contribute to high infant and ultimately the under-5 mortality rate. This indicator works on the assumption that an improved water source is a clean water source. The MDG definition of sustainable access and improved water source

means one of the following: piped water, public tap, borehole or pump, protected well and protected spring or rainwater. The Global Water Supply and Assessment Report 2000 defines reasonable access as “the availability of 20 liters per capita per day at a distance of no more than 1,000 meters”. However access and volume of drinking water are difficult to measure and so sources of drinking water that are thought to provide safe water are used as a proxy.

Taking Kiribati in that context, piped water, protected well and rainwater are considered accessible and improved water supplies. Protected wells mean covered wells. However, MHMS figures from outer islands show relatively low prevalence of diarrhoeal diseases, indicating that water sources here are relatively clean compared to those in urban and highly populated areas where, most protected wells, because of poor sanitation, are contaminated. A good proportion of outer islands water wells are situated where underground water is potable and not brackish and, as such, people often dig a fair and safe distance inland and away from dwellings, thus precluding the potential for sanitary contamination.

Figure 30: Number of household by sources of drinking water, Kiribati, 2005



Source: Kiribati 2006

Table 11: Proportion of households with sustainable access to improved water sources (%).

	Urban 1990	Urban 2000	Rural 1990	Rural 2000	Total 1990	Total 2000
Fiji	95	98	55	65-82	71	93
FSM	94	94	88	93	79	67
Kiribati	54	60	25	42	35	49
Marshal Is	97	83	85	87	93	85
Nauru					72	82
Niue	99	100	99	100	99	100
Palau	84	78	97	95	89	84
PNG		93		30		40
Samoa	99	92	89	88	91	89
Solomon Is		81		22		30
Tokelau					82	85
Tonga	97	97	90		92	
Tuvalu	93	94	98	98	90	93
Vanuatu	96	91	71	71	76	75

Source: Pacific Regional MDG Report 2004.

## Progress

The 2005 census shows in Figure 30 that the majority of households in Kiribati are still using open well for their water sources. This translates into about 70% (Kiribati, 2007). The majority of those using open well are from outer islands where piped reticulated water and non-availability of corrugated roofing for rain water catchment are definitely lacking. But as mentioned above, most outer islands wells are relatively safe compared with those on South Tarawa and Betio.

What is required are disaggregation of data on protected wells by urban and rural categories. Some regional data are available on this as we can see in Table 11. There are improvements to sustainable access to an improved water sources but this should be treated with cautions because of varying definitions as mentioned earlier. It should further be emphasized and brought to the attention of Government that among PICs, Kiribati has the lowest proportion of households with sustainable access to an improved water source. This is a very important message with far reaching consequences especially to the health of the population.

## Challenges and opportunities

Among PICs, Kiribati has the lowest proportion of households with sustainable access to improved water source. This will have widespread implications in terms of basic water requirements and the spread of water borne diseases – conditions that are quite rampant in Kiribati, and stand to impede progress towards reaching the MDG. The amount of rationed water supplies in South Tarawa and Betio falls far too short of the recommended 20 liters per capita per day recommended by the Global Water Supply and Assessment Report 2000.

The use of open wells and options for alternate water sources for the majority of people on outer islands will remain an issue for consideration by Government for many years in view of its inaccessibility, high cost and lack of materials to match modern water supplies systems. Because most well water on outer islands are relatively safe, the immediate problem now is to improve accessibility. However water

safety should not be compromised because of this. On the other hand the more pressing issue now is in urban areas where population congestion is exerting high demands for water needs in the face of dwindling underground piped water supplies which is the main source of clean water. Laboratory test results show that the majority of well water tested in urban areas is not safe for drinking and the MHMS regularly sends out public awareness messages on the need to boil water before consumption. Both accessibility and safety of water supplies in urban areas are on-going problems that would require considerable attention.

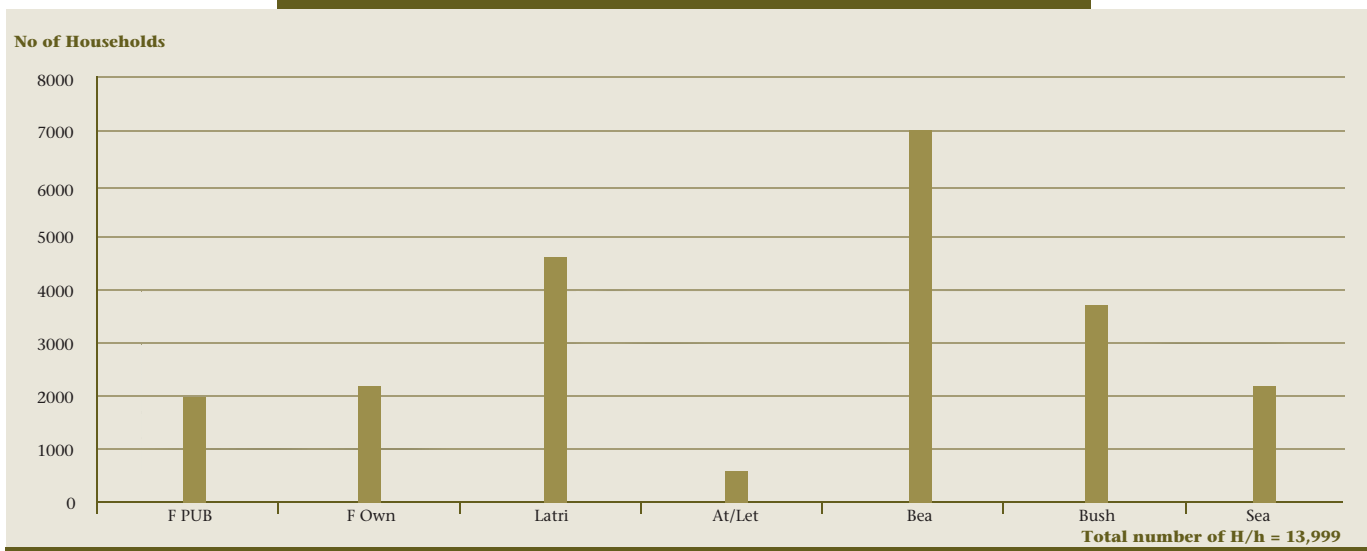
Rising sea levels and contamination of freshwater by salt water is also being observed in a number of islands and Government should strengthen its current efforts in addressing this need. These needs must be looked at under the broader context of global climate changes to which atolls islands are more susceptible. It is a fact that climatic variability as measured by El Nino/Southern Oscillation (ENSO) episodes, has been increasing in the region over the last few decades, and this may be linked to climate change resulting from increasing concentration of greenhouse gases<sup>61</sup>.

## 31. PROPORTION OF POPULATION WITH ACCESS TO IMPROVED SANITATION (FLUSH OR WATER SEALED LATRINES)

### Status and trends

The majority of the population, most of whom are from the rural area, use the beach for defecation, (see Figure 31). Flush toilets are used mostly in urban areas, but there is still a high proportion of the population in urban areas that also use the beach and the bush. Laboratory test results show that the majority of well water tested in urban areas is not safe for drinking and the MHMS regularly sends out public awareness messages on the need to boil water before consumption. These unhealthy practices will set the stage for rapid spread of water borne diseases especially diarrhoeal diseases among children, giving rise to high infant and child morbidity and mortality rates, damage to the environment and a deterrent to tourism. In the end most the targets of the MDGs will be difficult to achieve.

Figure 31: Household by source of sanitation system, Kiribati, 2005



Source: Kiribati 2006

## Progress

Progress from the last census on the situation of sanitation on South Tarawa and Betio is minimal despite the completion of an ADB funded sewerage project: Sanitation, Public Health and Environment (SAPHE) Project. A good water supply is essential for a well functioning sanitation system. The recent 2005 SAPHE end of project report shows that 30% of the systems are not functioning well. This is not surprising considering widespread tampering of water system by private households and individuals, and the apparent lack of enforcement and maintenance by the responsible ministry. A great deal of effort is required by Government to address the water and sanitation problem both in urban and rural areas.

## Challenges and opportunities

According to Maslow's Hierarchy of Needs: 'In order to enjoy living to the full, one must first satisfy his basic needs (food, water, house, toilets) before he/she can proceed to the next higher level of needs,' (Maslow, 1943).

A number of policies and legislation e.g. the Public Health Act, Environment Act, Councils By-Laws etc, are already in place to ensure environmental sustainability. It is the implementation and enforcement aspects that are miserably lacking. A once senior police officer commented that during the time when expatriate police commissioners were at the helm of the Kiribati Police Force, police on the beat used to be dispatched to Temakin and Takoronga early in the morning and in the evening. Two pairs from Takoronga and two from Temakin would comb their way along the ocean and lagoon beach until they eventually meet half way. On their way, they would stop whoever was using the beach for defecation to ensure and see that they remove their own waste. No wonder the beaches at Betio were beautiful then! And why not now?

More Environment Officers (MELAD), Environment Health Officers (MHMS) and Conservation Unit Officers should be recruited, trained, equipped and empowered under the law to implement appropriate provisions of those legislations. Although a number of these provisions and regulations are already in place they are in fact not being implemented and enforced, which brings us back to the point mentioned earlier that there is no point in formulating policies and legislations if the implementation and enforcement aspects are miserably lacking. Government should spend time in exploring this area. It may well be one of the major obstacles to progress at all levels in the context of Kiribati.

A senior WHO environmental health officer who visited Tarawa in the 1980s once commented that it would take one whole generation of multi-sectoral and multi-discipline public awareness approach to change people's behavior as far as using the beach for defecation is concerned. Put in another way, the greatest impact will be achieved when multiple interventions are implemented simultaneously. This would mean widespread campaign accompanied by

provision of enabling and conducive environment such as affordable toilet systems, affordable toilet papers, provisions of technical expertise, etc.

Children are agents of change and if we have to start the change process we must do so with our children. It is common knowledge that a number of Primary Schools and Junior Secondary Schools do not have proper water and toilet facilities. This is due to a combination of several factors: the unavailability of toilet paper, abuse of toilets by pupils, and the absence of a paid cleaner. Why opt for school computers when our children don't even have safe water to drink and are still using the beach for defecations? How much does a cleaner cost in salary compared to the cost of loss hours of school by children and parents time off work to be with their sick children as a result of unsafe water and poor sanitation? This is a national issue. It is neither an issue for the MHMS nor MEYS nor MPWU. Government should step in and take the leading role.

And why not subsidize toilet paper instead of the Irish Cake (te booa)<sup>62</sup>? This would have far reaching double positive benefits and impact of reducing the prevalence and deaths from both non-communicable diseases (NCDs) in adults, and diarrhoeal diseases in children. And it would go in history as one of the healthiest public health policy decision Government has ever taken. After all 'healthy public policies are good public policies'.

The revival of the Water and Sanitation Committee, now under the chairmanship of the Office of the President, should be made to oversee the implementation of water and sanitation strategic plans as part of the sustainability of the SAPHE project, and other action plans that are in place.

A building code should be enforced. Every home, private or Government, local or permanent, must be built on ample space, be accessible, and must have potable water and a toilet, before it can be declared habitable. One should pay a visit to environmentally "hot spots" like Santo Betero area Temakin Betio, Teteunene Area, Bairiki and Temaiku, to witness improvised construction of dwellings that allow no accessibility in the events of fire or medical emergencies, and also witness the scarcity of potable water and toilet facilities. 'First things first' means addressing our basic needs first.

All Government buildings can be fitted with huge rainwater catchment systems to supply the need of South Tarawa and Betio for months.

It goes without saying that the larger global environmental threats from rising sea level that impact on our lagoons and coastal areas is an issue of considerable significance to our fragile small island settings. Climate change which, a decade ago, was seen as pure conjecture, is here with us and here to stay. But this goes beyond the scope of this Report in view of its more external and global causes that are not easily amenable to our actions.

## Tracking Progress: Goal 7. Ensure environmental sustainability

Monitoring and evaluation components	Assessment		
Data collection capacity			Poor
Quality of recent survey information		Fair	
Statistical tracking capacity			Poor
Statistical analysis capacity		Fair	
Capacity to incorporate statistical analysis into policy, planning and resource allocation mechanisms			Poor
Monitoring and evaluation mechanism		Fair	

43. Kiribati: World Bank awards GEF Grant to help with changing environment, 2006.  
<http://www.pacificmagazine.net/news/2006/06/07/kiribati-world-bank-awards>
44. Kiribati Adaptation Project – Pilot Implementation Phase (KAP II), 2005. Project Information Document (PID), Project Preparation Review Stage. Report No. AB1138.
45. Forestry figures are derived primarily from regional Heads of Forestry meetings reports for the period 1991-2003. For the purpose of this report and in line with the Pacific Island Regional MDG Report 2004, forests include all types e.g. coconuts, mangroves, broadleaf forest areas and dry and wet woodlands.
46. Kiribati ratified the CBD on 16th August 1994.
47. Personal communication with the Director of Agriculture.
48. Forest, according to the Food and Agriculture Organization (FAO) refers to trees occupying more than 0.5 hectare with minimum height of 5 meters.
49. Personal communication with Project Coordinator of PIPA
50. The 'Micronesia Challenge' was put forward by Palau President Tommy Remengesau Jr. during the eighth meeting of Conference of Parties (COPS) to the Convention on Biological Diversity, Rio de Janeiro, 2006. The Challenge countries are actually Palau, FSM, Marshall Islands, Guam and Mariana Is., but there is no reason why Kiribati cannot join this sub-regional, innovative and sustainable effort.
51. Very long sticks with knives tied at the end to cut and drop high hanging and inaccessible fruits and nuts.
52. A milk fish with high fat content within its belly flesh is considered tastier than a lean one.
53. Personal communication with Senior Environment Officer.
54. For example: 1) Section 16 of the Environment Act covers provisions on 'Dumping in sea or lagoon' and states that "A person who causes or allows the dumping of waste or other matter in the sea or lagoon commits an offence". Maximum penalty: fine of \$10,000, imprisonment for two years. This bad habit is observed on daily basis on South Tarawa and Betio and nothing is being done about it; and 2) Public Health Regulation: "No person shall deposit any empty tin, bottle or other receptacle in any street, road or public places". One does not need to travel far on a public road to witness cans, plastic bags and other rubbish being thrown out of cars, buses etc. Yet no one gets penalized for it.
55. A pervasive customary way and a form of nepotism of pardoning or condoning people's action based on being a relative, a friend or simply the fact that he/she asks for forgiveness.
56. The Carbon Dioxide Greenhouse Effect, August 2007. In: <http://www.aip.org/history/climate/co2.htm>
57. The Montreal Protocol, with its major objective of reducing the use of ozone depleting substances, was adopted in 1995.
58. Pacific Islands Forum Secretariat, 2000. Forum Communiqué. Thirtieth Pacific Islands Forum, Suva Fiji.
59. Kiribati Adaptation Program (KAP), 2003-2015, has a major goal to reduce Kiribati vulnerability to climate change, climate variability and rising sea levels. It is divided into phases: KAP I (2003-2005): Preparation; KAP II (2005-2008): Pilot implementation, and KAP III (2009-2015): Expansion.
60. In reference to Hurricane Katrina, H.E. President Anote Tong, expressed condolence to victims of the hurricane, and invited the UN General Assembly to undertake a risk assessment on the impact of similar natural disasters occurring in SIDS, and further added that given their small land mass, there is a limit to the extent which population of low-lying coral atolls can adapt.
61. Most climate models predict an increase in ENSO activities and in the intensity of cyclones. Large waves associated with tropical storms can cause contamination of underground water supplies which most atolls island states heavily rely on. This is already happening in Kiribati.
62. Local name of a brand of tobacco product that is very popular in Kiribati

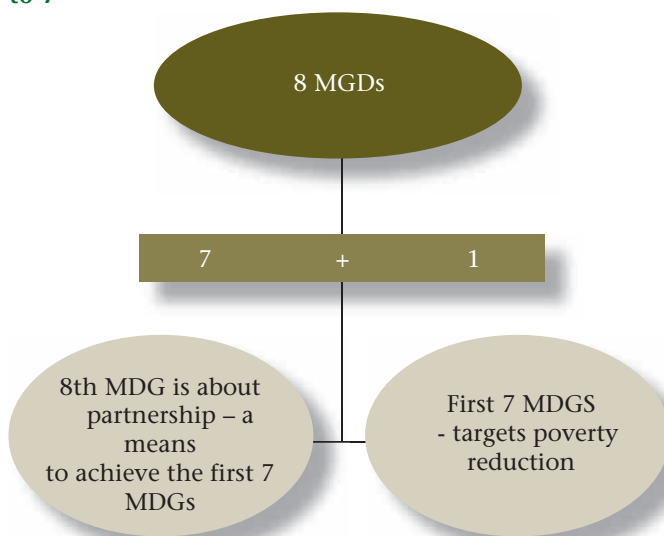
# Goal 8: Develop a global partnership for development

Target	Indicators
12: Develop further an open, rule-based, predictable, non-discriminatory trading and financial systems, including a commitment to good governance, development and poverty reduction - both nationally and internationally	34. Proportion of ODA to basic social services (basic education, primary health care, nutrition, safe water and sanitation)  37. ODA received in small island developing states as proportion of their GNI
13: Address the special need of the least developed countries – includes: tariffs and quota free access for LDC exports; enhanced program of debt relief for HIPC and cancellation of official bilateral debt and more generous ODA for countries committed to poverty reduction.	38. Proportion of exports (by value and excluding arms) admitted free of duties and quotas 39. Average tariffs and quotas on agricultural products, textiles and clothing
15. Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long run.	44. Debt sustainability. Debt service as percentage of exports of goods and services
16. In cooperation with developing countries develop and implement strategies for decent and productive work for youth	45. Unemployment rate of 15-24 years old, each sex and total
17. In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries	46. Proportion of population with access to affordable, essential drugs on sustainable basis
18. In cooperation with private sector, make available the benefits of new technologies especially information and communications	47. Telephone lines and cellular subscribers per 1000 people  48A Personal computers and internet users per 1000 people

## What is Goals 8 about?

The Millennium Development Goals are based on a global partnership between developing and developed countries, first and foremost stressing the responsibilities of developing countries to get their house in order, and for developed countries to support those efforts, (UN, 2005). The first seven goals are targeted to alleviate poverty while Goal 8 provides the means to achieve the other seven goals, (see Box 2). Commitments from major development partners have been revisited, calling for renewed efforts in reversing the decline in official development assistance (ODA) that would focus more on poverty reduction, education and health to help developing countries realize the MDGs.

### Box 2: Goal 8 provides the means to achieve Goals 1 to 7



## KIRIBATI AND ITS DEVELOPMENT PARTNERS

### Trends, status and progress

Kiribati receives several types of assistance, namely cash grants, loans, aid-in-kind, technical assistance and supplies and equipment from a number of development partners through bilateral, multilateral and regional avenues. These are very much guided by the country's National Development Strategies. AusAID and NZAID have traditionally been involved in supporting education, health, public finance management, public sector improvement, gender and urbanization interventions. Japan covers a number of fisheries development projects as well as infrastructure, Taiwan covers broad areas of assistance, and USA through its Peace Corps Volunteers (PCV) and its Salvation Army, addresses health and education. EU has its interest in infrastructure (health and TTI) and energy.

The United Nations, through its various agencies, have indicated their areas of interest in economic growth, governance, social security, and environmental management. UN agencies dealing with health include WHO, UNFPA, UNAIDS and UNICEF, while ILO covers standards and fundamental principles and rights at work, opportunities for decent employment for women and men, social protection and strengthening of social dialogue and

tripartism. UNDP addresses wider issues on economic growth and poverty reductions working together with other UN bodies to support Country Program Action Plans developed in consultations with host Governments and UNDP under the United Nations Development Assistance Framework (UNDAF) in the Pacific. Areas covered include: capacity buildings to analyze key development issues for policies; aligning national development documents with MDGs and national budgets; strengthening of national statistical capacities focusing on poverty data and analysis; trade mechanisms to encourage income generation and employment opportunities; and a joint UN program to address leadership development and multi-sectoral planning and actions on HIV/AIDS.

At the regional level SPC, SOPAC, FFA, SPREP and ADB play vital roles in the economic development of Kiribati through their own areas of expertise, based on Kiribati needs.

### Goal 8 and the Pacific Plan

Also at the regional level, the **Pacific Plan**<sup>63</sup> is a political undertaking by Pacific Island Forum Leaders to fully realize their "Pacific Vision" for the whole Pacific region into the future. This will be implemented through proposed concrete plans to 'strengthen regional cooperation and integration (regionalism), between the sovereign countries of the region, as underpinned by the Forum's key goals, which are: economic development, sustainable development, good governance and security. In the face of global environment that has dramatically changed since most countries in the region gained their independence, the Pacific Plan provides an excellent example of Pacific Island leaders efforts to work together in partnership and in sharing resources for sustainable development.

Additionally, the involvement of the Council of Regional Organization (CROP), donors and other international agencies (e.g. Japan, ADB, UNDP, WB), non-sovereign states in the Pacific (New Caledonia, French Polynesia and American Samoa), and **Post-Forum Dialogue Partners**<sup>64</sup>, reflects the true spirit and intent of the Pacific Plan to "Develop a global partnership for development" enshrined in MDG 8.

### Challenges and opportunities

The report will only show total ODA to Kiribati based on available data but is unable at this stage to break down this net ODA according to donor source and sectors receiving ODA. There is also a danger that government statistics do not include all donors and recipients, especially those projects that by-pass government accounting system and recipients of ODA outside Government i.e. non-governmental organizations including Church-based organizations. This in itself is an indication to Government, of the need to improve aid coordination and management practices.

### 34. PROPORTION OF ODA TO BASIC SOCIAL SERVICES (BASIC EDUCATION, PRIMARY HEALTH CARE, NUTRITION, SAFE WATER AND SANITATION)

#### Trends, status and progress

The World Summit on Social Development at Copenhagen in 1995 put forward the notion of "mutual commitment between interested developed and developing country

partners to allocate on average, 20% of ODA and 20% of national budget respectively, to basic social programs". These programs comprise basic education, basic health, population and reproductive health programs and water and sanitation, (United Nations 2003). Kiribati is moving close to this trend with about 13% and 19% of national budget allocated to health and education respectively. Data is not available on the breakdown of ODA by sources from traditional donors in the health sector but we can say that it is quite substantial.

This indicator is important in view of its coverage of basic social services which are essential to fulfill in developing countries like Kiribati. They are very much focused on reducing human and income poverty, and serve as prerequisites to a firm foundation for more sustainable future development. While these basic social services are covered under various development partner assistance, there is no breakdown as to how much ODA is allocated by sector.

### 37. ODA received in small island developing states as proportion of their GNI

#### Trends, status and progress

Official development assistance (ODA) to Kiribati amounts to between US\$15 million and \$20 million per year. This

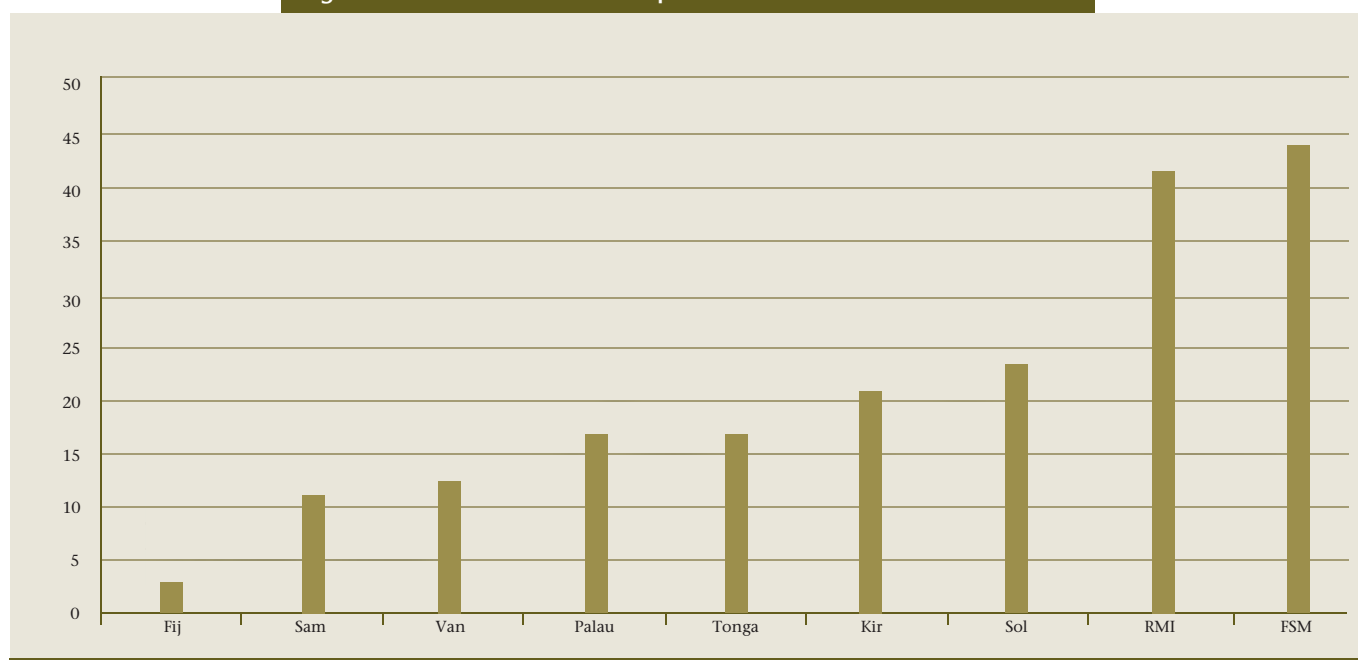
highest ODA as percentage of its GNI. A large proportion of ODA that the Solomon Islands receive is related to regional attempts to assist that country to return to normalcy from recent civil unrest, e.g. RAMSI<sup>66</sup>. If the case of the Solomon Islands is justifiable to promote peace and economic development, what justification does Kiribati has to receive such a high share of ODA compared to other PICs?

It is clear from Figure 33 that total ODA to Kiribati in Australian \$'000 has more than doubled from 1999 to 2004. The possible causes of poor economic growth and the growing budget deficit that Kiribati experienced over the last few years as discussed in the early sections of this report under: Economic Profile, and the failure to immediately and effectively address those factors, may lead one to conclude that this trend is likely to continue for sometimes.

#### Challenges and opportunities

Figure 33 clearly shows the increasing dependency of Kiribati on external assistance to finance its development projects which, in the long run, is not very healthy. There are also indications that this trend will continue for sometimes. We must find ways to reverse this trend. On the other hand, while ODA is supposed to respond to national needs by supporting implementation of National

Figure 32: PICs Official Development Assistance as % of their GNI

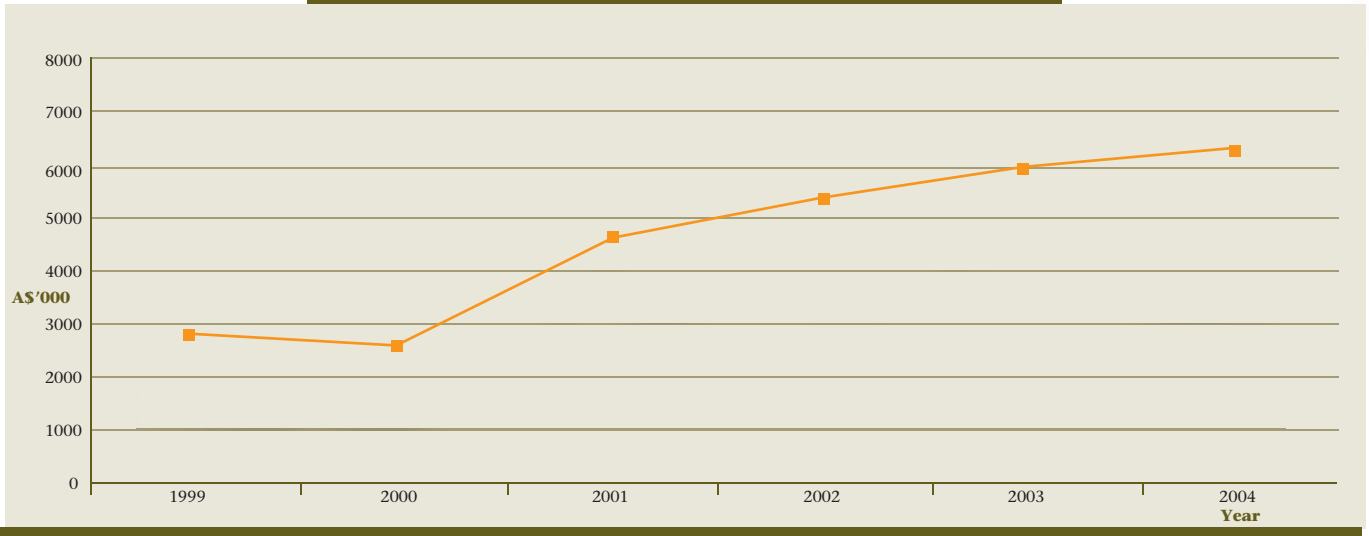


Source: UN Common Database (OECD), 2003

represents 20-25% of Kiribati GDP<sup>65</sup>. Figure 32 shows levels of ODA to a number of PICs as percentage of their GNI and not GDP. For Kiribati, the major donors are Japan, Australia, New Zealand, Taiwan, European Union, Canada, U.S.A., and UN agencies. Figure 32 also shows that PICs receiving relatively higher ODA are from US affiliated or Trust Territories. Putting those countries aside, Kiribati would come out second under Solomon Islands to receive the

Development Strategies, cases of donor-driven development projects have been reported and efforts must be made to see that this does not become a habit. Also, as part of "mutual commitment between interested developed and developing country partners", it would be in the interest of Government and its people to play their part in sustaining these projects on their completion.

**Figure 33: Official Development Assistance to Kiribati by year**



Source: MFED, 2006

**38. PROPORTION OF EXPORTS (BY VALUE AND EXCLUDING ARMS) ADMITTED FREE OF DUTIES AND QUOTAS**

**Trends, status, progress, challenges and opportunities**

Another form of assistance that Kiribati could capitalize on is trade agreements. Like a number of other Pacific Island countries, Kiribati is a party to the Cotonou Agreement with EU that was signed in 2000 and came into force in 2003. Under this agreement, provisions were made to allow for non-reciprocal free right of access for goods from Africa, Caribbean and Pacific (ACP) states into Europe. With other Pacific Island countries Kiribati is also a party to the negotiation for Pacific Island Country Trade Agreement (PICTA) and PACER whose aims includes creation of common markets, increase trade within the region and responding to some of the challenges of globalization.

PICTA will start to remove tariff on trade between member countries by 2010 and removing all tariffs by 2016. Therefore as a signatory to PICTA, Kiribati will benefit through tariff reduction and eventual elimination.

**39. AVERAGE TARIFFS AND QUOTAS ON AGRICULTURAL PRODUCTS, TEXTILES AND CLOTHING**

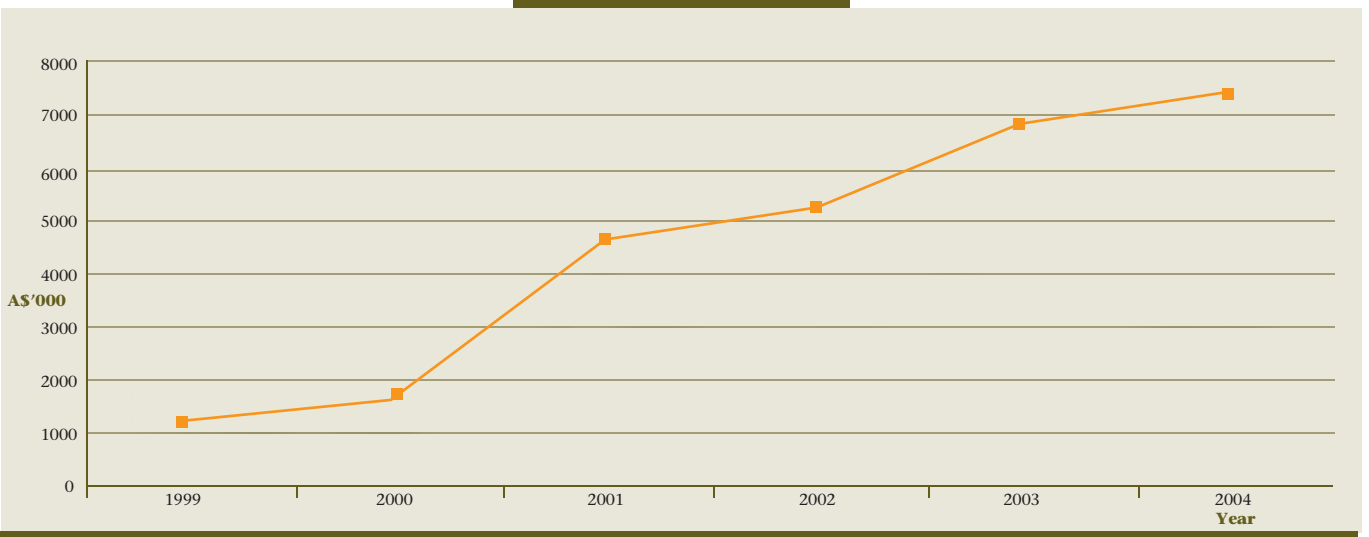
See indicator 38 above.

**44. DEBT SUSTAINABILITY: DEBT SERVICE AS PERCENTAGE OF EXPORTS OF GOODS AND SERVICES**

**Trends and status**

A global partnership for development requires increased debt reduction for heavily indebted poor countries (HIPC). External debt service refers to principal repayments and interest repayments made to non-residents in foreign

**Figure 34: Debt in A\$000**



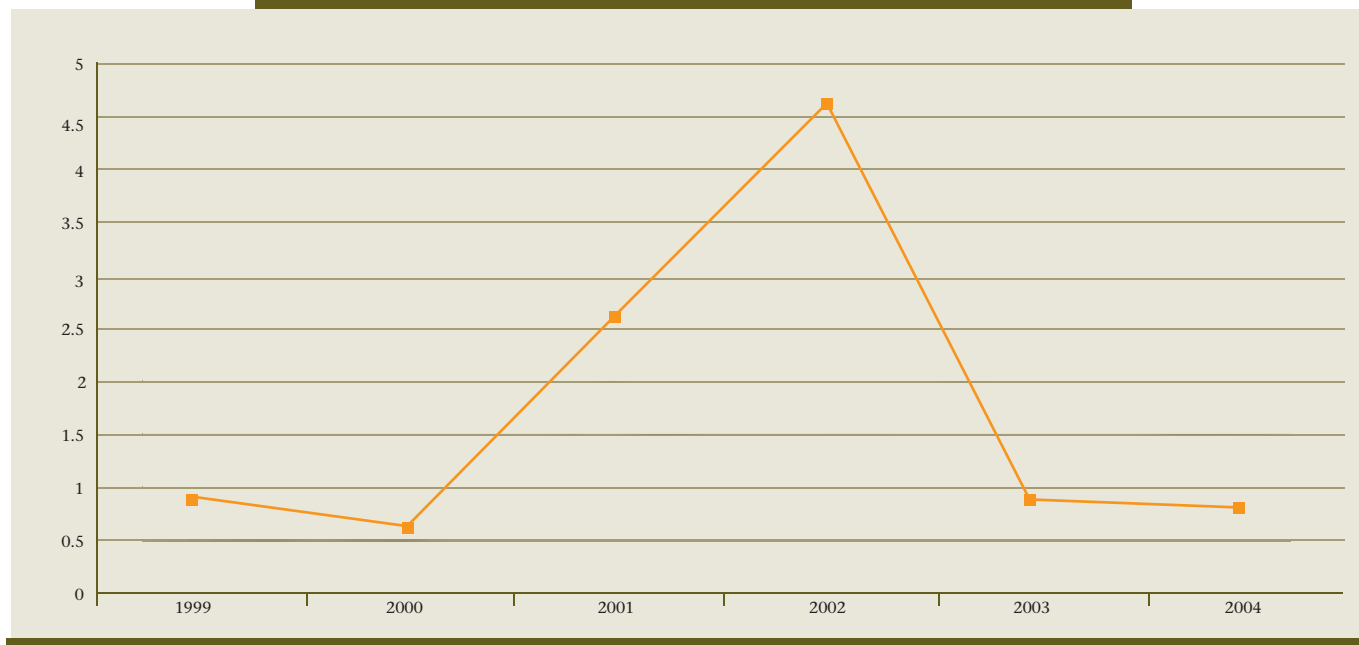
Source: MDG Task Force, 2006



currency, good or services. The HIPC initiative, launched in 1999, marked an official joint venture effort to reduce external debts of the world most debt-laden poor countries to sustainable levels.

Kiribati, with appropriate technical assistance, should embark on development of debt servicing strategies that are sustainable, meaning: it is critically important that debt servicing arrangements not be permitted to detract funds

Figure 35: Debt service as percentage of exports of goods and services



Source: MDG Task Force, 2006

### Progress

Figure 34 shows Kiribati debts increasing from about AUD\$13 million in 1999 to A\$73 million in 2004. This figure ties in well with ODA for Kiribati which we are increasingly relying on to fund our development projects, see Figure 33. In Figure 35 with the same scale in years, debt servicing as percentage of exports of good and services shows different trends to indicate that major interest repayment on a number of loans<sup>67</sup> took place in 2001 (\$548,000), and in 2002 (\$1.169 million). For the other years, annual loan interest repayment has been usually less than a quarter million AUD\$. Moreover, MFED data also shows that about 1.2% of official bilateral debt, especially those with PRC<sup>68</sup>, has been cancelled. It would be logical to assume therefore that debt servicing in Kiribati is not very high and this should be regarded as positive in terms of the need to avoid compromising national priority issues for the sake of debt servicing.

### Challenges and opportunities

The level of debt indicates the level of dependency of a country on donor assistance. Figure 32 shows that, putting the US affiliated and Trust territories aside, Kiribati ranks second to Solomon Islands, among selected PIC to receive ODA as percentage of GNI. Debt problems arise in most instances from the difficulties of raising government revenues sufficiently to reduce large government budget deficit, and, as mentioned earlier, this has been the situation in Kiribati over the last few years resulting in increasingly large amount of draw-downs from its RERF, to fill in that widening gap.

from necessary spending in areas relevant for sustainable human development, and for the promotion and protection of human rights, as defined in the principal human rights treaties, (UN Debt Report, 2005).

### 45. UNEMPLOYMENT RATE OF 15-24 YEARS OLD, EACH SEX AND TOTAL

#### Trends and status

The ILO categories of labor force are sometimes confusing, especially in relation to the 'unemployed' category. The 'unemployed' categories under ILO classification meaning 'having no work but are actively seeking work' would not fit the 'unemployed' in the Kiribati context. The former generally lives on social welfare benefits in the midst of relatively open employment opportunities, evidenced by easy accessibility to employment agencies or career centers. On the other hand, the latter would be doing subsistence activities in order to survive, and thus would be more correctly labeled 'village worker'. Having said that, two broad and common categories to describe the labor force are formal and informal, with the formal covering 'employee' and the informal covering all the other categories. However, the formal and informal sectors are not routinely covered in population censuses, so a proposed crude categorization of the labor force in Kiribati is presented in Table 12.

The village worker and 'unemployed' columns indicate a definite bulge in the age group 20-24 years, followed by age group 15-19. This totals up to 1,307 and represents the youth population in Kiribati (15-24 yrs) that, under this proposed category, are unemployed and constitutes 58% of all the 'unemployed' category, (I. Rouatu, 2007).

Table 12: Labor force by age group, work status and by sector, 2005

Age group	Village worker	Unemployed	Self employed	Employer	Total Informal	Employee Formal	Total Labor Force
15-19	2324	460	34	8	2826	247	3073
20-24	3304	847	67	37	4255	1618	5873
25-29	2681	341	77	30	3129	2135	5264
30-34	2227	175	83	38	2523	1839	4362
35-39	2766	136	116	46	3064	2079	5143
40-44	2231	98	91	23	2443	1678	4121
45-49	1905	89	87	30	2111	1295	3406
50-54	1462	37	72	18	1589	589	2178
55-59	1107	33	51	7	1198	357	1555
60-64	710	13	25	5	753	177	930
65-69	441	8	18	1	468	82	550
70+	424	17	13	3	457	41	498
Total	21582	2254	734	246	24816	12137	36953

If we include both 'village worker' and 'unemployed' columns, youth 'village worker' plus 'unemployed' would represent 29%. If we use 'total informal' sector column, youth involved in informal employment constitutes 28.5%. No matter how we look at it, the fact remains that youth unemployment in Kiribati is very high.

### Progress

Table 8 shows that between 1990 and 2005, out of the total number of employees of about 9,300 (Column 2), about 1,430 (15.4%) are youth (Columns 5 and 6), distributed as

740 (52%) males (Column 8) and 691 (48%) females (Column 9). It also shows that only about 9-10% (column 7) of the youth population is employed. What are the remaining 90%<sup>69</sup> doing and where are they? According to the 2005 census, the total youth population is 19,367 and 7,257 of them are attending schools (see Table 14). This means that if 10% (1,937) are working, and 37% (7,257) are attending school, 53% or 10,173 (=19,367 - (1,937 + 7,257)) are unemployed youths. From census years 1990 to 2005, the figure of about 10,000 unemployed youth annually has been fairly constant.

**Table 13: Youth school attendance, 1985-2005**

	Youth pop	Attending Schools	Left school	Never been
1985	13,865	2,358	11,505	2
1990	13,790	2,124	11,330	336
1995	13,133	3,489	9,384	260
2000	15,618	5,103	10,078	437
2005	19,367	7,257	11,424	686

Source: I. Rouatu, June 2007

### Challenges and opportunities

The statistics imply that every year there would be about 10,000 youths neither attending schools nor working. This represents about 53% of the total youth population. With only about 500 jobs available every year, it would be very difficult to see how these 10,000 youth could get jobs now and in the years to come. A truly formidable challenge indeed but which needs to be addressed. A substantial increase in the number of youth attending schools is observed from 1990 to 2005 (see Table 14). This could be a reflection of the establishment of JSS whose positive impacts include lengthening of school years, shortening youth idle time and allowing youth to obtain better education for competitive higher tertiary education and jobs in Kiribati and abroad.

Another challenge refers to the notion that unemployed youth is like a sitting "social bomb" that could explode, creating social disruptions, especially if living standards deteriorate. Gang and street fights, as well as the boarding of foreign boats by an increasing number of 'Ainen Mataawa', are but a few example of these "social dynamite" with its fuse alight.

#### 46. PROPORTION OF POPULATION WITH ACCESS TO AFFORDABLE, ESSENTIAL DRUGS ON SUSTAINABLE BASIS

##### Trends and status

Kiribati provides health services to its entire population free of charge. Traditionally fees for the use of Private Ward, purchase of dentures and reading glasses, and medical charges for non-I-Kiribati<sup>70</sup> have been the only means by which the MHMS could generate some revenue, but still this has been quite minimal compared with MHMS annual expenditures. Access to affordable drugs means having access to at least 20 of the most essential drugs. Access means access to health facilities (clinics) that are within one hour's walk of the population. In the Kiribati context, one hour's walk has been appropriately addressed since the construction that started several years ago, of more than ten clinics nation wide to reduce the 5km distance originally advocated during the introduction of Primary Health Care in the early 1980s.

##### Progress

Only recently, as part of its cost-recovery efforts to generate income, has the MHMS embarked on collecting fees for services that are considered minor and non-urgent such as medical clearance, sick certificates etc. But the dispensing of

drugs remains free. Kiribati, through tendering processes, orders its drug and medical supplies from its traditional suppliers, mostly from Australia and New Zealand including UNICEF for vaccines and UNFPA for contraceptives. As an example of true global partnership for development UNFPA provides contraceptives free while antiretroviral drugs and TB drugs are purchased through WHO assistance using the Global Drug Facility to ensure affordability and quality. The distribution of drugs to all outer islands clinics, except the Line Islands, based on clinics drug order, is by air and this has always been the main cause of delay. There is an Essential Drug List that health staff on outer islands use as a basis for ordering their supplies. Based on set criteria, clinic constructions on outer islands are on-going to improve accessibility. Having said all that and in particular the transport problem, the majority (95%) of the population has good access to essential drug supplies.

### Challenges and opportunities

The MHMS, in collaboration with the WHO, UNFPA and UNICEF, must remain strong partners in the procurement of drug and medical supplies for Kiribati. This refers in particular to vaccines, contraceptives and antiretroviral and TB drugs. Special consideration for the transport of drugs to outer islands need to be set up with the participation of Air Kiribati management and the MHMS. This should include putting drug supplies as a priority air cargo. Gone are the days when the mail bag was always a priority on any boat or flight. It should now be the medicine box. Efficient payment methods for freights must also be developed to by-pass the bureaucracy that is inherent in many financial institutions including Government-owned companies.

Donated drugs should not be entertained at all. Otherwise, it should be subjected to the provisions in the Medicine and Drug Policy to avoid having the MHMS receiving outdated (or nearly) drugs, and to ensure the use of these drugs in with line the essential drug list, and to ensure continuation of its supplies.

#### 47. TELEPHONE LINES AND CELLULAR SUBSCRIBERS PER 1000 PEOPLE

##### Trends and status

Indicators 47 and 48 are important means for monitoring progress towards Goal 8. An effective communication between those involved in the development process would not be possible without the necessary infrastructure. The use of information and communication technology improves communication, potentially allows for more transparency - leading to better governance, allows for easy access to better learning in the absence of textbooks or print materials and allows contact with rural areas. The sole provider of this service in Kiribati is TSKL<sup>71</sup>. But Digicel<sup>72</sup> has just recently come onto the scene and potential clients are looking forward for a healthy market competition that would eventually bring about better services.

##### Progress

TSKL figures provided to the MDG Task Force show that in 2001 the number of phone lines per 1,000 was 51. However the latest figures at the end of 2006 also obtained from TSKL show that phone lines subscribers was 64.3 per 100 peoples, while mobile subscribers was 18.5 per 100 peoples. This is definitely a significant improvement from the 2001 data

and this is to be expected – the general observation shows that more homes have been connected with fixed telephone lines while more people are moving about with mobile phones. Both fixed lines and mobile telephones on outer islands are non-existent except in Government (Island Councils) stations where only the former exists.

**Challenges and opportunities**

With TSKL being the sole provider of telephone service in Kiribati, the dangers inherent in having a sole proprietor are quite apparent. Monopoly brings about slow progress in development through high cost of services, especially to the general public, restrictive regulations and conditionalities, slow and small outputs that are produced purely for profit. But as mentioned above, the introduction of Digicel into the country means a brighter outlook in the form of more competition and hopefully lower prices and better services. Telephone lines to outer islands are slowly improving but only at Government stations. So it will take many years before more people can have a phone at home, considering the high cost.

**48. PERSONAL COMPUTERS PER 1000 PEOPLE AND INTERNET USERS PER 100 PEOPLE**

**Trends and status**

As stated above, indicators 47 and 48 are important means for monitoring progress towards Goal 8. An effective communication between those involved in the development process would not be possible without the necessary infrastructure. Computers were introduced in Kiribati in the late 1980s mostly in Government Ministries and Government owned companies starting with Secretaries and CEOs. The internet services started about 10 years later in the late 1990s. Since then the number of computers has increased in leaps and bounce and every unit of a ministry or statutory body would have at least one computer starting

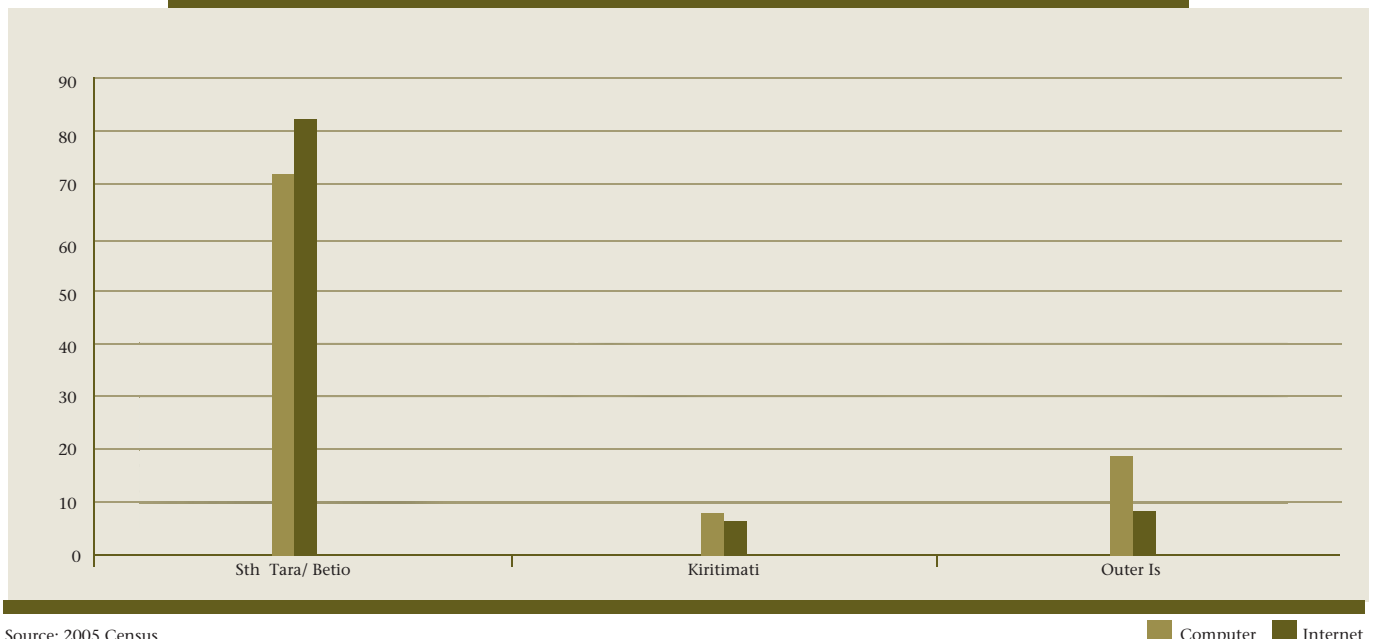
with the head of the unit. Now, all medium to large private businesses would own a computer and internet service, while the number of private homes especially on South Tarawa, Betio and Kiritimati Island with computers and internet services is increasing. The 2005 census shows that out of the total number of 13,999 households, 710 households (5%) have at least one computer. Distribution by islands shows that of this 710 households, 555 (72.2%) are on South Tarawa and Betio, 62 (9%) on Kiritimati Island and the remaining 82 (19%) on the remaining households on outer islands. This household computer distribution correlates fairly closely with the distribution of households internet connections with 83% for South Tarawa and Betio, 8% for Kiritimati and 9% for the remaining outer islands, (see Figure 36).

These outer islands figures for computer and internet connections actually come as a nice surprise and contrary to the general impression that computers and internet on outer islands are non-existent. The use of information and communication technology improves communication, allows for more transparency leading to better governance, allows for easy access to better learning in the absence of textbooks or print materials and allows contact with rural areas. There are several suppliers of computers in the country and two for internet use, TSKL and TKL.

**Progress**

Telecommunication Authority of Kiribati (TAK), with national coordination and licensing of communication services as one of its core functions was established in 2005 and as such, does not have the necessary database on this indicator. However TSKL, through the MDG Task Force, estimates that there are currently about 400 dial-up connections (Government, statutory bodies, businesses and private) in South Tarawa and Betio. With TKL also providing an internet service, the number is likely to increase quickly

**Figure 36: Proportion of household with computers and internet connections, 2005**  
Total number of households = 13,999



Source: 2005 Census

Computer Internet

as in any competitive market environment. Internet cafes provided by TSKL are recent developments to improvement in internet access and they are constantly being utilized by the general public. High school students are often seen using internet services not only to communicate with friends but to do assignments and carry out project works.

### Challenges and opportunities

The internet service will increase in Kiribati under current competitive market environments. In fact, it is believed that the internet will overtake telephone service considering the environment they are in. With more internet cafes, increasingly more people will have better access to internet services compared to telephones. Modern and appropriate technology should be used by suppliers of the service so as not to frustrate customers. Persistent 'Blind or black spots' is a cause for constant frustration on the part of customers, and are probable indications of lack of technological know how or uncaring attitude on the part of TSKL being the only provider of this service in the country.

## Tracking Progress: Goal 8. Develop a global partnership for development

Monitoring and evaluation components		Assessment
Data collection capacity		Fair
Quality of recent survey information		Fair
Statistical tracking capacity	Poor	
Statistical analysis capacity	Poor	
Capacity to incorporate statistical analysis into policy, planning and resource allocation mechanisms		Fair
Monitoring and evaluation mechanism		Fair

63. *The Pacific Plan, a 'road map for the region's future', came about as a result of the Pacific Island Forum Leader Vision: the Auckland Declaration, during the Forum meeting held in Auckland in 2004.*

64. *Post-Forum Dialogue Partners include Canada, People's Republic of China, European Commission, France, Japan, India, Indonesia, Republic of Korea, Malaysia, Philippines, Thailand, UK and USA*

65. *Bureau of East Asia and Pacific Affairs, October 2007. In: <http://www.state.gov/r/pa/ei/bgn/1836.htm>*

66. *Regional Assistance Mission to Solomon Islands*

67. *These loans were mainly from ADB and PRC.*

68. *People's Republic of China*

69. *A word of caution: The MEYS data shows 85% unemployment rate among youth while I.Rouatu (2007) talks about 90%, with the latter divided into those attending schools (37%) and those that are truly unemployed (53%) which, in absolute numbers, is about 10,000 unemployed youth every year.*

70. *This really means non-I-Kiribati citizens that do not work in one way or another for the Government or the people of Kiribati.*

71. *Telecom Services Kiribati Limited*

72. *A new telephone company that has just been established in Kiribati*

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